

# ReWAGE

## Evidence

**Building a business case for good jobs: The links between Good Work and innovation, productivity and employee health/wellbeing**

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## Building a business case for good jobs: The links between Good Work and innovation, productivity and employee health/wellbeing

### ReWAGE Evidence Paper

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#### Table of Contents

<b>1. Introduction.....</b>	<b>3</b>
1.1 Background to the research .....	3
<b>2. Framing the research .....</b>	<b>6</b>
2.1 Good jobs .....	6
2.2 Productivity, innovation and employee wellbeing.....	7
2.3 Data.....	7
2.4 The literature review .....	8
2.5 The case studies.....	8
2.6 Structure of the findings sections .....	10
<b>3. Job quality and innovation .....</b>	<b>11</b>
3.1 Terms of employment.....	11
3.2 Pay and benefits .....	12
3.3 Health, safety and psychosocial well-being.....	13
3.4 Job design and the nature of work.....	13
3.5 Social support and cohesion .....	15
3.6 Voice and representation .....	16
3.7 Work-life balance .....	18
3.8 Summary .....	19
<b>4. Job quality and productivity.....</b>	<b>21</b>
4.1 Terms of Employment .....	21
4.2 Pay and Benefits.....	21
4.3 Health, safety and psychosocial wellbeing.....	23
4.4 Job Design and the Nature of Work.....	24
4.5 Social Support and Cohesion .....	26

4.6	Voice and Representation .....	26
4.7	Work-life Balance.....	27
4.8	Summary .....	29
<b>5.</b>	<b><i>Job quality and wellbeing/health.....</i></b>	<b>30</b>
5.1	Terms of Employment .....	30
5.2	Pay and Benefits.....	31
5.3	Health, safety and psychosocial wellbeing.....	32
5.4	Job design and the nature of work.....	33
5.5	Social support and cohesion .....	34
5.6	Voice and representation .....	36
5.7	Work-life Balance.....	37
5.8	Summary .....	38
<b>6.</b>	<b><i>Limitations within the available data .....</i></b>	<b>40</b>
<b>7.</b>	<b><i>Conclusion and recommendations .....</i></b>	<b>42</b>
7.1	Recommendations.....	42
<b>8.</b>	<b><i>References .....</i></b>	<b>45</b>

## 1. Introduction

This report presents research findings on the relationship between good jobs on the one hand and productivity, innovation and employee wellbeing on the other. It builds on earlier research completed by Warwick Institute for Employment Research (IER) on what constitutes 'Good Work' as an expression of job quality (Warhurst et al., 2022) and which maps well on to both the characteristics of Fair Work in Wales and Scotland (Warhurst et al. 2023), the English metropolitan combined authorities' employment charters (Dickinson, 2022) and the Belfast City Council initiative for an Inclusive Growth City Charter (Belfast City Council, 2021). The purpose of the new research is to help build the business case in Northern Ireland for a good employment charter.

This project aligns with the LRA's general vision to be widely recognised as Northern Ireland's leading authority in promoting productive working relationships to the benefits of individuals and organisations and to support the creation of a thriving and inclusive economy. It also supports the LRA's specific aim within its *Corporate Plan 2021-25* (LRA, 2021) to promote improved employment relations in the context of growing the Northern Ireland economy. In support of these aims, there are three main objectives to the research:

- To provide evidence from secondary data on the relationship between job quality and organisational performance, with that performance focused on innovation, productivity and employee wellbeing.
- Based on local companies in Northern Ireland, provide illustrative examples of the emergent themes in the literature review.
- Use the new evidence base to raise awareness among businesses (and other key stakeholders) in Northern Ireland about the benefits of a possible good employment charter.

The project is undertaken for the LRA by IER on behalf of ReWAGE, which is an independent expert advisory group that which supports government's strategic response to the recovery and renewal of work and employment in the UK as it tackles the impact of current challenges to the UK's productivity and prosperity. Experts from ReWAGE with expertise in job quality supplemented the IER team.

The report presents the findings of a literature review of the link between good jobs, using the Good Work indicators, and the three organisational performance outcomes, and illustrates that link by drawing on two case studies of Northern Ireland based companies. The report first sets out the background to the research and its rationale. It then outlines the research design, with its conceptual framing and data sources. The following section then presents the findings, reporting the evidence for the relationship between particular aspects – or dimensions – of job quality and each of the three performance outcomes. The final section summarises these findings and makes recommendations for how more good jobs might be created, how policy to develop a good employment charter in Northern Ireland might be supported and how understanding of the business benefits of good jobs might be further developed.

### 1.1 Background to the research

The Minister for the Economy, in setting out his economic vision, highlighted the deep-rooted challenges facing the economy, including low employment, low productivity, low wages and

regional imbalances (DfE, 2024). There is a need to address these challenges because the Northern Ireland economy is under-performing relatively. Over the past 100 years, relatively low levels of productivity have been a persistent problem in Northern Ireland. Productivity levels in Northern Ireland are below other parts of the UK, which itself has relatively low levels of productivity, and also below that of the Republic of Ireland and a number of other small, advanced economies. Moreover the gap has been widening over the past two decades (DfE, 2022; Jordan, 2022; Jordan and Turner, 2022).

This persistent low level of productivity has no single explanation. It cannot be wholly explained by the composition of Northern Ireland's economy or the country's geographical peripherality relative to the rest of the UK or its level of capital investment or its lack of fiscal autonomy (Jordan, 2022). From their analysis of the productivity deficit, Bergin and McGuinness (2022) conclude that Northern Ireland needs to reform its education and skills provision. However, they also recognise that such reform alone might not be effective. One indicator that investment in education and training alone might not be sufficient is that Northern Ireland now has fewer low-skilled workers, is better at retaining its high-skilled workers and the proportion of high-skilled workers within the labour force has increased. Nonetheless these improvements have not translated into higher productivity (Jordan and Turner, 2022). In the context of this policy conundrum, productivity has become the 'the central problem' in need of addressing in Northern Ireland (FitzGerald and Morgenroth, 2020; Jordan, 2022).

In the DfE's case for making the Northern Ireland economy perform better, innovation is also important. Innovation can be a precursor to productivity and, as the DfE (2022) notes, 'is essential for economic growth' and creating 'a higher number of better jobs' (p.24). The backdrop, however, is again poor innovative performance: the level of innovation activity amongst Northern Ireland's businesses is below the UK average, though the gap is narrowing. Whilst some firms do invest well in R&D, under-investment generally in R&D is a persistent problem and Northern Ireland has a low proportion of innovative firms (Jordan and Turner, 2021, 2022). Northern Ireland has to avoid a vicious downward spiral in which poor productivity reduces the resources for innovation, which then leads to further poor productivity. In response, the Minister for the Economy's economic vision is premised on the four pillars intended to: increase the number of good jobs, promote regional balance, raise productivity and reduce carbon emissions. If the economy is to be sustainable, as the DfE intends, attention will also need to focus on the wellbeing and health of the workforce, particularly as the general population and so the working population ages (Jordan and Turner, 2022). The economic cost of ill-health is significant to individuals, firms and the economy. Through lost output, sickness absence alone is estimated to cost the UK £32-41bn per year. In recent years that has been an increase in workers leaving their jobs due to ill-health and also an increase in the numbers of workers who struggle at work with ill-health. Post-Covid, concern about the health of workers has intensified as the rate of economic inactivity amongst workers has risen across the UK. However economic inactivity has been a persistent and worsening feature of the Northern Ireland labour force to the point that, in 2022, Northern Ireland had the highest rate in the UK. Long-term ill-health within Northern Ireland's working population is also worse than the rest of the UK (Jordan and Turner, 2022). As the (working) population ages, there is a pressing need to keep workers healthier in order not to worsen the already difficult financial burden on health and social care services. One answer is more and better remedial interventions from occupational health professionals, though coverage tends to be limited to medium and large businesses (SOM, 2023). Another option is to address job quality, as it can

help or hinder employee health and wellbeing (Marmot et al., 2020). Job quality that leads to a reduction in ill-health is obviously good for employees but is also good for employers as it can reduce sickness absence, help with employee recruitment and retention, and increase productivity (SOM, 2022).

The NI Executive has acknowledged this link in its Good Jobs in Northern Ireland initiative that aims to create good jobs for all in Northern Ireland (OFMdfM/NEF, 2015). It argues that for a new focus on job quality, not just job creation, as part of economic policy. In this context, the Northern Ireland Statistics and Research Agency (NISRA) (2022) analyses sector-based job quality. It reports that employment security is relatively good and Office for National Statistics (ONS) (2022) data shows that career progression opportunities are relatively good in Northern Ireland compared to most other parts of the UK. In recent years the proportion of employees being paid below the Real Living Wage has fallen but the drop may reflect the furloughing of employees during the Covid pandemic (NISRA, 2022), and the extent of low pay in Northern Ireland remains above the UK average (ONS, 2022). Significantly it is the public sector in Northern Ireland that has better jobs (NISRA, 2022).

Although great play is made of the need to improve job quality in Northern Ireland as a route to improving productivity and innovation, questions are also now being asked about the quality of management in Northern Ireland. Research shows that productivity can be boosted by better integrated use of capital and labour as total factor productivity growth (Ford and Rincon Aznar, 2018) and that Northern Ireland has so far failed to effectively use this approach (Jordan and Turner, 2021). Northern Ireland's managers are particularly cautious in their practice. International comparisons show that it measures poorly against Great Britain in terms of the prevalence of best practice (Bloom and Van Reenen, 2010; Birnie and Hitchens, 1999). As Jordan and Turner (2021) state, a key problem might be that managers in Northern Ireland lag behind in best practice and so are not able to realise the benefits for their business, employees and the country as whole. Karasek (2004) has made the point that over past decades a series of management theorists have advocated a move away from a command-and-control style of management if businesses want to be more efficient and lever the potential of their workforces. In advocating this shift he also points that the social costs to the state of command and control – worker illness, inadequate skills and poor use of skills – will be reduced if different styles of management are adopted with more healthy jobs following as a result. Employment charters advocate this shift to better work and employment practices within firms. Charters have been introduced across England, with similar initiatives championed in both Wales and Scotland, and in all cases advocated for mutual gains – argued to improve not just employee wellbeing but also organisational performance, including productivity (see, respectively, Dickinson, 2022; Felstead, 2020; Findlay, 2020). Improving employment also features in the Belfast City Council Inclusive Growth City Charter initiative, which is also premised on delivering social and business benefits (Belfast City Council, 2021).<sup>1</sup>

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<sup>1</sup> For an update, see <https://www.belfastcity.gov.uk/documents/our-commitment-to-inclusive-growth-2020-2022#Embedding%20an%20inclusive%20growth>



## 2. Framing the research

This section outlines the research design and data sources. It explains how good jobs as well as productivity, innovation and employee wellbeing are conceived and operationalised in the research.

### 2.1 *Good jobs*

Having good jobs matters. In support of economic recovery and growth, job quality is now a feature of government policy across the UK and variously termed 'Good Work' and 'Fair Work'. Both the NISRA and the ONS are developing datasets to try to capture job quality for Northern Ireland and the rest of the UK respectively, see NISRA (2022) and ONS (2022). This turn to job quality is premised on it having a positive impact on productivity, innovation and employee wellbeing.

However, there is no national statistical dataset, administered by either NISRA or the ONS, that enables direct analysis of the relationship between job quality on the one hand and productivity, innovation or employee health/wellbeing on the other – although attempts are being made to deal with this data deficit (Bosworth et al. 2023f). In the absence of this dataset, a patchwork of existing secondary research has to be used. This research base is growing but remains limited and fragmented. Research focuses on different levels – the individual, firm, sector and national levels for example, and very few studies encompass all of the work, employment and management practices related to job quality.

The literature review for this project collates much of this research, with aim of identifying and highlighting the work, employment and management practices that might deliver improved productivity, innovation and employee wellbeing. The review has two conceptual underpinnings. First, given that they are part of the same family of concepts (Warhurst et al., 2022), it draws on generic terms such as 'job quality', 'Good Work', 'Fair Work' and 'Decent Work'. Second, it draws on the seven dimensions of Good Work as an expression of job quality developed by the Carnegie Measuring Job Quality Working Group (see Table 1 below) (Irvine et al. 2018).<sup>2</sup> These dimensions have been adopted in public procurement guidelines in Northern Ireland (DoF, 2022). The terms within these dimensions are analysed in conjunction with existing research examining productivity, innovation and wellbeing.

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<sup>2</sup> These dimensions draw on the research conducted by IER for the Chartered Institute for Personnel & Development (CIPD), see Warhurst et al. (2017), Wright (2018) and Irvine et al. (2018).

**Table 1: Dimensions of job quality**

Dimensions/Measures
Terms of employment
Pay and benefits
Health, safety and psychosocial wellbeing
Job design and the nature of work
Social support and cohesion
Voice and representation
Work life balance

Source: Irvine et al. (2018).

## 2.2 *Productivity, innovation and employee wellbeing*

In official statistics, productivity is regarded as the value of output produced in any economy. The ONS focuses on labour productivity which is output per hour worked.<sup>3</sup> However, businesses tend to think less in terms of productivity and more about efficiency (which, in the past, was the more usual term) and performance measured by sales or turnover for example. This broader conceptualisation is mirrored in a lot of research. Moreover, a measurement challenge exists, job quality is typically measured at the individual level and productivity best measured as firm level and, at present, there is no UK dataset that links the former with the latter for this reason (Bosworth et al., 2023). As such the use of the term ‘productivity’ and its measure can vary. In our literature review search we try to capture this variety as far as is practicable.

There are different types of innovation. The typology most used officially, for example in the UK’s and European Commission’s innovation surveys, draws on the Oslo Manual (OECD, 2005), which outlines two types: technological and non-technological. These two types are each broken down into two further types – within technological there is product and process innovations, and within non-technological there is organisational and marketing innovations. In addition to the generic term ‘innovation’, our review covers all four of these types of innovation.

Wellbeing can be a fuzzy term, particularly in attempts to operationalise it (Jansen et al., 2023). It is sometimes proxied by job satisfaction (Peroni et al., 2022) and even happiness at work or contentment with work (Green et al., 2012). Sometimes it is distilled into mental health (Warhurst et al. 2022). If it encompasses health, it then becomes unclear if it is an outcome or a feature of job quality (see Muñoz de Bustillo et al., 2011). Whilst we include literature that refers to wellbeing, we suggest that it is more usefully conceptually to focus on health covering both physical and psycho-social (mental) health.

## 2.3 *Data*

Two types of data underpin the research presented in this report. The first is a literature review. The second is drawn from case studies. This section provides a brief outline of the approaches to the literature review and case studies.

<sup>3</sup> See, for example, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/ukproductivityintroduction/julytoseptember2022#labour-productivity>



## 2.4 *The literature review*

There is an absence in the UK of administrative, i.e. national statistical, data that would allow assessment of job quality against productivity, innovation and employee health/wellbeing. Such datasets exist in other countries, Belgium for example (see Balogh et al. 2021). There are attempts to try to develop these datasets in the UK, see for example, Elias (2022) and Bosworth et al. (2023). In their current absence, this project collates primary data from empirical studies, through literature reviews.

There are many different types of literature review. Each have different purposes, procedures and require different resource bases (Xiao and Watson, 2017). The one used in this research is a textual narrative synthesis. This method has a standard data extraction format by which various items within a published study are identified and extracted. It is more rigorous than the more common narrative review, in which data extraction tends to be informal and it is less costly than a meta-summary, which adds a quantitative element to the summarising of the literature. The task is made easier with respect to health/wellbeing because within health studies there is a strong tradition of systematic reviews and meta-reviews (also called 'umbrella reviews' or 'systematic reviews of systematic reviews') on the health associations with some aspects of jobs (amongst many other topics).

The review draws on original multi-disciplinary, international data and ranges across scientific and grey literature that reports studies featuring job quality in relation to productivity, innovation and employee wellbeing/health. It comprises five phases: parameter setting, searching, screening, supplementing, and data extraction and analysis. The first phase, parameter setting, is crucial to guiding the information gathering process, including search terms. The second phase involves the identification and gathering of relevant data through the application of the parameters using relevant bibliographic databases. The third phase involves screening this data using titles, keywords, abstracts and full texts. In the fourth phase data additional to that in the bibliographic databases but known to the researchers will be considered. The fifth phase involves data extraction, with an in-depth examination undertaken to assess the quality of the evidence and identification of dimensions, measures or indicators for that particular study. The publications selected and analysed across these three reviews include a mix of reports of original research plus reviews of such research.

Using this approach, three rapid response reviews were undertaken, encompassing the relationship between job quality, as measured by the seven dimensions, and, firstly, productivity; secondly, innovation; and, thirdly, employee wellbeing/health – the last covering physical and mental health. Such rapid reviews enable timeliness without compromising quality (Hamel et al., 2021). A list of the publications included can be found in the Appendix.

## 2.5 *The case studies*

The literature review generated emergent themes for the Good Work dimensions in relation to productivity, innovation and employee wellbeing. Illustrative case studies of these themes draw on Northern Ireland businesses.

There are different types of case studies (Yin, 2018). The approach adopted here is two purposive, descriptive case studies based on selected companies that offer good examples of the positive organisational outcomes of the relationship between job quality and productivity, innovation and employee wellbeing/health.

Given the industry, firm size and employment composition of the Northern Ireland economy and the desire to promote advanced manufacturing (DfE, 2021), the two selected business represent the manufacturing and services sectors. The first is a large manufacturing firm in Kilkeel in County Down that provides airline cabin seating for global airlines. The second is a financial services firm based in Belfast with offices across Northern Ireland. For short overviews of each company, see Boxes 1 and 2 below. The two businesses were identified by and approached with the support of the LRA.

## **Box 1: Collins Aerospace, Kilkeel**

Workers at Collins Aerospace (henceforth Collins) manufacture commercial aircraft seating for clients across the globe. Although the facility has been in Kilkeel for more than 50 years, it has undergone several sales and mergers and today is part of a multi-national corporation.

The Kilkeel site employs 800 workers who are broadly classified into the hourly workforce (those working the production lines and logistics) and the salaried workforce (office staff, engineers, and management). Workers produce everything from simple main cabin seats with 200 parts to bespoke premium cabin seats with 5000 parts. As part of a larger corporate family, some of the salaried workers are physically present in the Kilkeel facility but work in teams or on projects based internationally.

Collins has been recognized by the Chartered Institute for Personnel & Development (CIPD) NI for its employment practices including best employee voice initiative, best hybrid and flexible work initiative, best people team, and best apprenticeship team.

Despite globalized competition, the Kilkeel facility remains a significant production facility, particularly for the bespoke seats and is working to become a Centre of Excellence.

## **Box 2: FinTrU, Belfast and Derry/Londonderry**

FinTrU is a multi-award-winning technologically enabled regulatory solutions company. Working with investment banks around the globe, FinTrU designs technology-enabled solutions to help their clients meet their regulatory obligations.

In the ten years since its founding, FinTrU has been named as one of Europe's fastest-growing companies by the Financial Times. It currently employs over 1200 people worldwide across Belfast, Derry/Londonderry, London, Dublin, Letterkenny, Maastricht, New York and Porto.

FinTrU is not only a fast-growing, successful high-tech business, it has also been recognised for its employee relations, job quality and workplace inclusivity. The firm has won awards and recognition from the Irish News Workplace and Employment Awards, the Digital DNA awards.

It is also one of only seven organisations in Northern Ireland to have received a Silver Diversity Mark. At the time of the award of this mark, FinTrU Founder and CEO, Darragh McCarthy, was quoted as saying: "Our goal is to continue to be a leading employer in Northern Ireland and we are steadfastly focused on ensuring our company provides everyone with the opportunity to be comfortable at their workplace."

The two businesses offer insights into the business rationale for good jobs. In each case interviews were conducted with human resource and management representatives, employees from various departments, and (where possible) employee representatives. In total six interviews were conducted at the manufacturing facility and four at the financial services business. A common template for reporting the two case studies was developed drawing on the literature review. The focus of the interviews was the productivity, innovation and employee wellbeing gains that may be attributed to improvements to various dimensions of job quality.<sup>4</sup>

## 2.6 *Structure of the findings sections*

This section presents the findings from the literature reviews for Good Work with respect to the three challenges for Northern Ireland and its businesses: innovation, productivity and employee health/wellbeing. It starts with innovation because innovation is often seen as a precursor to productivity (BEIS, 2021). The findings for productivity and then employee health/wellbeing follow.

The presentation of each set of findings follows the same format in terms of the ordering of the seven dimensions: (i) terms of employment, (ii) pay and benefits, (iii) health, safety and psychosocial wellbeing, (iv) job design and the nature of work, (v) social support and cohesion (line management and colleagues), (vi) voice and representation and (vii) work life balance. At the end of each sub-section, we present a summary table of the research findings. Across the three sub-sections we include illustrative quotes from the two case studies where germane.

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<sup>4</sup> The interviews were conducted in accordance with the University of Warwick's Ethical Research Policy, IER's quality assurance procedures, and all relevant data protection legislation.

### 3. Job quality and innovation

Reflecting the OECD (2005) typology outlined earlier, various types of innovation are included in existing research. Most studies, it should be noted, tend to focus on technological innovation, associated with research and development (R&D) (Chen and Sawhney, 2010), in part because there is better data for technological than non-technological innovation (Makó & Illéssy, 2015). Innovation has been associated with good job quality (Jaehrling, 2018). Although it is acknowledged that the relationship between job quality and innovation could be positive or negative (see Duhautois et al., 2022). Moreover virtuous and vicious circles may exist. In the former, innovation can improve job quality, job quality may then enhance innovative capacity, and innovative capacity might deliver more innovation and vice versa with vicious circles leading to a downward spiral of job quality and innovation (Warhurst et al., 2018; Hii and Neely, 2000).

The evidence on the links between different aspects of Good Work and innovation follows. Each of the seven dimensions is addressed in turn. Where available, evidence is disaggregated by the type of innovation, as defined above.

#### 3.1 *Terms of employment*

Terms of employment broadly covers job security, minimum guaranteed hours and the prevention of underemployment where employees would prefer to work more hours (Irvine et al., 2018). Research on terms of employment and innovation focuses on the use of temporary employment which can either promote or impede innovation. While the employment of temporary workers may be associated with poorer work, there can be differences between the employment of highly skilled and lower skilled workers on temporary contracts and difference between temporary workers who are specifically employed on temporary contracts and workers who are fearful that their employment might unexpectedly come to an end for other reasons (De Spiegelaere et al., 2014).

Employing temporary workers can bring specific skills associated with the development of innovation to an organisation, allowing firms to tap into external knowledge and to access various networks, bringing externally generated innovation to the organisation. Their employment can also indicate to other employees that the employer values knowledge (Ebers and Maurer, 2014; Kleinknecht et al., 2014; Ferreras-Méndez et al., 2016; Vogus and Welbourne, 2003; Wachsen and Blind, 2016). Cost-savings can be achieved by the employment of temporary workers, with these savings potentially being re-invested in other parts of the organisation, including in areas that may promote innovation (Galup et al., 1997; von Hippel et al., 1997).

However, Kleinknecht et al. (2014) found that a firm's innovative activities benefit less than expected from the flexibility of having temporary workers (see also Martínez-Sánchez et al., 2011). Temporary employment can weaken ties between employees and hinder organisational communication (Wheeler and Buckley, 2001) and temporary employees may lack the internal networks necessary to share their knowledge with colleagues (George and Chattopadhyah, 2015).

## 3.2 Pay and benefits

This dimension covers pay levels and employees' satisfaction with their pay (Irvine et al. (2018). Underpinning much of this research is a belief in the need to incentivise innovation. The evidence corroborates this belief: financial incentives are important but it is the structure of pay packages rather than payment level that matters most for innovation.

One of the key questions that then emerges is how pay may be used to incentivise innovation and activities that promote innovation (George and Zhou, 2002; Baer, Oldham and Cummings, 2003; Gupta, Tesluk and Taylor, 2007; Eisenberger and Aselage, 2009; Sauermann and Cohen, 2010; Manso, 2011). This is an emerging area of research and, as reviewed below, the evidence is mixed.

Providing individual and team incentives or reward programmes that encourage innovation and having work time devoted to developing new ideas are cited as effective for facilitating innovation (NESTA, 2019). Indeed Al-Asfour et al. (2020) finds that the most prominent method for motivating employees is through financial incentives. However, Curran and Walsworth (2014) find that fixed pay/salary and individual performance pay have no effect on product and process innovation. On the other hand, variable group pay (such as group/team incentive pay) and indirect pay (employee benefits) have a positive effect on both types of innovation. The group/team result is particularly salient. The odds of a workplace with a group/team incentive and/or profit-sharing plan being in a higher innovation category are almost five times greater than a workplace without such a plan.

Beyond individual-level remuneration, the pay structure across the firm may also matter. Yanadori and Cui (2013) show that pay differentials among employees within the same job level was negatively correlated with the number of patents registered – with patents being a proxy for product innovation. On the other hand, Wang et al. (2015) find mixed impacts arising from pay dispersion. Their research shows that pay dispersion has an inverted U-shaped effect on employee participation, which in turn promotes organisational innovation. However, after a certain level, a firm's pay dispersion impedes innovation as employees become demotivated, participation falls and voluntary turnover increases (see also Buccioli et al., 2014).

Importantly for Northern Ireland, it should be noted that performance related pay at both the individual and group level in SMEs is associated with higher levels of firm innovation (Salimi and Della Torre, 2022). However, Salimi and Della Torre also find that when a firm implements both individual and collective performance related pay schemes, it has a negative effect on innovation. Similarly, organisations that provide on-the-job training and use performance related pay scored higher on product, process and marketing innovation (Pouwels and Koster, 2017; Koster, 2019).

The complexity in the relationship between pay and innovation is compounded by the findings of other research. Manso (2017: 22) notes that innovation requires agents to 'waste time with unsuccessful actions', and thus the optimal contract should tolerate early failures, while rewarding long-term success. These 'exploration contracts' are argued to be better for innovation than standard fixed rate or pay-for-performance contracts based on experimental evidence. This experimental evidence suggests that these types of exploration contracts may positively impact on marketing innovation (see Ederer and Manso, 2013). Ederer and Manso also show that the threat of termination can undermine incentives for innovation, while



termination benefits (or golden parachutes) can lessen these innovation-reducing effects. The right incentives manifest in work that offers contract stability, provides feedback matched with task autonomy, and pay packages that reward exploration (Manso 2011; 2017). Sauermann and Cohen (2010) provide evidence supporting this theory, showing that there is a strong positive relationship between innovative output and intellectual challenge, independence and money incentives.

### 3.3 *Health, safety and psychosocial well-being*

This dimension covers physical injury and mental health (Irvine et al., 2018). Kesselring et al., (2016) describe health as a basic enabler of workplace innovation and supporting physical and mental health as necessary for workplace innovation. The evidence suggests that workplaces that are conducive to good health and/or can positively channel stressors make for a more innovation friendly environment.

The most common focus is mental health and the ways in which workplace stress inhibits innovation. This research focuses on the impact of specific stressors on innovative capacity, both positive and negative. A positive emotional atmosphere can promote innovation, while a negative emotional atmosphere hinders it (Dou et al., 2022; also Gasper, 2003; Isgett and Fredricson, 2004; Joseph and Ryan, 2019). Dou et al. also find that organisational climate, in the form of shared views, policies, practices and procedures and overall atmosphere as perceived by employees, including rewards and support, can impact on innovation. Klajkó and Czibor's (2020) show that psychological safety, in which employees feel able to share ideas and opinions with team members and others in the workplace, was positively associated with innovation.

Dou et al. (2022) divides work stressors into challenge stressors and hinderance stressors. Challenge stressors support work experience and the creation of opportunities for employees' personal growth (see also Baka and Prusik, 2021). Challenge stressors are positively correlated with employee performance and innovation (Dou et al., 2022; see also Cavanaugh et al., 2000; Noefer et al., 2009; Lee, 2011; Joseph and Ryan, 2019; Bu et al., 2021; and Tong et al., 2021). These types of stressor force individuals to work at higher levels of engagement, more willing to engage in exploratory activities to solve work problems and promote innovative problem solving and the practice of innovative ideas and behaviours. Hinderance stressors are stressors that interfere with or hinder an individual employee's ability to achieve goals, including innovation. Hinderance stressors are negatively correlated with innovation and cause job burnout and staff turnover (see also Baka and Prusik, 2021) which reduced innovation in firms.

### 3.4 *Job design and the nature of work*

This dimension encompasses use of skills and control at work (Irvine et al. 2018). It is sometimes called 'work organisation'. The impact of work organisation on innovation is one of the more researched areas linking job quality and innovation. There are two facets to this research: one that explicitly focuses on work organisation, and the other that focuses on organisational culture. Generally, both sets of literature suggest that there are sets of work organisation and types of organisational culture that can support or deter innovation, with a strong suggestion that Taylorist work organisation and management approaches are a hinderance.



*An Operations Improvement Team Lead at Collins explained the value of engaging workers: “It’s important to get the buy in from the [production] lines as well... You get two or three people come off the line to come onto the parts quality analysis team. They are experts in their own right. And you need the buy-in of the whole line. So we got the workers involved in problem solving and we monitored workers, we observed what they did because they are specialists in that station. And they created their own standard working process. So instead of someone from engineering coming in and saying ‘you need to do it this way’... these are the experts, these guys know how it fits together. [At other companies] it usually flows from the top down, but in our approach, analysis goes from the bottom-up.”*

There is a large body of research on work organisations that employs the Job-Demands-Resources theory. This model suggests a link between how job demands and resources balance in firms and employee engagement and innovation (Kwom and Kim, 2020; Findlay et al., 2021). Job demands are aspects of work that place demands on employees and can lead to physical and mental strain or burnout, such as role ambiguity, excessive workload and stressful job content. Job resources are aspects of work that mitigate demands, such as autonomy and control; task variety; development opportunities; feedback; and support from peers and managers (see reviews by Bakker and Demerouti 2017; Lesener et al. 2019). Using the Job-Demands-Resources model, De Spiegelaere, et al. (2012) find that innovative work behaviours are higher amongst employees with high resources and low demands (what the authors refer to as low strain jobs). However, somewhat contrary to De Spiegelaere et al., Martin (2017) found that innovative work behaviour was most common when both job demands and resources were high.

Another area of work organisation research looks at the impact of task diversity and how repetitive or routinised work (i.e. Taylorised work) can hinder innovation (Mannix and Neale, 2005; Horwitz and Horwitz, 2007; Basadur, Runco and Vega, 2000; Ohly, Sonnentag and Pluntke, 2006). Jobs that are more complex and diverse, i.e. provide an individual with opportunities to learn and use a variety of skills, provide some degree of autonomy and have a clear relationship with the work of others are more likely to promote innovation (Axtell et al., 2000; Farmer et al., 2003; Tierney and Farmer, 2004; Baer and Oldham, 2006; Noefer, et al., 2009). Moreover, task complexity and variety mean that employees have more skills, more freedom to develop and implement new ideas and employees in these roles tend to be more engaged and have higher job satisfaction which are regarded as precursors to innovation. However, the overall picture is somewhat inconclusive. Task complexity can hinder innovation in some teamwork-based circumstances (Urbach et al., 2010). Furthermore, its effects disappear when additional factors are included in their modelling (Ohly et al., 2006; Shalley et al., 2009). Relatedly, task autonomy is associated with empowerment and participation in decision-making, with autonomy the strongest direct predictor of innovative work behaviour (Ramamoorthy et al., 2005; Hammond et al., 2011). The explanation might be that autonomy results in a sense of responsibility which in turn is associated with the development and implementation of new ideas (McLean, 2005).

In addition to work organisation, a significant body of research explores the role of workplaces, organisation design and organisational culture’s effect on innovation. A recent body of research on workplace innovation, which rests on enabling the innovative behaviours of all employees, focuses on transforming work organisation from Taylorist practices of task specialisation, hierarchical structures and centralisation of responsibilities to developing flatter

hierarchical structures, team-working and greater involvement of employees in decision-making (Martins and Terblanche, 2003; Beblavý et al., 2012; Lorenz, 2015). This body of research claims that workplace innovation better levers all forms of innovation (see Totterdill et al., 2022). For example, research demonstrates that a hierarchical culture inhibits innovation because of the emphasis it places on control, stability and internal orientation (Simpson et al., 2006; Jaskyte and Dressler, 2005).

Other areas of organisational culture that have a bearing on innovation include the learning orientation of organisations and human resource management practices. For learning orientations, the research focuses on how organisations promote learning, and knowledge sharing and utilisation, to generate innovation. A common theme is skills development and skill use drive innovation in firms (Toner, 2011; Felstead et al., 2016; Cedefop, 2018; Ittermann and Virgillito, 2019). Research on human resource management practices largely focuses on different practices that can improve the *ability, motivation and opportunities* (the AMO model) in organisations that lead to discretionary effort from employees. It includes employees experimenting, learning, and reflecting, as well as engaging in collaborative problem-solving (Miron et al., 2004; Lundvall, 2014; Findlay et al. 2016; Lantz Friedrich et al., 2016; Sanders and Lin 2016; Shipton, 2017; Findlay et al., 2021).

### 3.5 Social support and cohesion

This dimension includes peer and line management support (Irvine et al., 2018). It is important because workplace innovation is an inherently social process involving creative collaboration (Totterdill et al., 2012). Pot (2011) found that the way employees work and relate to each other in a firm context is one of the main contributors to workplace innovation. The suggestion within this research is that social support amongst employees and from management can help innovation and innovative behaviour, though the evidence base is small.

Dediu et al. (2018) found that social support from both colleagues and managers is positively related to innovation, particularly in facilitating ideas generation. Managerial support had slightly higher predictive power than social support from colleagues, with empowering behaviour being particularly important (see also Deu and West, 2001; Shalley et al., 2004; Anderson et al., 2014; Özaralli, 2015). Dediu et al. hypothesise that social support from both managers and colleagues is important due to the initial feedback, encouragement and advice that come from this kind of social support.

Other authors highlight the role of social support in creating sharing behaviours, promoting cultural values and developing a feeling of mutual obligation, all of which can act as preconditions for innovative behaviours (Sharon and Mark, 2011; Shih and Chen, 2011; Ma Prieto and Pilar Pérez-Santana, 2014; Yen et al., 2015; Ling et al., 2017; Zimmermann et al., 2017; Liu and Tang, 2020). Kim and Bae (2005) suggest that informal relationships can facilitate a more formal engagement of employees in developing innovative work.

Teamworking can also help promote innovative behaviours and environments within a workplace. Teamworking can promote cross-fertilisation of ideas and knowledge sharing (Naveh and Erez, 2004; Andersson, 2013; Dokko et al., 2013; Totterdill and Exton, 2014; Brown and Dearnaley, 2016; Svare, 2016; Hamilton and Davison, 2018; Arsawan et al., 2020). Teamworking can result in employees experiencing positive feelings about their work and work environment, making them more likely to accept the introduction of innovations and engage in innovative work practices (Naveh and Erez, 2004; Davis, 2009; Richter, Dawson and West,

2011). Finally, teamworking, particularly when combined with task autonomy, can give employees a greater sense of influence over the decisions that affect them, contributing to innovative workplaces (McCartney and Teague, 2004; Xerri et al., 2015).

There has also been a significant amount of research on how managers can support and promote innovation in teams (for syntheses of this literature, see Tierney, 2008; Crossan and Apaydin, 2010; Vaccaro et al., 2012). Findings from this research includes the importance of leadership styles with transformational leadership being positively related to creativity and innovative behaviour in teams in almost all circumstances (Bono and Judge, 2003; Shin and Zhou, 2003; Gong et al., 2009; Jansen et al., 2009) Managerial attitude is also found to be significant in promoting innovation and that managers can drive innovation by making it explicit that it is expected and supported (Madjar, 2002; Tierney and Farmer, 2004; Janssen, 2005; Carmeli and Schaubroeck, 2007).

*At FinTrU, managers and staff engage in a variety of wellbeing activities designed to foster cohesion:*

*While attending a work-sponsored yoga class the Head of Talent Acquisition soon realized the CEO was doing the plank on a mat next to her: "I thought, I've joined the right company. This CEO is good craic, he gets it. He's very ambitious and a real inspiration. But he gets properly stuck in and gets to know the people that work for him."*

*She explained the value of such events: "after having a chat and having the craic at yoga then you know that if there are any questions of concerns, they can come to you because we have already broken the ice."*

### 3.6 Voice and representation

This dimension covers trade union membership, employee information/consultation and employee involvement in decision making (Irvine et al., 2018). Existing research in this area focuses on employee engagement and shows that innovative potential is higher in organisations imbued with employment participation and trust. There is no evidence that unions hinder innovation, they might even help it by incentivising employers to better use employees.

Although it has been suggested that unionisation and strong trade unions may impede innovation as they reduce incentives for employers to invest in innovations because high wage increases divert too much of the productivity gains from innovation away from profits, there is no empirical evidence to support this assumption (Addison et al. 2013; Kleinknecht et al. 2014). Conversely, it has been suggested that strong trade unions and employment protection may reduce worker resistance to the introduction of innovations and may also promote the development of the kind of tacit knowledge development necessary for incremental innovation. Unions may reduce turnover and related costs, thereby creating incentives for firms to invest in training and support relationships of trust to encourage knowledge sharing (Dediu, Leka and Jain, 2018).

The majority of the research focuses on employee engagement, of which employee voice and representation is one aspect but not an aspect often researched as a discreet topic. This research regards employee engagement as a precursor to innovation and employees regarded as key sources of innovation (Bélanger and Edwards, 2007; Echols, 2005; Schaufeli and Salanova, 2007; MacLeod and Clarke, 2009; Slatten and Mehmetoglu, 2011; Abraham, 2012; Andriopoulos and Lowe, 2000; McAdam and McClelland, 2002; Thamhain, 2003; Wood,

2003; McLean, 2005; Medlin and Green, 2014; Rao, 2016). The literature largely focuses on ways in which employee engagement can be increased, with voice and representation forming part of this engagement (Unsworth, 2003; Dhondt et al., 2014). This engagement largely falls into three categories: psychological engagement (employees believing that their voice is meaningful and can be safely expressed see: Saks, 2006; Ghafooret al., 2011; Shuck and Herd, 2012); emotional engagement (employees' belief and investment in the organisation, see Shuck and Herd, 2012); and behavioural engagement (employees engage in discretionary efforts to innovate, see Ram and Prabhakar, 2011; Sundaray 2011; Shuck and Herd, 2012; Gameda and Lee, 2020).

Evidence indicates that support and communication from management about the value they place on engagement and innovation is important, along with the provision of resources and training to enable employees to engage (Pavitt, 2002; Martins and Terblanche, 2003; Hyland and Beckett, 2005; Mostafa, 2005; OECD, 2010; Loewe and Dominiquini, 2003; Pohlmann et al., 2005; Brennan and Dooley, 2005; Shipton et al., 2006). Research also found that a work environment characterised by open and largely democratic dialogue with employees facilitates innovation (Duland Ceylan, 2011; Szobiová, 2015; Serrat, 2017; Su and Baird, 2017; Soto-Acosta and Martinez-Conesa, 2018).

*A finance director at Collins explained the importance of an environment in which workers voice their issues:*

*"If you make a mistake, speak up. If you made a mistake, put your hand up and say how do we rectify it? You need your teams and all your employees to be coming with suggestions. We can't implement every suggestion, but we can definitely look at them. And if there's enough people coming with the same suggestion, you have to say we need to look at this. [It is important that workers] don't have that fear to speak up."*

These practices are often linked in the literature to Social Exchange Theory which holds that when employees are given empowerment and training, they feel a sense of belonging and a need to repay their employer by showing engaged behaviour. This engagement motivates employees to work beyond their official duties and results in innovation in the organisation. However, other research notes that there is no single best way to promote participation and trust in organisations (Bloom and Van Reenen, 2010; Brynjolfsson and McAfee, 2014).

Recently, there has been increased research focusing on innovation driven by 'ordinary employees', defined as workers without innovation-specific functions in their job description (Kesting and Ulhøi, 2010; Høyrup, 2012; Keep, 2014; Ciriello et al., 2016; Bäckström and Lindberg, 2019). The innovative potential of an organisation is regarded as coming from harnessing the knowledge, skills and abilities of these employees. Their innovative work behaviour has four components: opportunity exploration; idea generation; coalition building; and idea implementation (De Jong and Den Hartog, 2010). To be effective, this mode of innovation requires employees who are empowered to voice, lead and implement new ideas and ways of working and discretionary behaviours supporting innovation with employees helping each other to resolve problems and identify better ways of working. In other words, promoting employee voice and participation matters (Patterson et al., 2009; Findlay et al, 2016).



## 3.7 *Work-life balance*

This dimension includes not only work-life balance policies within organisations but employee working hours patterns (Irvine et al, 2018). Work-life balance has been argued to be linked to innovation both directly and indirectly. Flexible working increases autonomy and decision making, which directly affects innovative behaviour (Moll and Leede, 2017; Theurer et al., 2018; Almahamid and Ayoub, 2022). Furthermore, flexible working increases job satisfaction, which then promotes innovative behaviour (Almahamid and Ayoub, 2022). Reduced working hours (particularly 3- and 4-day working weeks), working from home and flexitime are good for everyday learning and innovation by promoting worker autonomy and job satisfaction (James, 2011). Overall, work-life balance arrangements – especially those geared toward gendered work-life conflicts – enhance learning and innovation processes both within and between firms.

Where changes are made to promote greater work-life balance, such changes ultimately led to more organisational innovation – both in terms of routine/procedural work and more novel exploration (Malhotra et al., 2016). Similar results were found among SMEs (Azeem and Kotey, 2021) in which providing options for flexi-time and flexi-leave encourage innovation as these provisions are good for mental wellbeing and workforce diversity necessary for knowledge creation, sharing and exploitation. Flexible working hours was also linked to product innovation (proxied by patent applications) and that working beyond 36-hours per week can be bad for innovativeness (Celbiş et al., 2021). Importantly, organisational culture (namely support from management) improves the link between flexible working and innovative behaviours (Theurer et al., 2018; Tambosi et al., 2021). Gomes et al. (2021) find similarly and add a third factor into the mix – transformational leadership (see above). Findings indicate positive relationships between transformational leadership, work-life balance/flexibility, organisational learning capability and innovation.

One consequence of the Covid-19 pandemic was increased flexible working in terms of place of work, and a number of studies examined its consequences for innovation. Almahamid and Ayoub (2022) found that a significant correlation with innovative work behaviour. Ali et al. (2022) find similar results, showing that that employees who are highly engaged were most likely to exhibit innovative behaviours and maintain good work-life balance. An important consideration here is that innovative behaviour, not innovation, is the outcome. Innovative behaviour emerges when an employee proposes new solutions for a problem they have identified (Almahamid and Ayoub, 2022). By this definition, innovative behaviour is necessary for innovation but may not be sufficient. Findings show that teleworkers are more likely to be innovative in services (Sarbu, 2022; see also a pre-Covid study which established a positive relationship between teleworking and product innovation, Coenen and Kok, 2014).

However McAlpine (2018) cautions against abandoning the ‘water cooler’ moment within organisations and its role in generating ideas. This study finds that location flexibility reduces spontaneous work-related conversations, which McAlpine argues is the type of interaction that has the greatest impact on ideas generation. This finding is corroborated by Mattarelli et al. (2022) who find that flexible working arrangements are positively associated with increased work-life balance but not to creativity; conversely, having access to an organised work environment is linked to increased idea generation but a decline in work-life balance. Mattarelli et al. use a subjective measure of creativity based on self-reporting, which likely introduces noise in the dependent variable. Ultimately a balanced approach may be needed, as Coenen

and Kok (2014) show, teleworking can be good for product development but basic face-to face contact is needed to offset some of the potential negative effects of telework.

The above studies consider the link between various measures of work-life balance and intra-firm innovation. James (2014) shows that work-life balance arrangements – especially those geared toward gendered work-life conflicts, enhance learning and innovation processes both *within and between* firms.

### 3.8 Summary

This sub-section presented evidence for each of the seven dimensions of good work and innovation. There is heterogeneity in the quantity and quality of evidence across the different dimension – as well as variations in what is meant by innovation. Overall, the evidence demonstrates that there is generally a positive link between job quality and innovation. Table 2 below summarises these findings by each dimension of Good Work.

**Table 2: Summary of findings on job quality and innovation using the Good Work dimensions**

Dimension	Summary finding
Terms of employment	Little research exists on the relationship between terms of employment per se and innovation. Research on temporary employment offers mixed findings – it can both help and hinder innovation.
Pay and benefits	Financial incentives are important but it is the structure of pay packages rather than payment level that matters most for innovation.
Health and wellbeing	Workplaces that are conducive to good health and/or can positively channel stressors make for a more innovation friendly environment.
Job design and the nature of work	Types of work organisation and organisational culture can help or hinder innovation; Taylorist work organisation and management approaches are a hinderance; non-Taylorist can help innovation.
Social support and cohesion	Social support from management and colleagues can help innovation and innovative behaviour, though the evidence base is small.
Voice and representation	Innovation potential is higher in organisations with employee participation and voice, and a sense of belonging. There is no evidence that unions hinder innovation, though the evidence base is small.
Work-life balance	Reduced working hours and flexible working promotes innovation and innovative behaviour. It can also enhance learning and innovation processes both within and between firms.

A dimension level-analysis is useful but arguably some dimensions may have interactive effects and be reinforcing. For example, golden parachutes can be classified as a termination benefit (under the pay and benefit dimension) but also serve to reduce job insecurity (terms of employment). Our review found one study that assessed most of the dimensions of good work collectively, though the authors frame this around employee treatment, rather than good work



(Mao and Weathers, 2019). This research creates an employee treatment index (ETI) based on three components:

1. failure tolerance – retirement benefits, cash profit sharing and workforce reduction;
2. exploitation protection – union relations and community proxies;
3. working environment – employee involvement, work-life benefits, other employee relations, and R&D/innovation.

The findings show that each component is positively correlated with innovation and taken collectively the overall association is positive and significant. As the ETI score increases by one percentage point, patent counts increase by nearly 19%. This finding reinforces the point that the dimensions of job quality, singularly and combined, have a positive effect overall on (product) innovation.

## 4. Job quality and productivity

The standard labour productivity definition of productivity is easier to apply to some industries than others. It is easier in manufacturing, construction and agriculture for example. It is less applicable to service industries. Moreover, as we noted above, this definition can be less well understood and used as a measure of organisational performance by managers. Plus, a wide range of measures of productivity are used by researchers, for example output per hour, per capita value added or simply managers' perceptions of productivity. This review picks up that range.

The following section considers the evidence on the links between Good Work and productivity using the seven dimensions in turn. Where available, how productivity is conceived in particular studies is cited. Where there is an absence of research for a particular dimension, it is signalled. report.

### 4.1 *Terms of Employment*

There is limited literature on terms of employment and productivity. What does exist focuses on temporary employment contracts. This literature largely finds a negative relationship between the two. However, there are a small number of studies that find a positive relationship in some instances. Bosworth and Warhurst (2020) also note that job insecurity negatively impacts labour productivity.

Comparing temporary and permanent employment, Lisi (2023) found that the use of temporary employment has a small but negative effect on labour productivity: a 10% increase in the share of temporary employment led to a decrease of 2-3% in labour productivity (see also Ortega and Merchante, 2010; Cappellari et al., 2012; Lisi, 2013; Kleinknecht et al., 2014). Lisi et al (2017) also found that temporary employment contracts' negative effect on productivity is greatest in skilled sectors and less in lower skilled sectors – a 10% increase in the share of temporary employment in skilled sectors leads to a 1-1.5% decline in labour productivity growth compared to 0.5-0.8% loss in unskilled sectors.

Blanchard and Landier explain how, in theory, temporary contracts effect labour productivity: 'On the one hand, lower costs on fixed-term contracts give more incentives for firms to take more risks, and to design jobs which, associated with the right worker, lead to high productivity. On the other, lower costs on fixed-term contracts may instead induce firms to design routine, low productivity jobs, which they can fill through the use of fixed term contracts' (2002: 244). In their study, they found that the later scenario is more likely with fixed-term contracts having a negative impact on productivity.

### 4.2 *Pay and Benefits*

The relationship between pay and productivity is well-researched. This dimension includes pay levels and satisfaction with pay (Irvine et al. 2018) and these twin indicators are germane here. Economic theory posits that more productive workers earn higher salaries than less productive workers. Therefore workers seeking to maximise their salaries will aim to work more productively. The 'happy worker thesis' would argue that well-compensated workers are happier and, therefore, more willing and able to perform well at work. Bosworth and Warhurst (2020) report 8% higher productivity amongst workers most satisfied with their pay. However, the relationship between pay, satisfaction and productivity is not straightforward. Research has identified a tipping point whereby salary increases return satisfaction benefits but only up

to a point (Kenny 1999; Munoz de Bustillo et al. 2005). Overall, the research suggests a positive relationship between productivity and pay, including ESOPs and PRP schemes, across multiple national contexts and at various levels of analysis: individual, firm and sector.

Interestingly, Taiwo (2010) found that pay had a more significant impact on productivity than human capital (the latter usually expressed as skills and/or qualifications). In this study, 70% of worker-respondents reported that higher pay and supportive work environments would lead to productivity improvements.

*“My main theory is a happy person, a motivated person will do, obviously, the best job. A happy person will take pride in their work, will take pride in their quality, will think about their customer, and so on.” – Operations Improvement Team Lead at Collins*

Other research examining the relationship between pay, benefits and productivity focuses on performance related pay schemes (PRP) and employee stock ownership programmes (ESOP). These studies have examined the relationship between compensation schemes and productivity at the individual, firm and industry levels.

At the individual level, Booth and Frank (1999) examined performance related pay's effect on worker productivity (estimated via an increase in wages). They found a positive relationship between PRP and productivity. Theirs is also one of the few studies to look at the impact by gender of the worker. They found that the return on PRP was higher for men than women (9.3% and 5.6% respectively).

Several international studies examining firm-level productivity find a positive correlation. Based in part on employer reporting, Black and Lynch (2001) found that a profit-sharing system positively affects productivity – but only when extended to non-managerial employees. Drawing on managers' perceptions of their firm's financial performance, Kersley et al. (2006) found that profit-related payments extended to workers were perceived by these managers to positively affect firm performance. Using firm-level panel data, Gielen et al. (2010) found that PRP increased productivity by 9%.

Jones and Kato's (1995) study provides an important temporal context to the relationship between compensation and productivity. Examining the relationship between pay incentives through ESOPs and bonus pay systems and productivity, they found that positive effects were delayed. Firms that implemented an ESOP saw a 4-5% increase in productivity but only three to four years after instituting the programme.

Pay incentives schemes have been examined by Pendleton and Robinson (2010, 2017). In their 2010 study, Pendleton and Robinson looked at ESOPs' effect on productivity, using the data from the UK's Workplace Employment Relations Survey (WERS). This firm-level analysis found that ESOPs significantly positively affect productivity. However, in firms where there is minority involvement in the scheme, additional forms of employee voice and involvement are needed for the ESOP to be an effective means of improving productivity. In their subsequent study, Pendleton and Robinson (2017) again looked at pay incentive schemes to assess productivity, this time in private sector organisations with five or more employees in the UK. They compared three types of pay incentive schemes: individual payment by results, group payment by results and profit sharing. Of the three types, only profit sharing was shown to work on its own to improve productivity. In general, however, a combination of incentive schemes had a stronger effect on productivity, Pendleton and Robinson found.

In a firm-level study of productivity in manufacturing firms, Bender et al. (2016) analysed matched employer/employee data and found that nearly 30% of the improved productivity was due to workforce selection and positive pay premiums. However there can be differences by type of product being manufactured: Millea and Fuess (2005) elsewhere found that pay does act as a reward incentive in durable goods manufacturing but not in the non-durable goods manufacturing sector.

### 4.3 Health, safety and psychosocial wellbeing

Health and wellbeing are often bundled together but are not synonymous. Here we report the wellbeing research; we present the health research later in the report. Here we need to flag an assessment challenge: wellbeing is a broad term with a variety of measures. It is often loosely conceived and frequently proxied by job satisfaction, worker happiness and affect (or emotional) measures (Warhurst et al., 2017). This type of research resonates with the happy workers thesis mentioned earlier. As with pay, wellbeing's relationship to productivity is assessed at the individual and firm levels. Despite a conceptual looseness, the research overall suggests a positive relationship between productivity, wellbeing and job satisfaction. As such it supports the happy workers thesis: employees who are more satisfied as a proxy or measure for wellbeing tend to be more productive individually, which has aggregate benefits for firm and sector performance, though evidence of causality is limited.

*“For people to perform well, they need to be comfortable...we want people to be themselves at work” – Head of Employee Relations, FinTrU*

Several studies examine the relationship between wellbeing and job performance at the individual level. This research finds a positive correlation between the two; as worker wellbeing increases so too does job performance. Meta-analyses and large studies confirm this finding (and Bryson et al., 2017 provide state of the art reviews of this literature). Conversely poor wellbeing has a negative effect on productivity, at least across UK sectors (Bosworth and Warhurst, 2020).

Worker affect and reported job satisfaction have a positive effect on job performance. In a meta-analysis, Lymbomirsky et al. (2005) found a significant and positive relationship between job performance and positive affect (or positive emotional response). Judge et al.'s (2001) meta-analysis examining the relationship between job satisfaction and performance found a high correlation. In other individual level studies, Staw et al. (2004) and Zelenski et al. (2008) conducted longitudinal studies found that job-related affect was predictive of subjective evaluations of employee performance. Oswald and Sgrio (2015) conducted a randomised control trial experiment with students. In it, happiness increased productivity, and lower happiness was systematically associated with lower productivity.

Some studies examine the relationship at the individual and firm levels. For example, in another meta-analysis, De Neve et al. (2019) found a significant, strong and positive correlation between employee satisfaction and employee productivity *and* company productivity. However, De Neve et al. admit that claims of causality cannot be made from their meta-analysis. Similarly, analysing the relationship between human resource management (HRM), wellbeing and individual/organisational performance, Peccei et al. (2019) identified three models of how these three variables interact: 1) full mediation, 2) partial mediation and 3) parallel outcomes. Each model's outcomes are broken out into mutual gains, conflicting

outcomes and losses. Peccei et al. find that the most robust empirical support is for full mediation mutual gains models and parallel outcomes mutual gains. In short, their work finds evidence that HRM enhances performance either directly or through employee wellbeing. Similarly, research examined wellbeing at work through Covid-specific flexibility and support policies by the CIPD and Simplyhealth (2022) found that firms that take a 'strategic' approach to employee wellbeing and support policies are more likely to report positive outcomes for both employees and firms. Mutual gains are not always found however. Ho et al. (2020) considered the role of HRM in shaping both employee wellbeing and productivity in the UK. Some of the literature finds that HRM is beneficial for both employees and employers, while other research finds it is only good for employers (the authors term this outcome the 'wellbeing paradox').

Examining data just at the firm level, Bryson et al. (2017) provide empirical evidence for the relationship between workers' subjective wellbeing and productivity gains using linked employer-employee data. Employee satisfaction was measured along nine dimensions (pay, sense of achievement, scope for using initiative, influence over the job, training, opportunity to develop skills, job security, involvement in decisions, and the work itself). Performance was measured using managers' assessments of financial performance, labour productivity and the quality of service/good. Echoing the happy worker thesis, they find that employee job satisfaction is positively associated with labour productivity (as well as financial performance and quality of product). In another study of job satisfaction's relationship to productivity, Böckerman and Ilmakunnas (2021) examined matched data sets that combined plant-level data and a household survey that included job satisfaction data. They identified a causal relationship between satisfaction and productivity in manufacturing plants. In their analysis, a 1% increase in job satisfaction increased the plant's productivity by nearly 5%.

*The HR Business Partner at Collins explained the importance of fostering worker connection: 'How do we have this more connected, content and engaged workforce? Because ultimately that will translate to a more efficient [workforce] or more effective costs per head.'*

To assess industry-level relationships between wellbeing and productivity, Peroni et al. (2022) found that industries in Europe with more satisfied workers have higher levels of labour productivity. They also found that job satisfaction predicts productivity growth, with a unit increase in average job satisfaction in an industry resulting in a 5-percentage point increase in labour productivity. They conclude that 'there is a statistically significant link between worker wellbeing and labour productivity in industries' (p.59).

#### 4.4 Job Design and the Nature of Work

In practice, job design might be better called work design as it typically focuses on work organisation. At one stage during the second half of the 20<sup>th</sup> Century, job design, particularly in relation to the introduction of new technology and its impact on productivity, had significant research and policy attention (Guest 2022). This and other research show that some forms of job design lever productivity gains, while others are questionable in outcomes. In this respect, the current interest in High Performance Work Systems (HPWS) would seem to be fruitful.

An early example from Trist and Bamforth (1951) looked at the mechanisation of coal mining. A shift from team-based production to a more mass-production form of work organisation resulting from this mechanisation resulted in suboptimal productivity. As Guest explains, 'the important insight [from the study] was that it was not sensible to focus on maximising the



technical system alone, as Taylorism seemed to advocate, or the social system alone, which the human relations movement emphasised, but instead it was necessary to optimise both at the same time' (2022: 24). From this research a socio-technical systems approach and Quality of Working Life (QWL) movement developed that sought to combine new technology and particular forms of job design (i.e. work design) to optimise individual and firm outcomes, with productivity gains made and sustained in some cases over the 1950s-1970s. Although the QWL movement and its research largely waned from the mid-1970s, there are now calls for its renewal in the context of the new digital technology and expectations that this technology will deliver greater productivity (Grote and Guest 2017; Avis, 2018). Given that the call for a renewal of QWL is very recent, there is currently no empirical evidence of its impact.

In between the old and new call for QWL, lean production became vogue in many firms. It is premised on the redesign of work into teams with multiskilled workers. Great claims were made that companies with lean production, most notably in Japan, have much higher productivity than those with mass production in the US and Europe (Womack et al. 1990). Analysis by Williams et al. (1994) cast doubt on these claims. Revisiting the calculations used by Womack et al., Williams et al. discovered weaknesses in the measurements. Recalculations revealed that these Japanese firms were no more productive, even less productive, than many of their US and European competitors.

Beyond these specific types of job design, Moon (2009) undertook a theoretical examination of various economic models that relate to job design, earnings and the labour market. Productivity was measured at an abstract level, and job design was assessed based on whether jobs involve narrow, specialised tasks or broadly defined general tasks. Perhaps resonating with Williams et al.'s findings, Moon found that jobs with broadly defined tasks are less productive.

Of more interest recently have been HPWS. HPWS seek to stimulate more effective employee involvement and commitment to work in order achieve high levels of performance (Belt and Giles 2009). Arguments in favour of HPWS suggest that firms can take the high road to improved firm performance and productivity through effective HRM that creates a skilled, motivated, and involved workforce (Warhurst 2018). These HPWS have been shown to positively affect productivity. Meta-studies by Combs et al. (2006) and Jiang et al. (2012) found a strong and positive relationship between HPWS and firm-level productivity. The relationship was found to be stronger in studies in the manufacturing sector. Jiang et al. (2012) found that skill, motivation, and opportunity-enhancing HR practices resulted in improved firm-level financial outcomes. These findings are borne out in country-level studies of productivity and HPWS. A survey of Australian employees and managers at 77 service sector firms found that firms with HPWS were 12% more productive (Boedker et al. 2011). A Jordanian study with HR managers compared HPWS (measured by ability, motivation, and opportunity-enhancing factors) and productivity (self-reported company performance). It also found a positive relationship between the two (Obeidat et al. 2016). Moreover, in a quasi-experimental study looking at firms that introduced HPWS, Tregaskis et al. (2013) found that firms that implemented it experienced sustained improvements to productivity.

Training is one of the features of HPWS. Research indicates that some job training programmes lead to productivity gains, but not all. A 2011 meta-analysis by CEDEFOP assessed the relationship between employee training programmes and employer productivity. As in other studies, results were strongest in the manufacturing sector. Firms in non-



manufacturing industries had less likelihood of seeing productivity gains from employee training investment. A later study from CEDEFOP (2012) analysed industry data from across Europe. It found that employer-funded training led to productivity gains but employee-funded training did not.

#### 4.5 *Social Support and Cohesion*

Beyond the initial, limited analysis of Bosworth and Warhurst (2020), no research was identified on this dimension. In their initial analysis across UK sectors, Bosworth and Warhurst note a positive relationship, particularly from work teams but that it is not statistically significant.

#### 4.6 *Voice and Representation*

Much of the literature on the relationship between voice, representation and productivity focuses on the presence (or absence) of trade unions and collective bargaining agreements in a firm. However, as discussed below, a series of recent studies examine alternative forms of voice. Overall, the effect of worker's voice through unionisation are mixed but can be good in certain industries and certain countries. Non-union forms of worker voice have shown positive increases in productivity.

The presence of collective bargaining and trade unions, in theory, can increase productivity by setting wage floors high and forcing unproductive firms out of the market and increasing firm incentives to innovate and improve working conditions and worker voice (OECD 2019; Braun 2011; Acemoglu and Pischke 1999; Haucap and Wey 2004). Alternatively, in theory, the presence of unions can reduce productivity by reducing incentives for firm innovation investment and create limitations in changes to the organisation of work (flexibility) (OECD 2018).

A meta-analysis found that union coverage increases productivity in non-manufacturing industries but not in manufacturing industries (Doucouliagos and Laroche 2003). The OECD (2018) report cites research showing that collective bargaining can positively or negatively affect firm productivity. The outcome depends on specific features of collective bargaining systems and factors: wage floors, profit sharing, centralisation and coordination.

Single-country studies have identified positive relationships between productivity and union presence. In Norway, Barth et al. (2017) found that an increase in union density led to increases in firm-level productivity and wages. Similarly for the UK, Haskel (2005) found a significant and positive relationship between union recognition in the workplace and firm-level productivity. This relationship may however be declining in the UK, Manchin and Stewart's (1996) examined firm-level productivity (based on subjective managers self-reporting) and the presence of a trade union. They find that while the presence of a union did increase productivity, the effect has declined over time. Interestingly however, workers in UK sectors having voice and representation at work results in the highest (14%) productivity gain in Bosworth and Warhurst's (2020) recent analysis.

Bryson et al. (2006) found a complicated relationship between collective bargaining and productivity in the UK. They found a strong relationship between management responsiveness and productivity but did not find a significant relationship between voice (union and non-union) and productivity. However, voice was the best at eliciting managerial responsiveness. In the US manufacturing sector, Black et al. (2001) compared productivity with worker voice and pay.

They found that unionised firms that have promoted joint decision-making and incentive-based pay have higher productivity than non-union plants.

Other forms of worker voice are assessed in the literature ranging from participation in works councils, seats on corporate boards to opportunities to provide managers with feedback. The presence of works councils positively affects productivity (6.5%), according to a study of German manufacturing companies (Muller 2009). Jager et al. (2021) also examined worker representation on corporate boards in Germany as a natural experiment to assess worker voice's effect on productivity (measured as value added per worker). They found that firms with a shared governance system, with workers on corporate boards, produce higher output and have a 2-8% increase in labour productivity. Harju et al. (2021) conducted a quasi-experimental study of Finnish worker voice and productivity also focused on board membership. The presence of workers on firm boards slightly improved labour productivity, capital intensity and firm survival and had no negative effects on profitability, Harju et al. found.

Wu and Paluck (2022) conducted a longitudinal field experiment with work groups in Chinese factories. For the treatment group, weekly team meetings were redesigned as participatory meetings, wherein workers provided feedback to their managers. For the control groups, team meetings remained one-directional avenues of information sharing from manager to worker. The treatment workers had higher output per hour than the control workers, and this effect continued after the treatment. It suggests that an increase in worker voice drove higher productivity. Another experiment in India looked at workers with access to an app to provide anonymous feedback to HR (Adhvaryu et al. 2021). Quit rates were 10% lower in the treatment group. However, worker productivity and wages were unchanged.

A randomised experiment by Cai et al. (2020) provides further insight by comparing individual and team productivity after increasing worker voice at manufacturing facilities in China. Half of the workers were allowed to provide direct feedback to their managers and to evaluate their manager's performance. Although there was no change in individual productivity among the treatment group, team-level key performance indicators increased by 2.3%. The authors argue this outcome is likely due to the treatment's effect on quit rates. With fewer workers from the treatment teams quitting, they had less lost productivity due to less within-team turnover.

#### *4.7 Work-life Balance*

Work-life balance policies can encompass working time arrangements, flexibility (employer- and employee-led, schedule and location of work) and the intensity of work (Irvine et al., 2018). Studies examining the relationship between work-life balance and productivity are limited. Generally, the literature points to the adverse effects on productivity attributable to long working hours and fixed working time arrangements. The literature suggests that work-life balance initiatives that address these issues can improve productivity at the firm level.

Shephard and Clifton (2000) examined overwork and unpaid overtime's effect on firm-level productivity (measured by value added per total hours worked). Using US manufacturing data, they found that overtime had a negative effect on productivity. All things equal, they found that a 10% increase in hours worked led to a 2-4% decrease in productivity.

Beauregard and Henry's (2009) review examined the role of WLB policies in mitigating the negative effects on productivity attributed to long hours and unpaid overtime. They found that WLB policies are associated with improved firm performance. These findings are supported by earlier studies into the impact of WLB on productivity by Konrad and Mengel (2000). They

examined productivity (sales per employee) and the presence of WLB policies at 195 firms. They found the presence of such policies is positively associated with productivity. Moreover, these results were even stronger in organisations with a higher proportion of female or professional employees. In a multinational study of WLB policies and total factor productivity, Bloom and Van Reenen (2006) find that better-performing firms are more likely to be better managed and offer WLB policies. However, when controlling for quality of management, the relationship between WLB and productivity disappears.

*Offering high quality jobs is an important part of FinTrU's talent recruitment strategy:*

*"FinTrU's reputation and workplace helps the company stand out. We get great feedback on our culture, our training and development opportunities, salaries and hybrid working – which are so important to people." – Head of Talent Acquisition*

*"Whilst there is a vast array of opportunities within Northern Ireland, there is a skills shortage. We need to make sure we are attractive and competitive. We want to recruit and retain the very best talent. We want people to stay with FinTrU and develop with us." – Head of Employee Relations*

Flexibility can relate to working time and places of work. With respect to working time, Goudswaard et al. (2013) conducted a comparative case study of five companies in the retail and automotive sectors in three countries. They found flexible working time arrangements to be positively linked to productivity (measured by labour productivity). However, causality could not be determined. On the basis of this finding, the authors suggest that a triangular relationship exists between working time flexibility, improvement in work-life balance, and increased motivation and psychological conditions leading to better productivity.

Flexible places of work, including remote or hybrid working, is often core to WLB policies, particularly since the Covid pandemic. However, the literature is inconclusive about the effects on firm performance (Goudswaard et al., 2013). While several studies point to the benefits of flexible location of work (Beckel and Fisher, 2022; Eurofound 2020), there is evidence to suggest that spatial flexibility leads to challenges such as establishing boundaries between work and personal life (Felsted, 2022).

Ranses et al. (2022) examined workers self-reported productivity levels and remote working. Using survey data from a single firm in the UAE, the authors found a strong, positive and significant relationship between remote working and productivity. However, again drawing on an employee survey from a single organisation, this time in the Lebanon, Shouman et al. (2022) found no significant relationship between WLB policies and organisational performance, though the authors note that there are other firm-level benefits of gender-inclusive WLB, such as organisational branding.

Examining flexible working during the Covid pandemic, Felsted and Reuschke (2021) found that workers reported that their productivity was not affected by the shift to remote working. The authors found that 70% of employees reported they could get as much done working at home during the pandemic as they had before Covid-19. As the pandemic continued, this figure rose to 85% of workers.

Thus, longer working hours can impede productivity. Generally, studies have identified a positive relationship between WLB and productivity, particularly some forms of flexible working, though there is a question as to whether the effect can be explained by the presence of effective management.

## 4.8 Summary

There is heterogeneity in the evidence linking job quality to individual, firm, and industry-level productivity. Some of the seven dimensions of job quality have more robust evidence bases than others. Furthermore, while many studies have identified correlational relationships between various measures of job quality and productivity, few have confirmed causal relationships.

Despite the lack of clear, conclusive evidence of the relationship between job quality and productivity, there is reason to be optimistic. Where there is literature, it indicates there is a positive relationship between productivity and specific measures of job quality, as Table 3 below summarises.

**Table 3: Summary of findings on job quality and productivity using the Good Work dimensions**

Dimension	Summary finding
Terms of employment	While temporary employment negatively impacts productivity, no research appears to exist on the range of employment contract types and productivity.
Pay and benefits	A positive relationship between pay and productivity exists across national contexts and at individual worker, firm and sector levels.
Health and wellbeing	A positive relationship exists between productivity, employee wellbeing and job satisfaction at individual worker and organisational levels.
Job design and the nature of work	Some forms of job design, including Quality of Working life and High Performance Work Systems, can improve productivity in certain industries.
Social support and cohesion	Very little research exists; some on teamworking suggests a positive relationship with productivity but is not statistically significant.
Voice and representation	The effects of unionisation are mixed but can be good in certain industries and certain countries. Non-union forms of worker voice have shown positive increases in productivity.
Work-life balance	Longer working hours impede productivity. A positive relationship can exist between work-life balance and productivity, particularly for some forms of flexible working.

There is no analysis of the potential cumulative effect of these dimensions on productivity. In the case of HPWS, there is evidence that bundles of work practices (and some employment practices in some studies) have an integrative effect, though there are debates about how many and which practices constitute a HPWS (Warhurst, 2018).

## 5. Job quality and wellbeing/health

Employee ‘wellbeing’ is a popular way to frame the function of job quality (see Muñoz de Bustillo et al., 2011). However measurement of wellbeing is varied and inconsistent. One frequent measurement is job satisfaction. Such studies are useful but job satisfaction is not synonymous with health. For this reason, in this section, we focus on studies that directly report on health outcomes, whether mental or physical, in relation to the seven dimensions of Good Work. Unlike the other findings sections, it is able to draw on systematic reviews and meta-reviews. Where available, evidence is disaggregated by the type of health – namely physical or mental health, the latter sometimes referred to as psychological or psychosocial health.

### 5.1 *Terms of Employment*

This sub-section summarises evidence on the health associations of temporary employment, job insecurity and employment precariousness. Job insecurity, defined as the likelihood of involuntary job loss, can be both subjective, based on perceptions about this likelihood, and objective in terms of holding a temporary or permanent contract (Sverke et al., 2002). Temporary employment can have different forms, seasonal and task-based for example, and lengths but basically involves a defined, short period of formal employment. Precarious employment has no agreed definition and can refer to a number of precarities: employment insecurity, income inadequacy and lack of rights and protection. for example (Kreshpaj et al., 2020) Considerable evidence indicates that job insecurity and precarious employment and, to some extent, temporary employment have adverse mental health outcomes.

Cheng and Chan’s (2008) review concluded that job insecurity correlated negatively with physical and psychological health but that this correlation was not of uniform strength across the workforce. A number of subsequent systematic reviews and meta-reviews have looked at specific health outcomes. Niedhammer et al. (2021), for instance, in their meta-review found that job insecurity was linked to depression, coronary heart disease, diabetes and anxiety. From their meta-review, Harvey et al. (2017) concluded that both job insecurity and temporary employment are risk factors for depression, anxiety and stress as mental health outcomes but tempered their conclusion by stating that further assessment was needed of studies’ methodological robustness.

A number of recent reviews have also assessed the health associations of employment precariousness, including studies that measured precarious employment with either mono-dimensional (e.g. job insecurity, temporary employment) or multidimensional conceptualisations. In their systematic review and meta-analysis, Pulford et al (2022) found that ‘persistent’ precarious employment (especially job insecurity) was linked to poorer self-rated health, and that (persistent) job insecurity, temporary employment and multiple spells of precarious employment were also linked to adverse mental health outcomes. Reviews including multidimensional studies of employment precariousness with no exposure length restriction concluded that precarious employment was linked to adverse mental health in most primary studies (Jaramillo et al., 2022; Utzet et al., 2020). In addition, a rapid scoping meta-review suggested that the Covid-19 pandemic might have further deepened the health inequalities potentially attributable to employment precariousness (McNamara et al., 2021).



## 5.2 Pay and Benefits

This research tends to focus on the link between income (rather than pay) and physical and mental health. The interest in income likely driven by two factors. The first is methodological/conceptual, as income is a broader measure than pay and a more comprehensive measure of spending power. The second is methodological convenience, as the majority of studies rely on survey or administrative data, which are more likely to collect data on individual or household income instead of individual employee pay. That said, pay is still a good proxy of income. In the UK, for example, an estimated 78% of income comes from salaries/wages/pay,<sup>5</sup> though there is variability in this share across socio-demographic groups. This sub-section first presents evidence on pay (narrowly defined) and benefits, and physical and mental health, followed by income. The evidence is clear: better pay is associated with better mental and physical health outcomes. Some work-related benefits are associated with lower mental health problems. Higher incomes are associated with better physical and mental health outcomes.

In Thomson et al. (2022)'s systematic review of how changes to income impact mental health and wellbeing for working-age adults found only four studies related to pay: Boyd-Swan et al. (2016), Burmaster et al. (2015), Evans and Garthwaite, 2014) and Reeves et al. (2017). Reeves et al. show that the 1993 introduction of a national minimum wage in the UK led to a reduction in depressive symptoms in low-wage earners; though the treatment group had no change in physical health, as measured by blood pressure, hearing ability or smoking. Similar results were found with the introduction of a living wage at a private factory in Dominican Republic, where workers had fewer self-reported depressive symptoms compared to the control group 15-16 months after the intervention (Burmaster et al., 2015). In the US, the introduction of the earned-income-tax-credit (EITC) in the early 1990s was shown to have a positive effect on the mental health of mothers.<sup>6</sup> Relative to women without children, married mothers experienced a 15.7 percent decrease in depressive symptoms, a 4.4 percent increase in happiness and a 10.1 increase in self-esteem (Boyd-Swan et al., 2016). These four studies all used quasi-experimental methods and thus argue a causal link between changes in pay and mental health.

Findings from survey research (Ernst et al. 2004; Penz et al., 2008), and interview data (Archibald, 2006) identify an association between pay and burnout among nurses. Beyond the pay levels of individuals, there is also evidence to suggest that relative pay matters. Platt et al., (2016) show that where female income was less than the matched male counterpart, the odds of both depressive disorder and major generalized anxiety disorder were higher among women versus men.

With respect to benefits, the main benefit assessed in the literature is parental leave, and how it relates to (primarily) mental health. Heshmati et al.' (2023) systematic review of 45 articles found that paid parental leave was associated with improved maternal mental health, more time off is better for post-partum and longer-term maternal mental health, and that spouses are affected by each other's leave – use of paternal parental leave tends to benefit maternal

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<sup>5</sup> See: Sources of household income - GOV.UK Ethnicity facts and figures (ethnicity-facts-figures.service.gov.uk)

<sup>6</sup> Beneficiaries of this benefit need to earn to be eligible and earnings come from pay. Any changes to the EITC would be correlated with/arise because of changes in pay, which is different to other unconditional income-based welfare benefits.

mental health and longer maternal leave is linked to decreased paternal anxiety. These findings are similar to those reported in an earlier systematic review by Aitken et al. (2015) whose study was limited to maternity leave and maternal health. According to Aitken et al., in addition to mental health, paid maternity leave can be good for general and physical health.

Broadening the scope to from pay to income, there is significantly more evidence on physical health, and more corroboratory evidence on mental health. With respect to physical health, studies have looked at cardiovascular health, lung cancer and oral health. Few studies, however, are longitudinal.

From systematic review and meta-analysis, Khaing et al. (2020) estimate that relative to high-income status, those in low- and medium-income groups have higher odds of having coronary artery diseases, cardiovascular events, strokes and, ultimately, cardiovascular deaths. A meta-analysis of 64 original studies showed a significant increase in the risk of lung cancer among the lowest socioeconomic categories for income, educational attainment and occupational categories (Sidorchuk et al., 2009). The results were more conclusive for women compared to men. Looking at income and oral health, Singh et al. (2019) conclude that low individual/household income is associated with oral cancer, the prevalence of dental cavities and traumatic dental injuries. The review also qualitatively confirmed that low income is associated with periodontal disease and poor oral health-related quality of life.

With respect to mental health, studies looking at income confirm the results found from those which looked at pay only and reviewed above (i.e. Boyd-Swan et al., 2016; Burmaster et al., 2015; Ernst et al. 2004; Evans and Garthwaite, 2014; Penz et al., 2008 Reeves et al., 2017). Thomson et al. (2022) examine income changes on mental health/wellbeing. They find that either an income increase was associated with improved mental health or a fall in income with worsening mental health. Importantly, Thomson et al. note that a fall in income had a larger effect on mental income compared to an income gain. Other reviews have shown that there is a positive relationship between low income and common mental disorders (e.g. anxiety, depression and post-traumatic stress disorder) (Lund et al., 2010).

### *5.3 Health, safety and psychosocial wellbeing*

A number of reviews and meta-reviews have been published on the links between work and health. Much of this research draws on concepts such as job strain or Effort-Reward Imbalance [ERI] or Karasek's (1979) Demand-Control model.<sup>7</sup> The first, ERI, considers the interplay of (high) work-related effort and (low) rewards (see Kivimäki et al., 2018). The second that work-related stress originates from workers' simultaneous experience of high demands and low control in work. Often, job insecurity and long working hours are investigated jointly with and as part of psychosocial risk factors (e.g. Niedhammer et al., 2021) but are discussed separately under Terms of Employment and Work-Life Balance respectively in this paper. For this dimension, research finds that high demands and high strain without mitigation are linked to physical and mental ill-health.

A meta-review by Fishta et al (2015) concluded that psychosocial factors (including demand-control as well as job insecurity) were associated with cardiovascular morbidity (unhealthiness) and mortality (death). Harvey et al.'s (2017) meta-review identified work-related risk factors for common mental health issues, including anxiety, depression, and

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<sup>7</sup> We note that another strand of research focuses not on work and employment practices but exposure to physical hazards in the workplace is out of scope here.

stress. Their investigation found that high job demand, low job control, low social support are negatively related to these mental health outcomes. Effort-reward imbalance was also related to mental ill-health as a whole. A third meta-review by Niedhammer et al. (2021) concluded that job strain and high strain were related to an increased risk of coronary heart disease, and high strain (although not job strain, which takes account of both job demands and decision-making power, and physical health) was also identified as a predictor of an increased risk of stroke (Niedhammer et al., 2021).

Karasek's (1979: 287) seminal work notes that 'job strain occurs when job demands are high and job decision latitude is low'. It is linked to a modest increased risk of diabetes by some, but not all, reviews, and it was linked to a slightly increased risk of obesity in some other studies. In addition, nearly all of the included reviews found a significant association between psychosocial risk factors including job strain, ERI, bullying, violence and depression. Moretti Anfossi et al.'s (2022) review of different work exposures and medically certified cardiovascular outcomes and found 'sufficient evidence of harmfulness' regarding job strain and cerebrovascular and ischaemic heart disease but also 'limited evidence of harmfulness' for effort-reward imbalance and cerebrovascular, hypertensive and coronary heart diseases – though these latter findings were critiqued in a subsequent letter to the same journal (Li et al., 2022). These findings are confirmed by Gallie (2023). He presents data from two other systematic reviews which show that the health consequences of high levels of workload (or work demands) are greater when workers lack control over how their work is carried out. Work that involves high demands but low worker control (i.e. 'job strain') leads to increased risks of psychological and physical illness. The first review, on the relationship between high demand-low control work and psychological illness, shows that such conditions lead to a 74% increase in depression (HSE, 2021). The second review, on the implications of workplace stressors for mortality risks, shows that workers with low job control have a 21% increased risk of all-cause mortality and a 50% increased risk of coronary heart disease mortality (Taouk et al., 2020).

*The Head of Employee Relations at FinTrU explained that the cost of offering high quality jobs often is already built into a business model, but in different ways:  
"Quite often the costs are built in. If people come back to work [from illness] too soon as the company did not provide the policy, then that can have a direct impact on their work and on their entire team as well as themselves. It is a necessity for the company to invest in their people."*

#### 5.4 Job design and the nature of work

This dimension encompasses use of skills, control at work, opportunities for progression and having a sense of purpose (Irvine et al., 2018). The evidence base tends to focus on task control/autonomy, task variety and work content. Most studies assess links with mental health but some examine some aspects of physical health such as cardiovascular health and obesity. The evidence is clear that increased control over tasks and task variety is positively associated with health, particularly mental health.

Bambra et al.'s (2007) systematic review shows that changes in the level of control at work was associated with significant changes in self-reported mental and physical health. Mental health outcomes include stress, burnout and depressive symptoms, while physical health outcomes include musculoskeletal disorders and general health. Earlier studies also support

an association between task autonomy and work ability, where work ability was measured using an index of both physical and mental health indicators with self-assessed ability to meet work demands. Pohjonen (2001) finds a positive association between lack of autonomy and poor work ability and Tuomi et al. (2004) show that an increase in opportunities for influence and decrease in mental demands at work is good for work ability. Previous work by Tuomi et al. (2001) show that lack of freedom and uninspiring work are negatively correlated with work ability, while utilisation of work experience was positively associated.

Another strand of research has focused on particular types of workers. In the case of health workers, a study of ICU nurses (Poncet et al., 2007), confirms the finding above about task autonomy, whilst also providing evidence that task variety is also beneficial. Engaging tasks and having autonomy over choosing days off were associated with lower odds of burnout. Other studies of nurses have shown task variety and task identity (Chaboyer et al. 1999), as well as professional autonomy (Iliopoulou and While, 2010) matter for minimising burnout and improving job satisfaction. For young workers, two studies found that aspects of work such as high job boredom, low skill variety, low autonomy, high job insecurity, and lack of reward were associated with depressive symptoms (Wiesner et al., 2005; Yoon and Kim, 2013). Evidence from a longitudinal study also showed that young individuals who experienced two or more adverse job conditions (low control, high demands, high insecurity, and unfair pay) were more likely to report poorer mental health, compared to those not in the labour force (Milner et al., 2017). Basu et al. review of health workers also suggest that burnout was most prevalent among younger staff and those with fewer years of experience in the specialty.

The results reported above suggest an association between job design and the nature of work and health – particularly mental health. That said, an important consideration is how these dimensions interplay with individual factors. Van de berg et al. (2009: 211) aptly note that ‘individual differences are large and lifestyle factors such as physical activity in leisure time may substantially influence the balance between work capacity and work demands.’ In addition, there is often interaction with this dimension and other dimensions of job quality. For example, Basu et al.’s (2017) review note several studies assess skills/tasks autonomy alongside high work volume, long working hours and high work intensity. Similarly, Chaboyer et al. (1999) position work content (variety, autonomy, task identity and feedback) alongside work environment (ward facilities, collaboration with medical staff, cohesion amongst nurses, staffing, pooling and respected by others), and in so doing show the inter-relationship between ‘job design and the nature of work’ and ‘social support and cohesion’.

## 5.5 *Social support and cohesion*

The literature on this dimension is rich, and often relies on occupation specific studies. It suggests that social support from colleagues and managers can positively help mental health amongst employees.

Donovan's (2022) review of research on first responders concludes that peer support facilitates post-traumatic growth and coping with stress. Findings also suggest that support and acknowledgement from colleagues and management may reduce symptoms associated with burnout, secondary traumatic stress and depression among journalists who report on traumatic events (Dworznic, 2018; Weidmann et al., 2008).

Several studies have focused on health workers. A systematic review (39 papers) of emergency department staff (physicians, nurses, administrative and support staff) found that

social support from staff and supervisors was associated with fewer reports of burnout and depressive symptoms, and improved wellbeing/happiness and job satisfaction (Schneider and Weigl, 2018). Specific to emergency department doctors and nurses, low managerial and peer support was shown to be a key source of organisational stress in another systematic review (Basu et al., 2017). Similar results were found in review articles looking at peer support and burnout in paediatric oncology nurses (De la Fuente-Solana et al., 2020), and peer relationships, cohesion, feedback and burnout in nurses in general (Khamisa et al., 2013). Another systematic review highlighted the importance of regular supportive supervisory relationships and strong peer support networks (alongside balanced and diverse caseloads) in mitigating and/or preventing vicarious trauma and secondary traumatic stress of mental health professionals (Sutton et al., 2022).

Though the bulk of the literature has focused on workers who operate in occupations perceived to be more stressful (e.g. frontline workers and health workers), evidence from other sectors indicate a similar relationship between support at work and health/wellbeing. For instance, tech workers in the private sector and government workers who reported higher levels of co-worker and supervisor support were less likely to report work stress (McCalister et al., 2006). Nicholls et al.'s (2022) systematic review of academic researchers, concludes that job insecurity alongside high academic expectations increased the risk of poor mental health. However, access to peer support networks and mentorship (alongside opportunities for career progression) helped to mitigate work-related stress. The findings also highlight inequities in access to support by under-represented groups.

In general, the literature suggests that peer support from colleagues can help in coping with stress and supporting mental wellbeing. Beyond this point, some studies have identified worker resilience or 'hardiness' as a critical factor needed alongside organisational support structures (McCalister et al., 2006). That said, others argue that organisational structures can serve to build resilience. Research during the Covid-19 pandemic offers some practical recommendations on how to build and maintain resilience among frontline healthcare professionals during times of crisis. Elsewhere, psychosocial support teams are highlighted as a key variable (among others) for building resilience (Rieckert et al., 2021). Other studies in the health sector have assessed teamworking introduced by human resource personnel (Brown et al., 2000; MacDonald and Bodzak, 1999). Brown et al. and MacDonald and Bodzak both found that it had a positive effect on staff morale, sickness absence rates and turnover; whereas Lovgren et al. (2002) found a policy to promote an open climate instead increased burnout.

Another area for consideration – especially with the casualisation of employment – is that some occupations may not have formal co-worker/manager structures and therefore draw on informal arrangements. In this case, the results can be mixed. For example, migrant domestic workers often work alone but rely on other migrant domestic workers for peer support. These supportive relationships were instrumental for these workers, as many were not able to access formal support; however, there was the risk of passing on mental/emotional stress to those providing support (Ho et al., 2022).

A noteworthy feature of the literature in this area is the dominant interest in mental health as the outcome rather than physical health. This bias may result from the stronger a priori association between social support and cohesion and mental health (versus physical health), and the consequent empirical analyses in this area to test the hypothesised relationship. One



review on the organisational support and psychosomatic health complaints of emergency department physicians and nurses found no relationship (Schneider and Weigl, 2018). Two studies showed that poor management was negatively associated with the work ability of ageing workers, where work ability was measured using an index of both physical and mental health indicators (Pohjonen 2001; Tuomi et al., 2001).

## 5.6 Voice and representation

The voice and representation dimension includes trade union membership but also other forms of employee voice such as consultation arrangements (Irvine et al. 2018). The literature is significantly richer on the trade unions compared to these other forms of employee involvement for which little has been published. This research indicates that unions can have a positive effect on occupational health risks but little research examines union links to general employee health. What little research exists on the effect of other forms of employee voice on health is inconclusive.

Hagedorn et al.'s (2016) analysis shows that that, beyond higher wages and standard benefits and improved working hours, unionisation can positively affect physical health by reducing workplace hazards, and promoting wellbeing by encouraging democratic participation and a sense of community among workers.

On the first of these points, Donado's (2015) review notes that most empirical studies suggest a positive union/non-union injury gap, where unionised workers are *more* likely to have a non-fatal occupational injury compared to their non-union counterparts. However, Donado explains such findings have often been explained by reporting (unionised workers are more likely to report injury) and selection (unions tend to represent occupations with high occupational safety risks). There is also a wealth of evidence suggesting that unionised workers are less likely to become harmed on the job – including traumatic injury and fatalities (e.g. Amick et al., 2015; Economou and Theodossiou, 2015; Morantz, 2013; and Robson et al., 2022). These results are likely because union presence has a positive effect on the number of occupational health and safety inspections carried out (including in the presence of a union representative), violations cited and penalties (Sojourner and Yang, 2022). The implication is that unionised firms are less likely to violate safety standards (Morantz, 2017); and/or unionised firms tend to reduce risks through training and hazard identification and control strategies (Amick et al., 2015).

Beyond occupational health risks, the evidence to suggest a relationship between general physical health and mental health and unionisation is sparse and inconclusive. Reynolds and Brady (2012) show that union membership is associated with higher odds of reporting better self-rated general health, however they note much of that improved health may be attributable to higher incomes for unionised workers. Writing in a time of diminishing union power, a study by Eisenberg-Guyot et al. (2021) found that union membership was not associated with improved health (measured by self-assessment). The authors postulate that the absence of significant results may stem from the fact that changes in working conditions, wages, and benefits from union membership may be too weak to measurably improve health outcomes. A third study examined health changes linked to being in a union for workers nearing retirement (Wels, 2018). Descriptively the results are mixed – depending on how the variable is categorised. After factoring in work transitions, Wels shows that the odds of being affected by a negative change in depressive symptoms are lower for full-time unionised workers remaining in full-time job, moving to part-time work or moving to part-retirement.

Alongside unionisation, employee participation and consultation has also been argued to improve occupational safety (Pennie, 2008) but management support is vital in ensuring real change (Frick, 2011; Walters and Nichols, 2006). Others have argued that such consultation is often ineffective, leading to little change in the health and safety landscape (Coulson, 2008; Sargeant, 2001). Our review did not identify any research that specifically assessed the link between worker involvement and health, hence it remains an area for further enquiry, perhaps through a future systematic review.

## 5.7 *Work-life Balance*

Within this dimension, we focus on the health consequences of long working hours and shift work generally. Both shift work and long working hours are relatively prevalent factors amongst the working population and the research indicates that both can have adverse health consequences.

The hypothesised pathways between long working hours and health outcomes include an increased need for recovery after work, changes to health behaviour in terms of e.g. physical activity or alcohol consumption, sleep problems as well as exhaustion, circadian disruption and emotional distress (Bannai and Tamakoshi, 2014; Rugulies et al., 2021). Overall, small significant correlations between working hours and broad physiological health have been observed (Sparks et al., 1997). In terms of specific physical health outcomes, a meta-review by Niedhammer et al. (2021) suggested a link between long working hours and coronary heart disease, an association also supported by a systematic review by Bannai and Tamakoshi (2014). Moretti Anfossi et al. (2022), however, found sufficient evidence for lack of harmfulness between long working hours and coronary heart disease. Differences in inclusion criteria for these reviews (e.g. medically certified cardiovascular outcomes of different hours for long working hours) might explain some of these differing findings (for a critique, see (Li et al., 2022)). Discussions are also on-going on how robust the link between long working hours and coronary heart disease is and whether it only applies to particular socio-economic groups (Kivimäki et al., 2020; Li et al., 2020; Li, Rugulies, et al., 2020). Nevertheless, long working hours (>55 hours a week) were included in the WHO/ILO Work-related burden of Disease estimation and were estimated to be a leading cause of occupationally attributable deaths (WHO/ILO, 2021) Long working hours have also been linked to obesity (Niedhammer et al., 2021). Long working hours were negatively associated with safety and injury (Wagstaff and Lie, 2011), with working over 12 hours a day/55 hours a week associated with safety incidents (Matre et al., 2021).

Shift work may disrupt workers' circadian rhythm and lead to adverse health consequences (Rivera et al., 2020). It is important note that what constitutes 'night work' can differ depending on countries' legislation (Lee et al., 2018) and shift work is often defined as work carried outside standard working hours of 8/9AM to 4PM/5PM/6PM (Rivera et al., 2020; Wu et al., 2022; Zhao et al., 2019). Importantly, shift work can refer to multiple working time arrangements such as rotating shifts or constant night work, amongst others (e.g., Bannai and Tamakoshi, 2014). In terms of physical health outcomes, night-shift work has been linked to diabetes by two meta-reviews (Boini et al., 2022; Wu et al., 2022) although third meta-review found only very low-grade evidence for shift work due to heterogeneity (Rivera et al., 2020). Highly suggestive evidence linking shift work to risk of heart attack has been found by one meta-review (Wu et al., 2022) yet low-grade evidence was reported by another (Rivera et al., 2020). The link between shift work and breast cancer is relatively well-established (Rivera et

al., 2020; Hong et al., 2022; Wei et al., 2021). One review only found links between night shift work and breast cancer for exposure less than 10 years which might be partially explained by a healthy worker bias (Manouchehri et al., 2021). A meta-review found low grade evidence on the relationship between shift work and coronary heart disease (Rivera et al., 2020) whereas a review later found sufficient evidence of harmfulness (Moretti Anfossi et al., 2022). There is also evidence for night shift work being linked to obesity (Boini et al., 2022)

As for mental health outcomes in combination with long working hours or shift work, a meta-review and systematic review found that long working hours may be associated with depression and anxiety (respectively, Niedhammer et al., 2021 and Bannai and Tamakoshi, 2014) although the joint ILO-WHO investigation found inadequate evidence for depression (Rugulies et al., 2021).

Looking at working hours reduction (with no salary cut), a review of longitudinal interventional and experimental studies observed overall reduced stress amongst workers with reduced working hours but no clear conclusions could be drawn regarding their self-rated health (Voglino et al., 2022). A systematic review of systematic reviews found that changes to shift scheduling, including changing to forward-rotation had a positive influence on workers' mental health (Bambra et al., 2009).

## 5.8 Summary

This sub-section presented evidence for each of the seven dimensions of Good Work and employee health (rather than wellbeing). The research base is different here is that there exists a plethora of systematic reviews and meta-reviews of studies. Overall, the evidence demonstrates that there is a positive link between job quality and employee health – see Table 4 below.

**Table 4: Summary of findings on job quality and employee health using the Good Work dimensions**

Dimension	Summary finding
Terms of employment	Considerable evidence indicates that job insecurity and precarious employment and, to some extent, temporary employment have adverse mental health outcomes.
Pay and benefits	Better pay and higher incomes are associated with better mental and physical health. Some work-related benefits are associated with lower mental health problems.
Health and wellbeing	Unmitigated high demands and high strain in jobs are linked to physical and mental ill-health.
Job design and the nature of work	Increased control over tasks and task variety are positively associated with health, particularly good mental health.
Social support and cohesion	Generally, social support from colleagues and managers can positively help mental health amongst employees.
Voice and representation	A positive relationship exists between unions and minimised occupational health risks. Evidence on relationship between general physical health and mental health and unions is sparse and inconclusive.
Work-life balance	Long working hours and shift work generally can have adverse mental and physical health consequences.

It is noteworthy however, that in terms of interventions in jobs to improve employee health/wellbeing, there is again a tendency for those interventions to focus on particular aspects of the job rather than the job as a whole (Quinlan 2022). There may be integrative effects on health if such interventions adopted a whole job approach.

## 6. Limitations within the available data

The evidence that exists indicates a positive relationship between Good Work and the three organisational performance outcomes. However, the review also exposed some weaknesses and absences in the current evidence base.

For innovation, the prevalence of literature on Good Work varies by dimension. The prevalence of evidence is weak for the dimensions 'terms of employment', 'health, safety and psychosocial' and 'voice and representation', is moderate for 'pay and benefits', 'social support and cohesion' and 'work-life balance' and strong for 'job design and the nature of work'. Relatively few systematic reviews/meta-analyses were found, and thus our summary of findings has mainly relied on single empirical studies. Existing research uses a mix of administrative data (such as company records or patent filings), as well as survey data. Studies cover both firm and employees, though the emphasis tends to be more on managers and/or senior executives rather than employees. Different types of innovation were also covered. The evidence provides correlations between job quality and innovation.

The prevalence of literature on Good Work and productivity also varies by dimension. This prevalence is as weak for the dimensions 'terms of employment' and 'social support and cohesion', is moderate for 'job design and the nature of work', 'health, safety and psychosocial wellbeing' and 'voice and representation' and is strong for the of 'pay and benefits'. As with the literature on innovation, there were relatively few systematic reviews or meta-analyses. As with innovation, there was also a lack of research that examined multiple dimensions of Good Work and any interactive effects on productivity. Existing research drew upon a variety of data sources ranging from small to large scale surveys, administrative data, and quasi-experimental interventions. Productivity was measured in terms of labour-productivity, self-reporting, and measures of efficiency. Again, systematic reviews/meta-analyses are absent. While correlational relationships are identified between productivity and individual dimensions of job quality, directionality and causality remain undetermined.

The prevalence of literature on Good Work and employee health varies by dimension. The prevalence is weak for 'voice and representation', moderate for 'pay and benefits', 'job design and the nature of work', and 'social support and cohesion' and strong for 'terms of employment', 'health, safety and psychosocial' and 'work-life balance'. For 'work-life balance', the evidence base was particularly strong for measures related to working hours and shiftwork. For 'pay and benefits' there was a wealth of evidence on income but relatively less on pay specifically; hence our 'moderate' assessment for this dimension. There is a large number of systematic reviews, meta-reviews and meta-analyses covering different aspects of job quality and health. We have primarily drawn on these review papers in summarising the evidence presented in this report, complemented with individual studies in instances where there were limited review papers (such as with the 'voice and representation' dimension). Several studies use data from cross-sectional studies (based on surveys), and also cohort studies, case-control and longitudinal studies and quasi-experimental data. The syntheses mainly offer insights on correlations again, with few providing causal evidence.

Across all three organisational performance outcomes – innovation, productivity, and employee wellbeing/health – there is a lack of linked administrative data that would enable more insight and causal inferences. Such linkages are possible. Belgium, for example, has administrative data linking job quality and health (see Balogh et al. 2021). We noted earlier that there are attempts to develop this linked data for Good Work and productivity (Bosworth



et al. 2023; see also Administrative Data Research UK and the Longitudinal Linkage Collaboration). As it would with innovation and health, such data would help strengthen the evidence base.

Being able to analyse all seven dimensions of Good Work integratively would also help address the other weakness in data that we identified – the lack of studies examining multiple dimensions of Good Work in relation to innovation, productivity and employee health/wellbeing. There is a need for such analyses. Studies of HPWS indicate that it is bundles of work, employment and management practices that are most effective in driving organisational performance improvements, even if there exists debate about which bundles and how many practices comprise such systems (Warhurst, 2018). Having the supportive data and adopting a multi-dimensional approach will require new empirically grounded conceptual thinking about the mechanisms within firms by which synergistic integrative effects can be realised (cf. Benach et al., 2014). As a consequence it may be that causality can be ascertained.

Finally, there is limited relevant research on SMEs specifically in relation to Good Work and the three organisational performance outcomes – which is a challenge given that Northern Ireland has a high proportion of small firms. It is important to note, however, that the SME ‘sector’ is not homogeneous and contains a wide range of firms with varying levels of job quality and productivity at least (Ram and Edwards, 2023). As Ram and Edwards also point out, early research on job quality in small firms focused on indicators such as staff absence and quit rates. Whilst Ram and Edwards expand their research to include ‘less ambiguous measures’ (p.4) such as pay, working conditions and job [task] autonomy, there is an absence of research both covering all of the seven dimensions and how the different dimensions together might act cumulatively to drive performance improvements in SMEs.

## 7. Conclusion and recommendations

The research reported here has sought to explore the business case for good jobs, examining the relationship between, on the one hand, job quality, as expressed by Good Work and measured using the RSA/Carnegie seven dimensions, and, on the other hand, innovation, productivity and employee health/wellbeing. Its purpose is to explore the business case for more good jobs in Northern Ireland and, through these good jobs, improvement to Northern Ireland's economic performance. The research comprised literature reviews of the three relationships with illustrative examples drawn from two case studies of companies based in Northern Ireland. The literature reviews revealed some data gaps and some data weaknesses. However taken as a whole, the studies indicate that investments at firm level in good jobs will have performance benefits.

These findings offer good news for policymakers wanting to improve innovation, productivity and worker health/wellbeing in Northern Ireland. A number of reasons have been suggested as to why Northern's economy is relatively less competitive. None alone explain that performance nor provide a solution (Jordan and Turner, 2012). Improving job quality and creating more good jobs might be part of a range of measures that, combined, could deliver the step change in performance envisioned for the economy.

The findings also suggest that the Good Work dimensions are a useful foundation from which to develop an employment charter for Northern Ireland that promotes good jobs. Despite the different labels used in England, Wales and Scotland for their charters and related initiatives, there is strong content commonalities with the seven dimensions of Good Work (Zemanik, 2020; Dickinson, 2022; Warhurst et al., 2023). Parts of Belfast City Council's Inclusive Growth City Charter initiative too align with the principles of Good Work (Belfast City Council, 2021). There is thus currently a clear direction of travel for employment related policy.

### 7.1 Recommendations

The results of this literature review suggest a number of recommendations about how to progress good jobs policy in Northern Ireland.

*Recommendation 1: Northern Ireland should maintain policy aspirations that would deliver good jobs*

The results of the literature review clearly show that good jobs, using the Good Work dimensions, can benefit the innovation and productivity of firms in Northern Ireland as well as improve the health/wellbeing of their workforces, which in turn also helps firms by reducing sickness absence and retention problems for example. Working with the Labour Relations Agency and business stakeholders, the Northern Ireland Executive should update its plan for good jobs with a focus on firm level implementation.

*Recommendation 2: Northern Ireland ought to give serious consideration to implementing a good employment charter*

Good jobs clearly provide business benefits. Our analysis using the Good Work dimensions highlights which practices deliver those benefits. Focusing on these dimensions will therefore make an important contribution to delivering those business benefits. With the re-establishment of an Executive in Northern Ireland, there should be a concerted push to implement a good employment charter that incorporates all or a least many of these

dimensions. The implementation plan should be clear on roles, responsibilities and resourcing of the charter. It would specify who needs to do what, when, why and how. It should be devised and delivered in collaboration with business and other relevant stakeholders in Northern Ireland. It might also consider drawing in organisations in the public sector to act as model employers for a good employment charter.

*Recommendation 3: The results of this research should be used to educate and inform all firms in Northern Ireland of the business benefits of good jobs*

Communicating the business benefits of good jobs will be important if change is to occur in Northern Ireland. The findings of this literature review should encourage the Northern Ireland Executive to take a leadership role in promoting the need for change and the introduction of a good employment charter. Working with the Labour Relations Agency, the Executive should ensure that information about the business benefits of good jobs is easily accessible and publicly and widely available. This information should explain the need for change and the anticipated business and wider socio-economic benefits of making the change.

*Recommendation 4: There should be support for all firms in Northern Ireland to help them transition to providing more good jobs*

Many firms in Northern Ireland will recognise the business benefits of having good jobs. Some of these firms will already be providing good jobs, other firms will want to make the transition but will need support to do so. Information and education are useful but not sufficient. Practical support will be needed for firms. The establishment in Northern Ireland of a Workplace Transformation Unit, perhaps within the Labour Relations Agency, might be considered. This Unit would be a dedicated and identifiable advocate of firm level change and provide practical support for this change. Northern Ireland has a shortfall in management skills (Birnie et al., 2019). Support to improve management skills in relation to creating good jobs in particular will be necessary.

*Recommendation 5: Targeted support ought to be considered for small firms in Northern Ireland to help them improve the quality of their jobs*

There is a high concentration of SMEs in Northern Ireland, with almost 90% of all firms having less than 10 employees (NISRA 2020). Policy has rarely sought to systematically address the issue of job quality in small firms (Ram and Edwards, 2023). The results of the literature review here suggest that there is an untapped performance gains potential for small firms if they can improve the quality of their jobs. Ram and Edward's evidence indicates that business support to help make these improvements would be useful if tailored to the needs of the SME sector. Smaller firms tend to have more limited managerial capabilities and capacities. The Northern Ireland Executive might work with economic development agencies, business groups and professional bodies to develop and deliver programmes that provide this support to SMEs.

*Recommendation 6: Northern Ireland should consider including a measure of good jobs as part of its metrics*

The DfE has been collecting data on labour productivity and employment rates. Both measures are useful. It also proposes adopting 'good quality work' as another measure along with equitable pay and secure employment. This proposal should be delivered, with some of the key metrics developed by NISRA to measure job quality in Northern Ireland. NISRA might

also consult with the ONS on its evolving adoption of the Good Work measures (ONS, 2018, 2022).

*Recommendation 7: Researchers should be encouraged to address the data gaps and weaknesses around understanding of the business benefits of good jobs generally and in Northern Ireland specifically.*

The literature review clearly indicates the business benefits of good jobs for innovation, productivity and employee health/wellbeing. However it also reveals that there are gaps and weaknesses within the available data. This problem is compounded by current data availability challenges in Northern Ireland. There is currently limited research focused specifically on Northern Ireland's work and employment. Having a better evidence base of these practices will help policy development as well as evaluation of policy outcomes. Employment researchers in Northern Ireland's universities and independent research institutes should be encouraged to turn their attention more to Northern Ireland. This encouragement could be direct, through the competitive funding of such research by the Labour Relations Agency and, for example, the Department for the Economy; it could be indirect through the provision of formal support for research proposals to other funders such as the ESRC.

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## About ReWAGE

ReWAGE is an independent expert advisory group modelled on SAGE that is co-chaired by the Universities of Warwick and Leeds. It analyses the latest work and employment research to advise the government on addressing the challenges facing the UK's productivity and prosperity.

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