

Hard at Work



Job Quality, Wellbeing,
and the Global Economy
Francis Green

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Contents

<i>Preface</i>	viii
<i>Acknowledgments</i>	xi
<i>Acronyms</i>	xii

PART A FRAMING JOB QUALITY

1. The Significance and Terrain of Job Quality Science	3
The Call for “Decent Work” and for “More and Better Jobs”	3
The Definition and Significance of Job Quality	4
Job Quality Dimensions	9
Work and Life: The Comparative Importance of Job Quality for Wellbeing	14
Setting the Scene	18
2. Job Quality, Capability, and Wellbeing from Work	22
The Puzzle of Employment, Work, and Happiness	22
The Capability Approach to How Job Quality Affects Wellbeing	24
The Shape of the Curve	31
The Advantages of an Objective Approach	33
Job Quality and Trends in Wellbeing	35
The Capability Approach and the Significance of Job Quality Trends	41
3. Better Jobs or Worse?: The Forces Shaping Job Quality	43
Little Do We Know	43
Global, National, and Employer-Specific Factors Behind Changing Job Quality	45
Are There Predominant and Nationally Coherent Trends in Job Quality?	54
The Terrain of Job Quality Research	68

PART B JOB QUALITY NARRATIVES

4. Earnings Quality	75
Good News or Bad?	75
Earnings and Wellbeing	75

Earnings Determinants	77
Trends and Decoupling	80
Positive but Uneven Progress	90
5. Prospects and Precariousness	92
Jobs and the Capability for Future Planning	92
Prospects and Wellbeing	93
Prospects and Precariousness Theses	100
Trends in Prospects	105
Trends in the Cost of Job Loss	117
What's New	120
6. Working Time Quality	122
Duration and the Control of Flexibility	122
Working Time Quality, Health, and Wellbeing	125
Drivers of Working Time Quality	130
Trends	133
A Long Way to Go	143
7. Autonomy and Skill	147
Machine or Human? Autonomy, Skill, and the Capability for Meaningful Work	147
Direct Effects on Wellbeing	149
The Factors Shaping Autonomy and Skill Requirements	151
Trends in Job Autonomy and Job Skills: The 21st-Century Story	155
The Decoupling of Autonomy from Skill	162
8. Social Support and Workplace Abuse	166
The Workplace as Community, Source of Identity, and Locus of Divergent Interests	166
The Social Environment, the Capability for Support and Good Social Relations, and Wellbeing	167
Factors Shaping the Social Environment of Jobs	170
Trends in the Social Environment of Jobs	172
Conclusion: A Contrast Between Changes in Europe, the United States, and Elsewhere	179
9. More Demanding Work	181
"Hard Work"	181
Work Intensity, Capabilities, and Wellbeing	182
Origins of Work Intensification and De-intensification	186
Trends in Work Intensity	189
Work Well, Not Too Hard	194

10. Hazards and Harms of the Second Place	198
The Specter of Workplace Harm	198
Risks, Capability Deprivation, and Wellbeing	199
Development, Regulation, and the Composition of Industry	201
Trends in Risk Exposures	204
No More Hazards?	209

PART C BAD JOBS, JOB QUALITY POLICY, AND THE FUTURE OF WORK

11. The Conjunction of Job Quality in the Early 21st Century	213
From “More and Better Jobs” to the Onset of the AI Revolution	213
Overarching Findings	213
Forced Labor and “Bad Jobs” as Multiple Capability Deprivation	218
The Alkire-Foster Method	223
The Wellbeing Method	225
The Future of Work and Job Quality	226
12. Making Jobs Better	231
Agents of Change	231
Employers, “Mutual Gains,” and the Corporate Wellness Industry	231
Workers’ Exit and Voice	235
Regulation of Job Quality in the Social Democratic State	237
A Future for Job Quality Research and the Aspiration for Better Jobs	243
Appendix	247
<i>Notes</i>	249
<i>Bibliography</i>	262
<i>Index</i>	301

Preface

More than three billion people are at work across the globe, and everywhere, work takes up a huge chunk of the time they spend on this planet. Full-time workers in the United States, for example, spend nearly a third of their waking hours on their jobs; in Finland the proportion is lower, but in South Korea it is even higher. Not to mention the time spent traveling to and from the workplace. While at work, the world's workers must remain amply engaged in what they have to do, whether mentally, emotionally, or physically. So many people hard at work, and for so long!

Some must also work especially hard, laboring with unreasonable intensity, carrying out their tasks at a great pace, or always striving to meet pressing deadlines, attending to multiple tasks simultaneously, unable to pause for long. Often, they return home from work exhausted.

Spending time hard at work has been the experience of all but the privileged elites in human civilizations through the ages. This book springs from the conviction that if work is still taking up so much of our lives in this, supposedly much more affluent, 21st century, then modern-day social scientists had better be well placed to understand and account for people's evolving experiences in this realm. The social science of job quality, which I aim to set out here, is an emerging, interdisciplinary subfield that has gripped my imagination and engaged much of my own work time for the last quarter century.

In the crisis of the Great Recession that shook the global economy in 2008, job quality issues were pushed into the background behind the need to preserve *any* kind of employment. By contrast, during the COVID-19 pandemic lockdown crisis, job quality came to the fore in public discourse, with front-line workers being asked to turn up to the workplace and face the risk of infection. In the aftermath, young people in Western nations took advantage of good labor market conditions to secure better working arrangements. Some of the more privileged sections of the workforce questioned the need to return to the workplace every day, savoring the job quality advantages of flexibility and autonomy that had been revealed through working from

home. The nature of jobs has perhaps never been under such scrutiny. With the accelerated introduction of new technologies and management techniques driven by artificial intelligence, many people are concerned, too, about the future of work—about both the quantity of jobs that might be displaced and the quality of those that remain. Indeed, “future of work” projects, research centers, and networks are enjoying a heyday.

It is not such an extravagant claim that we should be able to build a comprehensive social science of job quality. Unless you believe that there will be a global revolution (which I do not), capitalism is here to stay for the foreseeable future, whatever disruptions climate change will bring. And capitalism means jobs, wherein people work, selling their “labor-power”—their potential to work—to capital owners in exchange for money. But there is an immense variety in the quality of jobs: from the best, where the work is meaningful, well paced, well paid with good prospects, safe, and a fount of social support and validation from a community, to the worst, where the working environment is dangerous and toxic and the work is low-paid, insecure, hyper-intensive and tightly controlled. Each of these aspects of jobs makes a difference to our lives; together, they matter a great deal, as evidence is now showing.

Who am I, an economist by training, to be writing about job quality? The short answer is that I have had a long-time fascination with the role that work plays in our lives. Though still an economist at heart, I reached out from labor economics many years ago and have come to the conclusion that a multidisciplinary perspective on this topic is essential. Work is something everyone does and many have opinions about because it has such a strong connection to everyday life. Yet while the issues start out seeming familiar, writing about work has its own hazards. It can be tempting to retreat into jargon, specific to one discipline or another, to render one’s arguments special and exclusive. Rather than give in to the lure of the disciplinary silo, I have aimed in this book to navigate a more open path, though no doubt the slip of my economics learning shows through. I minimize area-specific jargon that would be opaque to outsiders without recourse to consulting an online robot. I aspire to be convincingly scientific, drawing on and using terms that possess wide recognition among social scientists of all persuasions. The test of that should be found in the reasoning behind the ideas and in the evidence as it unfolds, not in whether I have conformed to the conventions of any one discipline.

This book is something of a sequel to my *Demanding Work*, which was published in 2006. It pursues the dimensions of job quality examined at that time, such as job insecurity and work intensification, but with application to many more countries. It is also substantially broader in its scope, covering several further dimensions and a concluding section on “bad jobs.” Conceptually, it builds on and elaborates the capability approach to job quality first mentioned in 2006. It uses this approach to frame the fundamental relationships of job quality to worker wellbeing. It draws on the large body of new knowledge accumulated by researchers in the intervening years, including the vast amount of empirical evidence, much refinement and some revision of concepts, and some limited evolution of public policy perspectives. Also greatly relevant is the explosion of new research on subjective wellbeing, including in the understanding of the experience of doing meaningful work. If nothing else, this new knowledge has confirmed how much the quality of jobs matters for the health and wellbeing of populations, and hence for social progress.

In addition, the first decades of the 21st century have seen a great deal of change in the global economic and political environment, including substantive economic growth, the pervasive deployment of digital technologies in production, intensifying extremes of top-end income and wealth inequality, economic crises, trade wars, real wars, and the COVID-19 pandemic. All these are potential drivers of job quality around the world. We need to try to understand better how it is evolving.

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Particular acknowledgement and thanks are due, also, to the people I have worked with on the British Employment and Skills Surveys over the years. At the forefront have been Alan Felstead and Duncan Gallie, but over the years I have also greatly benefited from ongoing collaboration with David Ashton, Golo Henseke, Hande Inanc, and Ying Zhou. I have also learned much from working from time to time with the European Working Conditions Survey team in Dublin, led by Agnès Parent-Thirion. It is appropriate, too, to add a remote acknowledgement to the survey workers and to all those who give their time to respond to the high-caliber surveys and in-depth interviews on which the social science of job quality is being built—what I call the “social telescope”—relaying to us the data we need to understand what is happening in that “second place” where everyone works.

Acronyms

Country Codes

Albania	ALB	France	FRA	Philippines	PHL
Andorra	AND	Germany	DEU	Poland	POL
Armenia	ARM	Greece	GRC	Portugal	PRT
Austria	AUT	Hungary	HUN	Republic of Korea	KOR
Belarus	BLR	Iceland	ISL	Romania	ROU
Belgium	BEL	Ireland	IRL	Russia	RUS
Bulgaria, Republic of	BGR	Italy	ITA	Slovakia	SVK
Canada	CAN	Japan	JPN	Slovenia	SVN
Chile	CHI	Latvia	LVA	South Africa	ZAF
Columbia	COL	Lithuania	LTU	Spain	ESP
Costa Rica	CRI	Luxembourg	LUX	Sweden	SWE
Croatia	HRV	Malta	MLT	Switzerland	CHE
Czech Republic (Czechia)	CZE	Mexico	MEX	United Kingdom	GBR
Denmark	DNK	Netherlands	NLD	United States	USA
Estonia	EST	New Zealand	NZL		
Finland	FIN	Norway	NOR		

Other

BSES British Skills and Employment Survey
 EWCS European Working Conditions Survey
 HILDA Household, Income and Labour Dynamics in Australia

ILO International Labour Organization
KWCS Korean Working Conditions Survey
OECD Organisation for Economic Co-operation and Development
USGSS United States General Social Survey

PART A

FRAMING JOB QUALITY

The Significance and Terrain of Job Quality Science

The Call for “Decent Work” and for “More and Better Jobs”

It was around the start of this century that international organizations, echoed occasionally by national governments, began to expand what they were saying about work. They called for measures not just to increase employment—their traditional focus—but also to improve the *quality* of employment. A new focus on “more and better jobs” was to be an aspiration, not just for higher wages but for improvement in all features of work and employment that contribute to wellbeing. Leading this new orientation was the International Labour Organization (ILO), promoting a new and evocative catchphrase—“decent work”—which, its director-general proclaimed, was “the most widespread need, shared by people, families and communities in every society, and at all levels of development.” The “primary goal of the ILO,” from then, was going to be to “promote opportunities for women and men to obtain decent and productive work, in conditions of freedom equity, security and human dignity.”¹

Not far behind, European Union (EU) heads of state announced a new objective at the Lisbon European Council meeting in 2000: “to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion.”² The Organization for Economic Cooperation and Development (OECD) soon also embraced the “more and better jobs” mantra even if, with respect to “better,” it would not receive really serious attention until much later.³ Then, in 2015, heads of state at the United Nations endorsed the 2030 Agenda for Sustainable Development, including SDG8, the goal to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.”

This goal was (and still is) a challenge, to say the least. By the end of the 2000s the European Lisbon strategy was widely thought to have been a

failure. By the early 2020s, economic development and progress in employment conditions had been affected by two global crises already this century and were being newly threatened by wars and geopolitical instabilities. Understanding of the key issues was also held back by conceptual and measurement confusions, by a lack of resources for relevant data collection, and by interest clashes between industry partners.⁴ Around the world, employment policy orientations leaned toward trying to create more “flexible” labor markets in support of employers rather than employees. Even without further health or financial emergencies, any future with “better jobs” has to contend with the proliferation of artificial intelligence (AI) systems at the workplace and with the imperative to adapt for climate change.⁵ In the developing world, the goal of decent work is a long way from being met, and policy-makers cannot ignore the persistent, huge informal employment sector almost everywhere.⁶

The Definition and Significance of Job Quality

Nevertheless, advances have been made, one of which is that the concept of job quality implicit in the aspiration for better jobs has, after early confusion, become more tightly specified—a prerequisite for scientific communication and endeavor. Job quality is constituted by the features of jobs that normally contribute to meeting workers’ needs from work. This definition can be taken as the foundational assumption underpinning the science of job quality, an enlivening multidisciplinary subfield of enquiry that has exponentially expanded, riding the wave of increased policy interest.⁷

Four features of this definition deserve comment. First, it focuses only on jobs. In contrast, “decent work” is conceived very broadly, covering not only job quality for all types of workers but also the labor market, social security, democratic participation, human rights, and ethical indicators such as the prevalence of child labor.⁸ Thus, the concept of job quality is an important component of decent work but is considerably narrower in its scope.⁹

Second, meeting workers’ needs from work signifies contributing to their wellbeing; indeed, this is another way of stating the foundational assumption. But just as there are different types of human need that can vary historically,¹⁰ there is a range of ways of conceiving work-related and general wellbeing—both eudaemonic and hedonic. To characterize job quality fully, we must consider these alternatives. Through this book I utilize an

application of the “capability approach” (which is developed in Chapter 2) to provide a framework for the understanding of wellbeing from jobs; while encompassing both eudaimonic and hedonic perspectives, this framework puts a particular emphasis on the scope of human agency through work. Third, the qualifier “normally” recognizes that people vary in their aspirations, needs, and circumstances, sometimes in ways that cannot easily be seen by others (including researchers). Higher wages normally increase people’s wellbeing because they can better satisfy their material needs, but that may not be true for all to the same extent. More autonomy at work normally helps to satisfy workers’ needs for self-determination, but those needs vary and are circumscribed by competence. A job characteristic is part of job quality if it contributes to satisfying workers’ needs on average, but in every setting there can be exceptions, which may disrupt the objective model of job quality. Even so, recognition of this variation is assuredly not to adopt a neoclassical subjectivism.

Finally, the accumulated validation of this definition stems, on one hand, from a combination of psychological, sociological, philosophical, and economic theories and, on the other, from the cumulating empirical evidence for how jobs relate to wellbeing. That evidence is mainly direct, through explicit studies of multiple forms of wellbeing (which are discussed throughout this book). Empirical support is sometimes inferred indirectly in economics, however, from experiments that derive the monetary equivalent of job quality attributes. The outcome is that, notwithstanding some variations, there is overall broad agreement over which job characteristics constitute job quality.

Before setting out these characteristics and how they may be classified, a little history of work can be helpful, in order to begin to appreciate the significance of job quality. After all, sociologists, psychologists, economists, ergonomists, and health analysts have been studying work for a very long time. For Greek philosophers Aristotle and Plato, work was not “virtuous,” since it deformed people, body and soul, and took them away from their leisure. All work was seen to be of low quality, even if ordinary Athenians in the fourth century BCE held what would much later be termed puritanical attitudes to work, deploring idleness.¹¹ Fast-forward to the 18th and 19th centuries, and we find that the quality of work has become part of the discourse of the classical political economists. For Adam Smith, work in the 1770s was made dull and extremely repetitive through the extensive division of labor in manufacturing. Though this kind of work was

deskilling, Smith supported the division of labor, seeing it as an inevitable cost of progress because of its industrial advantages. His remedy for mitigating this poor job quality, in the Scottish enlightenment tradition, was better education to improve the quality of workers' leisure time. In the same era, Thomas Malthus was even more pessimistic, maintaining that whenever the quality of work looked like it was improving, population expansion would always drag conditions down to subsistence level or below.¹²

For Karl Marx, neither the dullness of work nor the pressure on wages was inevitable. They came about because workers were alienated from what they do and make in a capitalist relationship (wages being exchanged for the potential to work) and because the capitalist economy was prone to recurring crises of mass unemployment that kept wages in check. His remedy, as is well known, was revolutionary because it required societal change before the experience of work could be improved. Yet what remains striking in Marx's writing is the centrality of nonalienated work in his ideal vision of a good life.¹³ Marx articulated the potential role that high quality work could play in giving meaning to people's lives. The faculty for doing good work—combining the conception, planning, and execution of tasks that transform what exists into something new and useful—is what sets the human species apart from the rest of nature.

Economics' idea of work continued in the tradition of Smith, however, regarding work as an inevitable "disutility" that had to be compensated by extrinsic rewards.¹⁴ Smith's normative economics became a key driving force at the start of the twentieth century in the United States, which was already the world's most advanced capitalist society. Though Frederic Taylor's efficiency engineers never achieved a universal acceptance of "time and motion" studies in American corporations, the philosophy of "scientific management" diffused across, especially, the corporate economy, encouraging employers to extend the division of labor to its limits, in order to ensure that knowledge of production technology was mainly monopolized by management rather than craft workers and to gain better control of the work process so as to increase production efficiency. Henry Ford added the advantages of a machine-driven assembly line in delivering closer control, further production efficiency, and intensified work effort. In the era of high Taylorism and Fordism, job quality was pulled apart in opposing directions: the intrinsic quality declined, but this was mirrored by better extrinsic quality in the form of higher wages—epitomized by Ford's

decision to double wages for working on his auto assembly lines to five dollars a day in 1914, so as to reduce labor turnover and enforce factory discipline.¹⁵

Not all workplaces and normative views of work developed in this way, however. Reacting to scientific management, socio-technical systems theory was developed at London's Tavistock Institute in the mid-20th century, offering to promote both a better quality of work life and improved productivity through an optimal combination of the social organization of the workplace with then-prevalent technologies. Its key policy was the championing of autonomous working groups. An interdisciplinary evidence-based research program on the "Quality of Work Life" briefly flourished in the 1960s and 1970s, alongside the development of health and safety at work, reduced hours, implementation of paid holidays, greater worker autonomy, equal opportunities, and industrial democracy, usually with Scandinavian countries in the vanguard. Then came development of the idea of "human-centered technology" design, in which the users of technologies were to be harnessed as a source of creativity and knowledge. Nevertheless, these ways of reimagining work were never widely diffused. Though some of the ideas survived, the Quality of Work Life movement as a whole declined thereafter amid conceptual confusion, the socioeconomic changes that followed the global crises of the 1970s, and the beginnings of neo-liberal politics.¹⁶

For US psychologists, the study of work and of how it meets or fails to meet people's needs mainly revolved more around the determinants of job satisfaction (a concept that would be exported in the 1970s to economics and, though against the grain of the dominant, neoclassical economics, would be slowly taken up over ensuing decades).¹⁷ Frederick Herzberg's theory, predominant both in scholarly psychology papers and in workplace practice, was that the factors that made for high job satisfaction (and therefore worker motivation) were systematically different from those that led to job dissatisfaction (the lack of "hygiene" factors). Later, that framework gave way to a combined theory of worker motivation, commitment, and satisfaction that, it was argued, were related to certain objective, measurable characteristics of people's jobs: the variety of tasks to be done, task identity, task autonomy, the meaningfulness of tasks, and provision of feedback.¹⁸ The design of many jobs and countless scientific studies have been subsequently guided by this "job characteristics" model. Also influential since the 1980s has been the "demand-control-support" model of worker stress, in

which a lack of autonomy combined with excessive work demands and deficient social support is predicted to generate the worst conditions and the greatest risks to health.¹⁹ Improved work design, informed by these models, would be beneficial for both employees and the organizations they work for.

Meanwhile, sociologists' conception of work emphasized the enduring importance of social class in distinguishing between the work of professional, managerial, and other occupations, according to their levels of control, autonomy, and skill. Especially in the United States, economic sociologists documented the postwar emergence of segmented labor markets—one sector with good jobs, including relatively high pay, job security, and good prospects for wages to rise with seniority in the corporation, and the other with low-wage, insecure jobs.²⁰ With relatively little intersector mobility, this segmentation bolstered class distinctions and reproduced ethnic and gender discrimination in job quality.

As a scientific topic, therefore, job quality is by no means new; yet, beginning at the end of the last century, it has been refined within and across several disciplines, using modern social scientific methods and evidence. Though not yet always consistent, it has become a distinct subfield for study and for potential policy action.²¹ The models of job quality that underpin this book and most present-day research, while having deep roots in the thoughts of classical writers, emerge from the “job characteristics” and “job satisfaction” bodies of knowledge, while also echoing the human-centered normative orientation to work organization and technology design of the Quality of Work Life research program.²² But they diverge from these traditions in two distinct ways. First, the models concern *only* those characteristics that affect wellbeing, in the broad sense of meeting the work-related needs of those doing the jobs. The relationship with wellbeing in its various forms is the subject of Chapter 2. Second, job quality is *exclusively* about the needs of workers, not those of employers. Modern job quality models follow the assumption common to both the classical writers and modern-day economics—namely, that the labor contract is an exchange between two parties with ultimately opposing interests.

This second point is vital. Socio-technical systems theories and subsequent quality-of-work-life papers have often been based on an assumption that potential mutual gain is universal. If so, advocacy for job quality improvement would become in its essence just a problem of persuasion, using scientific evidence where possible—a task of enlightenment. Yet that assumption is unconvincing, and one does not have to be a hardened

economist to think so. True, economic sociology theory provides a possible mechanism through which higher job quality might positively affect organizational outcomes: higher wages may call forth the reciprocal gift of higher discretionary worker effort.²³ In psychology's terms, employer policies that improve job satisfaction will also raise worker commitment and effort and, hence, organizational performance. Some empirical evidence is supportive, even if it is not always possible to establish the direction of causation.²⁴ Yet that evidence is sketchy and could not be used to establish that raising job quality would *always and everywhere* raise organizational outputs: one need only point, for example, to the high profits revealed by companies that deploy low-wage labor in modern warehouses. Still less can we assume that it would be universally beneficial for employers' profits if they improve job quality in their factories and offices. Raising job quality normally incurs costs for the employer, which might or might not exceed the additional revenues obtained from any improved organizational outputs; this much is rather obvious.²⁵ Studies of company investment in occupational health and safety exemplify this point: Some such investments are found to be cost-effective, while others are not.²⁶ In studying job quality, one must of course take into account the differing interests and behaviors of employers; indeed, employers' choices make a substantive difference.²⁷ But the distinction between workers' needs and employers' objectives cannot be sidelined.²⁸ Many books and papers have been written about the objectives and performance of businesses; this is not one of them.

Job Quality Dimensions

The job characteristics that constitute job quality can usefully be classified in various dimensions. No one classification is perfect or immutable, and since writing *Demanding Work*, my preferred classification has evolved and expanded. Working as a consultant for the European Foundation for Living and Working Conditions, and in collaboration with other scholars, I proposed adopting a classification with seven dimensions. These may be loosely divided between "extrinsic" dimensions, where the features might be identified explicitly within labor contracts, and "intrinsic" dimensions, which encompass characteristics of the work itself and its context. This typology, sometimes referred to as the "job quality framework", has been endorsed by the European Parliament and can be seen in use elsewhere.²⁹

The extrinsic dimensions are

- Earnings. These measure the extent to which jobs meet workers' material living needs, with high wages obviously being better and very low wages linked with poverty.
- Prospects. This is the group of features relevant to the future. Good prospects are found in jobs that offer high job security and the potential for future earnings growth.
- Working Time Quality.³⁰ The features of working time relevant to workers' needs include its overall duration, timing, and flexibility. High-quality working time means avoidance of very long working hours, flexibility for workers to have some control over when to work, and minimization of working patterns such as night shifts that are known to be detrimental to health.

The intrinsic dimensions are

- Autonomy and Skill.³¹ High-quality jobs are ones that allow significant autonomy (including good opportunities for employees to organize their work and influence the tasks they are performing), utilize workers' skills well, deploy higher-level skills in complex jobs, and provide training and opportunities for learning.
- Work Intensity. Distinguished from working time, work intensity refers to the rate of physical and/or mental input to work tasks performed during work time.³² A high-quality job minimizes the extent to which the work is highly pressured, with intensive tasks having to be done at high speed or to meet pressing deadlines with few pauses.
- Social Environment. A good social environment fosters support from coworkers and line managers and an absence of abusive experiences, such as verbal maltreatment, threats, humiliating behavior, physical violence, bullying, or sexual harassment.
- Physical Environment. High-quality jobs are ones that avoid health risks, including environmental hazards and posture-related vulnerabilities.

For the sake of clarity, throughout this book I refer to these dimension concepts using title case and deploy italic font when I refer specifically to an index for each dimension.

Typologies can have disadvantages, and job quality research should not lose sight of the common forces potentially affecting multiple dimensions, such as macroeconomic pressures. As Smith explained in the 18th century, one dimension may influence another through labor market competition: Wages can adjust to compensate—positively for poor intrinsic job quality and negatively for good intrinsic job quality. Even though competition is far from perfect, because workers cannot normally be well informed about conditions in all dimensions in competing jobs, worker's moving into and out of jobs is a way for job quality dimensions to be mutually connected. The different dimensions may also interact in their effects on worker wellbeing. One can think of the above-described typology as a basic plan to guide research and understanding, without holding back the development of theories that link dimensions.

But why this particular classification? The simple answer is that it conveniently allows existing ideas about job quality features to be incorporated in an aspect or dimension of what workers need from their job. The classification is *not* derived from a modeling of abstract latent features according to statistical methods that ensure a high covariation of features within each dimension. Rather, theory and evidence are used to judge whether each job characteristic should be included as part of job quality according to whether it contributes to wellbeing and, if so, where it should be placed in combination with other features. For example, indicators of flexibility and avoidance of long working hours are collected together in Working Time Quality as multiple ways in which the time requirements of the job are meeting the time needs of workers; the physical hazard indicators are similarly combined to summarize the totality of the physical health risks to job-holders; earnings contribute to satisfying material needs.

On the whole, most job quality research deals with similar components, subsets, or variations on the above, often depending on the data available. There is no widespread dispute about what objective features are to be included, yet the configuration in these seven dimensions is not fixed in stone.³³ Indeed, for this book I have expanded the scope of the dimension Autonomy and Skill, beyond the scope of the definition of “skills and discretion” that I suggested in 2012. It now includes the match between the job's requirements and the job-holder's skills; this is because a feature of a good job is one where the employer designs jobs and recruits, trains, and deploys workers appropriately, which will enhance skill utilization.³⁴ Modification of the indices in each dimension may also be required in order

to adequately describe the specificities of new job forms, such as platform work.³⁵

Dimensions and the Case for Multidisciplinarity

It may seem obvious that a multidisciplinary theoretical and empirical approach is called for in order to study job quality. Such an outlook is usually followed but, unfortunately, is not always respected by practitioners in disparate fields of study. As I noted ruefully in my earlier book, *Demanding Work*, while economists often define job quality as just wages, and sociologists sometimes define it by ignoring wages altogether!³⁶ Such scientific inconsistencies are disconcerting.

One reason within economics for focusing only on earnings has been that they are easier to measure than intrinsic aspects of job quality. While this is often true, measurement of nonwage components is nevertheless feasible, and increasingly, data are being gathered; much of the problem stems from insufficient resources having been devoted to this end by statistical and other authorities. In fact, some economists have deployed stated preference methods to measure the job characteristics that are valued through the trade-offs workers make with pay.³⁷

Another offered justification is the presumption that other dimensions are closely associated with wages. This presumption might be deemed valid in some situations, because employers wanting to reward highly valued workers may do so in many ways, including pay and other working conditions. But it does not follow from this that earnings are so closely correlated with other dimensions that we could simply use earnings as a single index for all job quality. In fact, the presumption of a *close* correlation between wages and other dimensions is strongly refuted.

Figure 1.1 illustrates this refutation, using data on all dimensions of job quality from across Europe in 2015. The figure shows that, with the exception of the *Autonomy and Skill* index, where the coefficient is 0.38, the correlation coefficients are below 0.3. There is zero correlation with the *Social Environment*. With *Working Time Quality*, the correlation coefficient with earnings is negative, meaning that high-earning workers experience a somewhat lower working time quality than lower earners.³⁸ The correlation with *Work Intensity* is positive, showing that high-earnings workers on average are required to work somewhat more intensively. Whatever the reason

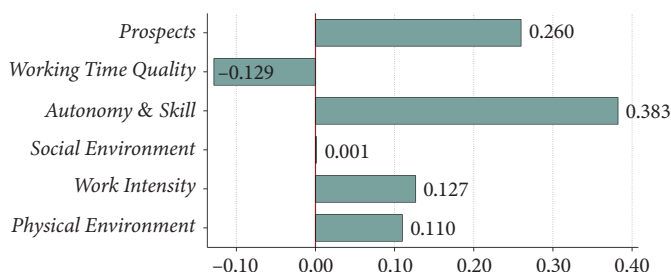


Figure 1.1 Bivariate correlation between monthly earnings and other job quality domains in Europe

Source: European Working Conditions Survey (EWCS) 2015 (thirty-six countries)

for these low (and “wrong-signed”) correlations with nonwage working conditions, the *Earnings* index alone is evidently not a valid measure of overall job quality.

Where other social sciences ignore wages, this is also unhelpful because extrinsic job quality features also matter for wellbeing and because wages may either compensate for or mediate in part the effects of other dimensions. Throughout this book my aim is to combine the best of all these social science disciplines into the study of job quality and wellbeing.

Assessing the Case for a Single Dimension and Single Index

Letting wages stand in for job quality as a whole is one manifestation of the more general temptation to designate a single index of job quality compressing all dimensions into one. Rather than a statistical dashboard, showing how a country or region or subpopulation is faring on each dimension, some have proposed that a unitary overall index would elevate the standing of job quality alongside other single measures such as GDP or the United Nations’s Human Development Index.³⁹ Moreover, a single index would enable policy-makers to better define “bad jobs” and devise remedies for vulnerable workers who are caught in them. A common example of such a single index is *job strain*, the sum of the positive aspects of job quality (conceived as resources) net of its negative aspects (conceived as demands);⁴⁰ each aspect is typically dichotomized into good or bad, so that the index is simply the count of the good aspects minus the bad.

Against having a unitary index is the argument that job quality dimensions are quite different from each other and that the development and monitoring of job quality policies is more likely to be aided by having indicators relevant to each area of policy or practice. A single indicator risks obscuring the complexities of job quality and its determinants that are manifested in its multiple dimensions. A further risk in many practical situations is that few job quality items are measured; studies that combine these and call them overall job quality are making a mistake, because the measured items, like wages, are typically poorly correlated with other dimensions of job quality. Thus, a single-index approach should be based on reasonably comprehensive data across all or most dimensions, and even then it has the additional problem of involving a decision about how much weight to give to each dimension in the construction of the overall index.⁴¹ Perhaps a single index might be warranted if it could be shown to deliver a theoretically justified, statistically parsimonious and efficient model of wellbeing compared with models deploying a small vector of job quality dimensions. But no such justification has, to my knowledge, been advanced, even for the widely used additive index of job strain: Studies typically overlook the loss of explanatory power that stems from reducing all job quality data down to a single index.

For most purposes the case for having multiple indicators is therefore strong, but it is subject to diminishing returns: The extra explanatory value of additional disaggregated indicators decreases and is eventually balanced by the additional cost in terms of lost clarity. Hence, most agencies and researchers have opted for a dashboard oligarchy of “a few” key indicators matching the selected dimensions—neither an opaque unitary index nor a confusion of indices with tens of hard-to-process numbers to watch. Nevertheless, there will be circumstances where the deployment of a single index is of value, as I am about to illustrate.

Work and Life: The Comparative Importance of Job Quality for Wellbeing

Theory tells us about the importance of job quality in the lives of humans. Yet how important is the *overall* quality of our jobs? Do they make a great deal of difference to our lives? And how does their impact compare with the effects of other parts of our lives?

If nothing else, the fact that everywhere such a long time is spent at work should alert us, at the outset, to the potentially high importance of jobs. In 2010, approximately 28 percent of the waking hours of the average Japanese or Belgian worker was spent at work. Less was spent in Finland (27 percent), but more in the United States (32 percent) and South Korea (34 percent). In all places, a minority were at work for much longer. With most people “hard at work” during those long hours, it seems more likely than not that the quality of their jobs would have made a considerable difference to their wellbeing. Moreover, we cannot take it lightly that survey respondents tell us over and again how very important the various dimensions of job quality are to them.

Indeed, 21st-century studies are now empirically confirming the huge importance of job quality for personal wellbeing, measured in a variety of ways. Several show large effects of multidimensional job quality indicators on general wellbeing, sometimes involving work-related wellbeing as a mediating channel. To illustrate, in one study the difference in life satisfaction between those in the worst jobs (at the lowest decile of job quality) and those in the best (in the top decile) amounted to approximately one standard deviation—in other words, a very substantial gap, even if not all of it could be attributed to the causal impact of being in a better job. Another study shows substantial causal effects of an index of working conditions on mental health outcomes across Europe. A third shows how working conditions help to account for substantive gender differences in health.⁴²

Figure 1.2 shows the association of all the seven dimensions of job quality delineated above with three indicators of health and wellbeing. The first is a conventional measure of psychological wellbeing (the WHO-5 index of mental health), the second is an indicator of the experience of meaningful work, and the third is an indicator that the worker perceives no risk to their health or safety from doing the job. Work Intensity is negatively correlated, as expected, with all these wellbeing indicators, while other dimensions are positively correlated with wellbeing, with one exception—namely, that higher earnings do not correlate with perceived health risk. Social Environment has the largest correlation with psychological wellbeing, Autonomy and Skill with meaningful work, and Physical Environment with perceived health and safety risk. While all these associations seem plausible, they are merely suggestive: They cannot, by any stretch, be interpreted as estimates of the causal effects of job quality dimensions on wellbeing. Throughout this book I cite studies of the effects of specific dimensions of job quality

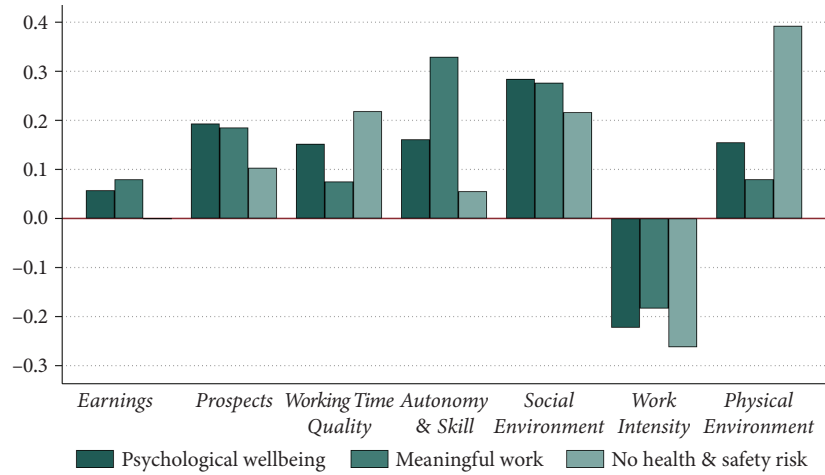


Figure 1.2 Bivariate correlation of job quality domains with wellbeing indicators in Europe

Source: EWCS 2015 (thirty-six countries)

on health and wellbeing that aim to control for confounding factors using a range of methodologies, a fertile and expanding area of modern-day job quality research. Nevertheless, Figure 1.2 illustrates that the links with wellbeing, while fundamental to the very concept of job quality, are likely to vary in magnitude according to the deployed concept and definition of wellbeing.⁴³

Some studies also show the *relative* importance of job quality, compared to factors in other spheres of life, in determining general wellbeing. Thus, one study shows that contrasts in working conditions, rather than in family circumstances, accounted for country differences in work-life conflict (the consequence of a poor work-life balance). Another shows that job insecurity can have comparable effects to being out of work.⁴⁴ The comparison with other life domains has also been made comprehensively in a 2024 study I led covering many countries.⁴⁵ We found that, among those in employment, variations in job quality accounted for roughly the same amount of variance in psychological wellbeing as variations in health—a little more among men than among women. By contrast, other factors that are also commonly found to affect people’s wellbeing—such as their education, their age or whether they have a partner—are relevant but matter far less than being in a good job or avoiding a bad one.

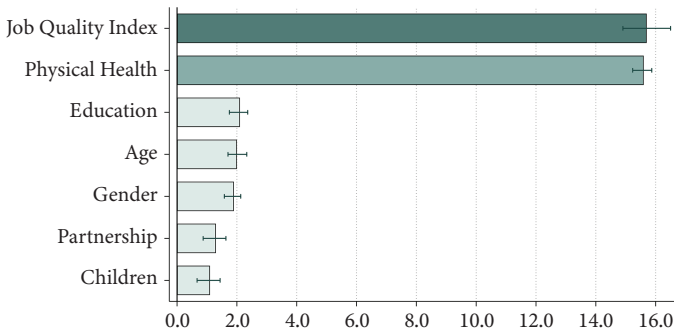


Figure 1.3 The comparative effect of job quality and other life domains on wellbeing in Europe

Note: Job quality index (median quintile versus bottom decile); physical health (good versus poor); education (university versus rest); age (others versus forty-five to fifty-four); gender (male versus female); partnership (partnered versus single); children (no child under sixteen versus any children under sixteen); wellbeing (measured with the WHO-5 wellbeing Index with a range of 0–100, and a standard deviation of 20.6).

Source: EWCS 2015

Here is an instance where the construction of a single index is of value to illustrate the point. Figure 1.3 displays the relative size of the association of a job quality single index for Europe with psychological wellbeing compared with effects of other variables. The index was constructed, for this purpose, from a combination of all seven job quality dimension indices.⁴⁶ The first bar shows a difference of just under 16 (on the 100-point scale) between the psychological wellbeing of those experiencing a middling level of job quality and those experiencing the worst—that is, the lowest decile of job quality. The second bar shows a similar difference in wellbeing between those in good and poor physical health. Both these effects are much greater than the wellbeing differences according to whether people are educated beyond high school, whether they are in mid-career (usually a low point), whether they are in a partnership, or whether they have children.

The same comparative story is found everywhere else that this juxtaposition is made: in Australia, South Korea, the United States, and each individual country across Europe. Consistently, job quality and health matter a lot, and other measured factors matter far less. In some countries job quality accounts for less of the variation in wellbeing—for example, Finland—because job quality is less unequal there than elsewhere. At the other end of the spectrum, job quality makes an especially large difference to psychological wellbeing in Hungary.

What most studies miss, however, are the external, social effects of job quality on others apart from the workers who fill the jobs.⁴⁷ The potential is there for jobs to affect the lives both of family members and of others in surrounding communities, through effects on health and through emulation and learning from others. The external effects of jobs could be usefully studied more extensively in further research. Whether such effects are positive or negative, the importance of job quality shown in existing studies seems likely to be a lower bound for its overall significance in society.

Setting the Scene

Encouragingly, even though “job quality” is narrower than the evocative concept of “decent work,” its enormous significance in ordinary working people’s lives around the world was already, by the time of the COVID-19 pandemic, coming to be appreciated more widely among social scientists. By the early 2020s hundreds of scholarly papers on job quality were reaching journals every year, compared to a mere trickle some two decades earlier. New investigations include some large-scale quantitative studies and many more small-scale investigations, some quantitative and some qualitative, of particular groups or occupations in specific places. The development of the nascent subfield of job quality studies represents one of the most promising and exciting challenges of modern labor research. Data resources are expanding, if slowly, and researchers are engaging with working people in their jobs across many jurisdictions. It remains, only for job quality issues to be taken more seriously by the designers of general social surveys, most of which have trailed behind the scientific trend in this respect.

In light of the newly understood importance of job quality not only for work but for general wellbeing and health, the issues surrounding job quality are edging into the realm of public health, where it is expected that governments should intervene on social grounds to protect job quality standards. I will consider this case for social intervention in some aspects of job quality within the confines of the 21st-century capitalist economy in Chapter 12. The idea underpinning this book is that what happens inside jobs should be considered a significant component of each nation’s welfare. When it comes to evaluating the social progress of nations, we should be able to add progress in job quality to the conventional list of items covering economic performance, longevity, health, and life satisfaction. Hitherto, there have been very

few studies of trends in job quality, usually applying to one or just a few countries or to short periods of time.

I am going to try to remedy this omission by posing and addressing in this book some generalized research questions for each dimension and country: How has job quality changed during the course of the first two decades of the 21st century? Specifically, what are the average trends for the various dimensions of job quality in different countries? How, if at all, is the inequality of job quality changing, including those based on gender? How should any such changes be understood within the frameworks of economic and social theory? What regularities, if any, can be detected in these changes across nations, industries, and demographic groups?

Dimensions and the Structure of the Book

To set the scene, the book proceeds in Chapter 2 by delineating how the capability approach enables us to conceive and elucidate the connections between job quality and wellbeing or health. Chapter 3 then sets out the general theoretical frameworks that provide potential accounts and predictions about how job quality may change as economies grow, technologies move on, and industrial relations evolve. I use these frameworks to develop and frame some overall stylized facts about these trends.

The backbone of the book, throughout Part B, is constructed around the classification noted above, the seven dimensions of job quality, with a chapter devoted to each. I consider the state of evidence linking each dimension to wellbeing (including their interactions) and set forth my (and others') findings about how they have been trending. While this framework is European in its origin, its scope of application extends across the modern world to wherever even partial data are available. This is no simple task, owing to the scarcity of data about people's jobs across the world. Given the importance and significance of job quality for working people's lives, already noted, it is striking that most of the world's statistical authorities and most general social survey designers have made so little effort to help understand the nature of jobs. There are encouraging exceptions, however, and signs of progress in tracking job quality. Most prominent are the European Working Conditions Surveys, complemented by national efforts such as the long-running bespoke surveys dedicated to the quality of working life in Finland and Sweden, and more general workplace surveys in Britain and France.

Working condition surveys modeled on the European one were extended first to the Republic of Korea in 2006 and later to the United States, to China, and to a number of Latin American countries, including Argentina, Chile, Uruguay, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. Most of these do not yet constitute usable time series of consistently measured job quality features. Yet the basis is there for future comparisons, and some of these I am able to use in this book.

Synthesizing many of these sources, and other partial data taken from more general surveys, I aim to build a picture of how job quality has been changing during this century. With the framework of the human capability approach to structure how I view the relationship of each dimension of job quality to wellbeing, and thereby deploying insights from a range of disciplines, I shall examine how each dimension is, in principle, determined and how it is changing.

Part C uses what has been learned to frame consideration of the future for job quality and of the scope for reducing the prevalence of very low job quality and, indeed, for making jobs better across the spectrum. Chapter 11 aims to set the scene for thinking about job quality in the future of work. It first pulls together my findings about the predominant trends in job quality and how they are interrelated, before reviewing what can be said about bad jobs and how they are trending. It then considers implications of two major disruptions in the 2020s—the COVID-19 pandemic and the accelerated deployment of AI in the workplace—for the future of job quality. Chapter 12 examines whether and how corporations, workers, and the state, separately or in combination, can use their agency to make jobs better. The first emphasis is placed on the dark side: the proliferation of extremely bad jobs, many of which entail forced labor or what is sometimes termed “modern slavery.” The paramount need for national and international interventions to seek out and proscribe such practices and to enforce regulatory controls is stressed.

I must acknowledge here at the start the many salient contributions of other writers (including those operating in policy-oriented organizations) to developing this science subfield. I have tried to build on these, to draw them into a conjunction with my own contributions to this collective endeavor, much of this in collaboration with coresearchers, and to generate a new synthesis of the state of the art at this time of writing. The book brings a number of new contributions: a distinctive new perspective drawn from the capability approach that enriches our understanding of the relationships between job quality and human wellbeing, evidence on trends in all seven dimensions

of job quality across countries and how they are related, and an assessment of theoretical frameworks in relation to these trends and how dimension-specific trends are related. It adds a review of the nature of bad jobs and how these may be measured and considers evidence on how these are changing. Lastly, the book puts forth a consideration of policy principles in the context of potential job quality futures.

In the age of AI, it is perhaps more important than ever to understand as best we can what is happening to this sphere of life, wherein the world's workers set out each day to spend a substantive part of their lives at work; this book aims to make a start. Some of my conclusions are set out with some confidence. However, in making use of the available data, I have no illusions that that they provide anywhere near a comprehensive picture of how jobs are changing. Not least, the scarcity of data greatly limits what can be deduced about job quality trends in poorer countries so far this century.

With this new and evolving subfield of job quality studies, a program of enquiry covering diverse circumstances and contexts is already opening up; for a long time to come, it should prove a rich hunting ground for researchers looking for socially useful, scientific research topics. It is a subfield with its own Lakatosian core assumptions (the foundational assumptions surrounding how job quality dimensions relate to need satisfactions) and with fertile space to develop novel testable hypotheses about the drivers and effects of job quality dimensions.⁴⁸ This research program contributes to the ILO's wider project of "decent work." The development, testing, and application of hypotheses about the determinants and effects of job quality, across a truly global range of contexts and drawing on ideas from across disciplines, seems a worthwhile endeavor. Especially in light of the enormous importance that can be attached to variations in job quality across and within countries, the program offers the potential for developing productive insights into the factors that affect people's lives so much across the world. From this, one can also expect an improved understanding of the possibilities and limitations of policies and movements to improve people's jobs and thus also their lives. With enough resources, the future of job quality research could promise much.

Job Quality, Capability, and Wellbeing from Work

The Puzzle of Employment, Work, and Happiness

Are you happy right now? In 1881 Francis Edgeworth—a British utilitarian economist—dreamed up a striking thought experiment about how to answer this question. He imagined “a psychophysical machine, continually registering the height of pleasure experienced by an individual. . . . From moment to moment the hedonimeter varies; the delicate index now flickering with the flutter of the passions, now steadied by intellectual activity, low sunk whole hours in the neighbourhood of zero, or momentarily springing up towards infinity.”¹ Fantastical and intriguing though it may have seemed to a Victorian sensibility, in modern times we can pose this seemingly intimate question on an industrial scale. With smartphones, willing recruits can report instantaneously to inquisitive academics how “happy” they are. With the participation of tens of thousands over many days, one study showed that people are less happy when they are at their work than when they are doing almost anything else.² Only being ill makes them more unhappy!

And yet, around the world, when asked to say how satisfied they are with their lives, or to report on the state of their own mental health, those who are unemployed—and therefore not working at all—are much less content than those in employment. This might seem obvious, because the unemployed have lower incomes. But the effect on life satisfaction of being employed is so large that it cannot be explained away by the lower satisfaction of material needs. Even after taking account of the impact of income loss when people are out of a job, they remain significantly less satisfied with their lives until they reenter employment.³ They want to get back to work even though they are not so happy actually working.

To unravel this puzzle, it is enough to recall that there is a distinction between hedonic wellbeing, which refers to the pleasure and satisfaction derived from activities, and eudaemonic wellbeing, which refers to the extent

to which people lead meaningful lives in accordance with their values and meeting their personal goals. The everyday happiness revealed in the smartphone study largely reflects the more immediate hedonic, emotional aspects of wellbeing at work. Yet the life satisfaction that stems from the state of being employed is both hedonic and eudaimonic: it is a measure of evaluative wellbeing. When people assess their lives, they are making a cognitive appraisal of themselves and their situation, and those that are employed are likely to factor in the identity, meaning, self-worth, social status, and structured social environment that comes from their jobs—much of which would be lost if they became unemployed.⁴

Whatever concept of wellbeing is chosen, the foundational assumption behind job quality science is that each dimension of job quality normally has *some* impact on one or more types of workers' wellbeing. This impact underpins the essence of “quality” in jobs, and it is this definition that delineates the space for analysis and policy action.

It follows that the effects of having a job, rather than being unemployed or altogether out of the paid labor force, are not expected to be the same for everyone: they depend on the quality of the job. Indian economist Amartya Sen shows, in his pathbreaking book *Development as Freedom*, that paid employment outside the home is a vital route toward women's empowerment and development. Yet the efficacy of this path to liberation varies with the types of jobs on offer. In the global economy, getting an insecure, low-wage temporary job increases life satisfaction much less than gaining a well-paid secure one.⁵ A job where your work is closely monitored and controlled is nothing like as good as one that allows you some leeway to do the job well, using your judgment.

While evidence specific to particular dimensions will be noted throughout the book, this chapter goes to the heart of the general association between job quality and wellbeing, looking at how that relationship comes about and how it is shaped. Social scientists studying work have had much to say in recent decades about *how* the characteristics that make up job quality affect workers' wellbeing, and it remains an ongoing, buzzing subfield that should be especially exciting for researchers with a respect for interdisciplinary perspectives.

There is no better way of framing this general relationship than through the lens of the capability approach, which spotlights several aspects of the connection. This chapter sets out this framework, which then provides the large-scale map for seeing one's way through the book and for locating the

science of job quality that is unfolding in the pages of scientific journals. The chapter uses this approach also to frame our understanding of workers' subjective experiences of work while reaffirming that job quality is defined by the objective features of jobs. The chapter concludes by considering what, if anything, might be inferred about trends in job quality from what is known about trends in general or work-related wellbeing.

The Capability Approach to How Job Quality Affects Wellbeing

The theory of human welfare developed by Amartya Sen, Martha Nussbaum, and others grew out of, and transformed understandings of, economic and social development in less affluent parts of the world, yet it has been applied to all countries, rich and poor.⁶ It has been changing thinking about wellbeing in many fields of social science, including education and welfare. In my earlier work I argued that the capability approach could also be productively applied to job quality research, but I now think that I did not do enough to follow through its implications.⁷ Just as, through this approach, development is reframed to signify more than economic growth (i.e., development as freedom), the concept of progress in job quality includes much more than a rise in wages. To evaluate a job, one must examine the capabilities it affords for job-holders: first, to exercise agency in pursuit of their goals through work and, second, to choose and achieve various "functionings" that they "have reason to value" and that therefore directly foster personal wellbeing. The Organization for Economic Cooperation and Development (OECD) also pays respect to the capability approach for its job quality measurement framework. The conclusion that the OECD draws is that job quality should be treated as multidimensional,⁸ yet implications for job quality research go further.

The capability approach has been deployed to build a foundation for a normative framework suitable for an evaluation of labor law and human rights, exploitation, labor market policy, training, regulation, employability, unemployment scarring, and work-life balance.⁹ But only a handful of studies in the capability literature have addressed the understanding of job quality.¹⁰ The opportunity for women to work for pay was conceived by Sen as a major developmental step that expands agency and freedoms and potentially removes the constraints of life in households.¹¹ It was then stressed

that the capabilities afforded through paid work for many women are constrained by the global configuration of work by multinational companies, which often locate poor-quality jobs in less-developed countries.¹² Moreover, all writers drawing from this approach emphasized that job quality is a multidimensional concept, not able to be summarized simply by pay or by skill.¹³ Some make the additional point that the wellbeing to which job quality is related is also multidimensional.¹⁴ One study deployed qualitative research using focus groups in a variety of urban settings (in Burkina Faso, Uganda, and Sri Lanka) to reveal capabilities from work, nicely showing that the traditional formal/informal dichotomy is a potentially misleading gauge of the divide between good and bad jobs.¹⁵ Its findings demonstrate the significance of social and environmental factors in how people experience their work, an important point that has been emphasized more generally.¹⁶ The capability approach has also been used to frame the analysis of social support in the workplace, the contribution of wages to decent living standards, the relation between the job-person fit and wellbeing, and the situation of gifted workers.¹⁷

What is unclear from previous studies in this vein, however, is whether the upshot of this reformulation is in practice substantively different from that of the needs-based account that underpins most of the job quality literature. Early applications are seriously incomplete in their coverage of work-afforded capabilities. When delineating a set of capabilities from jobs in one study, psychometric methods have been applied to test the internal validity of that set, yet no mention has been made of the physical environment, the social environment, work intensity, prospects for progression, or even workplace autonomy.¹⁸ Some applications seem hardly aware of the job quality literature, with the result that the potential contributions of the capability approach to that literature remain underinformed and underspecified.

Nevertheless, common to these studies is a (sometimes implicit) reaffirmation of the necessity to study job quality from a multidisciplinary perspective. This injunction is a welcome counterbalance to the narrow lines within which some job quality studies are unfortunately contained, with little or no reference to the outside world. And it is not only economics, as noted in Chapter 1, which is too insular. Too often, studies in psychological or sociological traditions seem to draw only on earlier studies in their own disciplines. Not wishing to labor this point at length, the wider issue of confinement to disciplinary silos can be more of a hindrance in this subfield

than in many others. Though all sciences must follow their methods and specialisms, to recognize and potentially learn from others who are investigating the same problems is important; to outsiders it seems unscientific, disrespectful, and ultimately self-defeating if they do not.¹⁹

A Framework for Job Quality, Capabilities, and Wellbeing

In contrast to the utilitarianism that underpins much of economics, the capability approach proposes a broader vision of human needs and of wellbeing, which embraces not only what one is and does but also one's capabilities (freedom to choose actions) and the agency to achieve personal goals.²⁰ Applied to jobs, the approach mandates investigation of how job characteristics affect wellbeing through each of these channels. These propositions make it necessary to step out of the conventional welfare economics of labor and work that still predominates within mainstream economics scholarship.

Figure 2.1 depicts the basic structure of the capability approach to the evaluation of job quality. The left-hand side of the diagram shows how the affordance of capabilities stems from the various job quality dimensions delineated in Chapter 1. For example, the earnings from a job provide the capability to support an array of consumption activities (functionings) that together provide a standard of living for workers and their dependents; their job prospects feed into their experience of security and their future aspirations and expectations; a better working time quality affords workers the capability of an improved work-life balance, thereby opening opportunities for the functionings that come from spending time well, mitigating role conflict and benefiting others too; a good social environment yields the capability for support, friendship, and engagement; a good physical environment contributes to the capability for health and allows people to perform their tasks and work in comfort and with the assurance of safety; a moderate pace of work permits an avoidance of stress and, in extremis, protects against burnout.

Finally, the dimension of autonomy and skill has a distinctive, important role in facilitating workers' agency. Thus, a good job is one that affords workers some capability to contribute to meeting personal goals, thereby giving job-holders a sense of meaning and purpose in their work. The evidence is supportive: autonomy, job complexity, the opportunity to develop skills and

competences, and social support are all key job features found to be associated with the facility to perform meaningful work.²¹ The capability approach is thus consistent with psychology's self-determination theory, which underpins the understanding of meaningful work.²² A good job in this dimension of autonomy and skill also contributes, through learning and training, to workers gaining sustainable employability.²³

Sometimes a capability might stem from several job quality dimensions. Moreover, the strength of the relationship between job quality dimensions and the afforded capabilities is not the same for all workers: It is moderated by "conversion factors," which may be individual (such as personality, gender, ethnicity, disability), social (family or community, labor market conditions), or institutional (such as social security). For example, as we shall see in Chapter 5, the effects of job security (part of Prospects) on employment security and hence on mental health are everywhere positive but are potentially enhanced in situations where social insurance is diminished. The relationships can also be interactive, with one dimension enhancing the effects of another. An example is the buffer hypothesis of the demand-control-support model (see Chapter 9) that more autonomy or more social support is especially effective in protecting against health impairments where jobs place high demands on their workers.²⁴

Figure 2.1 also depicts, on the right-hand side of the diagram, how the valuation of a person's capabilities is expressed through their health, wellbeing, and "lived experience" of work and through their fulfillment of personal goals. Multiple concepts of wellbeing are allowed for in this box, and some capabilities, or combinations of capabilities, may be more strongly related to some forms of wellbeing than others. For example, worker autonomy is relatively more important for eudaimonic wellbeing indicators such as the perceived meaningfulness of work, while the social environment of work may be relatively more important for avoidance of burnout, and a worker's earnings may be more important for material wellbeing.

These relationships are also moderated by the social and institutional context and by personal circumstances. Thus, through the conversion factors, the capability approach recognizes the potential for individual (potentially subjective) factors or social factors to moderate the effects of job quality dimensions on health and wellbeing, without compromising the objective character of job quality. Importantly, it allows that job quality's relationships to wellbeing are gendered, owing to the differing needs of men and women that stem from society broadly, and to the particular significance

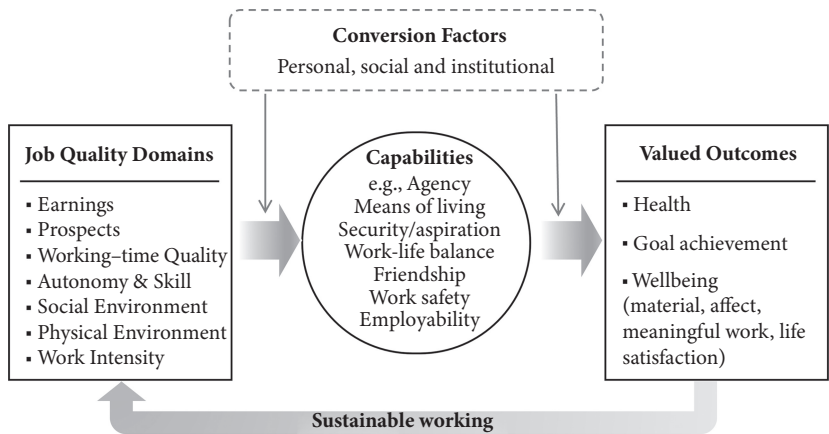


Figure 2.1 The capability approach to job quality and wellbeing

of work for the empowerment of women in many developing countries. Given the gendered nature of domestic life, the extent to which jobs deliver a good work-life balance may also vary between the sexes. To avoid discrimination, a high-quality job must cater to the needs of all, independent of their parental status. This inherent connection with gender mandates that job quality analyses should normally involve gender mainstreaming. Finally, while Figure 2.1 conveys a unidirectional process of causation, left to right, the arrow at the bottom from right to left recognizes that the wellbeing outcomes of good jobs are also the springs of sustainable work through the life course. This temporal perspective is emphasized in an analysis by the European Foundation for Living and Working Conditions, which conceives sustainable work as “achieving living and working conditions that support people in engaging and remaining in work throughout an extended working life.”²⁵

Some Evidence on Desired Work-Related Capabilities

To take this approach further, I return throughout this book to the capabilities potentially engendered by good jobs, or stifled by bad ones, and to how they are associated with good or bad health and wellbeing. It is useful at the outset, however, to review for context some evidence about what capabilities workers look for in a job, independent of whether they are successful in gaining them. The ideal method for delineating capabilities in any of life’s

domains is contested in the literature, as is the issue of whether there can or should be a universally applicable list of life capabilities.²⁶ Here, I deploy the commonly used survey method and draw on reports of workers' orientations to work, specifically their evaluations of the importance of various job characteristics.

These evaluations can be interpreted as desired capabilities. Evidence from the British Skills and Employment Surveys offers substantive validation for this interpretation. Respondents were asked to say what factors they looked for in a job. They were given a list of possible factors, for each of which their responses could be anywhere on a four-point scale ranging from "essential" to "not at all important." Workers' satisfaction with each facet of work is unsurprisingly related to whether their job provides it, but the correlation between satisfaction and provision for each facet is greatest among those who report that facet as highly important or essential.²⁷

Some past surveys explored a broad range of potential capabilities from work. In the United States the desire for "work that is important and gives a feeling of accomplishment" was workers' top priority, all the way through from 1973 to 2006, though pay and security were beginning to narrow the gap. In Britain, desired capabilities are found to be influenced, as expected, by education, gender, and domestic circumstances. The desire, in particular, for intrinsic capabilities increased between 1992 and 2006 along with the growing education level of the workforce.²⁸ Across all the 47 countries participating in the International Social Survey Project in 2015, having a job that was an "interesting job" was important or very important for nine out of ten workers, second only to the desire for security, which was especially elevated in poorer countries.²⁹

To gain an idea of how workers' desired capabilities have been changing in recent decades, Figure 2.2 shows trends in the proportions of workers in Britain who responded that each factor was either "essential" or "very important." What is striking is that most factors were high in importance and therefore could be deemed desired capabilities, for at least 70 percent of the population; moreover, they remained solidly in demand over the years. The few factors that were relatively low-rated in 1992—those related to working time flexibility and work load (panel A), promotion and fringe benefits (panel B)—were nevertheless steadily growing in importance.

This method for plotting capabilities, using preexisting surveys of work orientations as proxies for desired capabilities, has the advantage of giving us a window on recent trends. However, a limitation is that other capabilities

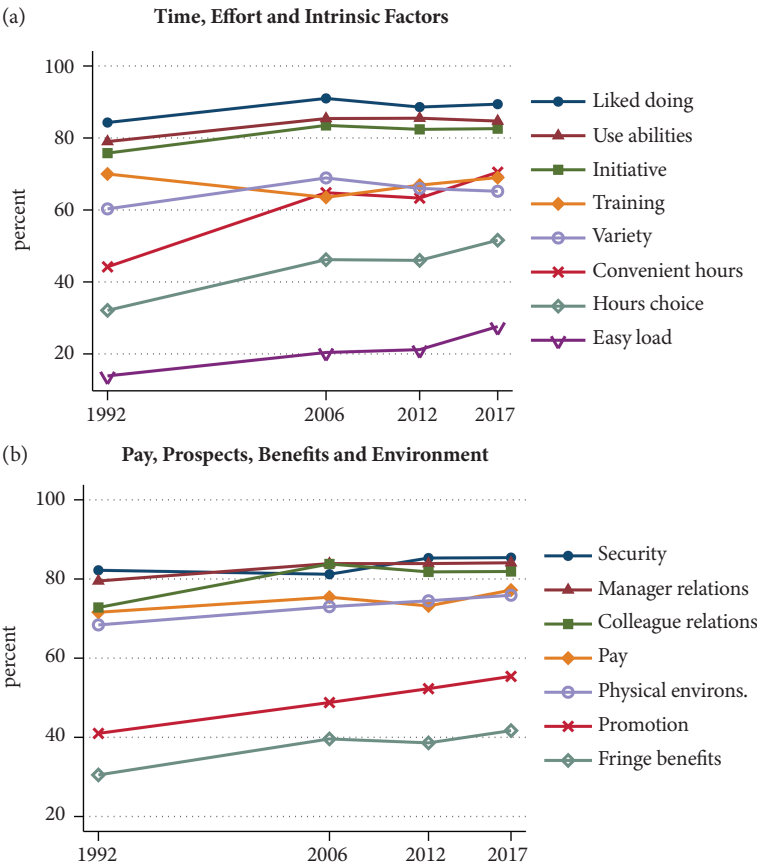


Figure 2.2 Trend in valued capabilities from jobs, Britain 1992–2017

Note: Percentage of workers who report each capability as “essential” or “very important.”

Source: British Skills and Employment Survey

from jobs might also be relevant: these might fruitfully be revealed in future research, especially if it is informed by an open mind while building on the many existing findings of the job quality literature.

What the Capability Approach Delivers

In short, through the lens of the capability approach, the evaluation of jobs should be based not just on the utility of the functionings experienced through doing the job and consuming its monetary rewards, but also on

the capabilities and agency afforded by the job. This stands as a potentially richer perspective than existing definitions of job quality framed using only an unelaborated language of needs.³⁰

My use of the capability approach in this book to frame the relationship between job quality and wellbeing should be seen, however, in the context of how the approach has been applied more widely to the study of work, as noted earlier. Thus, the capabilities afforded through jobs are embedded within a wider set of capabilities, including, for example, the capability to choose work over other activities, which is part of the notion of “decent work” at the heart of the International Labour Organization’s vision. The approach does not, in itself, provide a distinctive theory of the driving forces behind job quality or of any particular dimension of job quality. Yet it does affect how one should understand the concept of job quality and its effects on human wellbeing. In a nutshell, the approach upholds the adoption of a multidimensional concept of job quality, and reaffirms, in particular, the high significance (for wellbeing) of designing jobs that allow for some degree of worker agency. It also helps to configure our understanding of the moderating effects of personal, social, and institutional factors. Such factors imply that the effects of job quality on human wellbeing must be seen as generalizations, not deterministic predictions that apply to every job and person. Finally, the capability approach supports the view that the feeling of doing meaningful work is an essential component of job-related wellbeing, supported especially, though not exclusively, by the dimension of autonomy and skill. This aspect echoes the deep historical roots of the philosophy of work, especially the perspectives of Karl Marx, for whom the unity of conception and execution is taken to be the distinguishing character of human work.

The Shape of the Curve

While all job quality dimensions are thought to have overall positive effects on wellbeing, both from theory (including within the capability approach) and from the empirical evidence, three implications can be drawn from modern job quality research about the shape of this relationship. These concern nonlinearity, interactions between dimensions, and moderation by conversion factors.

Both psychology and economics expect that the marginal effect of at least some job quality dimensions on wellbeing diminishes as job quality

improves. Some psychology studies have taken the idea behind the law of diminishing marginal utility to an extreme: They suggest that, starting from a low level, raising job quality increases wellbeing up to a point, but that beyond that it makes no difference. British psychologist Peter Warr sees an analogy here with the health effects of vitamins: More is better but enough is enough—indeed some vitamins you can have too much of, as may be the case with some job quality features, such as autonomy.³¹ For economics, the “law of diminishing marginal utility” is at the theory’s core: It underpins its account of how labor supply is affected by wages, for which there is plenty of empirical support. To take account of the fact that many aspects of the wage-labor exchange are imperfectly observed by employers and employees, the science of personnel economics has arisen to study and prescribe the optimal design of wage contracts. Applying the law to all dimensions of job quality requires the extension of personnel economics to the optimal design of intrinsic as well as extrinsic dimensions of job quality, a project that remains in its infancy.³²

Psychology has also developed understandings of how the different dimensions of job quality interact in their effects on wellbeing. From the influential early theory of the American psychologist Robert Karasek and the Swedish psychologist Töres Theorell, one can expect that the detrimental effects of high work intensity (occasioned by high physical, emotional, or cognitive demands) are less severe in situations where jobs afford a relatively high level of worker autonomy. Conversely, job strain (a negative indicator of wellbeing) is especially high in situations of low decision latitude and high demands. Another leading theory, proposed by the Swiss psychologist Johannes Siegrist, is that recognition of reciprocity in the exchange between worker and employer is paramount and that wellbeing is especially compromised for workers where high effort on their part is not matched by high rewards from employers. Synthesizing and generalizing these two theories, the characteristics of jobs in virtually all occupations can be classified as either a “demand” or a “resource” or neither.³³ High job demands constitute a risk of health impairment or exhaustion—sometimes termed “burnout.” High resources foster motivation and engagement (both seen as aspects of wellbeing) and reduce the risk of burnout. Insufficient resources lead to employee cynicism. As discussed above, job demands and resources interact in their effects on both burnout and motivation. Through this “job demands-resources” model, psychology now evinces a reasonably common theoretical understanding of the job characteristics that can foster job strain.

The evidence surrounding these interactions was much expanded during this century and is considered in Chapter 9.

Just as the effects of one dimension of job quality may be moderated through interactions with other dimensions, the effects of all dimensions may also be moderated by other factors. The effects of conversion factors on the shape of the relationship between work and wellbeing are also likely to become a significant area of investigation for the science of job quality, as researchers seek to estimate more precisely the effects of each dimension and how they vary between men and women and between socioeconomic groups.

The Advantages of an Objective Approach

An aspect of the capability approach framework for job quality worth stressing is that job quality is conceived as comprising only objective features of jobs, not workers' "utility," satisfaction, or wellbeing. Relevant data can be collected in many ways—from the workers, their employers, other observers, or administrative records. In practice, for most aspects of job quality—for example, task discretion—the best-informed source is the individual worker. In such cases, analysts should be aware of the possible biases that can occur when individuals report about an objective feature close to themselves. However the information is acquired, studying an objective concept has distinct advantages. It permits jobs to be easily compared between individuals, occupations, industries, and nations. The trends can be examined with data collected over time, and the future can be contemplated through a knowledge of likely technological advances. Policies can be formulated and defined by the objective features, especially around objectively defined "bad jobs" that give concern.

Notwithstanding these advantages, an important minority of analysts have suggested that workers' subjective reports of their experiences of jobs (e.g., job satisfaction) be incorporated *within* the concept of job quality; for some, job satisfaction data can even constitute a single index of job quality.³⁴ I must therefore first address that important—but misconceived—proposal. It arises from the observation that the same job can be evaluated differently by different individuals. The core of the minority argument is that, without incorporating these experiences, job quality is not sufficiently closely associated with workers' subjective wellbeing and, moreover, that their values

and preferences, which vary among individuals, affect what they do. Thus, someone may be working in what appears, to the outside observer, to be poor conditions but chooses to stay with the job.

The case for including a subjective element, however, is weak. There are sound arguments against deploying a hybrid concept or, even more so, a wholly subjective concept like job satisfaction. Any subjective element embedded in job quality sacrifices the advantages of objectivity just listed—a cost not seemingly considered by subjectivity advocates. For example, there can be policies to regulate working hours or sexual harassment at the workplace, but it is difficult to see how a policy to regulate job satisfaction might work. Subjective components make it potentially invalid to infer trends in job quality from over-time comparisons of evaluative judgments such as job satisfaction, since these are affected by workers' adaptation and habituation.³⁵ Similarly, while cross-cultural comparisons of job satisfaction or of emotions are hard or impossible to interpret, cross-cultural benchmarking of job characteristics is informative.³⁶

While low job quality is not always accompanied by low levels of job satisfaction, the bulk of wellbeing research tells us that such cases are exceptions, for which explanations can be sought. *Normally*, good job quality is positively related to wellbeing, and bad job quality negatively so; exceptions are not enough on their own to reject the model. When it comes to very bad jobs, moral evaluations are also prominent: Even if some workers might come to accept and internalize poor working conditions, this does not mean that society would accept these conditions as just.

A general way forward beckons, however, for incorporating subjectivity. Let it be clarified that job quality is not conceived as the sole predictor of workers' choices and perceived experiences. Rather, in all underlying models of the economics and sociology of work, behaviors and work experiences result from an interaction between the worker, the job, and the wider context.³⁷ Within this, job quality study has become a vital subfield for research because of the importance of job quality for wellbeing. In studies of job quality's effects, preferences (as in economics) or work values (as in sociology and psychology) are required to complete the analysis. The evolving socioeconomic context affects how workers experience and evaluate the jobs that they have.³⁸ Some of the variation among workers' experiences of similar jobs may be related to gender, age, or education level. The capability approach allows for these moderating influences, conceiving them as potential conversion factors.

Yet misinterpreting job satisfaction as job quality is a mistake worth avoiding. Acknowledging that work values, job satisfaction, and workers' subjective experiences are proper objects for study does not imply fundamentally altering the concept of job quality to make it partly subjective (as the minority critics suggest). Nor does it mean we can slip job satisfaction inside our job quality indices. Ultimately, legitimate scholarly interest in subjective experiences should not obscure our understanding of the jobs themselves and of how they are constructed and evolving under the influence of changing economic and social forces.³⁹

It is both welcome and unsurprising, then, that most researchers, as well as transnational organizations such as the OECD, the European Union, and the European Trades Union Institute have opted for an objective concept of job quality.⁴⁰

Job Quality and Trends in Wellbeing

If job quality has such a significant effect on people's wellbeing, how job quality changes over time—a primary focus of this book—could be expected to have substantial implications for how people's general wellbeing evolves. Before proceeding to those changes, however, it is worth asking what is known about movements in wellbeing and whether it might be feasible to “reverse out” something about the job quality trends from the trends in wellbeing.

General Wellbeing

After an intensive collective research effort, it has been found that, in most countries, indicators of life satisfaction and happiness have risen on average over the long term as countries have grown more affluent.⁴¹ Moreover, richer people on the whole—although with many exceptions—express greater life satisfaction, or report greater happiness, than poorer people, and the average level of life satisfaction tends to be greater in richer than in poorer countries.

That connection with affluence is hardly surprising or profound, one might observe. Roughly speaking, the relationship between income and life satisfaction is “log-linear,” meaning that a doubling of income brings the

same increment to life satisfaction, no matter what the starting point.⁴² Nevertheless, there are many exceptions. As we have seen, income only accounts for a modest amount of the variation in people's life satisfaction or psychological wellbeing, so there are countless affluent people who are unhappy with their lives. There are also exceptional countries: one such is the United States, where happiness has declined since 1972.⁴³ Another apparent anomaly is China around the turn of the century, where, despite years of rapid economic growth after 1990, life satisfaction fell substantially before rising again in the 2000s. In both China and the United States a significant factor holding down life satisfaction has been increasing income inequality, which has meant that substantial swathes of the population have not received income gains and have seen their relative incomes fall. Such cases illustrate that there are further important factors, other than economic growth, that may shape the trend in wellbeing. Life events and personal circumstances such as marriage, divorce, widowhood, childbirth, or ill-health are relevant, though they may be only temporary in their effects on life satisfaction. Societal factors such as social trust, political freedom, and perceptions of corruption all feed into the equation. Unemployment can have a substantial effect as the business cycle ebbs and flows: Happiness indicators across many countries took a turn for the worse following the financial crash at the end of the 2000s. And there is evidence that societal and political change, such as greater democracy and personal freedom, can bring about durable gains in wellbeing.⁴⁴

Yet if job quality is as important as implied above, any ongoing secular (that is, long-term) changes in job quality would have enduring effects on the health and wellbeing of the working population and others who are dependent on them. Researchers have not studied this possible contribution to the trend in wellbeing, mainly because the data to investigate it have been scarce or wholly unavailable.

There are some isolated clues, however, suggesting that job quality may be very important for understanding these trends. The low satisfaction in China at the time of the millennium has been attributed to the prevalence of high unemployment and the job insecurity (poor prospects) it generated among urban employees.⁴⁵ At the micro level of the employing organization, one relevant study found that the general wellbeing of nurses in a hospital in Sweden had systematically declined in the 1990s; the researchers found that the declines in mental health were associated with increasing work intensity and

reduced control over their time following downsizing and organizational disruptions.⁴⁶

Because so many factors affect people's wellbeing, data on trends in general wellbeing cannot, on their own, tell us much about trends in job quality. Yet, could trends in *work-related* wellbeing—measures directly associated with jobs rather than other spheres of life—be more informative?

Work-Related Wellbeing: Accidents, Stress, Job Satisfaction, Emotions, and Meaningfulness

The available indicators include one objective indicator—concerning accidents at work—and several subjective measures, for each of which limited trend statistics are available: These are work stress, job satisfaction, work-related affect, and work meaningfulness.

As a negative indicator, work-related accident rates vary substantially between countries and might be conceived as an objective measure of the negative wellbeing outcomes of a combination of a poor physical environment, high work intensity, and long work hours. Across 34 OECD countries, work-related accident rates declined in 23 countries, while death rates declined in 25 countries, over the first two decades of this century. The main explanations surround not regulatory improvements or increasing enforcement but the declining prevalence of hazard-prone industries such as shipping and coal mining and increasing incentives to underreport minor accidents owing to tighter insurance rules.⁴⁷

Turning to the subjective measures, workplace stress is the consequence of a combination of high work intensity, low autonomy, and a poor social environment. According to a global survey of employees, the proportion who report that they were “stressed” a lot of the time increased substantially between 2009 and 2021.⁴⁸ Perhaps more reliably, because they were drawn from random nationally representative samples, data from the International Social Survey Programme between 1997 and 2015 show relatively modest rises in perceptions of work stress in eight countries, no change in nine countries, and a minor decrease in just one (the United States) (Figure 2.3). On the face of it, this predominant rise might suggest a worsening of job quality in some of the dimensions responsible for inducing stress, such as work intensity, low autonomy, poor social support, and insecurity. Nevertheless, these statistics can only be taken as indicative. To regard them as showing a

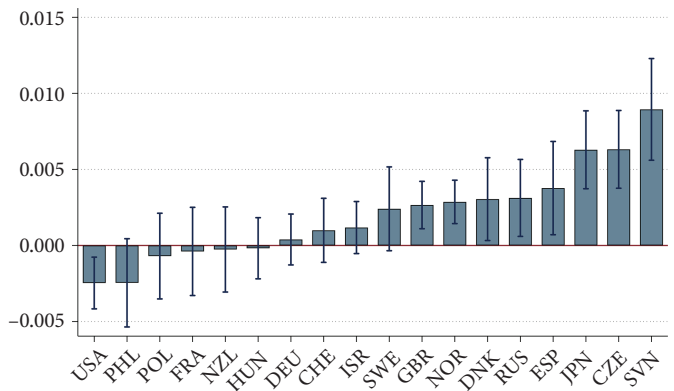


Figure 2.3 Trends in perceptions of stress at work, 1997–2015

Note: The bars show the trend coefficient, β from the following regression equation by country: $Y_i = \alpha + \beta \text{Year}_i + \varepsilon_i$, where Y_i indicates whether respondents often find their work stressful.
Source: International Social Survey Programme

trend, one must assume that survey respondents interpreted “stress” consistently over successive years—which is far from certain given the increased prominence of stress in public discourse.

Job satisfaction—a positive indicator of work-related wellbeing that may be affected by all dimensions of job quality—rarely figures among national statistics, but general surveys have collected data from representative populations over decades. In an earlier study with a colleague, I found that the proportion of workers who were either very or completely satisfied with their job had fallen from 52 percent in 1992 to 43 percent in 2001 in Britain and that the decrease was associated in part with deteriorations in job quality. Job satisfaction had also been falling during the 1980s in what was then East Germany. These trends in job satisfaction, however, must be interpreted with enormous care. Workers’ responses are affected not only by conditions in the job they are currently doing but also by their past experience of work, by other factors that condition what they expect from their job, and by their perceptions of the potential alternatives were they to quit or lose the job. Adaptation to experience is a powerful and pervasive force affecting how women and men evaluate their circumstances.⁴⁹ In particular, it affects workers who remain in their jobs for any length of time, as many studies have shown. For example, workers adapt their reported evaluations over time to changes in their pay, sometimes partly and sometimes completely.⁵⁰ Cleaners with low expectations in France and in Austria indicate that they

are well satisfied with their jobs despite poor objective working conditions (low pay, low control, high health risks), as do disabled workers in Spain and some ethnic minority migrant workers in Austria, Bulgaria, and Italy.⁵¹ Adaptation is also a leading explanation for why, as is commonly found, job satisfaction remains relatively stable.⁵² Looking at the long term through to the late 2010s, the surveys show that average job satisfaction flat-lined in the United States from the early 1970s, in the United Kingdom since at least 1991 (despite a drop in 2001), and in Australia since 2001.⁵³

I conclude that the trend in subjective job satisfaction could *only* be used as an indicator of trends in working conditions where it is reasonable to suppose that workers' potential alternatives are unchanged and adaptation is minimal. These are strong conditions, and I now consider that using job satisfaction as a proxy indicator for job quality trends is hard to defend and is unlikely to be a fruitful tool for job quality research. Job satisfaction remains an informative variable at the micro level for predicting worker behavior, such as quitting or retiring; for both employers and scholars, it is worth measuring and studying for this reason.⁵⁴ Yet it is a mistake to try to use job satisfaction patterns and trends as a guide for job quality policy or as a motivating instrument for trade unions and other political actors. It should not be part of any job quality index.

Other positive subjective indicators of work-related wellbeing include Warr's work-related "affect": two scales measuring the emotions and attitudes that people feel resulting from their work. One scale ranges from "anxiety" to "contentment," and the other from "depression" to "enthusiasm."⁵⁵ Analyses of British Skills and Employment Surveys data show that both scales fell between 2001 and 2012 but recovered partially by 2017. A portion of the deteriorations over the period including the "Great Recession" of 2008–2009—that is, between 2006 and 2012—can be accounted for by job quality changes.⁵⁶ Yet while reports of such emotions do not evoke evaluations relative to other potential jobs as strongly as has been found with job satisfaction, these trends must still be interpreted carefully, since adaptation or socialization may also change workers' expressed emotions. In any case, valid population-representative trend data concerning workers' emotional reactions to their jobs are rare.

Finally, there are also some trend data surrounding an important positive indicator of eudaemonic wellbeing: the feeling of doing meaningful work. There is a full and complex literature within psychology, philosophy, the humanities, and most recently, economics, showing the significant influence

of meaningfulness on workers' motivation, engagement, and other indicators of wellbeing.⁵⁷ Yet while the study of meaningfulness in work has been underway for some time, there is as yet no close consensus as to how it should be conceived and measured. Psychology draws heavily on the job characteristics model of psychological states, philosophy on the concept of a job as a "calling," and humanities on the premise that the quest for meaning in both work and life is inherent. These three overlap but are far from identical. Dimensions of job quality held to affect whether workers may experience doing meaningful work include job autonomy and skill, working time quality, work intensity, and aspects of the social environment, including the values encouraged by organization leaders. Sources outside the sphere of work are also salient. A commonly used indicator captures self-perceived meaningfulness in work, the sense that work contributes to meaningfulness in life, and the impression of contributing to the greater good.⁵⁸ But other indicators cover different concepts, such as congruence between employees' values and organizational vision. In "meaningfulness" we are dealing with a potent idea, but one where scientific progress may have been slowed down by a failure to agree on terms.

Contrary to a best-seller's claims that "bullshit jobs" were widespread and expanding in the United States and elsewhere, a striking study finds that there was an improvement in one indicator of meaningful work between 2005 and 2015 across all 28 European countries taken together: The proportion of workers who reported feeling that their jobs were rarely or never useful to society fell from 8 to 5 percent.⁵⁹ My own country-level analysis of European Working Conditions Surveys data shows a far from uniform story: The feeling of doing useful work, and of "a job well done," was on the rise in several countries (e.g., Bulgaria, the Czech Republic, Spain, Malta, Portugal, and Slovenia) but was decreasing elsewhere (such as Cyprus, Denmark, Poland, and Sweden). Outside Europe, feelings of doing work that is useful to society were also predominantly rising between 1997 and 2015, including in the United States, New Zealand, Australia, and South Africa (Figure 2.4).

Taken together, these trends in various measures of wellbeing provide no more than a hint about how working conditions may be changing over time. The predominant rises in subjective stress levels, if these were to be accepted as real, when set alongside the modest rises in feelings of usefulness, tell us that the picture of job quality change in the 21st century is likely to be complex. But that is all. The job satisfaction trends are flat as flat can be, not least because of the pervasive influence of expectations and adaptation.

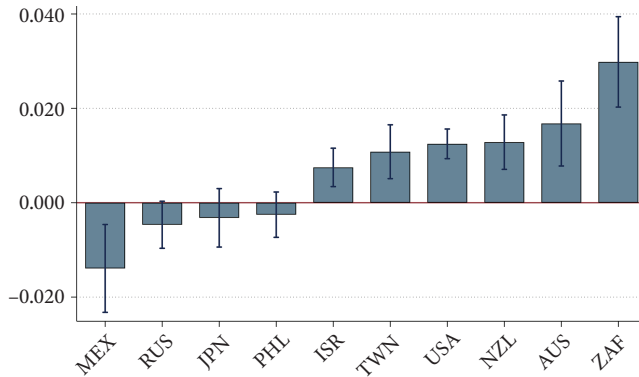


Figure 2.4 Trends in usefulness to society, 1997–2015

Note: The bars show the trend coefficient, β , from the following equation by country: $Y_i = \alpha + \beta \text{Year}_i + \varepsilon_i$, where Y_i indicates “useful” (1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree).

Source: International Social Survey Programme

In short, notwithstanding the foundational assumption behind job quality science, the available indicators of either general or work-related wellbeing are not much help and may even be deceptive for gauging job quality trends.

The Capability Approach and the Significance of Job Quality Trends

We had better go back, therefore, to the direct indicators of job quality dimensions and endeavor to build a picture of these trends around the world, piece by piece, as far as the data allow. I have suggested in this chapter that the theoretically assumed links between job quality dimensions and wellbeing, and the validating empirical evidence that I shall return to throughout this book, can be usefully framed in the context of the capability approach. Whether or not this framework is deployed, the evidence that job quality dimensions are, relative to some other life domains, comparatively major determinants of general wellbeing gives a strong motivation for the pursuit of job quality research. It reaffirms what an exciting field it could be for wellbeing researchers, both quantitative and qualitative. General social science, given this evidence, could become motivated to get its act together when allocating time and space in general social surveys, by including sufficient items to measure job quality dimensions more comprehensively. The United

Nations Economic Commission for Europe has begun collecting comparable data, but national statisticians could do more to track change using their labor force surveys. There remain many questions surrounding how job quality is distributed, how it is changing, and how it may be linked with the various forms of wellbeing.

The capability approach is not, in itself, a theory, either of how job quality is likely to progress in this century or of how job quality relates to wellbeing. Yet, as I have aimed to demonstrate in this chapter, the delineation of job quality dimensions and their correspondence with the potential capabilities afforded by jobs provides a charter for thinking and theorizing about the relationships with wellbeing. The approach emphasizes the importance of the agency and freedoms that jobs may or may not afford to workers, going beyond the valuation space of utility typically found in mainstream economic accounts of jobs; the scientific problem with utility space also lies in its unwarranted assumption of isolated individuals with fixed preferences. The capability approach also allows for a broader understanding of good and bad jobs, extending beyond psychology's common focus on job strain and stress. Extant theories within the job quality literature can nevertheless be accommodated and enriched, as the research develops both theoretically and empirically.

The capability approach thus provides a way to frame the significance of job quality trends during this century, as organizations and workers grapple with the disruptions of new technologies, global financial crises, a global pandemic, and threats to political stability. Substantive societal progress potentially stems from the better affordance of capabilities through people's jobs and, with that, improvements in wellbeing and health. Conversely, should job quality and associated capabilities decline, the health of the population suffers. For an understanding of the origins of job quality trends, I turn in the next chapter to frameworks and theories drawn from the spheres of economics, sociology, management and industrial relations.

3

Better Jobs or Worse?

The Forces Shaping Job Quality

Little Do We Know

If job quality in all its dimensions is so important for working people and their communities, and is also a central concern for employers that are keen to recruit and retain committed staff, an understanding of how it is changing in both rich and poor countries would seem essential. Yet pitifully little is known about this topic compared to the other great economic and social issues of our age. Can we be content with how we measure social and economic progress if we do not take enough account of this central part of our lives?

We comprehend much about the springs of economic growth, the acclaimed source of economic progress. It keeps unemployment at bay and, notwithstanding the question marks raised by the Easterlin paradox (see Chapter 2 note 41), raises our wellbeing. Inspired by the capability approach, we learn more when gross domestic product (GDP) is supplemented by the Human Development Index (HDI), which incorporates a population's life expectancy and education alongside GDP. Accordingly, our national and international statistical offices tell us a great deal about employment rates, GDP growth rates, and the changing HDI. GDP on its own is a limited and misleading indicator of socioeconomic progress, not least because economic growth fails to account for environmental degradation and has been accompanied by rising inequality.¹ Yet the information is made available to help evaluate how the world is changing.

But when it comes to the quality of jobs—which affects so much our health and wellbeing—we assess general trends only to a very limited extent. Hitherto, it has just not seemed important enough to statisticians and social scientists. The contrast is stark.

The last half century has seen a transformation in the way work is done, with the introduction of computers and the internet in most workplaces (the

“third industrial revolution”), an evolution of distinct management philosophies, and the rise of the service sector, which diminished the factory floor and elevated the customer interface, the office, and now the home as common places of work. While economic growth has persisted in all regions and in most countries, more so in the East than the West, the current century has so far seen a major financial crisis and a global pandemic. The latter, apart from its many consequences for health and education, generated a lasting shock to the near-ubiquitous practice of traveling from home to a workplace, installing hybrid working patterns across many occupations. The COVID-19 pandemic was followed by multiple wars around the world and a widespread jolt to inflation. These socioeconomic and macropolitical factors could be expected to have had their effects on the ground floor—in people’s workplaces and pay packets. The future of work, too, remains likely to be affected by huge global forces, including political and financial instabilities and global warming, overlaid by the promises and threats of artificial intelligence (AI) and the so-called fourth industrial revolution.

Now that the centrality of job quality is coming to be better recognized, we surely need to learn how the quality of jobs is changing across all parts of the globe in these turbulent times and to understand better what this implies for health, for life satisfaction, and for the opportunity to do something meaningful at work. Good future policy-making for public and individual health will depend on having better intelligence about what is happening.

What kinds of trajectories for job quality might one expect to find? Gone is the deep pessimism of the 18th and early 19th centuries, when the paths of job quality imagined by the great thinkers envisaged that, through overpopulation (Thomas Malthus) or through ever-deeper economic crises (Karl Marx), wages would be pinned long-term to the floor while capitalism reigned. Gone, too, is the expectation of uninterrupted, US- and Western-led income growth and better jobs that permeated the postwar world until the end of the 1960s. In place of these outmoded certainties, there is persistent slow growth in, especially, western Europe in the context of a probably unsustainable reliance on Chinese development to drive economic activity when Western economies stagnate. The state of our modern world would suggest diverse possibilities for job quality—some that speak of progress, others of decline. What can we say, with the evidence at our disposal, about the roads being traveled in the 21st century?

The aim of this chapter is to propose a way of thinking about the determinants of job quality against this background of interweaving macrosocial

forces. I emphasize, above all, the openness of this field to new discovery. Many varying trends across countries seem possible, and competing hypotheses need testing in different countries. While subsequent chapters look at individual dimensions, this chapter takes an overview of all dimensions of job quality and how their trends might be related. I summarize what researchers have discovered and present some new evidence about which dimensions have been predominantly improving this century and which have been deteriorating.

An important limitation should be noted from the start: Most of the evidence surrounds trends in high-income, or occasionally middle-income, countries. Thus, while many of the factors driving job quality are inherently global, the scope of the analysis and of the new findings presented through the book does not extend to trends in any of the low-income developing countries. This restraint is necessitated by the limited availability of consistent, good-quality data over a period of time. The generalizations drawn about overall trends are, then, less than global in nature; nevertheless, making the best of what is available provides a start in an area of enquiry for which we have been largely in the dark hitherto.

Global, National, and Employer-Specific Factors Behind Changing Job Quality

Jobs are market exchanges of “labor-power,” the availability to work, in return for an income. Aside from what might appear in an explicit job contract, there is much else to be determined, such as the required pace of work and whether the exchange is likely to be repeated indefinitely and sustained. It is normally the employer who creates and designs the job, but employees can also sometimes influence their own work through “job-crafting,” through bargaining with employers, and through their bounded freedom to exit the relationship. Beyond the firm, every job is part of a capitalist economy, whose general productiveness affects the employer’s profits and hence the terms of the exchange. To hold capitalist economies together, job design is everywhere constrained by market forces, institutional regulations, laws, and rights. Thus, many factors potentially affect how each dimension of job quality is developing across nations: ongoing economic development (or, conversely, economic crisis), the waning and waxing of workers’ power, major technological and organizational innovations, highly

differentiated national institutional regulation, and managerial cultures and personalities.

Economic and Social Development: The Affluence Theory of Job Quality

The conventional economic theory is that employers spend resources on pay and working conditions up to the extent that their marginal costs match the job-holders' added value. Those costs comprise both pay and the organizational infrastructure—including the provision of acceptable working conditions, such as adequate health and safety, flexible working times, a sustainable pace of work, and fair human resource management. As Adam Smith explained two and a half centuries ago, there is a trade-off between pay and other working conditions. Their relative costs, along with the employees' wants, affect how much it is best for employers to provide. Economic theory has it that the trade-off is set by equating the relative cost with the relative marginal utility for workers of each dimension of job quality.²

That determination of the trade-off would apply in the unrealistic setting of a competitive labor market in which all workers had a stable set of desires and preferences and were extremely well informed about the working conditions in their own and alternative jobs. In more realistic settings information is scarce, switching jobs is costly, and people's preferences are formed and re-formed by their experiences and the social context. Nevertheless, if it could be assumed that the trade-off is reasonably stable, then when product demand expands, so eventually, will all the dimensions of job quality. In the jargon of economics, working conditions are "normal goods" for which demand expands with rising resources. The trade-offs between wages and other working conditions might differ between better- and worse-resourced jobs, but not so much as to break this connection altogether. We would not expect to see the highly paid executives of large companies working in lousy working conditions, any more than we would think to see a billionaire driving a cheap car.

Writ large, the presumption of economic development implies, other things being equal, an expectation of broadly rising job quality: As the economy expands, employees will demand better working conditions as well as wages, and employers will find it profitable to bear these costs. I call this

the “affluence theory” of job quality trends for the modern age. Conversely, when economic growth is temporarily reversed through economic crisis, or if economic growth were to become long-term negative as a consequence of climate change, all dimensions of job quality would be expected to decline. If the pay gap between rich and poor were to increase—and there are many such episodes in recent history—other aspects of job quality would follow the same path of rising inequality.

Along with development, however, comes social change—most notably, the increasing participation of women in the workforce. Gender may impact the relationships between job quality, the affordance of capabilities, and wellbeing. Furthermore, the persistence of occupational segregation and of more general forms of patriarchal relations means that women and men are found in jobs with contrasting mixes of good job quality dimensions. As a result of a whole series of societal changes—women’s ongoing rise in labor force participation alongside changing norms, equalizing education systems, evolving equality regulations, and greater recognition given to the workplace needs of women and men with child-rearing responsibilities—working conditions will be expected to evolve to meet these changing needs. It could be expected that there will be narrowing wage gaps and narrowing gaps in other dimensions of job quality if human resources management evolves in the direction of greater equality.

The Bargaining Theory of Job Quality

The expectation that job quality trends are hitched to the general trajectory of economic growth and development is counterbalanced, however, by the possibility of a redistribution of economic rents (the surplus of revenues over normal costs) between labor and capital. Accounts of labor markets in Western capitalism in recent decades indicate precisely that. Across many countries union membership and collective bargaining power fell. The voice of labor in national politics similarly declined, this being an aspect of the growing hegemony of neoliberal ideologies in many countries. In Europe this sometimes took the form of “flexicurity” policies, which combined public training provision with reductions in social protection against the risk of unemployment. Across southern Europe, a complex pattern of deregulation of labor protections unfolded.³ In the United States labor markets in 1980 were already very flexible. From then on, they were transformed, through

the growth of antiunion managerial strategies supported by political and legal reforms (and a consequent decline in union membership), through the erosion of minimum wage levels, through domestic outsourcing (generating the “fissured workplace”), and through global outsourcing of tasks to low-wage countries. Smaller firms facing powerful, oligopolistic buyers were obliged to cut their costs and thus lower their wages and benefits.⁴ Along with the growth of the financial sector, these transformations shifted bargaining power away from production and supervisory workers and toward financiers, top professionals, and executives.

In a small but growing minority of jobs, the reduction in power derives also from the deployment of digital technologies to enable “platform working” in the “gig economy.”⁵ Those working in this way—often formally self-employed though dependent on just one company for their continued employment—found themselves in hyper-flexible jobs, only paid while they were actually working (that is, having zero downtime), funding much of their own working equipment, and with little ability to organize for concerted action with other workers. As gig work spread to more sectors, it is argued to have altered capitalism’s normal relation between unemployment and insecurity, and—from a macroeconomic perspective—to have enabled lower levels of unemployment to be sustainable without generating an inflation of real wages.⁶

The declining power of employees and the growth of dependent self-employment would be expected to lower job quality in many dimensions, perhaps enough to cancel out the benefits to job quality from economic growth. For example, employers might be more lax about health and safety in workplaces in the absence of union safety representatives. Taking bargaining theory and affluence theory together, there is no unambiguous expectation for the trend in job quality. Moreover, the trajectories for one country may differ from those of another, depending on how the balance of power varies between the two countries.

One striking indication of what to expect is shown in the share of national income accruing to labor. A falling wage share is a bellwether for the shifting power balance, even if it does not necessarily imply that all other dimensions of job quality are deteriorating. For much of the 20th century, this share was thought to be relatively stable. After about 1980, however, the share began a long-term decline in several countries, which did not pause until around the middle of the 2010s.⁷ Possible explanations for this decline include technological change and financialization, but the leading account

identifies the source as falling trade union power and the reduced political power resources of labor.⁸ The falling wage share indicates that workers' incomes were either falling or lagging behind productivity, a topic I shall revisit in Chapter 4.

The Job Quality Consequences of Technological and Organizational Change

The early decades of this century have also witnessed a continuation of deep structural changes in technology, in the organization of work, and in the shares of industries and occupations. Through technological change, computers were ever more present in workplaces, and their usage more sophisticated. By the 2000s, industrial robots were taking off in manufacturing industries and beginning to be adopted in some service sectors.⁹ The second half of the 2010s saw the take-off of AI-driven digital automation and integration of production systems, capitalizing on the rapid expansion of computer power, technological breakthroughs in nanotechnology and biotechnology, and the accumulation of “big data.” Industry observers place these innovations at the heart of the “fourth industrial revolution,” which is diffusing through all sectors and spreading globally at an unprecedented speed.¹⁰

Meanwhile, employers' ways of organizing work, which by this century had already evolved away from the traditional models of Taylorism and Fordism, were moving in opposing directions: either toward a kind of post-Fordism, where high wages were still possible for core workforces, accompanied by expectations of high levels of worker commitment through acceptance of “high-performance working practices” such as teamworking and target-setting, or toward a darker world of neo-Fordism, where employers were becoming ever more sophisticated in the use of incentives, surveillance, and control methods in order to eke out maximum effort.¹¹ Strikingly, management itself was becoming automated with algorithms, not only through platform working but across the wider economy.¹² While accurate figures are scarce, a sizable minority of companies in the European Union were using some form of algorithmic management in the aftermath of the pandemic; most industry experts expect its use to continue to expand, covering all areas of management, including the allocation of tasks and worker monitoring.

Such developments will have had ambivalent implications for job quality. For example, digital technologies might improve working time quality by reducing the need for night shift work or by curtailing commuting time through hybrid home/office working patterns. However, by enabling a connection with the workplace, they also enable employers to sustain an “always-on” work culture, penetrating home life. To take a second example, if high-performance management is a route to higher earnings and greater engagement, it may also be used to heighten the pace of work. Some trends can seem unambiguous: “lean production” methods result in lower job quality in many dimensions simultaneously: reduced wages, greater work intensity, and less job autonomy. However, these effects can be ameliorated through good line manager support.¹³ With the pandemic and its aftermath, digital technology became the key to shifting the place of work to people’s homes, with variable consequences for worker autonomy and improved working time quality, depending on how closely supervisors could monitor employees’ work.¹⁴ AI-based work systems, in particular, have the potential to raise or lower job quality, depending on how they are used and regulated. For example, nuclear waste disposal might be made less dangerous with a well-designed system. Robotic automation has been found to lower injury rates among warehouse workers, but conversely, raise the pace of work and the intensity of worker monitoring.¹⁵ The general prognosis for job quality trends as AI spreads through more sectors of the economy remains to be seen. With innovations, much will depend on the extent to which workers themselves are included in either their design or their implementation. In the absence of such involvement, the expectation is that many employers will take up the extra power and opportunities afforded by algorithmic management to control and intensify work, at the expense of their employees’ job quality.¹⁶

There are also potential implications for the inequality of job quality among workers. The theory of “task-biased technological change” from digitalization predicts that jobs that entail relatively routine tasks are the ones most likely to be displaced. Jobs with medium-level traditional skills and middling pay were often the most intensive in routine tasks. So employees became polarized between low-paid jobs with nonroutine tasks that could not easily be digitally displaced and high-skilled jobs involving more non-routine cognitive tasks.¹⁷ With the rise of outsourcing through networked firms came a differentiation among jobs between those in core firms, deploying “high-road” management strategies with open-ended work contracts,

and other firms supplying them, which more commonly offered temporary contracts and poorer working conditions.¹⁸ The expectation from such structural changes is that not only wages but also other dimensions of job quality are becoming more unequal.¹⁹

Another axis of differentiation was opened by the disruptions of the COVID-19 pandemic. During the lockdown periods “critical workers” who continued throughout to attend workplaces—many of whom were lower skilled and lower paid—experienced distinctly riskier working conditions. Afterward, the pandemic had a lasting impact on the proportion of workers who were permitted and enabled to work in part from home. Hybrid working brought benefits to job quality through increased autonomy, particularly over working-time arrangements.²⁰ But for many this avenue to improvement was closed off, because they were obliged to work at the customer or client interface.

Country Clusters of Job Quality

Economic growth, a changing balance of power, and technological change are common to all countries, but their effects are filtered by institutions and class relations, implying that the level and the dynamic trajectories of job quality will differ between countries. Some labor market institutions, however, may be similar within clusters of countries. According to “regime” theories, the key institutions are those involved with collective bargaining and with the formation of skills.

One set of expectations can be derived from the theory of production regimes, which hypothesizes that enterprises in a cluster of “corporatist” countries (such as Germany, Austria, and the Nordic countries) are likely to pursue high-skilled production methods, in contrast to “liberal market economies” (countries such as Britain and the United States) where market forces pressure wages downward, regulation is muted, and sectors with lower-skilled methods can prosper.²¹ Differences in skill requirements in turn imply that jobs in corporatist countries will be of longer duration (hence greater job security), afford greater decision latitude for shopfloor workers, and have more participatory management. In other words, job quality is predicted to vary systematically between corporatist and liberal market regimes, along several of its dimensions. These differences, moreover, affect how worldwide waves of growth and crisis, and of technical

and organizational change, impinge on job quality. Over time, it is expected that the job quality gaps between corporatist and liberal market economies would widen.

A contrasting set of expectations comes from the theory of “employment regimes,” where national employment policy and the terms of employment are seen as directly influenced by the balance of power between capital and labor. Employment regime theory implies differences among corporatist countries between the cluster of Nordic countries, where the power of organized labor is strong and policy orientation has historically emphasized social cohesion, and the other corporatist countries where more polarized outcomes are predicted. In the Nordic countries—sometimes referred to as “social corporatist” countries—it is expected that the polarizing tendencies of technology are mitigated by setting regulatory floors to job quality and extensive reskilling policies. In the other corporatist countries, there would be a greater (and increasing) dualism, with intersecting job quality gaps between the core and the periphery of the workforce, between social classes, and between men’s and women’s jobs.

In short, both these types of regime theory anticipate that job quality levels and trends differ between clusters of countries in multiple dimensions. However, only a minority of countries fit into one or the other of the institutional clusters of northern Europe. France is hard to pigeon-hole as manifesting any particular type of production regime, other than its own. Even within northern Europe the implications of production regime theory for skills do not always fit the predicted pattern;²² indeed, labor market institutions and employment practices across *all* of Europe were influenced by the 2008–2009 financial crisis.²³ Outside Europe it proves equally problematic to specify common “quality of work” regimes among developing economies.²⁴ Thus, regime theories have proven so far to be of limited value in understanding trends in job quality.²⁵ In some studies, countries are grouped by geography or primary language or grouped loosely by the common but increasingly distant experience of transition from communism. Yet these types of clustering of countries are as likely to capture different levels of development and affluence as they are to characterize distinct institutional configurations.

That said, the potential importance of each country’s institutional configurations remains. If their effects are large enough, job quality will be decoupled from economic growth.

Bosses and Job Quality

Complementing these grand theories of job quality focusing on high-level macrosocial, technological, and institutional factors, we should be reminded that jobs are actually designed and funded within distinct organizations. Employers, indeed, are significant, partly autonomous agents in the determination of job quality.²⁶ Business strategies—whether “high-road” or “low-road”—stem from the top-level decisions made by organizations’ directors, positioning companies in either the cores or peripheries of labor markets. Job quality in several dimensions is then constrained by these differentiated business strategies of large and peripheral enterprises and on the differences among workers within fissured workplaces. Constrained, but only imprecisely, by their labor markets and the external environment of law and regulation, employers determine the safety conditions under which their employees work, set the culture of management throughout and determine the wages, working-time arrangements, and many other terms of employment. With good-quality jobs, managers involve their employees in their decision-making and especially in their work innovations.

Job quality thus depends also on the particular personalities and skills of managers and supervisors. Firms are more likely to deploy nonstandard contracts for their workers when they are deficient in managerial skills.²⁷ Bad managers and supervisors, if tolerated, can spoil the quality of any employees’ jobs, whatever the nature of the organization. Bullying or unsupportive supervisors, for example, make life hell. According to one study, “bad bosses” are especially prevalent in larger organizations, in places lacking formal employee representation channels, and curiously, in the transport sector; overall some 13 percent of bosses in Europe can plausibly be classified as “bad.”²⁸ According to another, the establishments where people work are relatively more important than their occupational designation in accounting for the variation in most dimensions of job quality.²⁹ Firms also vary in the information they provide in job postings.³⁰

Much of the normative psychology of the effect of work design on well-being tacitly rests on the partial autonomy of employers and of individual managers in the determination of job quality. It assumes that labor markets, regulations, and broader global trends leave room to maneuver, to improve or worsen their design strategies, to the benefit or detriment of employees.

The Agenda

To sum up, what happens to job quality is the joint outcome of major economic, social, and political factors—economic development, changing power structures, the configuration of regulatory institutions, technological and organizational change, and the culture of management—overlayed by individual managerial choices. These forces are distinct yet connected and interrelated: for example, shifts in the balance of power may be enabled through new technologies. There are no unambiguously predicted trends. Moreover, while some dimensions may be positively associated with national income, others could have an inverse correlation. Given how job quality is so strongly related to our general wellbeing, it would be good to learn what these trends are—to better understand the changes that have been taking place and the further changes in store as the future of work unfolds through the fourth industrial revolution.

Are There Predominant and Nationally Coherent Trends in Job Quality?

Each chapter in Part B begins by reviewing, through the lens of the capability approach, what is known and understood about how job quality relates to wellbeing outcomes. In order to begin to address the questions surrounding job quality trends posed at the end of Chapter 1, the chapters then document, as far as the data permit, the trajectory of each dimension of job quality in a range of countries in the opening decades of this century.

To provide an overall perspective, however, Part A ends here by considering two overarching questions. First, are there identifiable *predominant* trends in particular dimensions of job quality? (By predominant, I mean trends that are found in a large majority of countries.) The significance of this question is that if predominant trends are detected, they potentially reflect global forces, as implied by, for example, the theorized importance of technical change. If, for example, the diffusion of industrial robots enhances the physical environment of jobs, those gains would be predicted to become generalized across countries as the use of robots spreads. Second, to what extent does each country have a *coherent* system-wide pattern of job quality development? For example, if pay and working time quality in a country are improving, does this make it more likely that the social and physical

environments of workplaces are also getting better? Such an outcome could be expected on the basis, for example, of affluence theory, with market forces bringing about this coherence. The significance of this second question is that with coherent patterns of change, country-level factors would be the key to understanding the broad direction of job quality in each country. Much depends on this issue. If the dimension trajectories are strongly related, then policy for job quality could usefully be developed from the macroeconomic and macrosocial driving factors. Moreover, a focus on the most-easily measured dimension—earnings—would provide a reasonable approximate indication of overall progress. If, however, the dimension trajectories are not closely related, then they must be followed separately, and specific policy interventions are likely to be needed across each dimension.

What Earlier Studies Tell Us About Job Quality Trends

I begin by looking at what previous studies can tell us. Other than for wages and working hours, the monitoring and recording of job quality dimensions by governments has been largely neglected, despite the importance of job quality for our wellbeing. With notable pioneering exceptions—such as the European Working Conditions Surveys (EWCS) and occasional national surveys—there has been too little investment in data collection worldwide. The OECD has folded together some of the EWCS dimensions and other evidence on earnings to generate a dashboard of two country-level indicators of job quality (earnings quality and quality of the working environment) and an index of labor market security; their indices have a limited time span and are very dependent on the EWCS data.³¹ In many countries across the affluent, developed world we know very little about the trends. Evidence is therefore regrettably thin, not least for the United States, which began regular, comprehensive job quality data collection only in 2015. Nevertheless, a handful of writers in recent years have made good use of the limited, available data to study job quality trends in a number of countries.

One early study deployed data from the US General Social Survey in an attempt to see whether the pessimistic outlook implied by neo-Fordism was more accurate than that of the optimistic post-Fordism. Its provisional conclusion was that average US job quality had remained quite stable in several dimensions between 1989 and 1997, though with a small decline in job security, balanced by yet smaller improvements in the social environment

of work—thus supporting neither general theory of change. However, this was a short period of time for any secular—that is, enduring—trends to be revealed.³²

For a longer interval, there are some indications of more substantial changes in US job quality. Comparing 1977 with 2002 and with 2006, another study found evidence of significant work intensification, partially offset by moderate improvements in autonomy, control over working time, and reports of workers finding greater meaningfulness in their work.³³ From the early 1980s average wages for men had stagnated, a remarkable fact given that US GDP per capita continued to grow. Women's average wages, however, had risen steadily, as had wages in the top 10 percent of the distribution among men. The 1980s, 1990s, and 2000s were thus decades of starkly rising wage inequality among both men and women, involving falling real wages for the low-paid American.³⁴ The trends were supplemented by a relative decline in the value of pensions and health benefits for the least well paid and rising inequality of working-time control—a further sign of the widely documented polarization of the American labor market.

The rise in US wage inequality has been linked to technological change that was biased in favor of the displacement of easily automated tasks and enhanced by globalization of production, finance, and trade. But another plausible and strongly evidenced explanation for these US trends lies in the long-term alteration in the balance of labor market power. Employers' increased use and sophistication of antiunion and strike-breaking tactics, the falling federal minimum wage, rising monopsony power of corporations, and outsourcing have also all been found to play a role, while workers' ability to push back against these forces declined through an erosion of worker protections as trade union membership and collective bargaining fell and as unions' influence on public policy waned. According to a definitive account by David Howell and Arne Kalleberg, these were the key factors underpinning the “unshared,” or “extractive,” growth of prosperity that characterizes job quality trends in the United States over several decades.³⁵

Gloomy as these job quality trends in the United States were at the turn of the century, the stagnant average wage trend was exceptional in global comparison. In Canada, earnings had started to pick up for men at the start of the 1990s and had been increasing for females over decades, even if other dimensions of job quality appeared largely stationary at the turn of the century.³⁶ For most other Western countries, earnings in real terms had been rising over previous decades for both men and women, even if

slowly and incrementally. It seemed to be what was expected from economic growth.

And yet, with evidence of work intensification on a wide front and falling autonomy in Britain, there remained, as I represented it in my earlier book *Demanding Work*, something of a paradox: Why was nonwage job quality declining amid the supposedly growing affluence of Western nations? That pessimistic picture of falling nonwage job quality—at least for the few countries for which there was some evidence—was enlarged in a study led by French labor economist Natalie Greenan looking at fifteen European nations between 1995 and 2005.³⁷ Taken as a whole, there were increases in physical strain, rises in work intensity, and a decline in work complexity (an indicator of skill requirements), with particular declines in job quality in Germany and Italy over this decade. Matters were hardly likely to be improved by the global financial crisis that erupted in 2008, and the picture of European decline was extended in further studies to 2010 and then to 2015, finding that increasing job strain—specifically, a rise in work intensity relative to employee control—had been greatest in low-skilled occupations.³⁸ Indeed, work intensification, a core ingredient of increasing job strain, has been reported in many countries around the world.³⁹

Notwithstanding these notable declines in nonwage job quality, there were more neutral or even hopeful signs in some dimensions in some countries. The skills deployed at work, as measured through the composition of occupational classes across the economy, were rising in Britain, France, Germany, and Sweden during the closing decades of the 20th century.⁴⁰ A later study reports that the Autonomy and Skill dimension improved between 1995 and 2010 in eight European countries—Austria, Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, and Spain; the Physical Environment of work remained as a whole fairly stable across Europe, while Working Time Quality improved substantially in many places.⁴¹ Meanwhile, there were no signs of any general rise in employment insecurity between 1997 and 2005.⁴²

As for the polarization hypothesis, there are few signs in these studies of a widespread trend other than through rising wage inequality. While there had been a long-term polarization of Working Time Quality in the United States, in Europe inequality in the Working Time Quality fell in many countries.⁴³ Inequality in the Physical Environment also fell in the Netherlands, Portugal, Spain, and the United Kingdom, while inequality in Autonomy and Skills remained static. In parallel, there were no major changes in the gender

gaps in job quality: The gender wage gap remained ubiquitous, and there were persistent male-favored gaps for Autonomy and Skill and for Prospects. Meanwhile women maintained an advantage in respect to Working Time Quality, Work Intensity, and the Physical Environment, which diminished only slightly over time.⁴⁴

Moreover, at the country level there was a moderate convergence in job quality, at least in Europe. The largest gains in the Physical Environment were in Greece and the United Kingdom, both of which had been below average in 1995. Between 1989 and 2005 the differences in job quality between Norway, Germany, the United Kingdom, and the United States diminished in several dimensions.⁴⁵ Job quality also converged in the European Union as a whole in most dimensions (the exceptions being Prospects and Autonomy and Skills) between 1995 and 2015.⁴⁶

The most notable counterbalance to the overall pessimistic portrayal of job quality trends in these studies comes from the Nordic countries. Policy-makers in Sweden had focused on improving job quality for a long time, and therefore interest in tracking working conditions began early on. Between 1968 and 2010, there were long-term increases in work complexity, in working time quality, and in the physical work environment.⁴⁷ The mean value of an overall job quality index increased steadily from 1968 for men and from 1981 for women; for women, the majority of the increase is accounted for by changes in the type of occupation, while men's gains were across the board. Yet the inequality of job quality, as measured by the coefficient of variation, fell; the job quality gap between men and women also diminished. Thus, not only has job quality been rising in Sweden, but there is no evidence of polarization; if anything, there is a convergence of observed job quality between men and women. Consistent with the theory of employment regimes, comparative data revealed that, by the end of the 1990s, Swedish workplaces, along with those in Denmark, were affording distinctly higher levels of autonomy and workplace participation than elsewhere in Europe outside the Nordic region.⁴⁸ Even in Sweden, however, this rosier picture is countered by distinct increases in the prevalence of high stress for both men and women.

Workers in Finland also benefited from some long-term increases in job quality. Opportunities for self-development through training were continually on the rise from 1977 to 2013. Task discretion also rose after the 1970s, while the prevalence of monotonous work fell until the early 1990s. Yet, just as in neighboring Sweden, the positive picture in Finland is balanced by

work intensification, starting with the onset of the early 1990s recession. In parallel, Finnish workers increasingly experienced adverse mental and physical effects from work. There was also a long-term increase in the prevalence of conflicts at work.⁴⁹

Consistent with affluence theory, some dimensions of job quality tend to be worse in poorer countries.⁵⁰ Levels of poverty are reflected, as expected, in wage data where it exists, and it is common, though not always correct, to associate good overall job quality with having a formal contract.⁵¹ In Chile, a relatively high-middle-income developing economy, the quality of employment improved, though unevenly, between 1996 and 2017, according to an index that includes a measure of working conditions (comprising non-wage benefits and excessive weekly hours).⁵² Along the way, however, the 2008 financial crisis had a serious dampening effect on job quality, with workers cycling between low-quality jobs and unemployment or economic inactivity.⁵³ Elsewhere in Latin America, short-period small improvements in some aspects of job quality (mainly wages, benefits, and security) are reported for Bolivia, Brazil, Chile, Ecuador, and the Dominican Republic, while there were declines in El Salvador.⁵⁴ A longer-term study of Bolivia, covering 2007 to 2021, found only limited change in job quality, even during periods of high economic growth.⁵⁵ Overall, however, the scarcity of data is especially acute in the developing world. A start has been made with the conduct of baseline working condition surveys in Argentina, Chile, urban China, Uruguay, and Central America (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama); follow-ups are in demand.⁵⁶

In short, existing studies—which mainly cover trends in the late 20th century or around the start of the 21st century—tell us that the overall development of nations was not being matched by a generalized rise in job quality. Nor, however, was there a generalized decline. In fact, job quality dimensions in many countries were moving in opposing directions. Working time quality and work complexity increased in a number of countries, even if autonomy declined in some. Relatively little change in the physical environment was recorded. And a widespread, though not ubiquitous narrative of work intensification has been observed. Yet, aside from wages, there is insufficient evidence in these prior studies to assess whether there have been *predominant* trends in any of the nonwage dimensions of job quality across the developed world. Affluence theory—the idea that richer countries have better job quality and that economic growth brings better job quality—has been touched on, with some patchy support in respect to

extrinsic job quality dimensions. The job quality advantage in Autonomy and Skill found in the Nordic countries is consistent with this affluence theory, but it also fits with the model of employment regimes that stresses the institutions that have supported the labor market and political bargaining power of employees in these countries. However, for the most part, the issue of how coherent the trends were between the various dimensions of job quality has not been examined. Meanwhile, there are few signs in this limited literature of widespread polarization of job quality outside the United States.

Data Sources and Methods

Building on these prior studies, I aim to add to this global narrative surrounding social progress (or regress) in the sphere of the workplace—both updating it where possible and extending its scope to cover many countries and all dimensions of job quality.

The key instrument for this type of research is the social survey—the “social telescope” that we line up for this purpose on the objective characteristics of jobs. Ideally, surveys tell us the big picture, in contrast to in-depth qualitative or ethnographic studies—the “moon shots” of social research. The survey respondent is the job-holder, who is normally the most closely informed observer about the job.⁵⁷ Representative surveys of workers about their jobs are thus the main sources of information about changes in job quality dimensions over time. This book uses data from multiple sources around the world in order to investigate the patterns of change taking place during the current century. They are supplemented by data gleaned from employers and administrative sources, especially for the extrinsic dimensions.⁵⁸ Part B assembles a broad picture of change across mainly developed countries. Altogether 42 countries are included in the analyses at some point, though many countries have missing data on at least some dimensions, and coverage is sometimes thin.

One key principle for the surveys is that they must be sufficiently closely representative of the sampled populations and therefore deploy the best available sampling methods. A second is that in successive surveys exactly the same questions with identical response scales must be put to respondents, if possible also in similar, if not identical, sequences.⁵⁹ It is fortunate that the surveys all conform to these principles. In the best cases the data

contain instruments that are harmonized across countries, allowing international comparisons. The most comprehensive of these are the EWCS series and the matched Korean Working Conditions Surveys. Also good, but still incomplete in their coverage of job quality dimensions, are the Household Income and Labour Dynamics in Australia, an annual panel survey, and the surveys of the International Social Survey Programme.⁶⁰

For each country, to map change, I consider the trend in the average value of job quality as best measured within each dimension, through Chapters 4 to 10. In every case, the trend is only included if the time span covers at least ten years during the opening decades of the 21st century.⁶¹ The book avoids the use of data on workers' own perceptions of change, because trends in society are very different from the changes each person goes through in the course of their work careers, which in any case, may be distorted through memory biases—in particular, the potential for nostalgia effects (such as “things were better in the old days”). Nevertheless, survey responses about workers' current jobs could also be biased, especially if questions are phrased badly. Personality may affect where people respond on scales. The need for social esteem can be problematic for accuracy when respondents talk about themselves; that issue is expected to be attenuated but might still be present when they are talking about their jobs. Cultural norms can affect how certain experiences are described—for example, bullying. Where such norms visibly change (e.g., the “MeToo” movement, which greatly heightened awareness of sexual harassment), the trends in survey responses may reflect both the changing behaviors and the changing norms. It is therefore always important to be aware of—and, if necessary, to control for—potential biases when aiming to observe and account for how jobs are changing.

A Heuristic Method of Analysis

For the purposes of addressing the issues of predominant change across countries and the between-dimension coherence of change in this chapter, no formal statistical analysis is possible. The data are not adequate for that purpose: In several cases the coverage of dimensions is incomplete, and the periods covered in different countries do not always neatly match.

Nevertheless, an overall tentative judgment can still be made using a heuristic approach, on the basis of the available evidence, which will help to

break down the complexity of a large amount of data and provide a perspective on the grandiose theories of change outlined above. To do so, I assess the overall direction of change in each country for each dimension, where it is possible to do so from the detailed evidence given in later chapters. For each dimension I give the value of +1 where there is a significant improvement, 0 when there is no change, and -1 for a significant deterioration. I exclude from my judgment all cases where no reliable trend data covering at least ten years can be found. This procedure provides a means of simplifying and describing the complex pattern of change during the first two decades of the century in a large number of countries but avoids reliance on precise estimates of the magnitudes of each trend.

Findings

Predominant Trends

Table 3.1 gives a first birds-eye view of 21st century trends in each dimension of job quality. It shows the extent to which there were common, widespread trends in each dimension of job quality in the first decades of this century.

The clearest positive trend is with respect to real wages: In 28 out of 34 countries examined, wages grew ahead of inflation. As we shall see in Chapter 4, these rises were slower than the increases warranted by the growth of workers' productivity; nevertheless, in all these countries the average worker was better off at the end of these two decades than they had been at the millennium, and only in seven countries was there little or no change. Also improving in the large majority of countries is the gender wage gap.

There was also, on balance, a predominantly positive trend in the Physical Environment of jobs around the world—something that had not been evident in earlier studies. The environment improved in 20 out of 29 countries, and fell modestly in two of them.

With respect to three dimensions, an overall net improvement this century is still visible but distinctly patchy. For Working Time Quality there was an improvement in 18 out of 37 countries but a decline in two. This rise followed the occasional positive trend detected in earlier studies. Prospects improved in 20 out of 40 countries but declined in five. Autonomy and Skill rose in 15 out of 30 countries while falling in four.

The picture for the Social Environment of jobs is mixed. In 18 countries the evidence points to a rise, but there is a decline in seven countries and

Table 3.1 General trends in job quality

Trend	Earnings	Prospects	Working Time Quality	Autonomy and Skill	Social Environment	Work Intensity	Physical Environment
Improving	28	20	18	15	18	6	20
Deteriorating	1	5	2	4	7	17	2
No change	5	15	17	11	14	7	7

Note: Number of countries, according to 21st century changes in job quality dimensions measured over at least 10 years from 2000 to 2020.

Source: Based in the analyses described in Chapters 4 to 10.

only minor or insignificant changes in 14 countries. A net positive of only 11 countries out of 39 examined suggests there was little overall progress in managing jobs so as to yield more supportive and less toxic places for workers to spend their working lives.

Finally, the trend toward work intensification, previously documented and shown to be fairly widespread in the closing decades of the 20th century, continued predominantly through the current century. Only 6 countries out of 29 examined saw a decline in work intensity, while 17 countries recorded work intensification in one form or another.

The Coherence of Country-wide Trends in Job Quality

Table 3.2 shows where there is a substantive link (a pairwise correlation coefficient of at least 0.3) between the trajectories of job quality in each dimension in the course of the 21st century.⁶² What is striking is the number of empty cells: On the whole there are few country-wide links between the trajectories of the different dimensions of job quality. Thus, regarding the second overarching issue, there is relatively little system-wide coherence in the determination of job quality within countries. The growth of Prospects is related positively, as might be expected, to the growth of Earnings and of Autonomy and Skill. Interestingly, the de-intensification of work in some countries—that is, where the reversed Work Intensity index is falling—is associated to a small extent with a decline in the Social Environment.

I conclude that it will be important to consider separately the trajectories of all dimensions. In particular, one cannot, from this evidence, presume that the trajectory of wages represents or proxies the general trajectory of other dimensions of job quality. Just because earnings are improving, it cannot be deduced that job quality in other dimensions is improving also.

Job Quality and Affluence

The fact that there are internationally predominant, if not universal, movements of some dimensions of job quality suggests that common, supranational explanations may be in play. If, as hypothesized, economic growth is an important general factor influencing job quality in all dimensions, as suggested by the economic approach, we would expect to see job quality correlated positively and substantially with country-wide measures of affluence, the most conventional of these being GDP per head.

Table 3.2 Correlation of country-level job quality dimension trends, twenty-first century

	Earnings	Prospects	Working Time Quality	Autonomy and Skill	Social Environment	Work Intensity (reversed)	Physical Environment
Earnings	1						
Prospects	0.57	1					
Working Time Quality			1				
Autonomy and Skill		0.35		1			
Social Environment					1		
Work Intensity (reversed)					−0.39	1	
Physical Environment							1
Real GDP per capita growth	0.72	0.43	0.33				
HDI growth	0.45	0.30					

Note: Pairwise correlation coefficients, significant at the 10 percent level, between 21st-century trends in job quality dimensions over at least 10 years from 2000 to 2020, indicated as 1, −1, or 0 as that dimension improves, deteriorates, or has no change, respectively. The last two rows show the correlation of each job quality dimension with economic growth and with HDI growth.

Source: Dimension trends are sourced from the analyses described in detail in Chapters 4 to 10. GDP per capita and HDI growth are sourced from national accounts.

Table 3.2 suggests that, indeed, there is a significant relationship between economic growth and the three extrinsic dimensions of job quality: Earnings, Prospects, and Working Time Quality; moreover, the Earnings and Prospects trajectories are positively correlated with trends in the Human Development Index (HDI). This finding gives qualified support to the ideas behind the affluence theory of job quality.

From that theory, we should also expect that, when comparing across countries at a point in time, job quality in these dimensions is associated with a country's affluence.⁶³ Figure 3.1 illustrates the variable importance of economic development for job quality dimensions in 2015 by plotting each dimension against the level of GDP per capita. This comparison is enabled by using the best source of internationally comparable data, the EWCS.⁶⁴

For *Earnings* and, to a lesser extent, for *Autonomy and Skill*, there is a correlation across Europe between job quality and GDP per head. For example, Switzerland had the greatest GDP per head in Europe, and that is where, in 2015, wages were also at their highest. At the other end of the scale, both Albania's wages and GDP per head were the lowest. The *Autonomy & Skill* index was high in affluent Norway and in Denmark, Sweden, and Finland; it was at its lowest, even lower than could be predicted, in Greece. As with the earlier studies, the superiority of the Nordic countries is consistent, both with regime theory and affluence theory. Using earlier Eurofound evidence, one can extend the association of affluence with Autonomy and Skill to some global comparisons: the affluent United States tops Europe and, even more so, China and South Korea with its annual training participation and exposure to learning at work; moreover, workers in China and South Korea perform less-complex tasks, and are less exposed to problem-solving and learning new things than workers in the United States and Europe.⁶⁵

Overall, however, job quality is by no means always better in more affluent countries. As Figure 3.1 shows, *Prospects* and *Working Time Quality* are each positively correlated with GDP but not highly. Denmark, for example, had one of the highest GDPs in Europe, and its *Prospects* index was the highest. Yet there are countries such as Spain, Italy, and especially, Greece where job quality Prospects were notably lower than would be expected purely from their GDP. Montenegro, one of the less affluent small countries in Europe, had the lowest *Working Time Quality* index. Yet other, similarly less affluent countries (e.g., Bulgaria) had one of the best *Working Time Quality* scores.

An earlier study shows that, outside Europe, the same mixed picture holds. Working Time Quality is worse in urban China, where 43 percent work more than 48 hours a week, compared with 19 percent in the United States. In Costa Rica and Guatemala the figure is also close to 40 percent. However, across all Europe and in Argentina the figure is only 15 percent, even though GDP per capita is lower than in the United States.⁶⁶

The Disconnection of Economic Growth from the Intrinsic Dimensions of Job Quality

The intrinsic dimensions of job quality, in particular, change independently of either economic development or the HDI (see Table 3.2): Whatever affects them, they will need to be explained separately.

This disjuncture is also manifest in the plots against GDP. As might be expected, high exposure to physical risks around the world tend to be found in the same occupations across countries: agricultural workers, plant and machine operators, and craft workers.⁶⁷ Nevertheless, the association of the *Physical Environment* index with GDP is distinctly loose. While affluent Switzerland and poorer Turkey had high and low scores, respectively, Italian jobs had a very much higher *Physical Environment* index than France, even though the per capita GDPs of Italy and France are similar.

As for the *Social Environment* index—which includes both positive aspects of job quality, such as whether you have a supportive manager, and negative aspects, such as whether you have been subject to harassment or bullying—living in a richer or more developed country assuredly does not mean that you have better support and are less likely to be harassed. The social environment does vary between countries, but the affluence of the country you are living in makes no difference. Portugal is one country that has particularly good workplace social environments, while France is the opposite, having the lowest *Social Environment* index in Europe. In the middle are, for example, Norway and Lithuania, countries with greatly different national incomes but quite similar workplace social environments. Across the globe, South Korean jobs afford far less support from colleagues than in Europe and the United States; but it is American workers who report the highest frequency of bullying and sexual harassment.⁶⁸

Finally, the *Work Intensity* index, a negative indicator of job quality, has a loose positive country-level association with GDP, meaning that more affluent countries are likely to record moderately higher work intensity—that is,

lower job quality in this respect—than poorer countries. In 2015 Cyprus recorded the highest level of work intensity, and Latvia the lowest. Yet these two countries' per capita GDPs were not greatly different. Ireland has one of the highest GDPs, but its level of work intensity is distinctly average. Work intensity is lowest in South Korea, providing an offset against having especially long work hours.⁶⁹

The Terrain of Job Quality Research

Given the significance of job quality in all its dimensions for workers' well-being, I have argued that it is important to try to establish a picture of the general directions of change. Drawing on an interdisciplinary social science perspective, this chapter has sketched out the components of the multilayered forces at the worker, employer, country, and global levels that are implicated in shaping job quality and its trends in 21st-century workplaces.

Previous studies of the pattern of change are informative, but the extent and scope of these studies is limited, as is their geographical coverage. Drawing in advance from the detailed analyses of each dimension throughout the book, I have established three overarching, “stylized facts”:

1. Overall, there is a clear net improvement in two dimensions (Earnings and the Physical Environment), a balance of improvement in three more (Working time-quality, Prospects, and Autonomy and Skills), no change in one (Social Environment), and a predominant, though not ubiquitous, deterioration of job quality through work intensification. In many countries some dimensions of job quality remained unaltered for long periods, despite all the changes going on around the wider global economy. Thus, the picture of change in average job quality is truly mixed, and no single, universal driver or theory can be expected to determine this pattern on its own.
2. There is little or no within-country coherence among dimensions in how job quality changed during this century. It follows that job quality could not validly be tracked just by studying any one dimension—whether this be wages, job strain, precariousness, or any other lone indicator. This finding presses further the need for separate studies of each dimension and seems consistent with my structuring of the

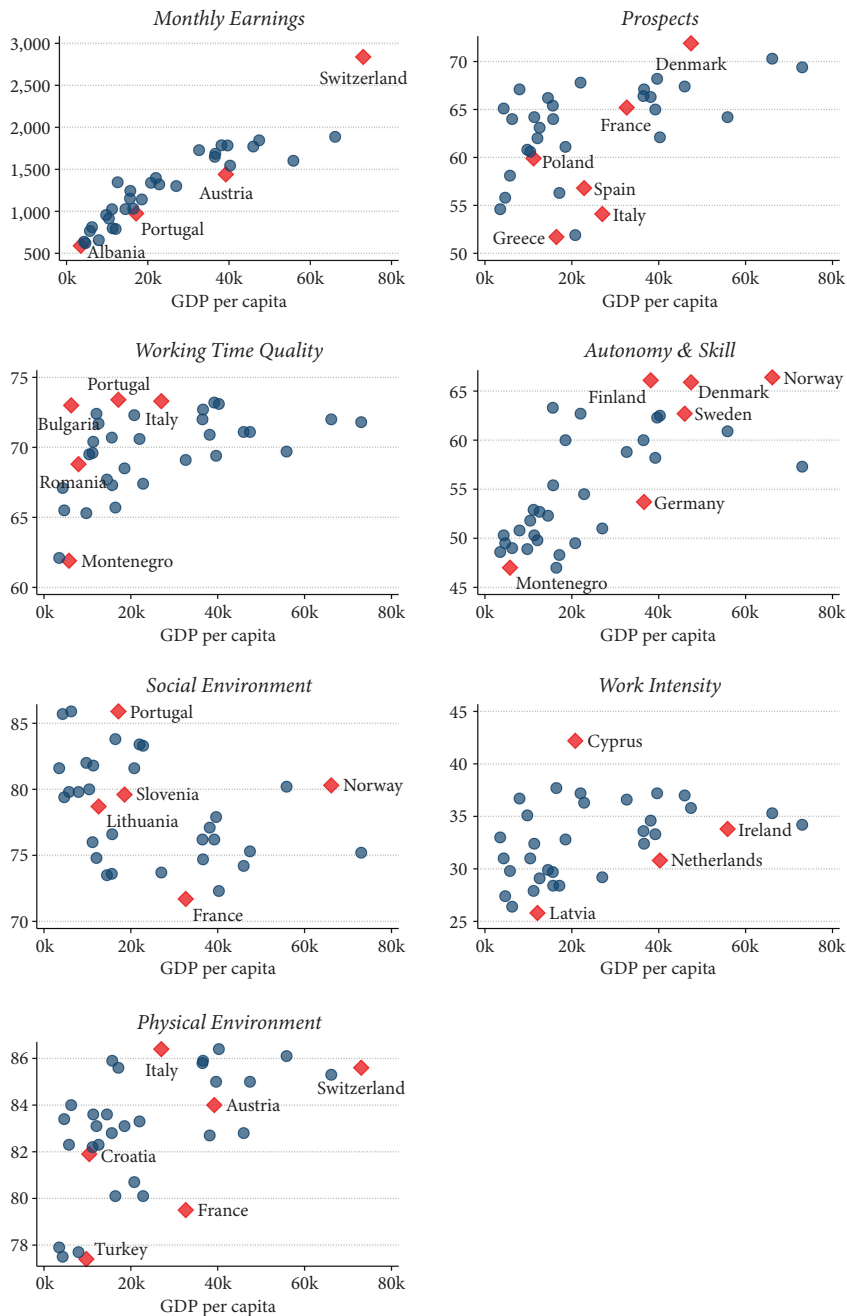


Figure 3.1 Country mean job quality indices by per capita GDP (€) in Europe, 2015

Note: Monthly earnings and GDP per capita are both purchasing power parity adjusted in euros. Other indices are normalized to a scale of zero to one hundred.

Source: EWCS 2015

second part of this book by dimensions (rather than by countries or regions).

3. Some of the extrinsic dimensions of job quality—principally, Earnings—are associated with a country’s “affluence,” as measured by its GDP per capita. However, the intrinsic dimensions of job quality are disconnected from GDP.

The verdict for social progress is, thus, neither all good nor all bad. Yet the absence of generalized improvement can be seen as a disappointment, or even a failure of modern capitalism to deliver progress, given that in other respects life has improved on average, with growing affluence in most countries, including increases in the HDI.

Chapters 4 through 10 consider how each dimension of job quality may be linked with the capabilities afforded to job-holders and review what we know and are still learning about how that dimension of job quality impinges on wellbeing. Each chapter then provides a new analysis of the trends for each dimension of job quality. The aim is to show what the trends are in different parts of the world and to highlight their significance.

Some big issues sit behind the motivation for this analysis. What are the determinants of each dimension of job quality, and how do these account for long-term trends? How far do these dimensions go, individually and interactively, toward generating capabilities and thereby meeting workers’ needs from work—that is, how do they affect wellbeing? And for both these questions, how are the causal links moderated by individual circumstances or by personal and social characteristics, including gender, ethnicity, and social class? How are these changes experienced by those living their lives through these jobs, and how do they affect workers’ behaviors such as quitting or retirement? Only partial answers can so far be given to these grand issues, here in this one book. Rather, these underlying issues delineate the likely plan for a multidisciplinary research agenda for scholars: a much-needed, but still-embryonic scientific subfield of job quality for the coming decades, built upon the foundational assumptions relating job quality to human needs, the emerging data, and a synthesis of modeling methods drawn from different disciplines. The subfield will continue to expand the collection of data on multidimensional job quality features, derive and test new hypotheses elaborating the relationships between job quality and wellbeing, and examine the factors driving the evolution of the dimensions of job quality across or within countries.

In an optimistic scenario for the coming decades, one in which scholars are listened to, this growing field of knowledge could better inform public policy for jobs and health, assisting policy-makers, policy advocates (including transnational organizations), labor unions, employers, and employment advisers to steer a way through a future of work that is beset by many uncertainties.

PART B

JOB QUALITY NARRATIVES

4

Earnings Quality

Good News or Bad?

The earnings we take home from our jobs form, for most people of working age, the prime capability for satisfying our material needs, thereby achieving material wellbeing. They afford us the freedom to devote resources to whatever we want or need for living the life we have reason to value, helping us to do and be whatever we aspire to.¹ If we want to see signs of progress for ordinary people in 21st century capitalism, we must hope that their earnings are rising faster than prices. Unfortunately, this positive perspective on earnings—as an essential part of job quality—is not commonly held when wages are discussed in public discourse. Often, they are seen instead from the viewpoint of businesses, for whom the wage bill is the largest cost item. Press commentaries typically view wage rises negatively, as potential risks to profits or sources of inflation, with employees' viewpoint strangely forgotten. Scholarly social science is, unsurprisingly, more even-handed, but it must contend with an alternative, long-standing complaint of disciplinary narrowness, which leads earnings to receive too little attention outside economics and too much exclusive attention within.

This chapter examines earnings in the current century from the workers' perspective while taking into account the objectives and actions of employers. The overarching question is this: Are earnings in 21st-century capitalism increasing, thereby promising improved capabilities and rising satisfaction of material and other needs, and thus contributing to socioeconomic progress?

Earnings and Wellbeing

Self-evidently, jobs that deliver higher pay afford the capability for more consumption of all kinds of goods and services. Social science lacks studies of how the material wellbeing gained specifically from earnings relates to

the other dimensions of human wellbeing considered in Chapter 2, such as happiness and life satisfaction. Nevertheless, it is reasonable to assume that the effects of earned income on capabilities and wellbeing are the same as those of all income (from whatever source), for which there is high-quality, broad-based evidence in recent decades.

That evidence tells us that material wellbeing is indeed positively related to people's self-evaluation of their lives and, up to a point, to people's emotional wellbeing. This relationship applies both to cross-sections of individuals in many countries and to time series trends of individuals or groups of individuals. The relationship is not very strong: Rather than encapsulating it with the simple epithet "money buys happiness," one might summarize it as the more prosaic "higher wages make you a bit happier." Nevertheless, the Easterlin paradox noted in Chapter 2 has been largely resolved. There is an approximately "log-linear" association between worker's earnings and their life evaluation, meaning that a given proportionate rise in income increases wellbeing by the same amount whether you are rich or poor. The log-linear association refutes any notion that, above a certain "adequate" threshold thought to satisfy basic needs, higher earnings cease to have any association with workers' own life evaluations. Rather, it implies that there is a diminishing marginal increase in life evaluation score for each successive increase in a person's wages; in other words, there is a concave rather than linear shape to the relationship.²

Other aspects of earnings, in addition to their absolute level, also matter, including whether they are paid on time and in full (especially relevant for platform workers). Foremost among these other factors is the relative earnings of comparators, who might be coworkers, highly paid company directors, or the workers themselves in their past jobs. Higher pay for a colleague doing similarly skilled work, for example, is a potential source of resentment and feelings of unfair treatment. When the comparators with higher pay are of the opposite sex or are of a particular ethnicity, the pay gap comes to encapsulate a deep social injustice. Such comparisons of relative income give reason to incorporate inequalities within an overall evaluation of earnings. Lower pay for oneself in comparison with a previous similar job may also be experienced as unfair.³ For more than a century such comparisons have been the focal point of the parallel "relative income theory" of consumer expenditure, stemming from the writings of the American social scientist Thorstein Veblen. A further

comparison is with what workers perceive as a fair reward in relation to the effort devoted to the job: According to psychology, the psychological contract between worker and employer is violated by an imbalance between effort and perceived fair reward, causing impairment to mental health.⁴

The perception of fairness depends also on the procedures through which wages and other job features are formed.⁵ Determining earnings through performance-related pay, in particular, has been found to have adverse effects on workers' health—increasing workplace accidents, injuries, and sickness absences, while lowering self-reported physical and mental health, elevating both medical and self-reported stress markers, and stimulating drug and alcohol use. The mechanism for these effects on health remains unclear. The possibility that it happens by inducing longer work hours, which then create health problems, has been refuted.⁶ Alternative potential channels, via performance-related pay or piecework affecting other aspects of job quality, such as work intensity, remain to be investigated.

In short, while earnings contribute directly to material wellbeing, the relationship with other dimensions of wellbeing—including subjective measures such as life evaluation or happiness indicators—has needed to be established empirically. That it is found to be positive, across a wide variety of settings and measures, is enough to add support for the inclusion of earnings as a substantive dimension of job quality. But there remains much to discover about how forms of remuneration affect the various dimensions of psychological wellbeing. The quality of earnings lies primarily in their contribution to material wellbeing and the corresponding afforded capabilities, but the formation and distribution of earnings also matter.

Earnings Determinants

Are your wages set in Beijing? So, famously, asked American labor economist Richard Freeman at the end of the 20th century.⁷ After a long period of rising trade and globalization, was the “law of one price” eventually prevailing, as China's huge population (alongside those of India and Indonesia) joined the capitalist world's labor force en masse? If so, the recently endured immiseration of lower-skilled American workers was set

to be generalized through the developed world. After assessing a lot of evidence, Freeman concluded, however, that the reality is much more complex, that “trade matters, but it is neither all that matters nor the primary cause of observed changes” in the earnings distribution. That judgment still holds, some three decades and much global turbulence later. As framed in Chapter 3, the earnings of workers everywhere are subject to a mix of competition, bargaining power, and regulatory controls, all shaped by global and national political forces alongside technological and cultural change, and by the predilections of employers.

The main point of comparison is productivity, the per capita output (that is, the value added) of organizations or of whole economies. If the value generated by employees exceeds the wage cost and the surplus is enough to provide a “normal” return on capital given the risk, the employer can continue in business. If that productivity rises, employers can increase their profits by investing more capital and hiring more labor. Competition in the labor market may then bring about a rise in wages. If the employer continues to receive the same return on capital, then wages should increase at the same rate as the growth of productivity. If and where wages grow faster than productivity, then capital would be withheld and businesses would close, thereby reining in the wage pressure, keeping wages and productivity in balance. In the perspective of mainstream economics, labor market competition is the dominant economic driver.

Labor markets deviate from competition in significant ways, however. On the upside, sometimes employers pay above the going wage in order to gain employees’ loyalty and commitment and induce harder work effort (“efficiency wages”). Premium wages may also be paid for employees who remain long-term with the company, especially where that longevity is valuable to employers: The premium is an incentive for younger workers to work hard and may reward extra skills acquired through working on the job. On the downside, the core reality of labor markets is that employers’ bargaining strength is strong, resting ultimately on employees’ need for an income to survive and thrive and on limitations on their ability to choose other employers. Thus, employers’ superior bargaining power normally keeps employees’ wages below their marginal product indefinitely, thereby adding an “economic rent” to their return on capital. That power can be enhanced by proemployer government actions such as restrictions on labor unions or legal protection of antipoaching agreements; it can also be offset by effective

unions, minimum wage rules, and an infrastructure of judicial employment protections and antidiscriminatory legislation.

As long as the balance of opposing forces remains relatively unchanged, however, it could be anticipated that wages will rise in the long run as fast as productivity. This expectation—embodying what I termed in Chapter 3 the “affluence theory of job quality,” applied here to earnings—forms the baseline for understandings of earnings over time.⁸ With ongoing growth in all varieties of capitalism since the Second World War, real earnings rose steadily. Following the crises of the 1970s and the end of the age of unrivaled US economic hegemony in Western nations, productivity growth slowed down, especially in the larger and richer Western developed nations, but remained positive.⁹ Earnings, accordingly, continued to grow in most nations, if slowly.¹⁰ The rate of growth varied partly because nations had developed at an uneven pace: Where economies were still catching up and converging on the lead economic nations, wage growth was faster—exemplified in the extreme by South Korea, where from a very low base, wages rose by nearly 5 percent per year between 1975 and 2002. Conversely, Switzerland had low economic growth, and wages grew by less than 1 percent per year, having begun from a high base line in 1975.

The slowdown in overall economic growth over the last quarter of the 20th century, together with the convergent paths narrowing the gap between leading and following nations, combine to hint at the emergence of a “wage transition” in developed countries, whereby historic high rates of earnings growth gave way to low or even zero rates in an advanced capitalism. Such a slowdown has been posed as similar to the widely discussed process of transition to lower growth observed in developing economies.¹¹ Could wage stagnation in late-20th-century United States presage a similar tale in other developed economies as they matured?

The variation in wage growth was down to more than just variable economic growth. A prime example is Spain, whose labor markets were emerging from a half century of repression. For a while, wages grew faster there, after the death of dictator Francisco Franco in 1975, than anywhere else in Europe. Conversely, wages had stagnated or risen much more slowly than was warranted by economic growth in some of the liberal market economies: the United States, Canada, Australia, and New Zealand. A similar tale of low wage growth lagging behind productivity growth emerged after 1990 in Taiwan.¹² These departures from the posited simple relation

with economic growth confirmed that the affluence theory of wages needed to be combined with an understanding of how the balance of power in labor markets was changing, altering the economic rents that could be extracted by employers.

One indication of this changing balance of power is that the share of national income accrued by labor fell significantly in a number of countries: in the United States, for example, by more than 5 percentage points over 1980 to 2000, with lesser falls in Britain and Germany but an even greater drop in France over the same period.¹³ Forward into the 21st century, the labor share fell by more than 1 percentage point in 19 out of 31 countries between 1995 and 2014 while rising in just eight. It could therefore be anticipated that wage trends may have “decoupled” from productivity trends. That turns out to be the case: Across 24 OECD countries, from 1995 to 2013 productivity grew by 28 percent, while average wages grew by only 22 percent, and median wages by just 18 percent.¹⁴ A comprehensive study has shown that most of this decoupling is explained by a combination of labor market slack and weakening prolabor institutions, supplemented by global pressures from trade and capital mobility.¹⁵

The changing balance of power in labor markets, together with technical and organizational changes that began to reduce the relative demand for less-skilled and routine labor, contributed also to the rising earnings inequality among workers in a majority of the developed nations in the late 20th century—a trend that, in itself, amounted to a decline in the quality of earnings, a distinct offset against the gains in average earnings.¹⁶ Against this trend, however, changing attitudes and the increasing regulatory grip of widespread antidiscrimination legislation was expected in the 21st century to deliver ongoing reductions in the historical gender wage gap in many countries.

Trends and Decoupling

Given that long-term economic growth has persisted in the 21st century in the large majority of countries, despite the major financial crash of 2008, it is expected from affluence theory that average earnings will have risen in parallel and that a transition to slow wage growth could only occur in economies with reduced economic growth. But that prediction is modified by known ongoing shifts in bargaining power. Union membership

density and authority continued to decline, if unevenly, through recent decades in most countries, and prospects for renewal in the postpandemic world remain uncertain.¹⁷ With their bargaining power solidified or even increased, employers could continue to claim a high or rising share of productivity increases, with the potential consequence that ongoing wage growth would be decoupled from productivity growth. Moreover, while computers and new communications methods had already spread to most workplaces by the 2000s, the exponential expansion of computer power and the gleaning of big data through an unchained internet were ushering in the so-called fourth industrial revolution with robots, advanced biotechnologies, and artificial intelligence. The ongoing “fissuring” of workplaces as less-skilled tasks were being outsourced to separate domestic or global service companies paying low wages was expected to contribute further to inequalities.

This chapter addresses four questions posed by these developments:

- Did a wage transition emerge in the 21st century, or have wages predominantly continued to grow on average at a decent rate, signifying ongoing progress?
- Have wages been keeping up with or, conversely, been decoupled from productivity growth?
- Have earnings continued to become more unequal this century, and has the gender wage gap continued to narrow?
- And how can the changing average earnings and inequalities be evaluated overall?

Data

Data improvements in recent decades make it easier to track broad pay trends for many countries from the 1990s on, and for even more countries from around 2005.¹⁸ A disadvantage is that pay data do not tell us about the earnings of self-employed workers, many of whom are solo-self-employed and dependent on one or a few “clients” for their work and are therefore, in practice, if not juridically, in an employment relation with those clients. The proportion of solo-self-employed rose after the millennium in a number of countries, notably in the Netherlands and the United Kingdom.¹⁹ Nevertheless, self-employed earnings remain only a small proportion of total

earnings, so wage trends can be relied on to portray the big picture about earnings trends.

Predominantly Rising Average Wages

Figure 4.1 addresses this chapter's overarching question as to how far employees' earnings are contributing to meeting their various material and social needs. It tracks, for 34 countries, the OECD's estimate of the average wage (measured in US dollars) received over the year, as calculated from national account sources, after allowing for inflation, for price differences across countries, and for the fewer hours put in by part-time workers. Several conclusions can be drawn:

- Strikingly, in most countries the average wage has indeed been rising for the last three decades, including for much of the 21st century. There is no sign of any generalized "wage transition" to drastically slower growth, let alone to a decline.
- There are, however, some significant exceptions. Across southern Europe the picture has been gloomy for a long time. In Greece, wage rates soared from the mid-1990s but peaked in the mid-2000s and then plummeted after 2009. By the end of the second decade of the 21st century, Greek employees' wages were settling back at a level below where they had been in 1998. In Spain, Portugal, and Italy wages have changed little since the mid-1990s, despite a short-lived boom in Spain just before the 2008 Great Recession that briefly echoed the boom in the post-Franco years in the 1980s. In Mexico, a large and still developing country, the average wage has stalled for three decades and remained, in the early 2020s, no higher than in the early 1990s. At a much higher level, wages also came to a halt in fully developed Japan during the 1990s; however, they appear to have restarted an upward trend from 2014. In the rich United Kingdom, the average wage virtually stalled from 2007. Then, the disruption of the 2008 Great Recession also became the occasion for a virtual halt to average wage increases in a few other countries such as Ireland and the Netherlands after 2009 and Australia after 2011. In Iceland, with its severe banking crash in 2008, wages spiraled downward but recovered rapidly after 2014 to regain their long-run upward path.

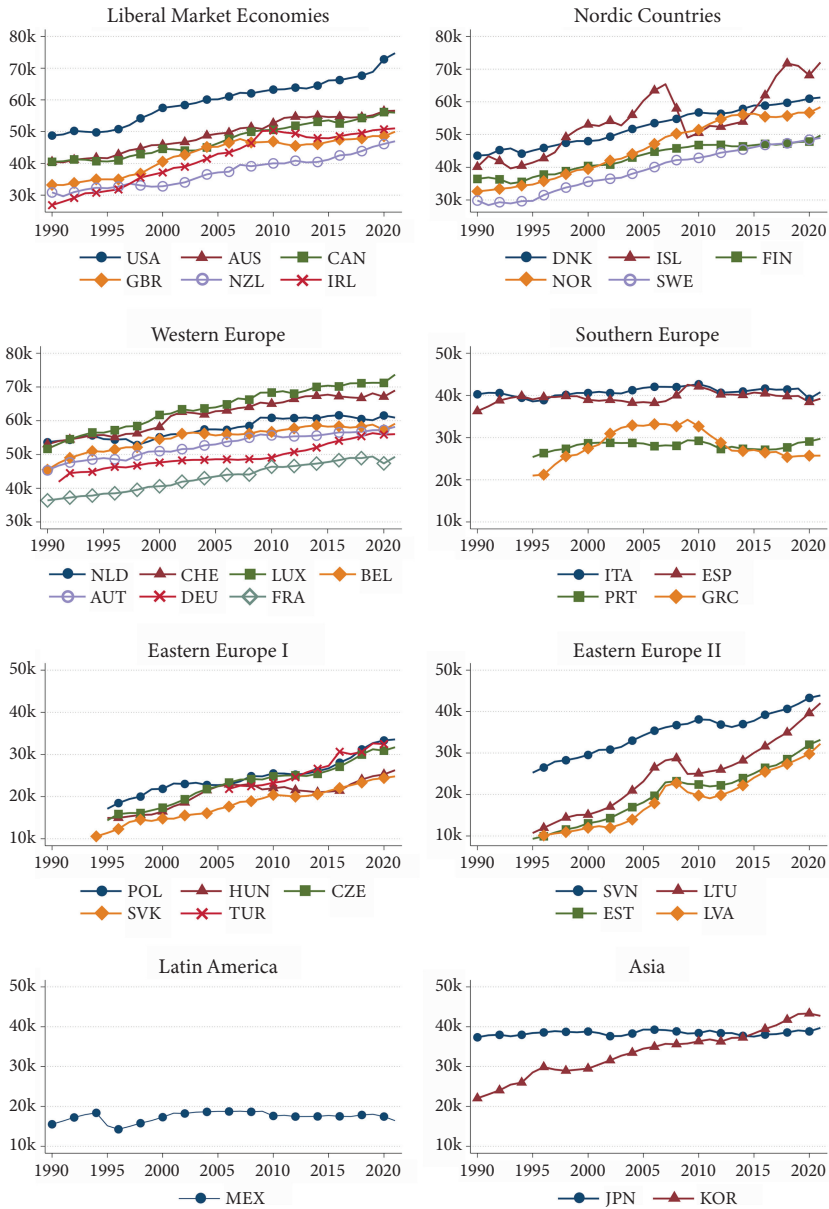


Figure 4.1 Average annual wage per full-time and full-year equivalent employee: trend change by country

Note: The indicator is measured in US\$ constant prices using 2016 as the base year and purchasing power parities for private consumption of the same year.

Source: OECD Statistics: <https://data.oecd.org/earnwage/average-wages.htm>

- There are also signs of continued national convergence. The average wage rate grew especially fast in the rapidly growing countries of Eastern Europe, following their transition from authoritarian communism. In Lithuania, Latvia, and Estonia wages were between three and four times higher by the start of the 2020s than they had been in the mid-1990s—undeniably, a huge improvement in job quality. Average wages also continued rising in most of the richer countries, although at a slower pace than in eastern Europe.
- Other evidence confirms that wages continued to grow outside the OECD. In China, whose economy had been rapidly growing in the late 20th century, one study confirms that wages grew rapidly from 1988 to 2013.²⁰ Earnings in Taiwan, by contrast, were largely stagnant in real terms from 2000 until at least 2012.²¹

Altogether, pay rose during the 21st century in 28 countries and fell in just 1 (Greece), though it stagnated in 5 countries. It is fair to conclude that earnings have *predominantly* increased across most of the examined nations during this century.

Decoupling

While the predominant average wage trend is positive, has this trend kept pace with or lagged behind economic growth? Figure 4.2 shows the percentage point gap between the growth of GDP per capita and the rate of growth of real wages between 2000 and 2022.

- Its main conclusion is that, between 2000 and 2022, real wages grew by at least one percentage point per annum more slowly than national productivity as measured by real GDP per capita, in each of 31 OECD countries out of the 33 examined. The two exceptions were Japan and the United Kingdom, where both wages and economic growth were very low. In some countries, the decoupling gap is large: In Lithuania, for example, where catch-up growth in the 21st century has been as high as 8 percent, wages have grown by only 4 percent per year—a still-decent rate of improvement but far less than was warranted by Lithuanian workers' increased productivity. In Israel, where economic growth was near 4 percent, wages grew by less than 1 percent per year.

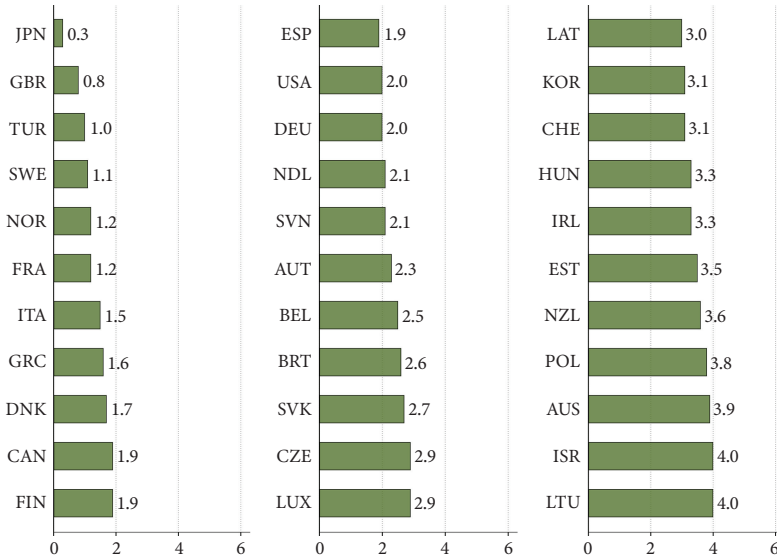


Figure 4.2 Difference between annual economic growth and average wage growth, 2000–2022 (percent points)

Source: OECD Statistics: <https://data-explorer.oecd.org/>

In the United States, average wages grew by 1 percent per annum, while growth was 3 percent.

In short, the pulling apart of wages and productivity in earlier periods persisted and is pervasive. Wages have generally become decoupled from economic growth. The gap suggests indirectly that there has been an ongoing decline, this century, in the share of values generated at workplaces across the world that are distributed to workers.

Inequality

Though informative, the trend in the average wage may not portray well the changing experiences of typical workers, such as those who are in the middle of the wage spectrum. The median wage in every country is less than the average wage, because the latter is lifted by a small number of extremely well-paid individuals at the top. In most developed countries, earners at the 90th percentile of the distribution earn more than three times those at the 10th

percentile; and in some countries—for example, the United States, South Korea, Israel, and Ireland—the ratio is more than four.²² Above that 90th percentile, pay is upwardly skewed even further at the very top for company executives, top finance workers, and sports stars. In the United States, that federation of extremes, the best-paid 1 percent at the beginning of the 2020s earned 15 percent of all pay, up from 7 percent in 1979.²³

Following this logic of the wage distribution, the rise of pay inequality since the 1980s in the United States, and to a lesser extent elsewhere, will have widened the gap between the average and the median wage. Therefore, the decoupling between economic growth and the wages of typical workers (i.e., the median wage) is even larger than that between economic growth and the average wage.²⁴ With increasing wage inequality, those below the median may even experience falling wages, despite the overall context of economic growth—as happened in the United States after 1980, especially among men.²⁵

Because of the concave relationship between earnings and wellbeing, and because of the impact of relative pay on wellbeing, a full evaluation of earnings as a domain of job quality for a whole society should take into account not only average earnings but also how earnings are distributed. So, what has been happening to inequality since the millennium? Figure 4.3 shows, on the right side, overall inequality over most of the distribution, as measured by the ratio between earnings at the 90th and the 10th deciles. On the left side, it shows trends in the gender earnings gap, one of the key socioeconomic axes of inequality. Together, three main conclusions can be drawn:

- First, the overall trend in earnings inequality is no longer predominantly upward, as was the case in the closing years of the 20th century. Rather, there are as many countries with reduced as with increasing inequality. In some countries (South Korea, Germany, the Netherlands, Australia, Sweden, and Turkey) there is a striking fall in earnings inequality of at least 6 percentage points.²⁶ Some of the falls happened from 2020 and may therefore have been temporarily influenced by the pandemic.
- Second, in the large majority of countries, the gender wage gap has fallen as predicted. The diagram lines countries up from top to bottom according to the size of the gender wage gap at the start of the century, which had varied a great deal: from as much as 41 percent in

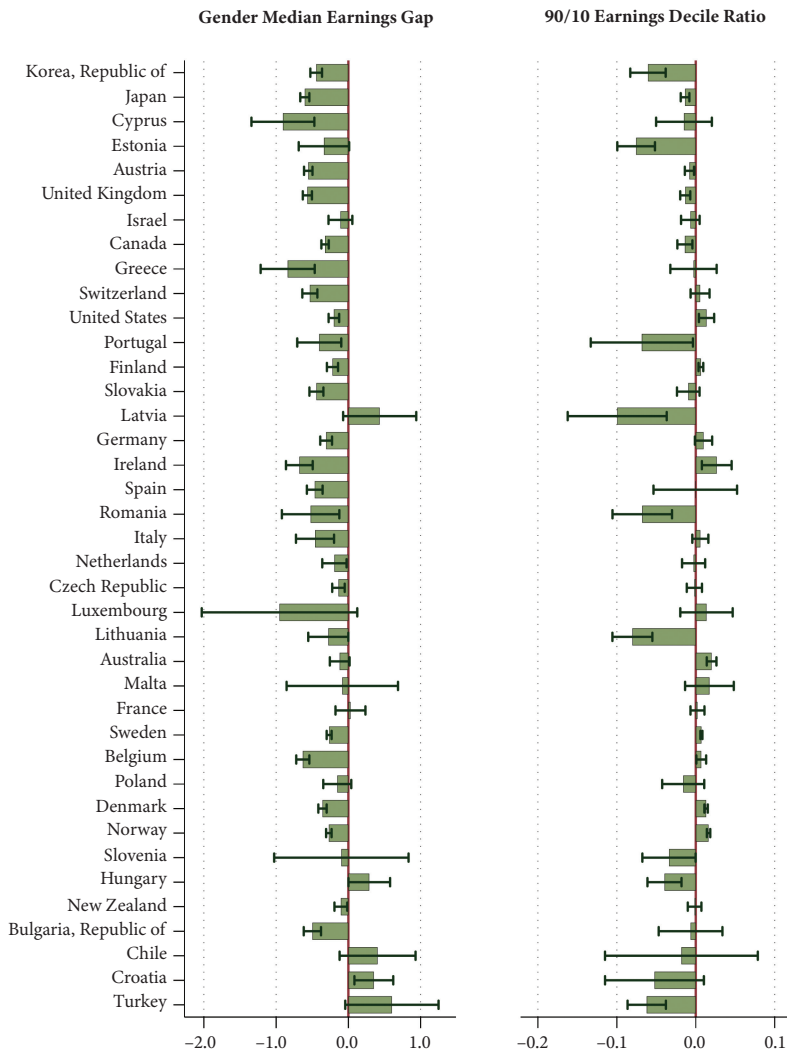


Figure 4.3 Twenty-first-century trends in earnings inequality

Notes: Based on earnings of full-time employees and the self-employed. Countries are ordered by the size of the initial gender median earnings gap. The trends are the estimated annual trends from the initial year until 2021. For the gender gap, this initial year is mostly 2002; for the decile ratio, this is mostly 2006.

Source: OECD Statistics: <https://data-explorer.oecd.org/>

South Korea down to just 3 percent in Turkey. For the three countries with the lowest initial gender wage gap (Chile and Croatia alongside Turkey), the gender gap even increased over the 20th century, and by

2021 the gender gap in Chile, at 11 percent, was close to the average for all OECD countries. This exemplifies some convergence. Nevertheless the rate of convergence is slow. In some countries with a high initial gap the trend was sharply downward—for example, Greece. In others with a similar starting point—for example, Israel—there was much less progress. In sum, there have been only slow reductions in the gender wage gap and a modest convergence between countries. Despite the predominant progress, extrapolating the trend shows that there is no clear end in sight for this manifestation of job quality inequality.

- Third, although one might expect that gender inequality is a key ingredient of overall inequality, there is no substantive correlation between the trends in the gender gap and the 90/10 decile ratio. Half a century ago, female workers in the United States were “swimming upstream”—benefiting from a falling wage gap, even while overall inequality was increasing.²⁷ That juxtaposition continued in the United States in the 21st century, though the changes were relatively small. Other cases of upstream swimming can be seen in, for example, Slovakia, Cyprus, and Estonia, but more of the changes were in the same direction—for example, in Bulgaria, Switzerland, and South Korea, where both overall and gender inequality came down.

“Earnings Quality” at the OECD

To try to take account of both average earnings trends and the changes in inequality in one single measure of “Earnings Quality,” the OECD adopts a Benthamite utilitarian philosophy, representing society’s overall wellbeing in a social welfare function that combines the two ingredients of average earnings and inequality. Deploying methods proposed originally by British inequality economist Tony Atkinson, and assigning a strong degree of “inequality aversion,” the OECD computes indicators of Earnings Quality for each country.²⁸ One does not have to accept the tenets of utilitarian philosophy, originally proposed in the mid-nineteenth century by Jeremy Bentham, to prefer more equal societies.²⁹ Yet, putting aside any reservations about this individualist philosophy, the trends in the OECD’s measure may nevertheless be informative. Figure 4.4 shows how the hourly Earnings Quality index has changed between 2004 and 2016 in 35 countries.

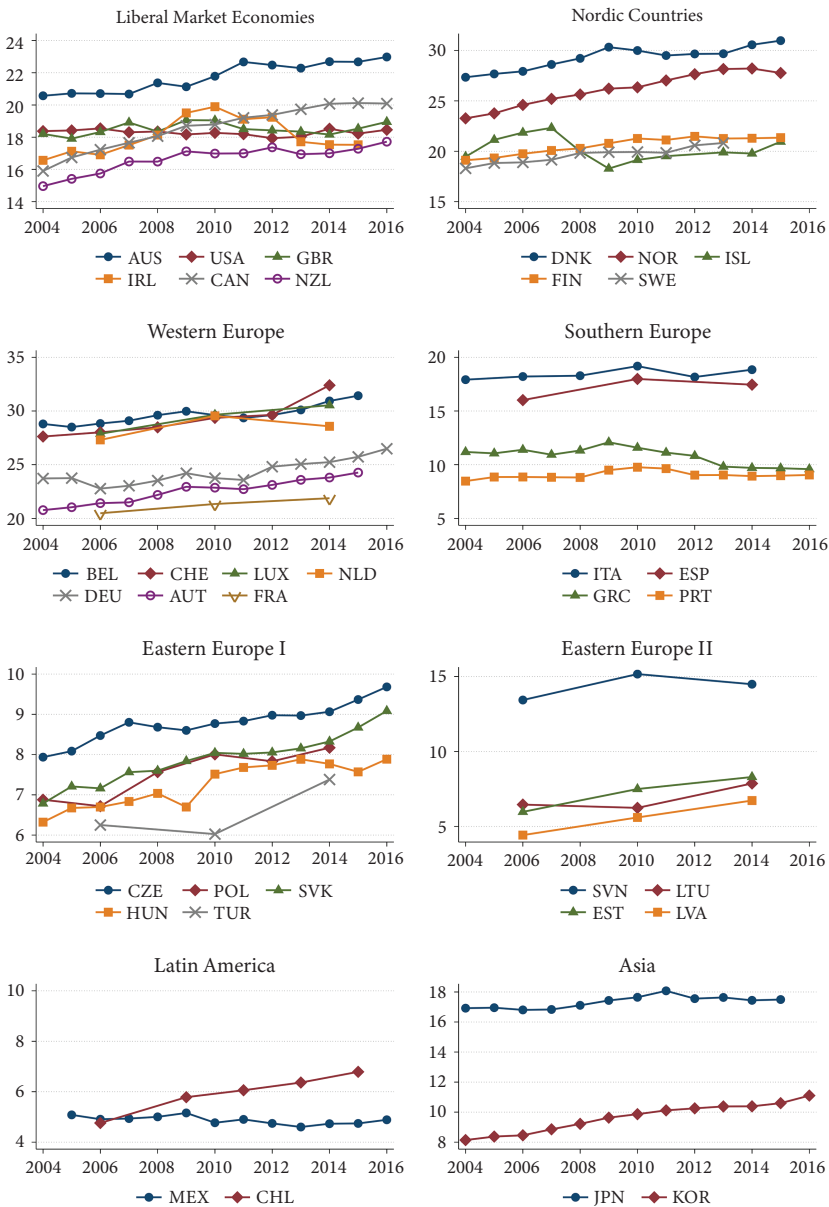


Figure 4.4 Earnings Quality, 2004–2016

Note: Earnings quality measures hourly earnings taking into account both their level and their inequality; it is measured through the general means approach and assumes high inequality aversion. The units are constant US\$ at 2015 prices.

Source: OECD Statistics: stats.oecd.org/Index.aspx?DataSetCode=JOBQ

- Compared with Figure 4.1, the trends in Earnings Quality are, for many countries, moving in the same direction as average annual wages over the same period. The overall picture is again positive, in that Earnings Quality rose for most countries. In particular, even though inequality increased in places, Earnings Quality increased right across eastern Europe and for much of western Europe and the Nordic countries with the same exceptions—the Netherlands and the United Kingdom. In Southern Europe the picture is, again, predominantly flat. In Greece, Earnings Quality fell over the period.
- There are, however, some important differences. In contrast to the high and slowly rising average wages in the United States over this period, the level of its Earnings Quality does not stand out above that of other liberal market economies and is distinctly flat in its trajectory. The difference stems from the high and rising inequality, where the 90/10 decile ratio soared by 20 percentage points between 2006 and 2016. This stagnation in the United States contrasts sharply with the vibrancy of its neighbor Canada, where Earnings Quality was booming for most of the same period. In Mexico, instead of a flat profile, there is a downward trend in Earnings Quality over the period.

In short, while the OECD's "Earnings Quality" indicator cannot claim to fully encapsulate the varied ways in which earnings meet (or fail to meet) people's material and other needs, it does enough to show how earnings inequality trends and differences do matter for how societies' jobs may be evaluated.

Positive but Uneven Progress

So, global progress in earnings, though uneven, has been predominantly positive in the 21st century so far. The central story of this chapter is that as far as jobs' contributions to material wellbeing are concerned, the first two decades showed modest improvements in average earnings in most (that is, 28 out of 34) countries. These improvements were not as large as could have been warranted by the continuing growth of productivity. Nevertheless, the improvements were supplemented in many countries by reductions in gender pay inequality. Moreover, while in some countries there were adverse movements in the 90/10 decile earnings ratio that dampen the evaluation in

those cases, there was no predominant upward trend in earnings inequality across most countries such as had occurred in the latter part of the 20th century.

Workers in Britain, in particular, have been missing out since 2007, not helped later on by the trade impediments and loss of skilled workers occasioned by its secession from the European Union. Yet, as is often the case, the largest economy of all—the United States—is the major exception to the mainly positive narrative. There, wages lagged behind productivity, and wage inequality continued to rise, with only brief interruptions from 1979 to 2021.³⁰ Large swathes of American workers traveled downhill. The situation in southern Europe also remains poor, with low economic growth and near-zero wage growth. For large proportions of the population in these countries, the stagnation in their earnings inevitably limits the capabilities afforded to them to make reasoned choices and experience a decent living standard in ways they prefer.

Back in the 1970s, upheavals in the politics of the oil industry triggered inflation crises that marked the end of a long period of stability across global capitalism. Driven once again by an energy shortage, this time in the wake of the Russia-Ukraine war, the 2020s saw new and widespread inflation in the aftermath of the pandemic lockdowns, leading to a cost-of-living crisis with unfolding consequences for workers' real earnings. But one difference in this third decade of the 21st century is that social scientists can more easily follow the macrosocial picture and thus assess the progress of earnings in the context of the disruptions and the evolution of the global economy. Through the modernization and digitization of data collection processes, an aspiration for both scholars and policymakers is to expand yet further the range of countries for which such tracking is facilitated. Such an expansion, combined with prompt dissemination of findings and an even-handed rather than solely business-oriented perspective, would enhance the quality of public discourse and of policy-making related to wages.

Prospects and Precariousness

Jobs and the Capability for Future Planning

Throughout human history only minorities have enjoyed a great deal of real control over how their working lives unfold. Everyone else must live and deal with uncertainty or somehow come to terms with it through their philosophies and faiths. In preindustrial times, the risks of harvest failures, disease, displacement, and military incursions were pervasive. Under capitalism, the jobs that provide us with incomes for today might not be there tomorrow, or might have changed. In 2015, one in six European workers feared that they might lose their jobs within six months.¹ Automation looms and financial crises arrive out of the blue, while insecure “platform jobs” seep into view. Sometimes employment insecurity comes to be implanted into the fabric of the economy for lengthy periods of macroeconomic stagnation.

And yet, in modern times, most jobs come with a presumption of at least some continuity, whether for months, years, or for a small minority, a working lifetime. The “Prospects” of jobs are those characteristics that affect how well, or badly, they are expected to meet workers’ future work-related needs. Prospects are thus positively related with wellbeing, and taken together, they constitute a distinct dimension of job quality, whose trends are to be examined in this chapter. The positive side to this dimension is that jobs might improve: future earnings may rise with longer job tenure and experience; the work may become more skilled, and more autonomy may be granted. The negative side is job insecurity: the risk of involuntary job loss or that the job will be degraded with attendant losses of income, status, and sense of meaning.

An understanding of trends in the Prospects of jobs is an indispensable ingredient of any examination of work’s contribution to socioeconomic progress in the current century. Good Prospects afford the capability to plan lives and careers. They give a certain freedom to move forward with relationships, families, and life’s aspirations. Not only for the future, better

Prospects also enable greater material satisfaction in the present (through home mortgages or other consumer loans) and psychological satisfaction from having a sense of identity and from pursuing a chosen life narrative.² Conversely, poor Prospects can be a huge source of contemporary stress in the here and now, stemming ultimately from the unrelenting daily need for an income to obtain the food and accommodation that families need for living.

Security, in particular, is one of the most appreciated capabilities afforded by a job. When workers were asked how much they valued various job features, job security was among the most treasured: it was rated as “very important” or “essential” by 82 percent of British workers in 1992, rising to 86 percent in 2017. Across 37 countries in the International Social Survey Programme in 2015, some 93 percent of respondents thought that job security was either important or very important in a job; in the United States, the proportion was 97 percent.³ It is no wonder that job security is also a central ingredient of the social democratic vision of social progress.⁴

This chapter has three aims. First, it examines the reasons why people assign so much importance to this capability—being secure and able to plan for a positive future—and reviews the developing body of evidence about how job security is related to workers’ health and wellbeing. Its second aim is to consider the factors and policies that are shaping the Prospects of jobs in the 21st century. Employers, as well as workers, commonly have reason to value continuity of employment, at least for some sectors of the workforce. Yet it has been argued that the benefits of continuity are being undermined by innovation and by disruption in employment relations. It is maintained that the early 21st century is a new era of job insecurity and that the costs to people and communities of that insecurity have been rising. The third objective, therefore, is to examine the evidence of whether the Prospects of jobs have been changing across countries and whether they have become more divergent and to consider evidence of whether workers’ precariousness has increased due to an increasing cost of job loss.

Prospects and Wellbeing

From the economic perspective, Prospects are constituted by the potential flow of future job benefits (including future earnings) and by their

uncertainty. On the upside, Prospects would be higher when rising earnings are anticipated or when improvements in jobs and their quality can be confidently projected. Conversely, Prospects would be lower when future earnings are expected to stagnate or fall or if there is a positive probability of job loss (i.e., job insecurity). Prospects would also be lower, but significantly so, when retirement is imminent.

As noted in Chapter 2, social scientific evidence has confirmed that the effect of being unemployed on a person's wellbeing is much stronger than can be accounted for purely by the attendant loss of income: The loss of a job may lead to decreases in social status, social exclusion, and a compromised identity. In parallel, job insecurity potentially goes well beyond just the economic calculations of job loss. Moreover, short of job loss, workers may fear that the nature of their jobs will be degraded.⁵ According to one stream of studies, each of these multidimensional insecurities affect workers' mental and physical health and their job satisfaction; they also affect attitudes such as trust and organizational commitment that are of direct value to organizations. With these risks of several types of losses, the psychological perspective conceives job insecurity as a multidimensional stressor, contributing to a repudiation of the implicit psychological contract between worker and employer, with potential consequences for health and wellbeing. Conversely, job security is conceived as a component of "reward" in the effort-reward imbalance model of job strain, or a component of "resources" in the job demands-resources model.⁶ More generally, the Prospects of jobs, encompassing both job security and the anticipation of advancement within the job, can also be construed as a resource.

The wider concept of "employment insecurity" derives from job insecurity combined multiplicatively with its potential cost, remembering that the cost is both financial and nonpecuniary:

$$\text{Employment Security} = (\text{Probability of Job Loss}) \times (\text{Cost of Job Loss})$$

The effects of job insecurity on health are channeled through employment security, implying that they will be greater for people or groups for whom the cost of job loss is higher. Employment insecurity is at the heart of the debate and scholarship surrounding the precariousness of work in recent times, to be discussed below. When focusing only on the financial costs—which are likely to be heavily influenced by the level of social insurance compensation

offered by the welfare state—employment insecurity is the expected earnings loss associated with unemployment and has been termed “labor market insecurity.”⁷ In the United States and elsewhere where health insurance is often packaged with jobs (and so becomes a part of job quality), the cost of job loss may include the loss of that insurance.

To this individualistic perspective, economic sociology adds the expectation that Prospects also have external consequences for workers’ families and communities.⁸ Family formation and fertility are predicted to be positively affected by good Prospects; conversely, where poor Prospects induce workers’ job strain, this extends stress to their families. Children’s sleep quality suffers when parents’ jobs are insecure.⁹ Where employment insecurity is sustained, workers are denied the capability to build a career narrative as part of their life plans: Sociologist Richard Sennett portrays the consequent loss of wellbeing as a “corrosion of character.”¹⁰ Social cohesion is also said to be put at risk where there is widespread endemic insecurity. From the sociopolitical perspective, precariousness has even been conceived as the modern age’s new “regime” for social control, the consequence being quiescent workers who are reluctant to push back against poor wages and working conditions.¹¹

How far does the evidence substantiate these private and external effects of the Prospects of jobs on the health and wellbeing of workers and communities?

Issues of Measurement and Method

Since Prospects are forward-looking, workers’ expectations are the primary item to be measured. As it happens, workers’ expectations of job loss and of their chances of subsequent reemployment are known to correlate reasonably well with the frequency of their subsequent experiences.¹² Whether or not their expectations are accurate, it can be argued that their perceptions are what matters for their wellbeing and for the choices they make.

A variety of strategies are followed to measure expectations of employment insecurity. The preferable approach is to measure its components individually, using survey items that ask respondents to report their chances of becoming unemployed within a stated period, such as the coming year, and separate items asking them to report their chances of reemployment.

The two measures of job insecurity and cost of job loss can be multiplied together and combined with social insurance data to compute their employment insecurity. A second strategy is to ask respondents to report their level of concern or anxiety about job loss (or other uncertainty such as job redesign). This strategy captures with one item the elements of employment insecurity *and* the respondents' loss of subjective wellbeing. This all-in-one approach is efficient, but the resulting measure is unsuitable for investigating the impact of insecurity on health and wellbeing. Less useful is a third strategy, which is to combine the two elements of employment insecurity additively, which fails to capture the enhanced effects of job loss when the cost of job loss is high.

Though direct indicators of workers' expectations are accepted as valid, the contractual terms of jobs (for example, whether temporary or time-delimited) or measures of how jobs turn out (e.g., average job tenure and loss of income) can stand in as alternative indicators. In this way, "objective" outcome measures are treated as proxy measures for the true item of interest: what workers expect. Such objective measures are useful where subjective measures are absent or suspected to be unduly biased.

Methodological questions are also especially important for this area of enquiry. Insecurity is correlated with low job quality in other dimensions, so to isolate and estimate the specific impact of job insecurity requires controlling for these other factors. Another issue is reverse causation: Workers may be selected into less secure jobs if they already have poor health, or their poor health may make them prone to job loss and therefore to feeling insecure.¹³ To try to allow for these problems of endogeneity and reverse causation, data sets with measures of a rich set of controls are commonly used. Many such studies have now been published, showing associations between insecurity and ill-health or low wellbeing. One straightforward interpretation of these is that job insecurity does indeed cause ill-health, but in most of these it is not guaranteed that all potential controls have been included and that reverse causation is absent, so the results of some studies could be seriously biased. The more satisfactory cross-section studies are those that examine the effects of insecurity that result only from an exogenous variation—that is, some factor that comes from outside the model. Also more acceptable are those that utilize longitudinal data and can therefore avoid estimates being confounded by bias associated with unobserved personal characteristics.¹⁴

The Key Evidence

Evidence surrounding the effects of career advancement possibilities on wellbeing is rare.¹⁵ Thus, the focus here is on the following effects of job insecurity:

- In most studies the estimated impact of being in an insecure job is found to be substantial. For example, a recent study in South Korea found that, compared to those in secure jobs, those with low job security were found to have a 25 percent higher chance of experiencing depression, a 73 percent higher chance of a decline in self-rated health, and a three times higher chance of suicide ideation.¹⁶ In one of my studies, I found that among Australian workers a 10 percentage point rise in their perceived risk of job loss would lead to a rise of between 16 percent and 45 percent of a standard deviation of their life satisfaction, depending on their perceptions of the chances that, if they were made redundant, they could regain an equivalent job.¹⁷ Large effects are also found from variations in insecurity that explicitly derive from an outside factor such as the firms' downsizing strategy or the cross-national differences in labor regulations.¹⁸ In some studies, the detrimental effects of job insecurity on mental health are reported to be larger than those of other dimensions of job quality for which data are available, such as earnings, work intensity, autonomy, and the social and physical environment.¹⁹ One study in Britain concluded that the effects were so large that insecurity was a "major issue for population health."²⁰ A metastudy reveals that the substantive effects of insecurity on depression, anxiety, emotional exhaustion, and low life satisfaction are to be found across many nations and economic contexts.²¹ One study also confirms explicitly that there are detrimental effects from job insecurity, *independent of* workers' financial insecurity, confirming that the potential nonpecuniary losses are important.²² However, there is little evidence as yet about the mechanisms through which insecurity affects health. Suggestions include the idea that job insecurity induces sleep deprivation, which then causes depression: There is only some limited support for this.²³
- The effects of job insecurity are worse where it is combined with a high cost of job loss: In other words, the effects of job

insecurity and the cost of job loss are, as hypothesized, multiplicative. Highlighting this interaction, the impact of job insecurity combined with low employability can be comparable in magnitude to the impact of being unemployed on life satisfaction and mental health.²⁴ Or, to take another striking study, lengthening the time to retirement—a consequence of pension reforms across many European countries—caused a large increase in depression, but only among workers whose jobs were open to automation and therefore insecure.²⁵

- Several studies show that the magnitude of the detrimental effects of insecurity varies among people and between distinct socioeconomic groups. For example, personality makes a difference: Job insecurity has a larger negative effect on mental health among those who have high levels of neuroticism or introversion.²⁶ Midlife and older workers tend to suffer more than the young.²⁷ Exactly why has not been firmly ascertained: A possibility is that older workers, more established in their careers, face a greater cost of job loss (both pecuniary and non-pecuniary). One study found that job insecurity especially affects older workers' sense of personal control, which may in turn be experienced as stressful and debilitating.²⁸ Nevertheless, a systematic review confirms that insecurity remains a potent determinant of poor mental health even among young workers.²⁹

The effects of other moderating factors are also in line with the hypothesis that the effects of job insecurity interact multiplicatively with the cost of job loss. Occupational self-efficacy (a belief in one's own competence) enhances one's sense of employability and thereby reduces the impact of job insecurity on health; good social support is found to help (especially female) workers to develop coping strategies; the detrimental effects of job insecurity are worse for those who are experiencing work-to-family conflict.³⁰ The studies do not, however, consistently reveal a gender difference in the effects of insecurity.³¹

- Finally, there is some evidence that the effects of job insecurity extend beyond the individual, impacting the health and wellbeing of others in workers' families and communities. These effects come about through altering life courses in two ways: delaying entry into careers and postponing marriage and family formation.³²

Conclusion: Science Is Now Unveiling the Costs of Job Insecurity

In the era of mass unemployment that befell much of the Western world in the 1930s, its devastating effects on people and communities were unraveled and laid bare in Marienthal, a small town in lower Saxony, Germany, in what was to become a classic study.³³ In the post–Second World War world, insecurity has often remained a hidden, underestimated problem.

Yet the body of evidence supporting and elaborating on the effects of job insecurity and employment insecurity on health and wellbeing is fast expanding and has become a key, ongoing component of contemporary job quality science. Its abiding verdict is striking: that job insecurity poses a genuine health risk. The findings are now starting to confirm that the detrimental effects that stem from poor Prospects of jobs are serious and substantial. Insecurity may be likened to a newly proven pervasive health risk in a population, such as industrial pollution. The issue of insecurity is not new, yet the science of the 2020s is better able to pin down the health consequences, paving the way for potential rationally motivated macroeconomics and regulatory controls. The social “disease” of insecurity stems initially from unemployment, which can seem to confine the welfare issue to the small minority of the population who experience it directly. But unemployment also has large external effects: It brings the fear of job loss and the difficulty of job replacement to many other workers and their dependents—what I have referred to as the “misery multiplier.”³⁴ The detriment is still broader when job quality insecurity is added to the considered sum of uncertainty. In some subsectors of the workforce—for example, among the youth of Spain—the insecurity can become endemic. In times of economic depression, it spreads to majorities.

There remain many issues on the research agenda. Further experimental, quasi-experimental, and longitudinal studies are needed to establish yet more firmly the causal effects of insecurity; specific health and wellbeing effects will hopefully be better identified. The research needs extending to test the importance of career advancement possibilities for wellbeing. Precisely how the effects vary across countries with differing levels of development and welfare protections, among communities and socioeconomic groups, is an ongoing project of discovery. Further interactions between the

social and economic dimensions of job quality are likely to emerge from research, and mitigating treatments (such as good management practices and reemployment guarantees when mergers or downsizing are undertaken) also merit much more extensive investigation.³⁵

Prospects and Precariousness Theses

It is also important to establish a good understanding of the trends in the Prospects of jobs and, more specifically, in job security: If Prospects are so important for the health and wellbeing of workers, what shapes them?

Ultimately, the factors driving Prospects are the same macroeconomic, institutional, technological, and organizational factors that affect all dimensions of job quality, as outlined in Chapter 3. At the core of economic thinking on security is an application of the affluence theory of job quality, the idea that economic growth and development bring an increasing demand for labor, which in turn drives up the Prospects of jobs as firms compete in the labor market.

Unemployment and Job Insecurity

The complication, however, is unemployment—its presence being ever the reminder that markets do not settle in a simplistic textbook equilibrium of supply and demand.

A well-known rule of thumb in macroeconomics, dubbed Okun's law after the American economist Arthur Okun, who proposed it, is that rising unemployment is associated with low economic growth—that is, below the economy's potential growth. Higher unemployment implies that more people encounter or hear of people being out of work—if not directly, then through their family and friends or through their own employer freezing recruitment or downsizing. National and social media reports of unemployment help to make people aware of the risk and apply it to themselves. According to the “availability heuristic” in psychology, a greater availability of news about unemployment induces higher individual expectations of job loss, sometimes beyond what is reasonable given their own situation. Through whatever mechanism, an increase in the overall unemployment rate would be

expected to raise workers' perceptions of job insecurity and of their chances of gaining another job if needed. Conversely, both elements of employment insecurity will be lower when unemployment is low. Thus, consistent with affluence theory, low economic growth will be associated with rising unemployment in the aggregate and with increasing job insecurity. Conversely, insecurity can be substantially reduced if potential and actual growth are fast enough.

But could unemployment and job insecurity be reduced virtually to zero—a state of so-called full employment? In the interwar depression years Polish economist Michal Kalecki, following in the footsteps of Karl Marx, explicitly theorized why businesses may have appreciated there being a certain positive level of unemployment as a discipline for labor. With the threat of unemployment hanging over workers, wage inflation could be kept in check, and the propensity to work less hard could also be reined in by the fear of job loss. Without such a threat, he argued, “the social position of the boss would be undermined, and the self-assurance and class-consciousness of the working class would grow. Strikes for wage increases and improvements in the conditions of work would create political tension.”³⁶ In the ongoing conflict over economic rents, some positive rate of unemployment was thus the normal state of affairs. More radical analysts following Marxian business cycle theory argued further that periodic economic crises with accompanying surges in unemployment were inevitable. From these perspectives a substantial and variable level of unemployment, and hence of job insecurity, was an inevitable fixture in modern capitalism. Worldwide, the 1930s were precarious times, not just for those who were actually unemployed but for all those in work, together with their dependents, who lived in fear of unemployment, alongside growing anxiety over war.

Both these macroeconomic perspectives came to be rejected by economist Keynes in the 1930s and by the post-Second World War philosophy of Keynesianism, which argued that unemployment could be kept to a minimum “frictional” unemployment by competent fiscal and monetary policies that matched the growth of aggregate demand to potential supply. A certain minimum level of frictional unemployment was seen as inevitable, as firms evolve and people move between jobs. The assumption remained that involuntary unemployment and insecurity could be minimized through adept macroeconomic management, accompanied by efficient labor market institutions that assist in matching labor supply to demand in all areas and at all skill levels.

Thus, affluence theory, together with conventional macroeconomics, places the main driver of job Prospects in the macroeconomic policy court. Job insecurity and the probability of regaining employment are both predicted to vary with the stage of the business cycle, which is an outcome of macroeconomic functioning. Job insecurity and employment insecurity can be minimized if unemployment is kept low. If employment insecurity is increasing in a business cycle downturn or, worse, in a sustained period of economic depression, it is the competence of the treasury ministry and the monetary authorities, rather than that of the employment secretary, that should be called into question.

Of course, the reality is contradictory and complex, and how macroeconomic insecurity plays out in different countries cannot be predicted in a deterministic way. If Kalecki's theory is also taken into account, even the most competent monetary authorities might have to tolerate more than a minimal frictional level of unemployment and insecurity. Additional unemployment might be deemed necessary in some states to strengthen employers' resolve to suppress wages and working conditions and to better enforce workplace discipline.³⁷ Thus, there are, it seems, inherent limits to how far rising affluence can reduce job insecurity. A very affluent society could expect to reduce the costs of insecurity through better insurance, better-funded training, and more-efficient job market agencies, but not eliminate it.

Another complexity is that neither employment insecurity nor unemployment are randomly distributed among populations. Rather, labor markets come to be segmented into more and less secure sectors. Employers and some groups of workers enter into latent long-term contracts, where security and career advancement are offered in return for commitment and hard work. In "internal labor markets" employees can expect occasional promotions and regular pay raises along with their seniority and their accumulation of skills. Jobs with better Prospects therefore come to be populated with higher-skilled workers.³⁸ The boundary between insiders and outsiders often coincides with discriminatory demarcations of gender or ethnicity. From the perspective of precarious work theory, it is expected that persistent gendered social inequalities will lead to women experiencing a greater burden of insecurity, especially in part-time jobs.

Precariousness Theses

The net conclusion of these arguments is that job insecurity, at some level, is inevitable and normal. One could not therefore aspire to remove altogether the ill-health effects of insecurity by eliminating insecurity. Nevertheless, job insecurity is variable: It affects some communities and socioeconomic groups much less than others, and along with macroeconomic trends, it varies over time.

This verity frames my assessment of the proposition that modern capitalism is mired in an age of precariousness for workers.³⁹ While this idea has many complexities, I distinguish between three oft-cited theses within this general proposition: first, that from around the late 1970s to the present, throughout most of Western capitalism, unemployment and insecurity have generally been substantially greater than during the period of postwar stability; second, that job insecurity has continued to increase throughout this time, including through the 21st century; and third, that the costs of insecurity have been increasing. It is helpful to assess these theses separately.

The first precariousness thesis—that the modern capitalist era since the 1970s is clothed with a new, higher level of normal job insecurity—is the straightforward recognition of the historical break with the postwar capitalist settlement, marked by the formal demise of the dollar standard in 1972, the intensification of wage conflicts, and the rise of middle-Eastern oil power through the 1970s.⁴⁰ Major opposition to Keynesianism grew from a resurgent monetarist approach to managing macroeconomic policy that substantively denied the existence of involuntary unemployment. In the succeeding decades, unemployment in most countries averaged significantly higher than during the 1950s and 1960s, though without returning to the levels of the 1930s Depression era. Even though we have no direct, representative data on perceptions of job security from, say, the 1950s to compare with the 1980s and after, there is little reason to doubt the veracity of this first thesis.

This upward shift in unemployment was accompanied by changes in the balance of power resources of capital and labor. Widespread de-unionization, the financialization of management incentives and attitudes, the globalization of trade, and outsourcing of production tasks have enabled employers to transfer more risk to workers. The institutional supports for

internal and occupational labor markets were thus undermined.⁴¹ Behind the changes lies the imprint of neoliberal employment policies, such as the “flexicurity” policies that came to be widely advocated across the European Union, and the deregulation and permissive antiunion practices in the United States. These factors are supported and supplemented by the introduction of digital technologies, enhancing fears of dismissal and job quality degradation and facilitating new forms of production and employment through gig work via digital platforms. Taken together, these factors add to the argument that job insecurity is generally greater than in the post-war period. They have also supported the second precariousness thesis, the idea that job insecurity has continued to increase in the current century.

There is, however, a counter-argument to this second thesis—, namely that the rationale for the maintenance of internal labor markets, based on employers’ continuing needs for workers with strong firm-specific skills and employees’ undiminished preferences for security and for advancement, remains strong. Moreover, the appearance of new forms of employment which are, *prima facie*, less secure, does *not* in itself imply more insecurity in the aggregate. While digital platform work is established in most countries, it remains a small part of the workforce, and some jobs thereby displaced were already insecure. And if flexible employment practices, and more efficient job markets, did actually succeed in lowering unemployment rates, insecurity might even trend downward along with it. The question for research therefore concerns whether or not there has, in practice, been a secular upward trend in subjective insecurity, continuing into the 21st century.

The third precariousness thesis—that the costs of job insecurity have been continuing to rise through the 21st century—is especially significant. If verified, it implies that insecurity is becoming more detrimental for wellbeing and health and that this adds to the shift in the balance of bargaining power in labor markets. The main factor predicted to raise this cost of job insecurity is the uneven decline in social insurance provision across many welfare capitalist states in the developed world. According to the OECD, the coverage of social insurance to mitigate the cost of unemployment has been declining, although unevenly, over the long term; while it rose during the 2008 Great Recession, it subsequently fell again.⁴² OECD Statistics also report countries’ “net replacement rate in unemployment”: the ratio of social insurance income to workers’ earnings prior to job loss, taking into account how other benefits for housing and social assistance adjust. For couples earning minimum wage, the net replacement rate fell at least three percentage points

between 2001 and 2019 in ten countries, increased in four, and remained stable in five.⁴³ The most striking declines took place in Poland (94 percent down to 77 percent) and the United Kingdom (85 percent down to 63 percent), while conversely, the replacement ratio in Ireland rose the most (from 76 percent to 95 percent).

The counterbalance to this third precariousness thesis is that if unemployment were lower and if neoliberal flexicurity policies that include state-subsidized retraining for the unemployed made it easier to find another job after becoming unemployed, then rises in the cost of job loss could be mitigated and even nullified. Indeed, the putative promise of flexicurity policies was precisely that they would facilitate the employment mobility needed to minimize frictional unemployment associated with technological innovations. The second major question for research, therefore, is whether there is a tendency for the cost of job loss to rise or fall in the current century.

Trends in Prospects

In recent years there has been a remarkable expansion of research into forms of insecure or precarious work (see Figure 5.1), leading to more than 22,000 publications of all types between 2000 and 2022. The annual rate of publication rose more than fivefold over this period. This expansion is welcome, not least because of the strong links between Prospects and wellbeing. Unfortunately, very little of this research presents solid evidence of the changes over time in job insecurity.

Prior Evidence

According to Eurofound, Prospects declined across Europe between 2005 and 2010 and then increased substantially through to 2015, driven largely by rises in the expectation of career advancement as economies recovered from the global 2008–2009 recession.⁴⁴ Across the eastern European region, this left a net increase over the decade.

Most of what we know about Prospects comes, however, from narrower studies of the trends in job insecurity. Direct evidence on job security from surveys of workers' expectations is unambiguous in showing that there has been no systematic rise in job insecurity in recent decades. It is clear from

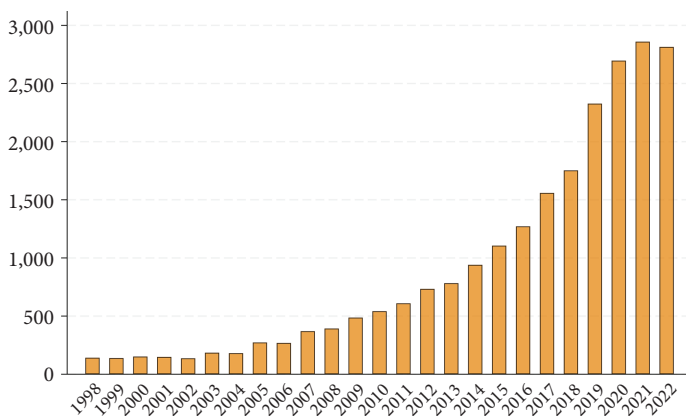


Figure 5.1 The rising scholarly concern with precariousness, 1998–2022

Note: Search of Web of Science across all fields for “job security” or “job insecurity” or “precarious” or “precarity” or “cost of job loss” (November 3, 2024).

studies carried out in the United States, Canada, Germany, and Britain that perceptions of the risk of job loss rise and fall over the long term with regional or national unemployment rates.⁴⁵ Comparing across many more countries, those with the highest unemployment rates have higher proportions of their workforces fearing job loss or regarding their jobs as insecure.⁴⁶ In Australia, job security fell distinctly after the onset of the Great Recession.⁴⁷

Indirect, proxy evidence on job security is available through two channels: first, by trend data on the contractual forms of jobs and, second, through trends in job stability. The extent and trend in the prevalence of temporary contracts—the most overtly insecure form of employment—does not support the thesis of widespread rising insecurity in the long term.⁴⁸ Another job form—namely, digital platform working—grew from nothing, enabled by new digital technologies. This job form is highly variable, covering both low-skilled and high-skilled occupations. It brings some worker-controlled scheduling, but it is also a likely overall source of insecurity owing to uncertain hours of work and remuneration. Whether this trend is ongoing is, however, hard to tell, because solid evidence is scarce. Estimates vary substantially, but it is likely that platform work is limited to a relatively small portion of the workforce. For example, one study using the best survey methodology found that between 0.4 and 3 percent of the workforce in central and eastern Europe were working most of their time in the platform

economy in the years immediately prior to the pandemic.⁴⁹ Other forms of nonstandard work—for example, part-time jobs—do not carry an intrinsic presumption of high insecurity and thus are unsuitable indicators of precariousness.

Other evidence surrounding precariousness has focused on trends in job duration and stability.⁵⁰ The limitation of such proxy evidence is that it only indirectly and loosely captures job insecurity. Many job terminations are voluntary, rather than caused by redundancy. Thus, downward trends in job tenure can come about from other secular changes, such as the propensity for workers to want to change jobs more often during their working lifetime. Studies have found that in several countries there have been declines in the average length of job tenure among men—especially visible among older workers. Conversely, however, job tenure among women has often risen, which is thought to be associated with changing participation and with increasing ability and expectation to continue working through the years of childrearing. A focus just on men would be to take a biased gender perspective: Taking women and men together, average job tenure in developed economies has changed little. There has been no consensus, however, partly because such job tenure trends are affected by the increasing average age of the working population in most developed countries and other socio-demographic changes.⁵¹ The declining tenure among older men, in a number of countries, is what lies behind the oft-cited perception that there has been an end to “jobs for life” in the decades since the late 20th century. However, even the evidence for that is weak at best: In postwar Britain, “lifetime” employment for at least 30 years was never reached by more than a minority of well-educated men (and very rarely among women). The proportion of successive cohorts with at least 20 years in one job declined somewhat among men but increased among women.⁵²

This indirect evidence therefore does nothing to persuade me that the prior direct evidence—which found no abiding, secular trend—is invalid.

New Global Evidence

Building on these prior studies, which were applied to relatively few countries and mainly for earlier periods, in this section I present evidence for the 21st-century trends in Prospects for a wide range of countries. The working conditions surveys for Europe and South Korea include a measure

of the perceived chance of career progression, an indicator of job security (the expected chance of job loss within six months), and—in the case of Europe—an indicator of contract status (whether open-ended—that is, “permanent”). These are combined in a time-consistent composite index.⁵³ For other countries, available indicators of the elements of Prospects are considered separately.

Europe

As shown in Figure 5.2, across Europe, *Prospects* increased significantly between 2005 and 2015 in 19 out of the 31 countries for which there are data. The most striking rise took place in Turkey, where the proportion of workers who agreed or strongly agreed that their job offered them good Prospects for career advancement rose from 21 percent in 2005 to 50 percent in 2015. But there were also substantial increases across other eastern European countries. Only in three countries was there a significant fall in *Prospects*, the most dramatic case being Italy, where the proportion of workers who agreed or strongly agreed that they might lose their job in the upcoming six months rose from 9 percent in 2005 to 21 percent in 2015.

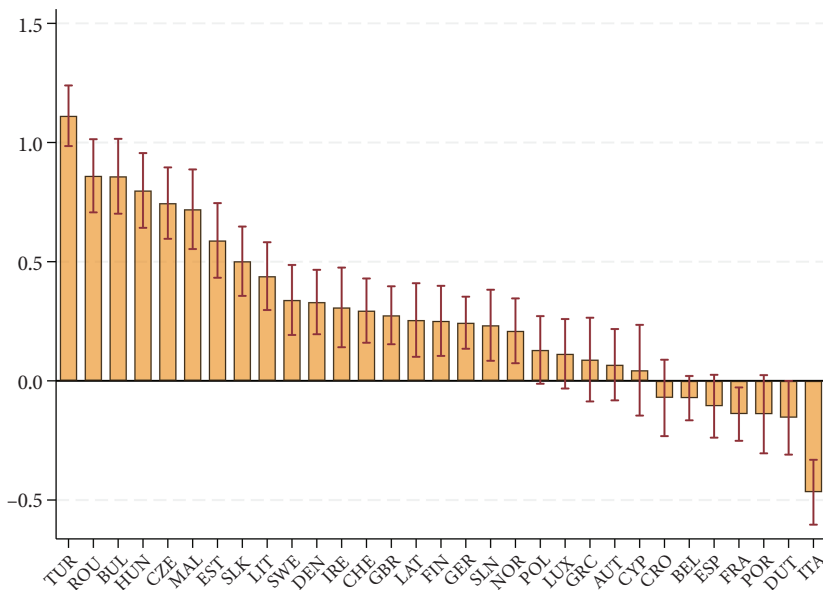


Figure 5.2 Trends in *Prospects* index in Europe, 2005–2015

Note: Estimated coefficient of year from regression of *Prospects* on year.

Source: EWCS

These findings are corroborated by the **International Social Survey Programme** (ISSP), as shown in Figure 5.3. Between 1997 and 2015, career prospects in jobs improved in a number of countries, again with the emphasis on eastern Europe. There were significant increases in the Czech Republic, Slovenia, and Russia over eighteen years and in Latvia over a decade. In the case of Hungary, there was a sharp fall in job security in the early part of the 1990s following the collapse of communism, but by the 2000s job security was back to its earlier levels; meanwhile, prospects of career advancement in Hungary were on an upward trajectory, especially for men. These increases in eastern Europe generally start from low levels compared with other countries. Following what was a sharp dip in the 1990s, compared with the communist period when jobs were traditionally relatively secure, a catch-up process was in play during their transition to capitalism. Elsewhere in Europe, there was relatively little change in Prospects over the long period stretching from the 1990s onward, excepting Switzerland and Sweden, where both job security and career advancement possibilities rose substantially for both women and men.

Data from separate survey series in individual countries add further details of the long-term trend. In Britain, job insecurity has historically matched unemployment; by 2017 it had reached its lowest level in three decades, and by 2024 it was little changed; meanwhile, the proportion of employees who believed they had no chance of promotion remained around 36 percent from 1992 to 2012 but fell to 25 percent in 2024.⁵⁴ In Finland, while similarly, the job loss threat followed the cycle, there was a small secular increase in insecurity after the 1970s and 1980s. In particular, insecurity about the work itself (the risk of increased workload, disability, or unforeseen changes) increased.⁵⁵

Inequality in Prospects, meanwhile, changed little during the twenty-first century. In most of western and northern Europe, there were no substantive changes to the overall inequality of the *Prospects* index; however, in Italy, Spain, and Portugal inequality increased after 2010.⁵⁶ Nor is there any indication across Europe of much change in the gender gap. In almost all countries the *Prospects* index for men exceeded that for women by a modest but unchanging margin; however, in Spain this margin fell from 6.1 to 2.5 from 2005 to 2015—another instance of swimming upstream. The ISSP data confirm this overall picture of stable gender inequality: across all years pooled together, men have a better chance than women for career advancement in 16 European countries; the difference is insignificant in 11

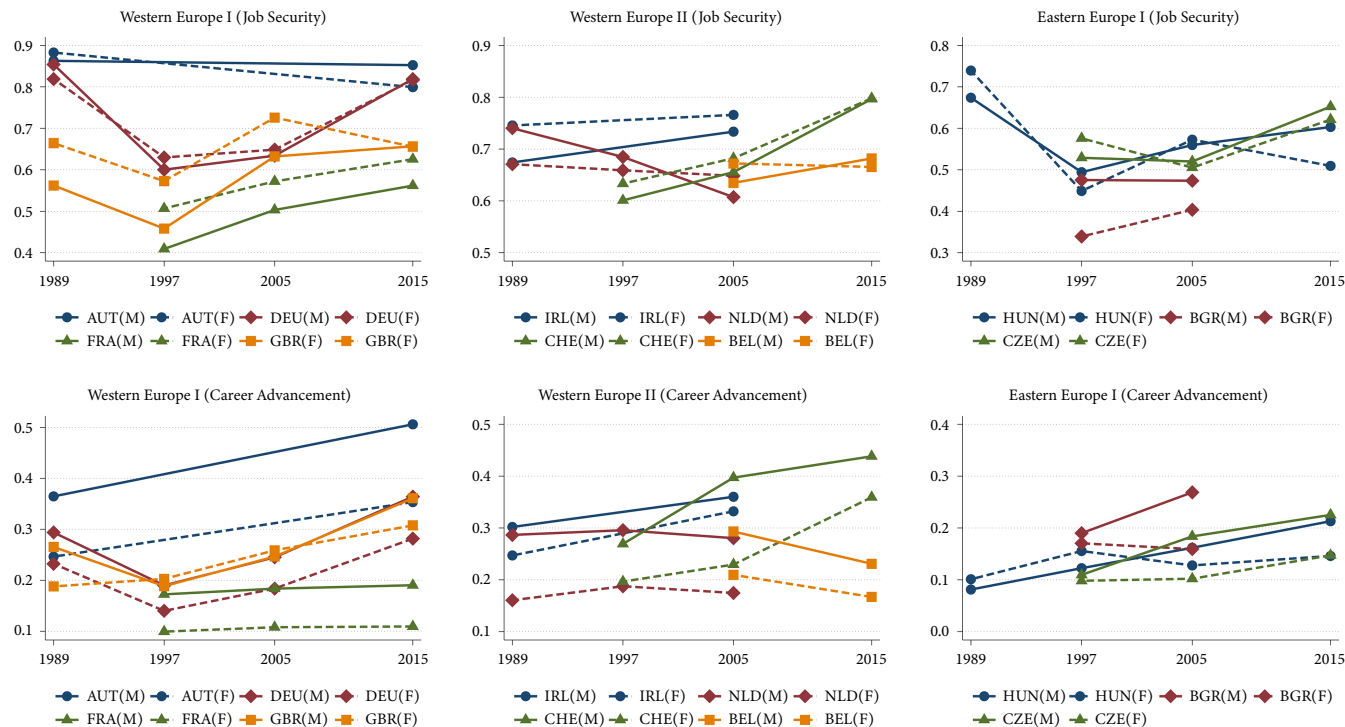
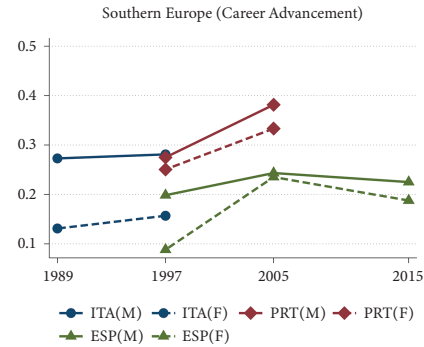
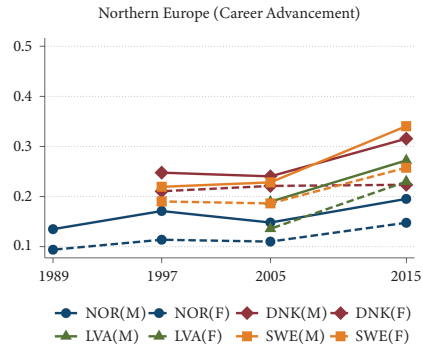
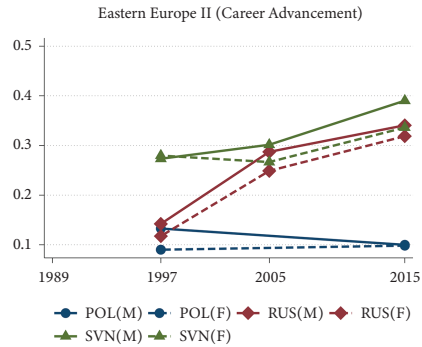
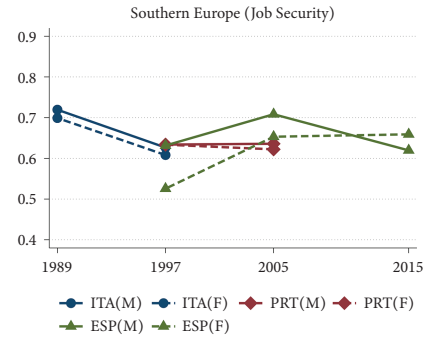
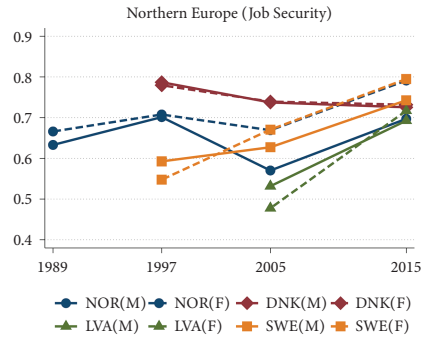
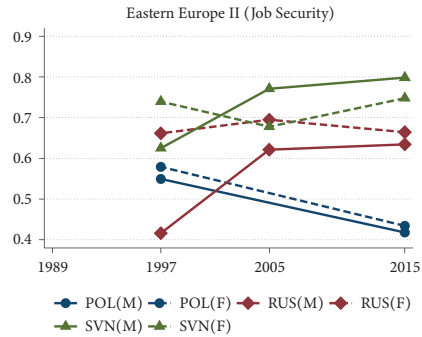


Figure 5.3 Trends in elements of Prospects in Europe, 1989–2015

Note: Job security: proportion who agree/strongly agree that “my job is secure.” Career advancement: proportion who agree/strongly agree that “my opportunities for advancement are high.” Western Europe I comprises Austria, Germany, France, and Great Britain; Western Europe II comprises Ireland, the Netherlands, Switzerland, and Belgium; Eastern Europe I comprises Hungary, Bulgaria, and Czech Republic; Eastern Europe II comprises Poland, Russia, and Slovenia; Southern Europe comprises Italy, Portugal, Spain, and Croatia; Northern Europe comprises Norway, Denmark, Latvia, and Sweden. (M) refers to males and (F) refers to females.

Source: ISSP



other countries and negative nowhere. However, this overall picture is balanced by the fact that in six countries men experience higher insecurity—most notably in Russia and Lithuania.

The United States

Mirroring the relatively stationary picture for most of Europe, other than eastern Europe, there has also been remarkably little change in the Prospects of jobs in the United States over three decades. Figure 5.4 shows the changes in job insecurity, indicating how this approximately tracks, as predicted, the national unemployment rate. Notwithstanding the enormous cyclical rise in insecurity provoked by the 2008 recession, there has been a small reduction

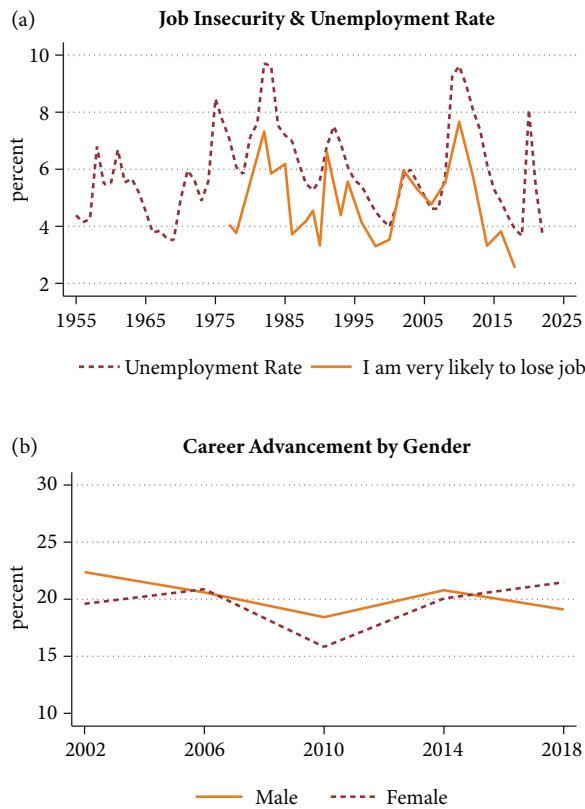


Figure 5.4 Prospects in the United States

Note: (A) Percentage of “very likely to lose job”; (B) Percentage of “a good chance of promotion.”

Source: US General Social Survey; US Bureau of Labor Statistics

in job insecurity during this century; indeed, just like in Britain, perceptions of insecurity were at a historic low in America in the late 2010s. By contrast, there has been no trend this century in workers' perceived chances of promotion.

There is also no sign of a continuation of the polarization of US labor markets that began in the 1980s. In this century neither overall inequality nor gender inequality of job prospects have shifted significantly. In fact, there remains little difference between American men and women in the proportions who feel they are very likely to lose their job; by 2018 women had gained a small lead in the proportion who anticipate a good chance of promotion.

Australia

Overall, there is no indication of a *secular* change in Prospects among Australian workers, either from the Household, Income, and Labour Dynamics in Australia data or from the ISSP data since 2005. Following the global financial crisis, the fear of job loss increased from 2009 onward, while the proportion of workers with permanent contracts came down from its peak of 70 percent in 2008 to less than 67 percent a decade later (Figure 5.5). The proportions who thought they had a secure future also decreased from 2009 onward but began to pick up again in 2015. The proportion of people who thought that the company they worked for would still be functioning in five years' time picked up in 2014.

There is, however, a gender difference in job insecurity in Australia, with men perceiving a greater risk of job loss than women and that gap rising over time. Despite the fact that a larger proportion of men than women hold open-ended job contracts, more women than men think that their company has a secure future and that they have a secure future in their jobs.

South Korea

In South Korea, the *Prospects* index was at the same level in 2014 as it had been in 2006, as shown in Figure 5.6. But it fell dramatically in the late 2010s. Underpinning this fall in the overall index was a substantial fall in job security over this time. There is also a gender gap for *Prospects* in favor of men, which if anything widened by a small amount between 2006 and 2020. This gap comes on top of the very large (though falling) gender wage gap noted in the previous chapter.

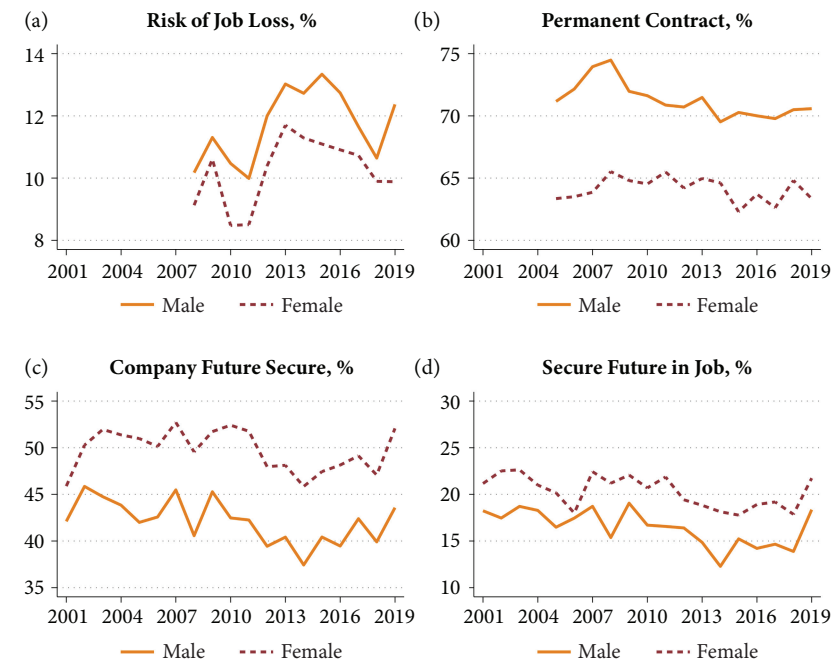


Figure 5.5 Prospects in Australia

Note: (A) average respondent estimate of percent chance of losing job; (C) respondent anticipates company still in business five years on; (D) response of 7 (“strongly agree”) on scale of 1–7.
Source: Household, Income, and Labour Dynamics in Australia

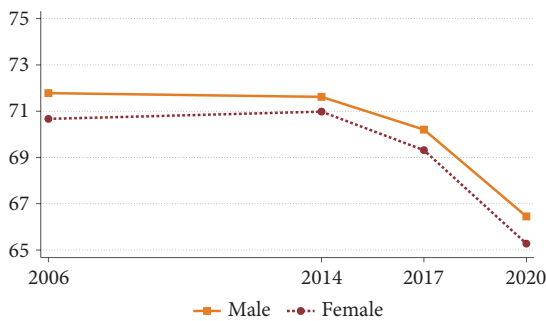


Figure 5.6 The *Prospects* index in South Korea, 2006–2020

Note: The composite *Prospects* index has a theoretical range from 0 to 100.
Source: Korean Working Conditions Survey

Other Countries

Elsewhere, a mixed picture of change and stability in Prospects is shown in Figure 5.7. Japan registered a significant decline in perceived job security between 1997 and 2005 and then again in the following decade. By 2015, only 51 percent of Japanese workers agreed or strongly agreed that their job was secure. Simultaneously, the proportion of Japanese workers who strongly disagreed that they had high chances for advancement increased from 44 percent in 1997 to 51 percent in 2015. This trend tracks the long-term period of stagnation in the Japanese economy from the 1990s on.

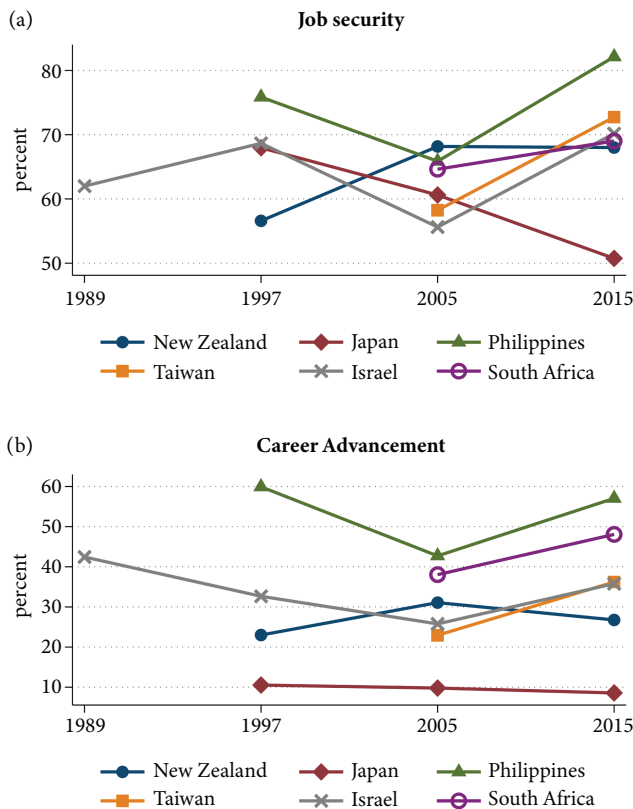


Figure 5.7 Elements of Prospects in New Zealand, Israel, Japan, Philippines, South Africa, and Taiwan

Note: (A) Percentage of respondents who agreed or strongly agreed that “my job is secure”; (B) percentage of respondents who agreed or strongly agreed that “my opportunities for advancement are high.”

Source: ISSP

Meanwhile New Zealand, the Philippines, and Israel saw no longer-term trends after 1997. However, for the short period from 2005 to 2015, both career advancement and security improved by a small amount in South Africa.

In Japan, the decline in Prospects was much sharper for men than for women, with the consequence that the gender gap fell, although from an initial high level. Elsewhere, there was a widespread, stable gender gap in favor of men in the chances for career advancement but generally only small, statistically insignificant differences in perceptions of job security, again with no signs of change.

Verdict on the Second Precariousness Thesis: Refuted

Across 38 countries in Europe, North America, Australia, and South Korea, the first two decades of the 21st century show relatively little evidence of structural or secular change in the extent to which jobs themselves satisfy workers' needs for a future that they can anticipate. Only in South Korea is there a sign of a substantial decline, despite continued high economic growth. The opening decade was rocked by the recession emerging from the financial crisis, with unemployment soaring and workers' job insecurity following suit in a broad range of countries for which we have data. Over the long term, workers' futures oscillate with the business cycle. Recessions are traumatic affairs for some, unsettling for many, and have lasting impacts on those scarred by them; but they pass.

Taken together, the prior studies and the new evidence from this chapter are thus sufficient to definitively answer the research question posed above surrounding the second precariousness thesis: There has been no *pervasive* secular rise in the perceived risk of job loss. Job security during this century has, if anything, been rising in 20 out of the 40 countries (mostly in Europe) for which we have data covering at minimum one decade; it has fallen only in 5 countries, and in another 15 countries there is no trend. As for the chances of career advancement, there has been no visible decline this century. Thus, notwithstanding global political uncertainties, pandemic fears, disruptions in store from AI-driven new technologies, and mass migration movements due to climate change, jobs in 21st-century capitalism continue with the same broad mix of stability and precariousness that has existed for at least half a century.

The empirical investigation has also not uncovered any major widespread shifts in the inequality with which Prospects are experienced. The gender balance remains, for most countries, in favor of men, a result largely driven by the trajectory of career advancement. On the other hand, job insecurity appears to be confronted in equal measure by men and women.

Trends in the Cost of Job Loss

This section will address evidence about the changing costs of job loss and the third precariousness thesis—the expectation that the costs of job loss have generally been increasing. Technically, this extension to the changing labor market takes me beyond the scope of this book, which is set by the dimensions of job quality. The cost of job loss depends in part on the provision of transferable training in a job but is largely determined by labor market factors and social insurance, neither of which are job characteristics. However, the importance of the debate about the putative age of precariousness, together with its link to the wider discourse on “decent work,” merits this excursion.

Unfortunately, the evidence remains scarce. Partial evidence confirms some changes in the perceived difficulty of finding another job in the event of unemployment, which indeed rose sharply in the context of the mass unemployment of the early and mid-1980s and was still relatively high in the early 1990s. It had, however, fallen back by the start of 21st century, with no trace of an overall upward secular trend up to the 2000s.⁵⁷ Income reduction after job loss was substantially greater for men in Germany during 2004–2010 than it had been during 1984–1991, though for women the trend is somewhat reversed. There were also increasing ill effects on the self-reported health of German men stemming from subjective job insecurity in Germany between 1995 and 2015: the predicted probability of poor self-reported health for those with perceived job insecurity rose from 15 percent in 1998–2001 to 20 percent in 2010–2015, following the 2004 Hartz reforms of the labor market and the 2008 Great Recession, whereas it remained steady at around 9 percent for those who were not subject to job insecurity.⁵⁸ In the United States, by contrast, overall income losses two years after job loss increased considerably for women, comparing 1995–2008 with 1980–1987, but were little changed for men. Also relevant is the evidence from studies of long-term changes in the volatility of men’s incomes in the United States:

This rose between the 1970s and 1980s but showed relatively little long-term trend thereafter.⁵⁹

Trends in Labor Market Insecurity, 2004–2016.

In a final examination of the evidence, Figure 5.8 shows how the OECD's indicator "labor market insecurity," which is an important element of the wider concept of "decent work," has changed over a 12-year period during this century. This indicator, the expected earnings loss associated with unemployment, goes part way toward estimating the precariousness (that is, both the job insecurity and its cost) faced by the average worker in each country, but it does not capture the nonpecuniary, psychic costs of job loss.

In the Nordic countries, in northern and western Europe, and in Japan and South Korea, average labor market insecurity is rarely much more than 5 percent of previous income and usually much less; in most liberal market economies, it can reach 7 percent in hard times; in southern and eastern Europe, labor market insecurity can rise to much higher levels. At the worst point during the economic downturns following the financial crisis of 2008, labor market insecurity in Greece increased to 25 percent: Greek workers looking to their Prospects were, in effect, having to discount their current earnings by a quarter when computing their ongoing spending power.

The index displays the dramatic effects of the global Great Recession in the hump-shaped curve of precariousness that hung over workers in almost all countries. Nevertheless, the period shown, 2007–2016, is barely long enough to reveal or refute any secular trends in the insecurity coming from work as hypothesized by the precariousness thesis. For most countries, there is no suggestion of this period being part of a secular increase in overall insecurity. A possible exception is southern Europe, where the latter part of the hump had not been reached by 2016: Some eight years after the Great Recession, labor market insecurity had not come down to anywhere near its mid-2000s levels.

Taken together, these findings do not yet paint a comprehensive, confirmatory picture of the opening decades of the 21st century as a special age of precariousness. A full verdict on this third precariousness thesis awaits further evidence pertaining to a range of countries.

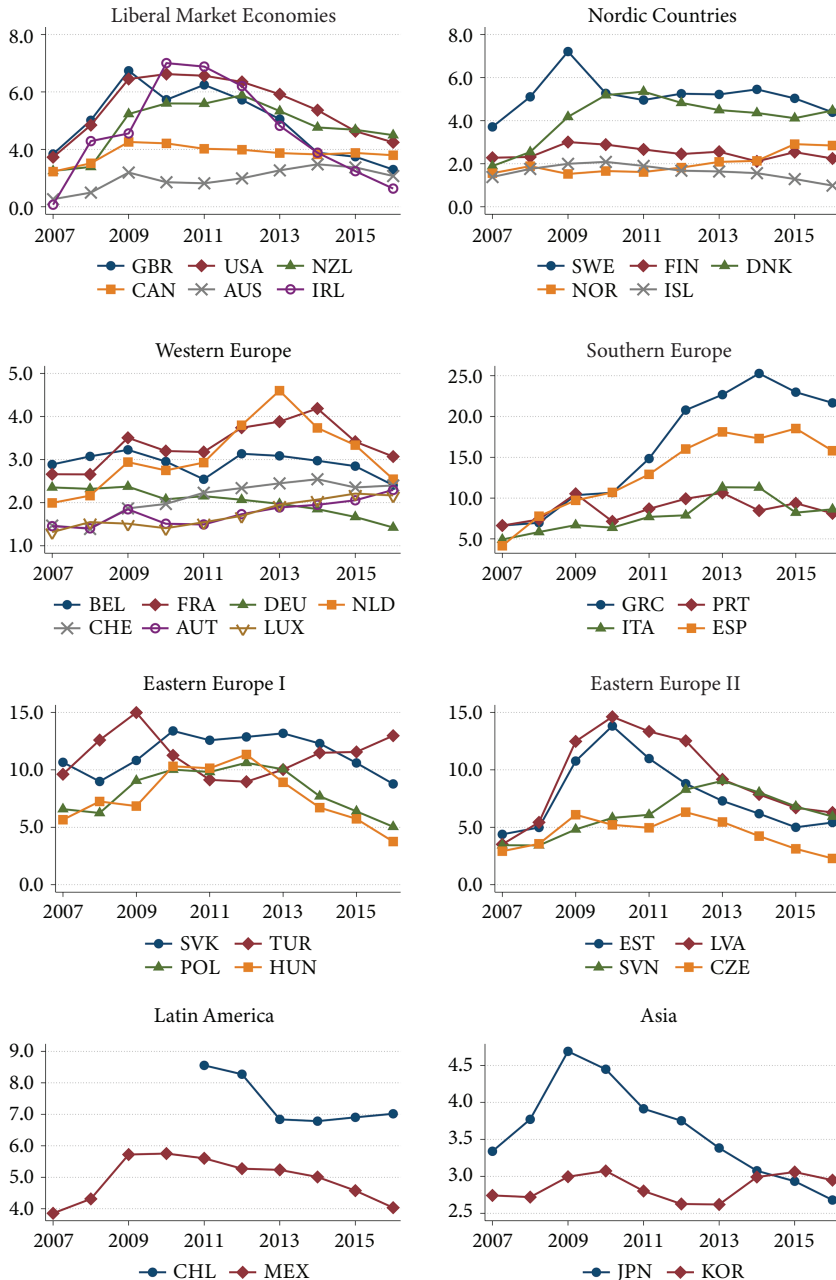


Figure 5.8 Labor market insecurity

Note: Labor market insecurity is the expected earnings loss associated with unemployment, as a percent of earnings. It is computed from information on the risk of becoming unemployed, the expected duration of unemployment, and the degree of mitigation against these losses provided by government transfers to the unemployed (effective insurance).

Source: OECD Statistics: stats.oecd.org/Index.aspx?DataSetCode=JOBQ

What's New

Unfortunately, many of the studies of precarious work assume—unnecessarily and without supportive evidence—that job insecurity is rising in the current era (the second precariousness thesis) as a primary motivation for the research.⁶⁰ Moreover, as noted by sociologist Arne Kalleberg, the literature on precariousness is also sometimes weakened by adopting a romanticized, ahistorical perspective—forgetting, for example, about the experiences of so many during the 1930s depression era—and by not recognizing that informal and insecure work have long been endemic in developing countries.⁶¹ It turns out that the second precariousness thesis finds little or no support in the data, either in the prior evidence, or in the new broader evidence presented here. Job security during this century has, if anything, been increasing in half the countries examined. This refutation of the second precariousness thesis by no means alters the salience of job security and the Prospects of a job as constituting a major element of job quality. The first precariousness thesis remains valid. The third thesis, concerning the costs of insecurity in a world where welfare state protections against life's uncertainties have been undermined unevenly in many countries, has in no way been refuted. Social insurance for unemployment risk has predominantly, though not universally, weakened. Nevertheless, wider evidence of trends in a range of countries is awaited. The OECD evidence on labor market security—a major constituent of decent work incorporating both job insecurity and the costs of that insecurity—covers an insufficiently long interval to be confident about secular trends. Evidence is also lacking surrounding any trends in the broader wellbeing costs of insecurity.

Whatever the verdict of future research on such trends, the focus of contemporary research on precarious work can be properly motivated by the expanding science surrounding the detrimental effects of job insecurity, including an examination of the new forms of employment relations supported by digital technologies. Job insecurity is as old as the hills, but what *is* new about the 21st century is that job quality science is unveiling and quantifying the costs of insecurity to health and wellbeing, which have turned out to be very substantial. The evidence is still growing, but it is already strong.

Emerging, therefore, is a powerful argument for treating job insecurity as a public health hazard, requiring regulatory policies in addition to the ongoing need for macroeconomic stability. Workers typically have limited access

to information about their organization's future prospects or about their strategies for human resource management. Their ability to avoid insecure jobs is anyway limited by the restricted choices of employers in monopolistic labor markets. Insecure workers tend to be especially vulnerable to adverse shocks, and the external effects of their insecurity are potentially large. In the age of AI, therefore, when innovation threatens to spawn both job insecurity and job quality insecurity, policies to reduce all forms of insecurity associated with work and to mitigate their effects may thus be rationalized on both public health and social justice grounds—a theme to which I return in Chapter 12.

6

Working Time Quality

Duration and the Control of Flexibility

In the age of the first industrial revolutions, with their pervasive squalid working conditions and extremely long working hours, far worse than in earlier eras, progressive policy activists used to call for a maximum ten-hour work day for factory workers. Later, even more radically, they held out for an eight-hour day: eight hours each for work, sleep, and play. Extreme hours were seen as a cause of inexcusably high accident rates in factories.¹ The demands were also underpinned by a vision of democratic and social progress. Early trade unions argued that having enough time away from work each day would free people to engage with community and culture and that more leisure time was the cure for the dehumanizing burden of wage-work.² Advocates felt that lost parental care was a cost borne by families and their communities, but not by the employers who kept their workers occupied for such a long time, day and night. They held that fathers needed to spend time with their families to prevent the “moral degradation” of children.

The first successes in many countries arrived in the form of controls on the working time of children and of women. Generalized regulations of hours worked followed in the late 19th century at an uneven pace across Europe, the United States, Australia, and New Zealand, with Britain being the path-breaker, while France, Belgium, and Russia lagged behind. But it was not until after the First World War that the eight-hour day was achieved widely across Europe, in response to worker unrest and the Russian revolution.³ Much later, campaigners elevated their aspirations, calling for still fewer working hours. Through the 20th century, center-left movements and many trades unions in western Europe pressed for the expansion of paid vacations. With social aspirations at the fore, postwar unions strove for a five-day work week: In a fervent slogan of the German Trade Union Federation in the 1950s, a young boy proclaims, “On Saturdays, Daddy belongs to me.”

By contrast, five thousand miles away, in South Korea, in deep poverty after civil war yet embarking on its own late industrialization, workers still toiled for extreme hours, their emancipation a long way off.

The fact that progress in Working Time Quality meant, above all, spending less time at work reflected a common assumption among economists that work possessed inherent disutility. Eminent among those who felt that work was best if it could be minimized was John Maynard Keynes, whose much-cited 1930s vision for a future capitalist utopia of abundance, to be enjoyed by the grandchildren of the then-young generation, was for a 15-hour work week for all by the 2030s, to be enabled by high productivity and a shared, diminished workload.⁴

For modern job quality science, however, Working Time Quality is a much broader concept than merely duration. Rather, it is defined by the extent to which the apportionment of time between the job and other life domains meets the needs of workers. Working Time Quality thus involves both the historical question of working time duration and contemporary issues of work time scheduling and flexibility. Control over starting and finishing times, the ability to stop working at short notice for emergencies, and the time of day (or night) when work happens are the main aspects of time control that make a difference. There is suggestive evidence that increasing flexibility may even have become more important than lowering working hours for improving psychological well-being across Europe.⁵ Such concerns might seem more mundane than the 19th-century dreams of a better society to be enabled through working less, but—given the importance of job quality for meeting general needs—high Working Time Quality is surely a necessary ingredient of the good society.

Both duration and flexibility affect the capability of job-holders for creating a work-life balance, providing the opportunities to spend time well, to mitigate role conflict, and to benefit family and friends. Work-life balance has two key features: a separation between work and the rest of life and a satisfactory match between a job's working hours and what workers want (in both duration and scheduling). With a good work-life balance, workers attain a degree of agency to organize their time and energy to best meet their income, work, and other needs and thus to potentially flourish in both work and nonwork spheres; it is valued both for its own sake and for what it enables them to do, and to be, at work and elsewhere. Thus, work-

life balance mediates the association between Working Time Quality and wellbeing.

Working Time Quality is the most important dimension of job quality affecting work-life balance, but other dimensions of job quality also contribute. For example, a job that affords a high level of worker autonomy and avoids high work intensity can improve work-life balance. “Conversion factors,” such as workers’ personal and social circumstances (see Figure 2.1)—for example, whether they have a family or other time-consuming interests—may moderate the association. In the 21st century, working time flexibility—especially though not exclusively for women—has become a major issue, more prominent in public discourse than in earlier decades. The persistent sex-based division and organization of paid work and, a fortiori, of domestic labor and leisure time, implies that it will be especially important to document and track the gender gaps in this dimension.⁶

A consequence of conceiving of work not just as a simple “disutility” but as having multiple dimensions, each with its effects on wellbeing, is that the theory of incentives and labor supply embodied in economics requires modification. In respect specifically to working time, the simple disutility approach assumes that an extra hour of work is an additional detriment to wellbeing. Each worker is predicted to work as many hours up to the point where the (increasing) marginal disutility of an additional hour equals the marginal utility of the hourly wage. It is deduced that, as a rule, a higher wage rate gives an incentive to work longer.⁷ However, the broader concept of Working Time Quality implies that the theory of labor supply must be modified. There can be progress for workers not only through working fewer hours but also through a closer congruence between hours worked and daily life. Thus, labor supply curves can be shifted by alterations in the scheduling of work time by management or in workers’ influence over when they work.

It follows that employers aiming to incentivize more work time from their workforces may find it more cost-effective to permit employees greater control over work hour scheduling than to raise wages. Alternatively, employers can manipulate the supply of labor through the fragmentation of work tasks. Automated management technologies enable bite-size tasks with piece-rate setting, especially in platform jobs, to incentivize supply; employers can also deploy behavioral methods based on nudge psychology to induce sustained worker availability for work, without having to pay for idle times

when no tasks are carried out. Such strategies have been expertly analyzed within their sociological contexts; yet the modeling of flexibility incentives and behavioral strategies and how these management approaches affect the labor supply is, as yet, an embryonic project for both economics and psychology.⁸

If we want to enrich our understanding of progress in modern societies, it will be important to see how Working Time Quality is associated with good health and wellbeing and to examine in some detail how it is changing. Is there some good news about Working Time Quality, and if so, is that progress coming from working fewer hours, or are workers gaining more control over the scheduling and flexibility of those hours? Are some countries traveling better than others?

Working Time Quality, Health, and Wellbeing

For some time, studies in many countries have been uncovering the effects of elements of Working Time Quality on multiple aspects of physical and mental health and on wellbeing.

Long Hours and Health

Working long hours, beyond a certain point, may make us unhappy, as economics assumes, but a question for medical social science and policy-makers has been, Does it materially affect our health?

Many studies have found evidence consistent with the hypothesis that long-hours working is detrimental to physical or mental health. As for the mechanism of this effect, sleep deprivation from long-hours working is one commonly identified route to ill-health—specifically, cardiovascular disease.⁹ One recent meta-analysis, combining studies that involved over half a million subjects, discovered that those working more than 55 hours per week had a 33 percent elevated risk of stroke relative to those working 35 to 40 hours per week—a substantial effect. Such findings form part of the rationale for ongoing regulation of working hours: health is a public concern beyond those of the individual sufferers and their employers. Studies also find that the elevated risk of ill-health from working long hours is lower for those in higher-quality jobs and for those who are driven more

by intrinsic work motives than by external incentives. This heterogeneity in the effect of long-hours working is especially notable in respect to heart disease and type 2 diabetes: Significant increased risk is found among those in lower-socioeconomic-status occupations (hence with below-average job quality generally), but not for workers in higher-socioeconomic occupations.¹⁰

Let me be cautious, however. This body of evidence contends reasonably well with some familiar, serious methodological challenges, such as reverse causation or, in the case of meta-analysis, publication bias that arises from not publishing studies that find no effects. Yet a problem that is not always well addressed in these studies is that they control only partially for other aspects of Working Time Quality or for other dimensions of job quality such as Work Intensity and Social Environment.¹¹ This failure to control fully for other influences matters because long-hours working may be correlated with these other confounding variables, even within the same occupation. One recent study shows the consequence of not taking confounding factors into account: While long-hours working is associated negatively with mental health, that association was statistically insignificant when other dimensions of job quality were controlled for.¹²

As of the early 2020s, then, the *causal* effect on ill-health of long-hours working per se, as opposed to the effects of other factors that tend to be coupled with long hours, remains to be fully confirmed. The channels through which this effect may happen, and how it is modified by workers' social, economic, and personal circumstances, are also not yet established. The future for this line of research, and thence for the rational development of hour-reduction policies, lies in deploying more comprehensive controls for confounding factors than hitherto, and in deploying quasi-experimental methods where these become feasible.

Night Shifts and Health

When work happens also matters. In particular, a salient negative indicator of Working Time Quality is the frequency of night shift working, which is a necessity in some sectors, such as in medical care. Long-distance air travel requires pilots and airline hosts to carry on through multiple time zones, day and night. Some people may work nights by choice. More than 7 percent of US workers were doing night shifts as part of their usual schedule in 2018,

and while night working is less common in some countries, nowhere is it absent.¹³

Night shift working has obvious disadvantages for work-life balance, especially for those with responsibilities for other family members active through daytime. The risk is that night shift working also affects health adversely through the disruption of circadian rhythms, suppression of melatonin production, and other channels. Medical research, which even by the early 2020s had yet to finalize its verdict, has been most concerned about the direct, long-term, health effects on the person doing the night shifts; as yet, little is known about the external effects on others.

The health consequences that have been studied include breast cancer, obesity, dementia, reproductive health, and cardiovascular disorders. For example, an overview of metastudies up to 2022 concluded that night work has substantive effects on diabetes, obesity, and hypertension; it recommends that night workers be monitored for cardiovascular risk.¹⁴ The World Health Organization determined that night shift work is “probably carcinogenic in humans,” even though not all the studies are conclusive. There is some evidence, too, that the impact on breast cancer is affected by the frequency, intensity, rotation, and duration of night shift working.¹⁵ Working at nighttime in particular occupations can also be hazardous in the short term, such as for nighttime taxi-drivers, who bear an enhanced risk from dealing with difficult nighttime customers. “Sometimes I think I am like a dog, I wait here, they whistle for me like a dog” was how one driver felt, describing his experiences in a northwestern town in the United States.¹⁶ Other cab drivers tell their tales of nighttime racist abuse and threats of violence.

There is, in short, reasonable evidence of a notable health problem linked to jobs that involve night shifts. Any reductions in night shift working can therefore be taken as an improvement in job quality. The science is not yet definitive about how large the additional risk is; nor is it clear about the detailed effects—for example, as to whether rotating night shifts are less or more detrimental than regular night shifts. Night-working occupations remain a live zone of investigation, the goal being to be able to provide public health advice and recommend regulatory controls for both workers and employers, based on a rational balance between a sector’s needs for night work and the potential costs for those who take it on and for their families.

Worker-Influenced Scheduling

It is theorized that good Working Time Quality also entails being able to fit scheduled working time more generally with people's needs. The amount of solid evidence surrounding this hypothesis remained low as of the start of the 2020s, but the early findings were striking. "Happiness is flextime," declares one study using data from the General Social Survey in the United States: There is a significant positive association between a general happiness measure and having the freedom to take time off during work to take care of personal or family matters, the opportunity to set start and finishing times, or the ability to vary these times on a daily basis. Time flexibility and control seem to matter as much as household income for workers' happiness.¹⁷ In Germany, researchers found that employer-driven work flexibility—specifically, in the form of unpredictable changes in work hours and the requirement for permanent availability—is worse for employees' health than long-hours working.¹⁸ In China, a field experiment showed that workers would take jobs with lower pay if offered time flexibility.¹⁹ Earlier, a remarkable quasi-experimental study found significant improvements in work-life balance for shift workers in Denmark who were given control over scheduling their shifts: The effects were measured by reduced marital conflicts and by increased "work-family facilitation."²⁰ Absent such control, however, nonstandard work schedules are associated with a diminished work-life balance (as indicated by greater work-family conflict).²¹ Such findings remind us of the problem of, in the majority of jobs, workers having little opportunity to directly affect when working time is scheduled and needing to arrange the timelines of their daily lives accordingly.

For some, the challenge is made greater when working times are unpredictable—which can stem from the variable demands of customers and clients or simply from capricious employers. An extreme example of unpredictable work scheduling, more common than hitherto in industrialized nations, is the rise of the "zero-hours contract." With employer-controlled flexibility, including requirements to be at work at short notice, unpredictable scheduling is less easily adapted to.²² Readers may be familiar with the trope of heroic crime-solving detectives whose work-life balance is disrupted when they are called out at inconvenient times, their private lives dramatically "interesting" or ill-fated unless salved by other family members' willingness to absorb the strain.

Further evidence of the link between worker-controlled scheduling and wellbeing can be inferred from the potential for such control to match the required duration of jobs to workers' preferred hours. "Underemployment" is where workers would prefer to work longer hours than their employer(s) demand; "overemployment" is where employees must work longer than they want in order to keep the job. In studies from Britain and Australia, both these indicators of mismatch are found to be associated with lower subjective wellbeing, though in the case of Australia it is overemployment that has the most detrimental effect.²³ A study based in Germany came, however, to different conclusions, finding little evidence of detriment from working hours mismatch; this cross-national difference has been tentatively linked to the strong union influence over working hours in Germany.²⁴

Finally, researchers have examined how wellbeing is affected by a composite *Working Time Quality* index, which incorporates both duration and several elements of flexibility and scheduling control. One study, for example, shows how, in Britain, an improvement in the average *Working Time Quality* within an occupation significantly reduces depression, anxiety, and social dysfunction among women who continue to work in that occupation, but it did not find such an effect for men. A second study utilizes a similarly constructed overall index for South Korea to show that *Working Time Quality* is positively associated with a good work-life balance, as measured by subjective measures of the fit between working time and nonworking time and of the job's intrusion into personal life.²⁵

The Research Agenda

Taken together, the evidence has accumulated that *Working Time Quality* is significantly associated with elements of health and wellbeing, either directly or mediated by indicators of work-life balance; it is right, therefore, to regard *Working Time Quality* as one of the main dimensions of job quality. Moreover, it has been confirmed that good *Working Time Quality* does not just mean less working time, as imagined by progressives from previous eras; rather, it also includes a substantive dose of employee-controlled flexibility. Understanding how duration and flexibility are related, and how they may be complements or substitutes in their effects on wellbeing, can contribute to an adaptation of labor supply theory to the more realistic settings of modern-day families, situations commonly eschewed in elementary

economics textbooks. Much remains to be done, however, to establish the magnitude of the causal effects of Working Time Quality and how this magnitude may vary across cultures and nations. These effects are best studied in contexts where it is possible to control for the effects of other dimensions of job quality, because there are likely to be correlations between Working Time Quality and those other dimensions. For example, employers in some sectors may compensate for poor working conditions by designing jobs with good Working Time Quality; where this is the case, the positive effects of good Working Time Quality on general wellbeing may be underestimated or altogether hidden.

Drivers of Working Time Quality

Working time is part of each workers' individual job contract, but its interconnectedness with the working times of coworkers, customers, and clients, and its interrelation with the rhythms of family and community, means that the factors determining the duration and scheduling of working time are inherently social. Trading organizations must normally be open for business at the same times; parents need to be available to pick up their young children from schools and nurseries; shops are best open when customers want to buy; hospitals with emergency treatment units must be open day and night.

This interconnectedness underpins the evolution of the standardized model of working time, which in developed nations had arrived by the 1950s at the five-day work week—a kind of social equilibrium between the needs of employers, workers, and the tempo of the rest of life. Departure from the standardized norm was costly for either party, and so, in an individualistic setting, there arises an built-in tendency for social stasis. Sometimes the social effects of work time scheduling were reflected in explicit regional or national coordination between companies: The external bonds were so strong in manufacturing localities of early postwar northern Britain, for example, that it was common for factories to coordinate down-times for workers' summer holidays—despite the consequential crowding in seaside resorts during those the same weeks. In the modern era, with most women in paid work and fewer children left to come home on their own, some employees' working time arrangements have become tied to school timetables.

Notwithstanding the benefits of sticking to the social norm, Working Time Quality is open to the same pressures for change affecting all dimensions of job quality, as discussed in Chapter 3. In particular, rising affluence brings a demand by workers for reduced working time and improved flexibility. On their own, small increments to workers' demand for leisure time would be unlikely to be realized because of the high costs of departure from the social equilibrium, which employers would resist. When demand rises substantially, however, and in combination with political pressure for regulatory change—such as proscriptions of long-hours working—or with trade union demands where these represent wider community needs, major shifts can be brought about. Over the very long term, large reductions in working hours have taken place since the 19th century, in line with the growing affluence of nations; but this decline has been irregular, interspersed with lengthy periods of stasis.

Advances in working time can sometimes be traced explicitly to periods when the political demands for regulatory change, collective bargaining, or both have been in ascendancy. One way in which annual working hours were reduced was through the institution and subsequent extension of paid vacations. Improvements occurred in France, for example, in 1936 (the election of the *Front Populaire*), 1956 (led by the state's ownership of Renault), 1969 (in the aftermath of the May events of 1968), and 1982 (after the election of François Mitterand's socialist government): All these moments saw explicit extensions to mandated generalized minimum vacation requirements.²⁶ More widely across Europe, the 1993 Working Time Directive required European Union member countries to legislate for a minimum of four weeks of paid vacation, a measure that was especially effective for women working in part-time jobs.²⁷ Through longer holidays, then, Europe grew to differ from the rest of the world in the amount of time their citizens were spending at work.

What, then, do such considerations augur for the 21st century? Providing a positive driver, most nations have continued to grow reasonably fast, especially in East Asia. Yet the regulatory support for further shifting working time norms has been sporadic at best. In Europe the main focus of the Working Time Directive in the 1990s was on limiting the work week normally to a maximum of 48 hours; that Europe-wide constraint was then reinforced in France with a regulation restricting weekly working time to 35 hours in large establishments.²⁸ These European regulations remained in place through the first decades of the 21st century, in especially stark contrast

to the model of the United States, where no minimum vacation laws have been in force and where workers in the 2020s experienced a legacy of only short vacations; Canada forms an intermediate case, having in 2005, only two weeks of mandated minimum vacation.²⁹

Yet trade unions, as one source of pressure for change, have been weakened even in Europe, both politically and at the bargaining table, and there have been no major new regulatory constraints on working time duration or schedule control. From this perspective, one would expect that working time reductions and other improvements in Working Time Quality would slow down or cease. In addition, certain structural factors impose inherent ceilings to the possibilities for Working Time Quality improvements. Industries have their own rhythms, such as the seasons' imperatives for agricultural workers through harvest times; public-facing industries must indeed face their publics, limiting the freedoms of workers in small businesses; night shifts cannot be eradicated if hospital patients are to be cared for and buildings are to be secured; someone has to be on call to respond at any time to unpredictable emergencies.

A further significant 21st-century development is the fragmentation of working time that is facilitated by digital technologies. Digitalization, automation, and algorithmic management techniques lowered the costs to employers of deviating from standardized working hours, facilitating the fragmentation of work so as to better match worker availability to the temporality of required tasks.³⁰ Labor market deregulation, a major driving force in Australia (for example) in the closing decades of the 20th century, helped to pave the way.³¹ Forsaking standardized hours, employers can ensure that they only pay for the hours when workers are needed on task, thus reducing their labor costs. In consequence, work is intensified. Moreover, the neat and clear division between work and nonwork becomes blurred, with the ability to reach, monitor, and control labor processes closely even when these happen away from the employer's workplace. Computers in the home allow an "always-on" culture of expectation, disrupting nonwork life spheres. One way this trend is manifested is the rise of digitally enabled platform working, supporting increases in "self-employment" in some countries. Though, in principle, self-employed workers decide when they want to be at work, they are constrained by their customers' and clients' schedules; with platform workers commonly limited to working for one platform, their status and regulatory protections as employees or self-employed are ambiguous and often contestable in law.

When the pandemic lockdowns required home working—which was subsequently partially sustained through ongoing increases in hybrid working—this spatial flexibility ushered in new opportunities for worker-controlled flexibility. Yet the same technologies that have facilitated home working could be adopted for employer monitoring and control. The chief consequence of home working for Working Time Quality has been the difficulty of separating work and nonwork time.³² Evidence of the net effects of new digital technologies on working hours and, more generally, on Working Time Quality remains relatively scarce and contradictory.³³

In short, the de-standardization of work times lowers the costs for employers to match task delivery with their customers' rhythms and schedules. With the new digital technologies, it became easier to disrupt the social equilibrium embodied in the standard work week. But while nonstandard working hours make working times more flexible for the benefit of employers, they do nothing to match working hours and schedules to workers' needs; if anything, the blurring of the boundary between paid work time and the rest of the day is a source of job strain, unless workers can wrest back control.

Taken altogether—the increasing affluence, ongoing but few new regulations on working time, weakened trade unions, and technologies that have eaten away at the foundations of the standard work week—the expected trends in Working Time Quality during the 21st century are ambiguous. In the next section, I address three questions. Has there been a predominant improvement or deterioration in Working Time Quality across a range of countries this century? Then, breaking these changes down into components, have there been ongoing reductions or rises in working time duration? And have there been improvements in worker-controlled scheduling and flexibility?

Trends

Previous studies of 21st-century changes in the *Working Time Quality* index show a distinctly favorable picture of change up to 2015 in the European Union as a whole and within regions. That improvement is underpinned by ongoing reductions in the proportion of workers putting in long hours (more than 48 hours a week or 10 hours a day). Reductions were particularly notable in the agricultural sector and in eastern Europe, which was catching

up to the rest of Europe. In Australia, after a wave of deregulation and disruption to the standard work week in the latter part of the 20th century, the early years of the 21st century saw reductions in working hours.³⁴

This section presents a broad picture of change in Working Time Quality, both as a composite index and through some of its constituent elements, covering a wide range of countries.

Global Trends in Working Hours

Although work duration is not the be-all and end-all of Working Time Quality, it is the metric for which there is the longest and widest spread of data. These data show widespread progress in the modern world mixed, however, with stagnation.³⁵ Across the 37 countries shown in Figure 6.1, the predominant and striking trend is for a reduction in annual average working hours over the last half century. But the story is by no means universally optimistic.

In the more economically advanced countries, the decline in hours has slowed down and in some cases ground to a halt. The deceleration began in the 1980s in most of the liberal market economies and was followed during the 1990s by most of western Europe. The United States stands out for having reached around 1,800 hours in the early 1980s, after which workers' annual work time changed little. Several countries, among them Austria, Belgium, Denmark, Finland, Germany, and Italy, were still registering reduced annual hours during this century. In consequence, a substantial gap opened up between the United States and western Europe—a fact unrecognized in conventional comparisons of GDP or the Human Development Index. Nevertheless, working hours in modern capitalism appear to be gravitating toward a floor. Sweden was ahead of the pack in reaching a floor of 1,400 hours per year by 1980. No country's working time has yet headed below this level. For the most part, workers in western Europe and the Nordic region work for an average of around 1,400 to 1,600 hours per annum. Those in the liberal market economies have largely reached a floor of around 1,700 to 1,800 hours per year, with the exception of the United Kingdom, which looks more like western Europe in this respect.

There is, then, no tangible sign that the economically most advanced countries in the world are heading towards Keynes' utopia of a 15-hour work week (which would amount to less than 700 hours per year). Rather, a reading of this trend suggests that there may be a level below which countries

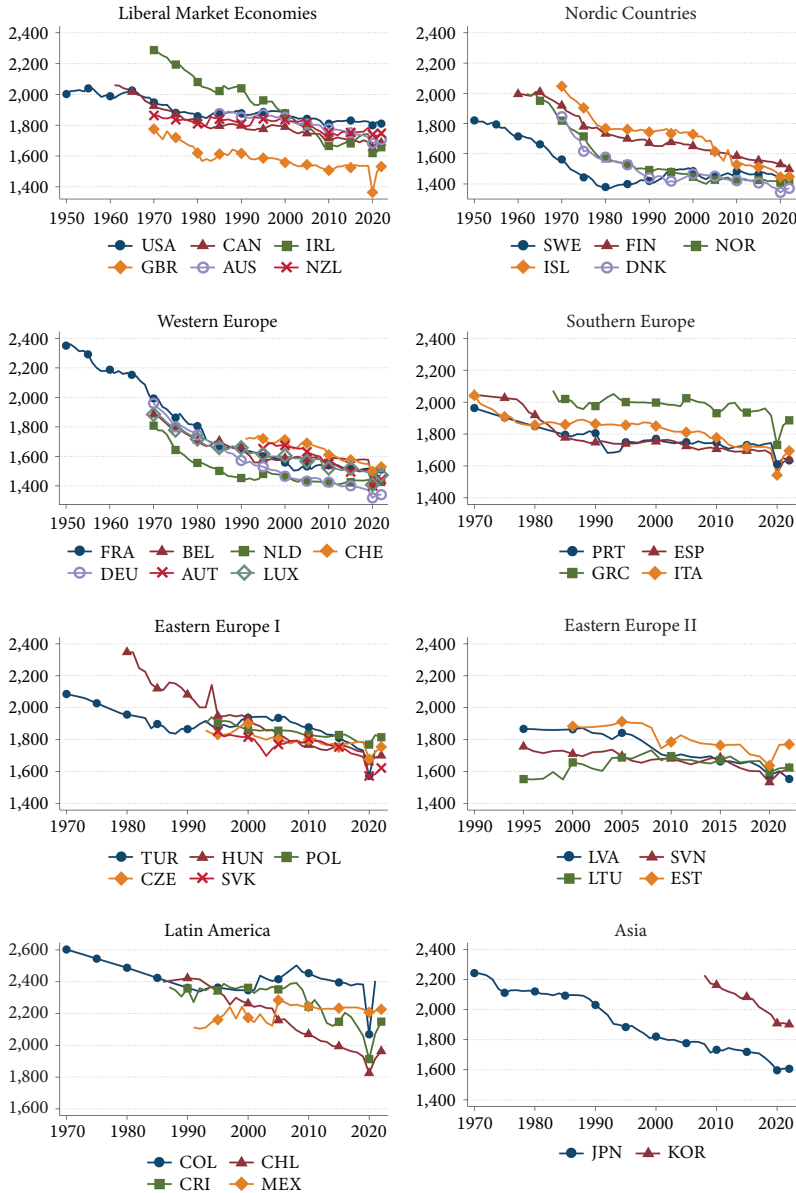


Figure 6.1 Annual working hours per worker by country

Source: OECD Statistics. See the acronym list at the front of the book for country codes.

are unlikely to go in the foreseeable future, absent any major disruptions. As yet, there has been no major threat to the norm of the five-day work week.³⁶

For countries in Latin America and East Asia, the predominant picture is one of convergence from above—in some cases, for example, South Korea, a rapid decline—toward the annual hours more typical of western, economically advanced nations. In Japan, a traditional home of the long-hours working culture for men, annual hours have fallen over four decades from very high levels, around 2,100 hours, to around 1,600 hours per annum just before the pandemic. For these and other converging countries, there is further to go before they encounter the decelerations—or perhaps the floor—in western countries' annual work hours. Eastern European countries (the so-called transitional economies) had, by the second half of the 2000s decade, also joined the pack of downward-converging countries, though Lithuania's convergence has been initially from below, and Estonia's came after a decade of no change.

Europe

For a fuller picture of changes in Working Time Quality in Europe, one that takes into account the flexibility as well as the duration of working hours, we can turn to the composite *Working Time Quality* index.³⁷ Between 1995 and 2015 the *Working Time Quality* index rose in 11 out of 15 European countries for which there are data; moreover, overall inequality in *Working Time Quality*, as indicated by its coefficient of variation, fell in 10 of these countries. The gender gap, however, which is everywhere in favor of women, remained unchanged in most countries.

Figure 6.2 shows a broader picture covering many more countries, though at the expense of reducing the span of years to just 2005 to 2015. This period is just long enough to show a medium-term trend, but it is also subject to cyclical fluctuation, given that it embraces the Great Recession of 2008. The index combines indicators of long weekly hours, long daily hours, schedule control, opportunity for time off for emergencies during work hours, and night shift and other shift work, all consistently measured over time.

There remains, on balance, an upward movement in the index: Out of 31 countries, it rose in 12, mainly but not exclusively in eastern Europe, and declined in just 1 country, France. However, for two out of every three countries there is no significant change over the decade.

Figure 6.2 also shows that in six of the countries with a rise in *Working Time Quality*, it is picking up the still-ongoing reductions in long-hours working. Taken together, the first and second columns depict a narrative of ongoing transition and, in a number of cases, joining or preparing to join the

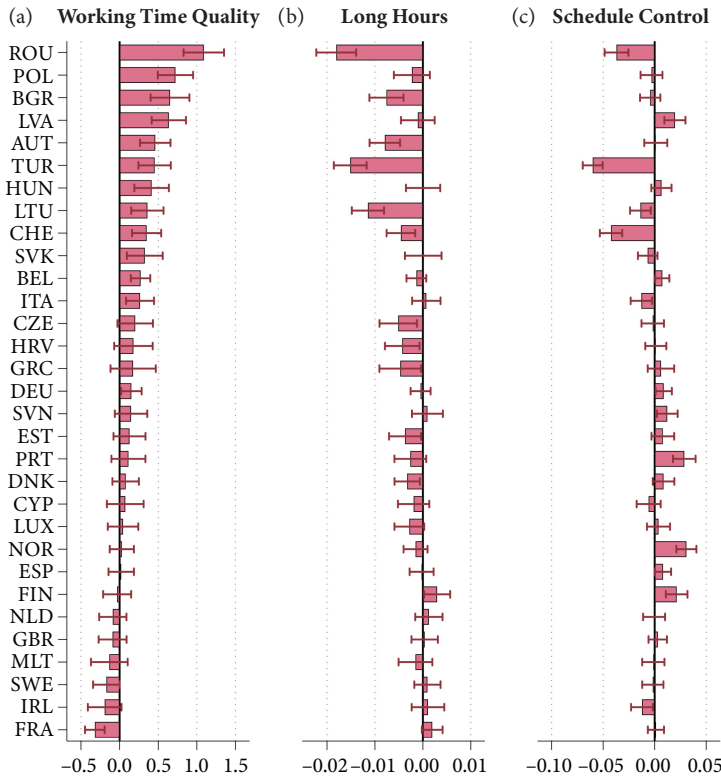


Figure 6.2 Elements of Working Time Quality in Europe, 2005–2015

Note: The *Working Time Quality* trend is estimated from a regression of the index on year for each country. The long hours trend is estimated from a linear probability model regression on year for each country. Schedule control is measured on a scale of 1 to 4, based on responses to the question “How are your working times set?,” with response categories as follows: 1 = “they are set by the company with no possibility for changes”; 2 = “you can choose between several fixed working schedules”;

3 = “you can adapt your working hours within certain limits”; 4 = “your working hours are entirely determined by yourself.” The trend is estimated from a regression of schedule control on year for each country.

Source: European Working Conditions Survey

European Union with its regulatory working time directives. The predominant reductions in working hours were *not* complemented by widespread improvements in employees’ ability to influence their own work schedules—a significant disappointment, given the importance of worker-controlled flexibility for wellbeing. In six countries, workers’ schedule control was even diminished between 2005 and 2015, most strikingly in Turkey, Switzerland,

and Romania, counterbalancing reductions in working duration. There were moderate improvements in Norway, Portugal, and Finland, but otherwise, there were only minor gains in five other countries, while in most countries there was no significant change for better or worse.

Some of the other elements of Working Time Quality, however, have improved more widely. From 1995 to 2015 the average number of night shifts declined significantly in 7 out of 15 countries, most strikingly in Greece. The proportions doing weekend work were widely reduced in these countries, as were the proportions working more than 10 hours per day.

Data from some country-specific surveys amplify the picture of moderate improvement in elements of Working Time Quality. In Finland, for example, parental leave was increasing dramatically among male employees with children under 18 (up from 33 percent in 1990 to 82 percent in 2018); while regular night shift working was kept to a low of around 2 percent of the employed population.³⁸ In Britain there was a slow but steady improvement in workers' freedom to affect start and finish times: Specifically, the proportion of workers who "strongly disagreed" that they could decide their start and finish times fell from 32 percent in 2002 to 24 percent in 2014, a change that was largely associated with the rise in the proportion of self-employed workers (who have more freedom).³⁹

The United States

In contrast with Europe, Working Time Quality in the United States has been decidedly flat. At the beginning of the 1980s, annual working hours in the United States came down to around 1,820 hours but, as noted above, it then leveled off. In 2020, at the height of the pandemic, annual hours were still only a little below 1,800. Nothing illustrates better the relatively poor Working Time Quality of the typical worker in the United States than the low affordance of paid vacation time, which can even today amount to little more than two weeks off for those with short tenure. This picture of stagnation is reinforced by evidence on the trends in working long hours. Figure 6.3A shows how the proportion working over 48 hours a week in their main job was rising for both sexes from the 1970s and then leveled off at the start of the 1990s, with no subsequent improvement.⁴⁰ Figure 6.3B shows no trend in the flexibility to take time off during work hours, there being a decline during the 2000s that was partially mitigated thereafter. Finally, there has been no overall rise or fall in the freedom to change schedules or in night shift

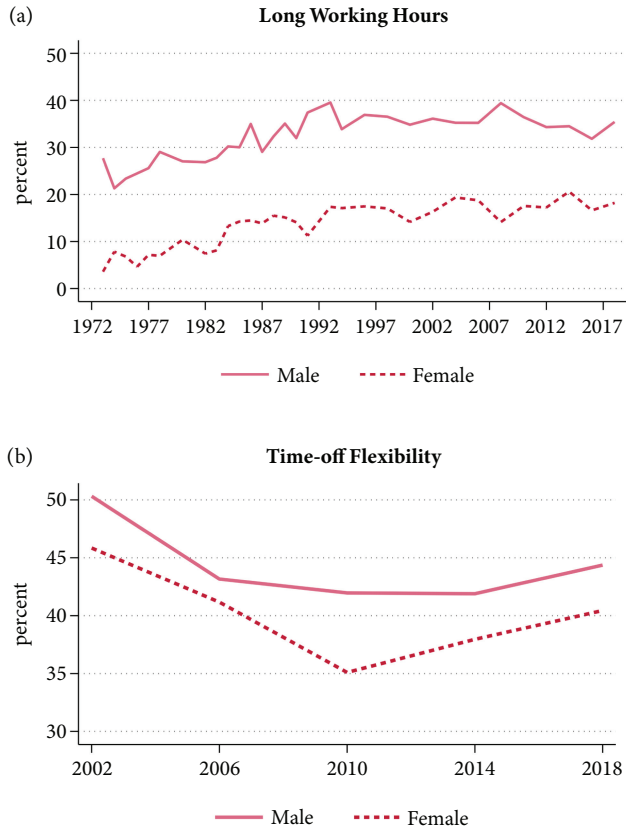


Figure 6.3 Elements of Working Time Quality in the United States

Note: (A) Percentage of “more than 48 hours per week in main job.” (B) Percentage of “not at all hard to take time off.”

Source: US General Social Survey; US Bureau of Labor Statistics

working.⁴¹ None of these conclusions are substantially altered by allowing for changes in industrial composition over the period.

Working hours in the United States remain much greater for men than for women, with the gap falling only slowly since the 1970s. Figure 6.3A shows that, since the 1990s, the proportion working long hours was about twice as high for men as for women. Conversely, however, men have greater flexibility to take time off during work hours. And there is no substantial gender gap in the proportion of US workers who work night shifts. Trends of general inequality in the duration or flexibility of work schedules are also stationary.

While not significantly worse off than before, US workers have missed out on the progress made in this area in many European countries. The hours gaps between US and European workers have widened, as European workers continued to decrease their working hours, while Americans did not. By 2019, on the eve of the global pandemic, the average American worker was working approximately four hours for every three put in by workers in Denmark.

Australia

As in parts of Europe, though not in the United States, workers in Australia experienced strong elements of improving Working Time Quality this century.

The proportion of men working long hours (more than 48 per week) steadily declined from 20 percent in 2001 down to 15 percent by 2015, though thereafter it remained steady (Figure 6.4A). Meanwhile, females' long-hours working remained unchanged at under 5 percent. In parallel, there was an increasing flexibility afforded to Australian workers. The proportion reporting flexible work times (at the top of scale) rose from 10.0 percent in 2005 to 11.6 percent in 2019—a small but statistically significant increase (Figure 6.4B); similarly, the proportion who strongly agreed that they could decide when to take a break rose by 0.2 percent per year. In both cases, men had greater flexibility than women. Since the proportion of self-employment declined a little over this period (2005–2019), it is unlikely to explain the rise in flexibility; indeed, the increases in both types of flexibility are greater once controls for self-employment status are added to a regression trend. Nor are the changes associated with changes in industrial composition.

The exception to this positive trend for Working Time Quality in Australia is that there was also an increase in night shift working for women at a rate of 0.13 percent per annum over this period, with no offsetting decline in men's night shifts (Figure 4D). Women caught up with men, so that by 2019 there was no significant gender gap in night shift working.

South Korea

In South Korea, the pattern of change was also positive on balance. Figure 6.5A documents a rise, for both men and women, in the Korean *Working Time Quality* index, beginning around 2011 in the recovery period after the 2008 financial crash.

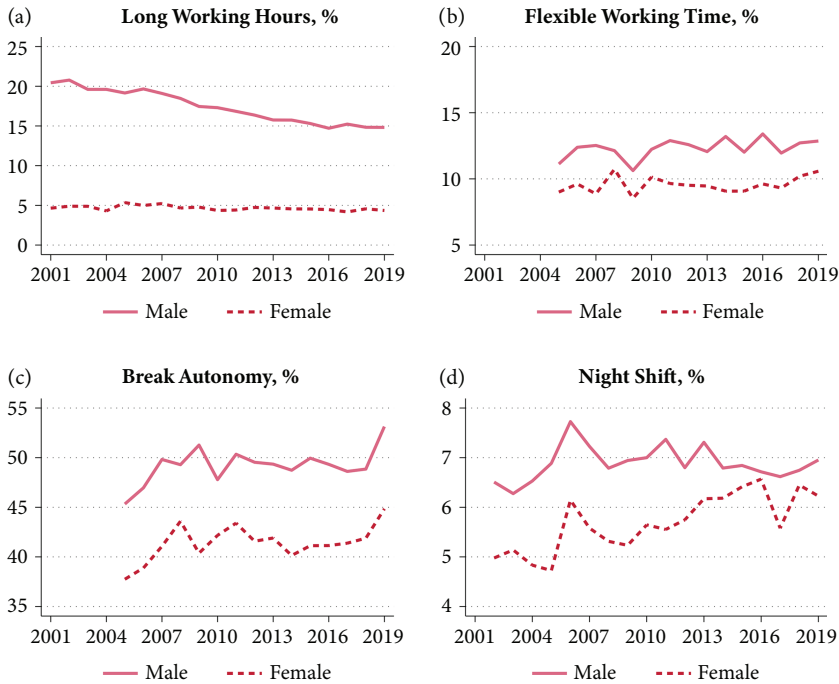


Figure 6.4 Elements of Working Time Quality in Australia

Note: (A) Percentage of “working more than 48 hours per week.” (B) Percentage of “flexible working time” (responding at points 6 or 7 of a 7-point agreement-disagreement scale). (C) Percentage of “being able to decide when to take a break” (responding at points 6 or 7 of a 7-point agreement-disagreement scale). (D) Percentage of “night shift.”

Source: Household, Income, and Labour Dynamics in Australia

As in Europe, the improvement comes mainly from the decline in working hours duration as the country continues a fast downward convergence toward the working hours durations typical of economically advanced countries (Figure 6.1). That decline is reflected in decreasing proportions of both men and women working long hours every week (Figure 6.5B). There was also a decrease in the prevalence of night shift working.

Only partially offsetting this improving trend, there were significant declines in worker-controlled flexibility (Figures 6.5C and 6.5D). From 2010 to 2020, there was a reduction from 27 percent to 17 percent in the proportion of South Korean workers who could entirely determine their working time arrangements. Short-term flexibility also fell over the same period: The proportion able to easily take time off during work hours fell from 18 percent to 6 percent.

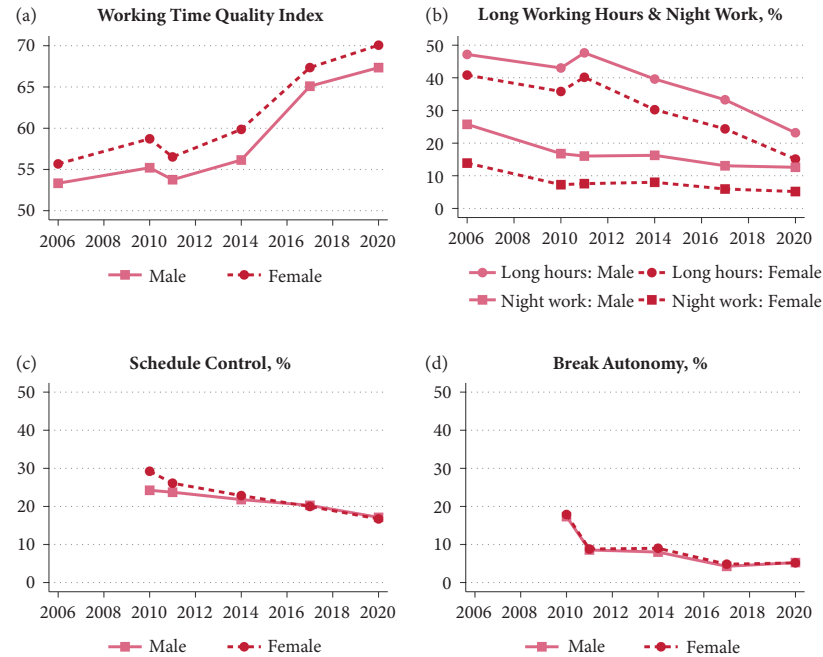


Figure 6.5 The *Working Time Quality* index in South Korea, 2006–2020

Note: (A) The *Working Time Quality* index has a theoretical range from 0 to 100. (B) Percentage of “working more than 48 hours per week” and percentage of “working at night at least 2 hours.” (C) Percentage of workers who can entirely determine their schedules. (D) Percentage of workers who can easily take one or two hours off.

Source: Korean Working Conditions Survey

As elsewhere, women have the greater Working Time Quality in South Korea. The gender gaps, in terms of working hours, exposure to night shifts, and the overall index, are strongly in favor of women, with little change over the period.

Other Countries

Reliable data for other countries are scarce, but the International Social Survey Project provides hints in six places that are not otherwise covered by more comprehensive data. Figure 6.6 shows that, from 2005 to 2015, the flexibility to take time off during work hours diminished sharply in Japan and moderately in Taiwan while increasing moderately in South Africa and remaining little changed in New Zealand, the Philippines, and Israel.

As for gender balance, the International Social Survey Programme surveys confirm that in most countries, women have more chance—by a substantial

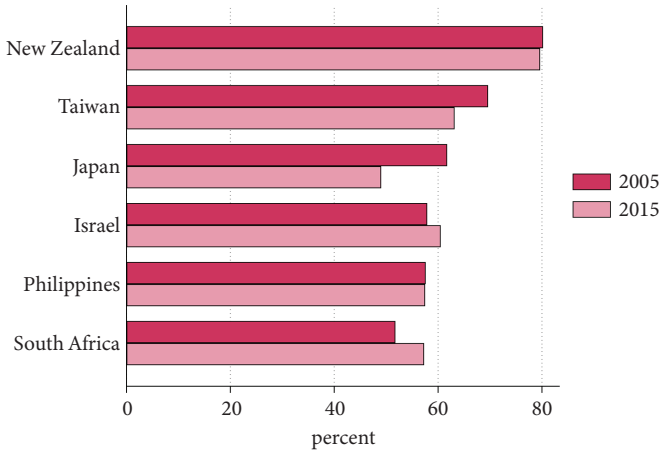


Figure 6.6 Break autonomy in New Zealand, Israel, Japan, Philippines, South Africa, and Taiwan

Note: Percentage for whom it is not difficult (“not too difficult” or “not difficult at all”) to take an hour or two off during working hours to take care of personal or family matters.

Source: International Social Survey Programme

margin—of being permitted emergency time off, with no sign of this changing. There is also a preponderance of countries where men are more likely to be subject to working time schedules that are decided at short notice and are less likely to have a regular schedule.

A Long Way to Go

Set against past battles over working time, progress—interpreted as “doing fewer hours”—has seemed good for the past half century, with the exception that no advances are detectable since 1980 for the large workforce in the United States, the world’s leading economy. Yet that progress has become decidedly slower this century in most of the world’s most affluent economies. Considering Working Time Quality more comprehensively, the picture of change this century remains positive, but less so. There is a predominance of countries, across Europe and South Korea, where the index has moderately risen, reflecting a mix of reduced long-hours working and, in some cases, fewer night shifts. Overall, however, Working Time Quality has risen in just 18 countries out of 37 examined around the world. In 19 countries there

was no significant improvement in Working Time Quality over the intervals examined, and in 2 of these countries it became worse.

The age of worker-influenced flexibility over working hours has clearly not yet arrived. Across the world, only a minority of employees have any say on their daily working time arrangements without changing jobs. Only in eight countries is there any evidence of a (mostly small) gain in employee influence. In seven others, employers have been increasing their grip over work schedules—especially, it seems, in countries such as Turkey, Switzerland, and South Korea, where the propensity for long-hours working has been declining. Even in Australia, where hours have been falling and flexibility for employees slowly rising, overall progress is held back by the increasing proportion of women working on night shifts. In Japan, hours have been falling from the extraordinary high levels of the past, but workers are reporting less flexibility for time off during work hours.

The picture of change and stagnation is regionally variable. There are some signs of convergence from eastern Europe and elsewhere, in respect to working hours, toward the norms of the most affluent countries. Yet all seem to be headed for, and some to have arrived at, a potential floor for annual working hours. Also stuck is the general inequality of working hours. The gender gap in Working Time Quality is universally in favor of women and has been impervious to any substantial diminution.

What might account for this mix of change and standing still? Structural changes in the industrial composition of jobs do not serve as an explanation because the differences between industries in Working Time Quality, and the changes in industrial composition, are too small. Only in isolated cases can an explanation be constructed from rising self-employment. Are there, however, plausible accounts that have a more universal application? More generally, the rises in Working Time Quality can be interpreted straightforwardly as reflecting increasing prosperity. That the connection with GDP per capita is loose reflects not just the shortcomings of GDP as a measure of welfare but also the ongoing importance of power resources in determining job quality. Apart from the equilibrium stickiness argument noted earlier in this chapter—which is less forceful in the light of the working time fragmentation enabled by digital scheduling—weak or absent regulation and the long-term decline in union power are, potentially, straightforward explanations for the fact that working hours have failed to come down in the United States. In contrast, maximum weekly hours regulations may have been instrumental in bringing down work hours in South Korea.⁴²

Growing Tensions, and a Kickstart from the Pandemic

Where Working Time Quality does not increase, there arises the potential for increasing mismatches between the capabilities for work-life balance and the reality of the jobs people can aspire to. It is likely that shifting norms among populations in respect to male and female roles, both at work and in the household, have increased the value that people attach to a good work-life balance. As shown in Chapter 2 (Figure 2.2A), acquiring the capability for greater choice over working hours and for more convenient hours of work became highly important for a rising proportion of workers in Britain during the quarter century from 1992 to 2017. As might be expected, this capability is valued more by women than by men, but it has increased in importance for both sexes. Similarly, flexibility is valued more highly by those with dependent children; yet both parents and others, from whatever social group, have come to attach increased importance to work hours choice and to convenient hours. With only limited indications of improvements in workers' control over flexibility, signs emerged, even before the pandemic, of rising tension between employers' organizations and unions, reflecting employees' changing demands for a work-life balance and employers' demands for time flexibility appropriate for global labor markets and increasingly public-facing services.⁴³

Then COVID-19 decidedly altered the dynamic balance of power surrounding working time. Along with the spatial flexibilities that were forced upon both employers and workers by the global lockdowns, and the accelerated introduction of facilitating technologies, employers ceded time control to some employees at far lower cost and with less resistance than might once have been the case. In the aftermath of the pandemic, there was a step change in worker-controlled scheduling, with many people being able to switch to working at home indefinitely or else adopt hybrid spatial working patterns that mix home and the traditional workplace.

The consequence, as shown in a rare before-and-after study, was a distinct improvement in schedule control and in worker-controlled flexibility, and hence in Working Time Quality in Britain.⁴⁴ To illustrate the source of this gain, some 80 percent of those doing some form of remote working find it not at all difficult to take time off during working hours, compared to 48 percent of other workers who cannot work remotely. Since hybrid working has risen wherever the technology has been available, postpandemic gains in schedule control and flexibility are likely to be found in many countries, though they are held back by the extension of remote surveillance.

While it is easy to see this boost to worker-controlled flexibility as a silver lining to the losses and costs of the pandemic, it also heralds a new axis of polarization between jobs that allow hybrid working and those where employers cannot or will not permit it.

Reframing the Vision

How is work time to be articulated well with the other parts of peoples' lives? To minimize role conflict, a good balance is to be achieved not only by working fewer hours (up to a point) but also through greater flexibility controlled by employees and by maintaining a segmentation of work from other life domains. It also means fitting paid work as far as possible into normal waking hours by minimizing night shifts. Yet the world's jobs, even in developed nations, have a long way to go before they can be said to have decent working time arrangements. A new target is needed to guide future negotiations and regulations. Keynes's idea for a future of work was focused too narrowly on substantially reducing work hours and in practice is not detectable on the horizon. To frame a more realistic and inclusive future vision of working time for human flourishing, his utopia could well be reformulated as one where work is meaningful and where jobs allow people to control the terms of the separation between their paid work and the other parts of their lives. Because people are different and therefore have varying needs, reaching this vision will normally involve letting workers have greater power to fix when they do their jobs, within the constraints of conformity with company activities. Affording workers greater agency in this way would not necessarily mean working ever-shorter hours or reducing the labor supply. But there is no denying the potential tensions that will arise: While the eight-hour day was the Working Time Quality challenge of the 19th century, control over working time flexibility could become the battleground as the 21st century unfolds.

Autonomy and Skill

Machine or Human? Autonomy, Skill, and the Capability for Meaningful Work

Philosophers and political economists have long realized that the social and economic relationships involved with work, and the character of the work itself along with its physical surroundings, make a huge difference to how people experience it. The humanity of workers is especially heightened when they are combining forethought with productive action, when their tasks are freely chosen, and when they are mentally engaged with the purpose and process of what they are doing. Conversely, the more workers are expected to respond automatically—to behave as if they were machines—the greater is their alienation from their inner selves. Both philosophers and psychologists have rightly argued that the need for meaningful work is far from being satisfied in the contemporary world. Any trend toward work becoming more human-centered, even within the bounds of a capitalist economy, should be taken as a sign of positive social progress.¹

A key ingredient of human-centered forms of working is the degree to which workers can influence their own labor process. The degree of job autonomy is therefore an important indication of progress or decline. Autonomy affords the capability for workers to exercise their agency—a fundamental component of their wellbeing, distinct from the satisfactions to be gained from the tasks they perform and the things they can do with the earnings they receive. The scope of that autonomy covers the tasks that they are expected to perform (including the methods, pace, and choice of standards for that performance) and the timing and duration of work. Individual autonomy in each worker's own job is fundamental, but that may be supplemented by the autonomy extended to teams of workers or through professional codes of practice. Autonomy is construed in psychology as one of several intrinsic needs, alongside relatedness, beneficence, and

competence.² Satisfaction of the need for autonomy opens the way for people to feel that their work is meaningful. Autonomy at work thus improves general health and wellbeing, though the impact could be expected to be curvilinear, with too much autonomy becoming a stressor beyond a certain limit (especially where workers' skills are stretched). Autonomy also enables a better match between tasks and workers' preferred activities, whether through job crafting or through controlled work-time flexibility as discussed in the previous chapter.

It might also be argued that establishment-level or higher-level participation in decision-making—through, for example, trade unions or works councils—should be treated as an additional element of job quality, and if so, this participation would be part of the Autonomy and Skill dimension.³ Indeed, the International Labour Organization sees social dialogue between employers, trade unions, and government agencies as an integral element of the broader concept of “decent work.” With respect to the definition of job quality, however, the OECD took the position that only outcomes should count in the concept of job quality, thereby excluding “procedures” such as social dialogue or organization-level participation through works councils or unions (OECD 2017, 13–14, 19). Perhaps there is a political side to that stance, given the contested role of unions in many OECD member countries. There is, after all, some suggestive evidence that the fairness of procedures and participation in organizational decision-making are valued in themselves by at least some workers.⁴ Nevertheless, it remains unclear whether that valuation is general and widespread. It can also be countered that, for many, participation through elected representatives adds little to the direct satisfaction of their needs from work, even though it adds indirectly when that participation leads to improved working conditions. Thus, organization-level participation is arguably an instrumental capability, but not a distinct intrinsic element of job quality. With the case for including organization- and higher-level participation as a distinct element of job quality unmade, I have not included it in this book—though unions figure strongly in the explanatory narratives.

Because a good knowledge of tasks and processes is required to exercise autonomy, especially when engaged in complex procedures or in making innovations, the needs for competence (or skill) and autonomy are intimately linked. While skill is conceived in various, contested ways within both economics and sociology, satisfying the worker's need for competence is necessary to achieve autonomy, though the converse does not

necessarily hold: a worker may be highly competent but accorded little job autonomy.⁵

The need for competence in a job is relative, however, to the job's skill requirements. Skill has a nuanced relationship with wellbeing. Workers gain satisfaction from successful achievement of tasks that are challenging but not too difficult. With too little skill to carry out required tasks, workers feel stress from fear of failure; with too much skill, they are more likely to feel bored and disengaged. More-skilled workers can better satisfy their need for autonomy if adequately matched to jobs in terms of both job autonomy and skills. The exercise of a higher level of competence might also contribute to feelings of meaningfulness at work, though that interpretation could be contested by those with meaningful lower-skilled jobs.⁶

Taken together, these links rationalize the grouping of autonomy and job skill, including the job-person skill match, as a distinct domain of job quality. Jobs that afford greater autonomy, where recruitment and training better match jobs to workers, generate higher health and wellbeing; low autonomy and a poorly matched workforce is, by contrast, a bad sign. These effects are expected to apply across all sectors of society and are theorized to interact with the effects of other domains—specifically, work intensity and the social environment—in their effects on health and wellbeing.

Direct Effects on Wellbeing

This presumed link between autonomy and human flourishing can seem self-evident. The centrality of agency within the capability approach to wellbeing emerged not from any formal or semiformal empirical studies but organically from within the broad traditions of humanist and religious philosophies. It is hard, therefore, to conceive of an approach to *human* wellbeing that did not allow any space for autonomy—even though its role is portrayed in multiple and contrasting ways among diverse philosophies.

Nevertheless, rather than asserting the value of autonomy as an unfalsifiable truth, it is satisfying to be able to relate that autonomy's effect on wellbeing and health is supported by many modern-day formal studies from around the world, both quantitative and qualitative in nature. The evidence, from varied cultures and settings, confirms that workplace autonomy is

directly associated both with work-related wellbeing indicators (job satisfaction, work-related affect) and with general wellbeing (life satisfaction, mental health); there is some suggestive evidence that the relationship with job satisfaction is curvilinear, as expected, in jobs with high levels of complexity.⁷ An impressive meta-analysis found that having a job with low job control was associated with the likelihood of taking more than three days of sick leave being elevated by around a third.⁸ Studies in many countries also report positive effects of autonomy on workers' perception that their activities serve meaningful goals. In Chilean workplaces, for example, autonomy and the opportunity for beneficence are found to be the most important factors underpinning perceptions of meaningfulness, while in a qualitative study of the welfare of blue-collar workers in Finland, the role of autonomy was the most widely raised issue.⁹

Economics adds to and complements the array of evidence on the link between autonomy and wellbeing, using the assumption that the choices people make reveal what they want. Few or no opportunities that would enable researchers to distinguish the intrinsic from the instrumental value of having control present themselves naturally; therefore, laboratory experiments are deployed.¹⁰ Participants in one informative study were selected mainly from student communities in Switzerland, Germany, Japan, France, and more broadly, online. They were asked to choose between actions that had different payoffs and different degrees of control. If it is assumed that the stated preferences of the participants and the experimental settings of these studies are informative about the ordinary actions of the whole population, their choices reveal that most people are prepared to accept a lower average payoff in return for having greater control over what they do.

There is also evidence about the importance of the job-to-person skill match. Both overeducation and skill underutilization are found to be associated with lower job satisfaction and a reduced sense of meaningfulness in work (as well as lower wages).¹¹ Evidence of underskilling (where workers report being insufficiently skilled for their jobs) affecting workers' wellbeing, by contrast, is scarce, because workers acutely lacking the skills to perform a job are normally unlikely to be able to remain long in that job. There is some indirect evidence: One study found that when job autonomy is low, higher job complexity above a certain level induces lower job satisfaction; another found that the negative effects of digitization on health (the number of days off sick) are lessened by the provision of training.¹² Nevertheless,

when skill mismatch indicators are used as an element of job quality, they typically refer only to skill underutilization.

Whether and under what circumstances the autonomy-to-wellbeing relationship is curvilinear are not yet settled empirical questions. However, further evidence of the impact of autonomy on health and welfare is found among the studies investigating the importance of workplace social support and in the even more voluminous research on the demand-control model. Evidence for these theorized interactions among job quality domains—that is, Autonomy and Skill with the Social Environment of work, or Autonomy and Skill with Work Intensity—will be noted in subsequent chapters.

The Factors Shaping Autonomy and Skill Requirements

Since autonomy at work is so deeply significant for meeting people's needs through their jobs, there is ample motivation, if we want to appreciate the contribution of modern-day jobs to social progress, to develop an understanding of the trends in the affordance of autonomy and the opportunities for the exercise of skills at work across nations. These trends have ramifications beyond merely the jobs that people do. Skills and job autonomy, fed by workers' education, are strong determinants of living standards and cultures. They carry the mark of social class and of gender and ethnic differentiation, with their long-term implications for unequal life outcomes. As is the case for much of this field, a multidisciplinary approach is essential.¹³ It is also important to embed the approach in a perspective that acknowledges employers' objectives.

From the employing firm's perspective, jobs will be designed with a degree of autonomy, a balance between competing objectives. On one hand, greater latitude for workers to make decisions about their work makes use of their close knowledge of the day-to-day production process, keeps them engaged and committed to it, and encourages productive innovations in the labor process. On the other hand, employers and managers aim to reduce latitude in order to monitor worker effort more closely and to attain to efficient production methods through standardization and through machine control. There is an optimum degree of autonomy that balances these advantages and disadvantages from the employer's perspective of maximizing profit.¹⁴ Because of the many interdependencies between all the different production processes in each organization, jobs are likely also to carry a systemic

organizational marker, set by the owners or senior management who run the organization.¹⁵

Over recent decades, extensive study has established that the optimum latitude is normally higher for jobs in more capital-intensive industries where complex operations are typically involved and for jobs where production has a lot of day-to-day variation and uncertainty. In services this is especially true at the higher-value-added end of the market, where customers expect a premium-quality product, such as in professional or expert services. The orientation toward greater latitude in professional jobs is only dampened by the evolution of bureaucratic methods of control. More latitude is likely to be afforded where workers are more committed to working hard for the organization.¹⁶ Managers may also find that increasing autonomy engenders greater employee commitment to the organization, thereby enabling a higher level of autonomy (in a virtuous circle of causation). Experimental modeling by economists shows that higher job autonomy becomes the optimal outcome for employers only when it is possible to screen job applicants for their commitment.¹⁷ Managers conscious relaxation of monitoring and control of detailed work in order to sustain workers' effort and productivity has been termed a strategy of "responsible autonomy," in which the tensions between the interests of employers and their employees are suppressed. Similar tensions were present in knowledge workers' jobs that were relocated to homes and accordingly afforded greater autonomy during the lockdowns of 2020 and 2021 and their postpandemic aftermath.¹⁸

Job design in organizations does not, however, take place in isolation. Employers operate within a social, regulatory, and political context, especially in respect to skill formation and deployment. Only through these country-wide factors can certain macrovariations, such as the tendency for workplace autonomy to be set at high levels in Nordic countries, be understood. The institutional "regime" of employee relations—whether concerted and corporatist or "liberal market"—conditions skill formation, especially among younger workers, through regulated apprenticeships. Employers must also take into account the workers' relative power resources through trade unions, works councils, and political representation. Employees, too, have a preferred degree of latitude, which would normally be expected to be greater than the employer's optimum; so even with the loose regulation found in liberal market economies, labor market competition might be expected to exert some pressure on job design decisions.

Expected Trends

In light of these complexities, might we expect to see some progress and advancement of Autonomy and Skill in 21st-century workplaces?

The optimistic trail that has run through economic and education policy discourse for much of the last half century follows the line that technological and social progress, and the increasing complexity of tasks of the modern workplace, have raised the required skill levels of the workforce. Technological change has been, in effect, “skill-biased,” raising the optimal ratio of more- to less-skilled labor. That skill bias stems, it is argued, primarily from the pervasive, progressive diffusion of computers into the workspaces of the large majority of jobs in the closing decades of the twentieth century. The same decades witnessed the onset of a global “knowledge economy,” in which the most important element in leading firms’ ability to innovate and compete in a global economy was the expertise held by its workers and embodied in its patents and processes. Technological change is also argued to have reduced the importance of routine tasks, because these are the ones most easily replaced by computers, a factor that is disrupting and polarizing employment structures throughout developed nations. Because the efficiency with which nonroutine tasks can be carried out is likely to benefit especially from affording workers greater autonomy, “skill-biased” and “nonroutine-task-biased” technological change theories predicted an increase over time both in skill requirements and in the degree of job autonomy.¹⁹

In short, in these optimistic perspectives, the presumption has been that the rising affluence of developed countries would be accompanied by increasing autonomy and skill in workplaces, a welcome upward trend in job quality. For government advisers, the theory opened the door to universal win-win policy solutions that promote increases in the supply of skills that mitigate class conflict. For management policy analysts, the affluence theory is consonant with the diffusion of more enlightened “high-involvement work organizations,” alternatively termed “high-performance work organizations.”²⁰ The implication is not that sustained long-term economic growth could be expected to generate indefinite increases in the degree of autonomy afforded to workers but that, more modestly, it would enable autonomy to approach more closely the levels preferred by workers, which would be more conducive to their needs and their health.

The converse perspective is that predominant organizational and managerial changes have lowered the optimum level of autonomy that firms design into their jobs, owing to new possibilities for low-cost digital control of work. Moreover, with institutional changes shifting power away from organized labor, managers found themselves increasingly able to impose job design closer to *their* desired optimum. In one influential perspective, that set forth by neo-Marxist Harry Braverman in the 1970s, firms reinforced their power by shifting the knowledge base up the corporate hierarchy, deliberately deskilling labor processes by extending the division of labor. That perspective, exceptionally American-focused and overly concentrating on control rather than the profitability of firms, gave way to more nuanced perspectives that characterized the leading management strategies, such as “lean production” (systematic elimination of “waste”), extensive bureaucratic control, and flexible specialization. Later, fueled by finance-driven pressures for organizational change, came the growth of the “fissured workplace,” where sections of the workforce at each site would become employees of subcontracting companies, usually with inferior wages and working conditions.²¹ In these newer perspectives, management strategy is conceived as driving reductions in job autonomy through the enhancement of workplace control, building on the new technical possibilities afforded by digitization.

Unlike the Braverman approach, however, these newer strategies for closer control do not necessarily involve the deskilling of workers. The expansion of bureaucratic control methods, especially, opens up the possibility that job autonomy may decline even among nonmanual and professional workers, reducing the inequality of autonomy and even reducing traditional social class differentials. Moreover, skill requirements could continue to rise even while autonomy is falling because managers are taking greater control of what workers do: a *decoupling* of two historically enjoined categories.²²

Another potential for decline in this element of job quality comes from the universal massification of higher education participation that has occurred over recent decades. In many countries, concerns have arisen this century because graduate jobs have not expanded rapidly enough to match the expansion in the supply of graduates aspiring to high-skilled jobs with a high degree of autonomy.²³ Though overqualification (achieving more education than a job requires you to have) does not necessarily imply skills underutilization, the likelihood of the latter increases. Such a tendency should be

set against the potentially improved match that ought to emerge from the spread of the knowledge economy, which would be expected to bring high levels of training and on-the-job skill acquisition to better match workplace needs.

There are, then, three questions concerning the progress of Autonomy and Skill, as a dimension of job quality, in the 21st century. First, has Autonomy and Skill been rising, in line with the presumptions of affluence theory? Second, have the two conjoined elements of autonomy and skill been sticking together, or has there been a tendency for them to start to decouple as higher-skilled groups start to feel the encroachments of bureaucratic and digital controls? Third, and linked to this same potential trend, has there been any tendency for autonomy to become less unequally distributed among jobs?

Trends in Job Autonomy and Job Skills: The 21st-Century Story

Prior Evidence

We have some limited prior evidence to go on, showing a mixed picture. Positive indications come from Finland, where between 1977 and 2013 there was a hefty increase in the proportion of workers who reported that their job facilitated good self-development at work. Also positive, though less striking, was a modest rise in perceptions of autonomy at work in the United States from the 1970s onward. The trend in Britain, by contrast, was the reverse, with task discretion declining during the 1990s, stabilizing for a while, and then resuming its downward trend between 2012 and 2017. Nevertheless, several indicators of skill use were rising during the 1990s and early 2000s—an early and arresting indication that autonomy and skills could not be expected necessarily to trend in the same direction.²⁴

There is even less evidence concerning late-20th-century trends in the matching of people's skills to the skill requirements of jobs.²⁵ Studies of overqualification, often focused on the employment of graduates in nongraduate occupations, show rising trends—for example, in Germany between the 1980s and 1990s, in Britain from the 1990s to 2006, and for a later period in the United States between 2002 and 2016. In Poland, overqualification rose through the 1990s as the country went through its

transition away from a planned economy. Among East Asian countries, a mixed picture is found: graduate supply far outstripped the demand for graduates in Hong Kong and in South Korea but was held under control and more in line with rising demand in Singapore. Though these trends are undoubtedly significant social developments, the links between education and skills are loose, with each education level implying a range of skills. It remains unclear how much one can infer from rising overqualification that the skill match was also deteriorating.

New Global Evidence

Europe

The *Autonomy and Skill* index comprises several indicators of skill use (including task complexity and ongoing training) and several indicators of task discretion.²⁶ Figure 7.1A shows that, across a wide range of European Union (EU) countries—17 out of 27—there is a preponderance of countries where the index has been increasing this century. There were statistically significant falls only in three countries: Hungary, Cyprus, and the Netherlands. For 15 of these EU countries, it is possible to start the comparison in 1995, which shows *Autonomy and Skill* rising over two decades in 8 countries, falling only in 1 (the Netherlands). All these changes are, however, modest and incremental, mostly being at a rate of less than 0.5 per year. With a standard deviation of 27 for the Europe-wide index, the trend would not start to have a noticeable impact on people's capabilities and their wellbeing in less than a decade.

In most countries—12 out of the 15 mentioned above (the EU15)—there is a positive gender gap in favor of males. However, in four countries—Belgium, Italy, the Netherlands, and the United Kingdom—that gap was falling over the two decades from 1995. Indeed, in Belgium in 2015, men and women enjoyed the same level of *Autonomy and Skill*. At the same time, there were notable reductions in the overall inequality of the *Autonomy and Skill* index in five countries, balanced by some increases in inequality in three countries: Italy, Portugal, and the United Kingdom.²⁷

There is welcome supplementary evidence from the European countries that feature in the International Social Survey Programme (ISSP) data. Those data show little change in the proportion of respondents in five countries who reported between 1997 and 2015 that they could

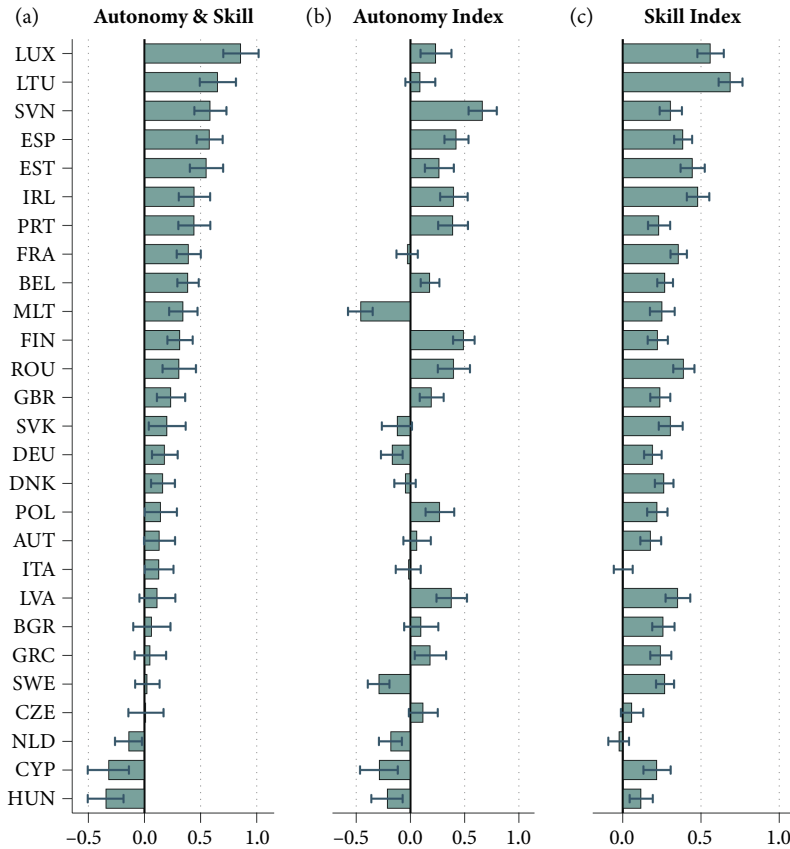


Figure 7.1 The *Autonomy and Skill* index in Europe, 2000–2015

Note: The *Autonomy and Skill* trend is estimated from a regression of the index on year for each country. Two separate indices, *Autonomy* and *Skill*, were newly constructed using the same variables used to construct the *Autonomy and Skill* index. The *Autonomy* index (standard deviation = 25.4) covered task discretion over order, methods and speed, consultation on targets, choice of colleagues, ability to apply own ideas, and influence decisions. The *Skill* index (standard deviation = 14.3) covered training, problem-solving, complex tasks, learning new skills, computer use, and average education level in occupation.

Source: European Working Conditions Survey (EWCS)

“work independently”; but there was a modest rise in France and Slovenia and, from 2005 to 2015, in Finland and Latvia. In most countries, men are more likely than women to be able to work independently but are less likely to receive training; in most cases these gender gaps did not change.

Because the bonds between skills and autonomy could be loosening or tightening, it is also relevant to ask what has been happening separately to

the two main elements in the *Autonomy and Skill* index. In a large preponderance (24 out of 27) of the EU countries, the *Skills* index increased between 2000 and 2015 (see Figure 7.1, column B). The story on the *Autonomy* index is mixed, however. In 13 countries there were significant, if modest, increases, but there were declines in 6 countries. Not uncommonly, there was increasing discretion over task methods and task order, accompanied by falling discretion over the speed of task completion. The overall fall in the *Autonomy and Skill* index in the Netherlands since 1995 occurred because jobs came to be designed with lower discretion over both work methods and the speed of task completion, with no increase in training to counterbalance this decline. The net effect elsewhere is that there were as many as 11 countries where skill requirements were increasing, but with no accompanying rises in the autonomy of workers and even, in several cases, a fall. Thus, despite the expected rises in skills and their use in employment this century associated with the putative expanding knowledge economy, the changes in overall Autonomy and Skill are modest, and in some cases perversely negative.

The information embodied in the EWCS indicators for task discretion, while multidimensional, is limited by the response scales that are dichotomous and therefore do not allow respondents to report degrees of task discretion. Some nuanced changes might therefore not be recorded through this indicator. By contrast, the British Skills and Employment Survey also follows multidimensional aspects of discretion, but each one is reported on a four-point scale. The average of this scale shows that, in British workplaces, there was a large decline in task discretion between 1992 and 2001; after a period of no change, the decline resumed between 2012 and 2024.²⁸

Data on skills matches is available in the EWCS, but only for the relatively short interval between 2005 and 2015. It can nevertheless be reported that, over this decade, the proportion of European workers saying that their skills matched their jobs rose significantly in 16 countries out of 28, falling only in 2 countries (Slovenia and the Czech Republic). In Croatia, to give a striking example, the proportion of skill-matched workers rose in this decade from 43 to 61 percent. In Europe as a whole, the proportion reporting that they needed more training to cope with their duties remained steady (at around only 13 percent); thus, in most cases, where the skill match improved, it was mainly because of a decline in the proportion who said that they had the skills to cope with more demanding duties.

The United States

Respondents to the US General Social Survey are regularly asked, “In your job, how often do you take part with others in making decisions that affect you?” and if it is true that “I am given a lot of freedom to decide how to do my work.” Figure 7.2 shows that, from 2002 to 2018, the proportion of workers who report often taking part in decisions fell from 43 to 35 percent among women and from 44 to 37 percent among men, with no change in the gender gap. Simultaneously, there was only a small lowering of the coefficient of variation in this variable, indicating no great change in its inequality. Over the same period, there was little change in the proportion of men who said it was “very true” that they had a “lot of freedom” to decide how to do their jobs. Taken together, these findings suggest that job autonomy has been declining moderately during this century in the United States but that its distribution has been relatively stable. The gender advantage for men in decision-making is small and did not significantly change.

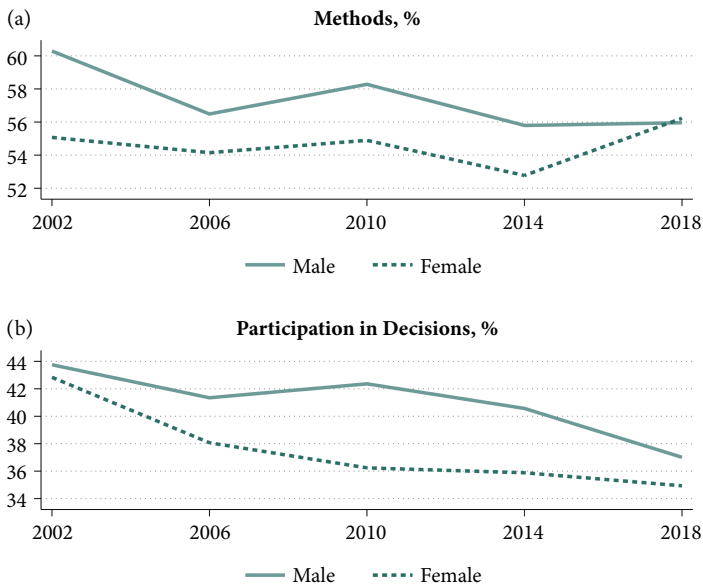


Figure 7.2 Autonomy and decision-making participation in the United States

Note: (A) Percentage of workers who have a lot of freedom to decide how to do their work.

(B) Percentage of workers who often take part in decision-making.

Source: US General Social Survey

Australia

Respondents to the Household, Income and Labour Dynamics in Australia panel survey in Australia were asked, every year since its start in 2001, how much freedom they had to decide how to do their work and whether they felt that they had a say over what happens in their jobs; starting in 2005, they were also asked how much choice they had in deciding what to do at work. Figure 7.3 shows a distinct and statistically significant decline in two of these three variables during the 2000s; all three remained level during the 2010s. From all three angles, there is a gender gap that favors men experiencing greater autonomy than women, with the gap declining only slightly over nearly two decades. However, the overall inequality in perceptions of having “a lot of say” increased over the period, as measured by its coefficient of variation.

South Korea

The Korean Working Conditions Survey permits the construction of a comprehensive index identical to that used for Europe (see Figure 7.4A). The index declined significantly between 2006 and 2014 and failed to recover much in subsequent years. During this time, there was a persistent gender gap in favor of men and virtually no change in the overall level of inequality.

The subindex for Skill declined sharply over the course of the 2008–2009 financial crisis (Figure 4C). While that subindex recovered somewhat afterward, the subindex for Autonomy (Figure 7.4B), which had also plummeted before the crisis, merely flatlined between 2014 and 2020. It appears that South Korean employers may have used the economic crisis as the occasion to substantially tighten their control of work, reducing employee autonomy. For example, the proportion of Korean workers who said that they could choose or change the order in which they carried out their tasks declined steadily from 69 percent in 2006 to 44 percent in 2020.

Other Countries

Informative trend data for several other countries is provided by the ISSP series, presenting a picture of modest upward change in some countries (Figure 7.5). In South Africa there was an increase over 2005–2015 in the proportions reporting that they could work independently and in the proportions who said that they had received training over the previous

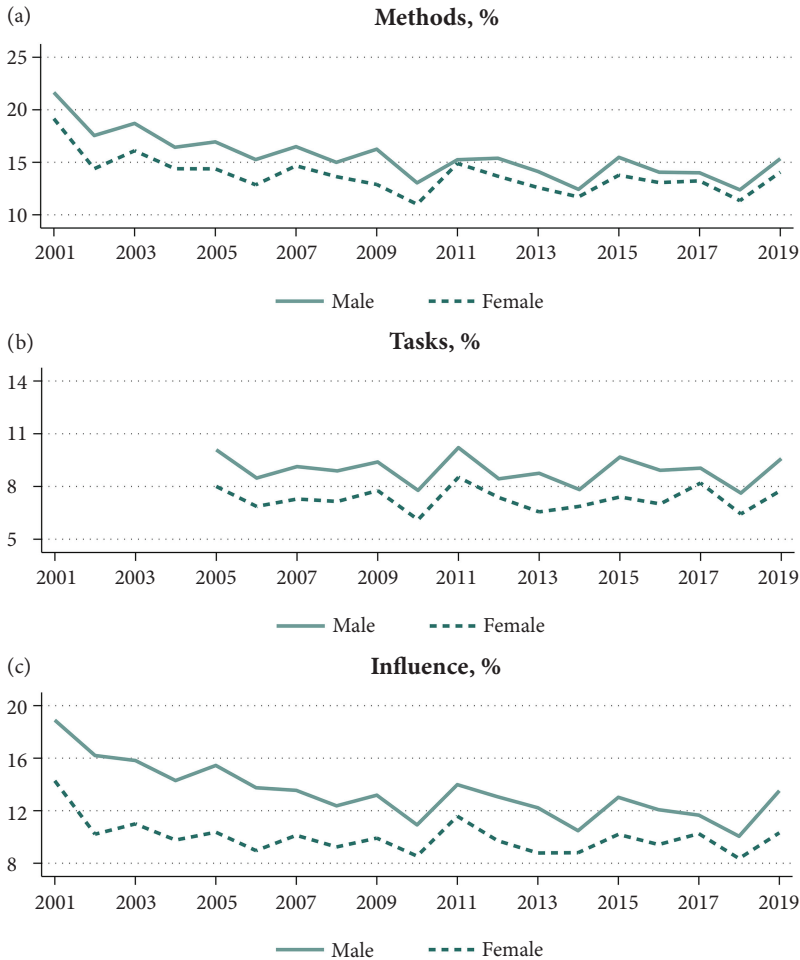


Figure 7.3 Autonomy in Australia.

Note: (A) Percentage of workers who have a lot of freedom to decide how to do their work. (B) Percentage of workers who have a lot of choice in deciding what to do at work. (C) Percentage of workers who have a lot of say about what happens on the job.
Source: Household, Income and Labour Dynamics in Australia

12 months. Training participation also increased in the Philippines and in Japan, but in the latter, there was simultaneously a fall between 2005 and 2010 in the proportion who could work independently—another case of autonomy and skill drifting apart. Meanwhile, little change is recorded in New Zealand, Israel, or Taiwan, though there was a closing of the gender gap in each of the latter two countries.²⁹

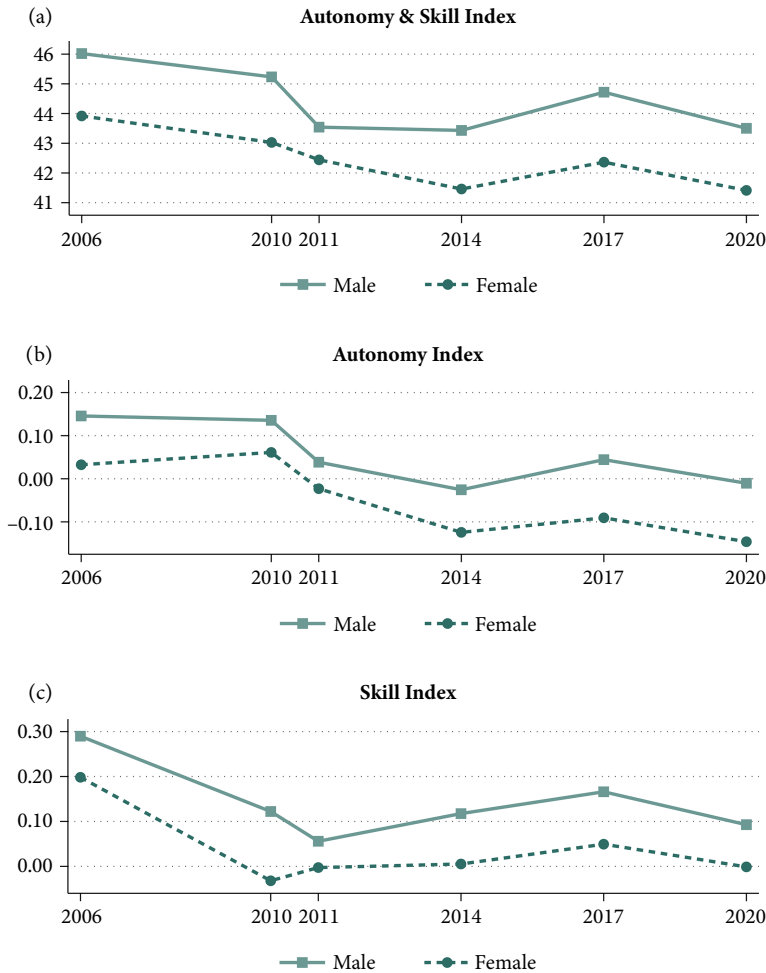


Figure 7.4 The *Autonomy & Skill* index in South Korea, 2006–2020

Note: The *Autonomy & Skill* index is normalized to a scale of 1–100. The *Autonomy* index and the *Skill* index are standardized.

Source: Korean Working Conditions Survey

The Decoupling of Autonomy from Skill

A key finding of this chapter has been that, on balance, this dimension of job quality has been improving this century, partially in line with the presumptions of affluence theory. Autonomy and Skill has been rising in 15 countries, remained unchanged in 11, and has been falling in just 4. This judgment comes either from trends in the constructed overall index or from

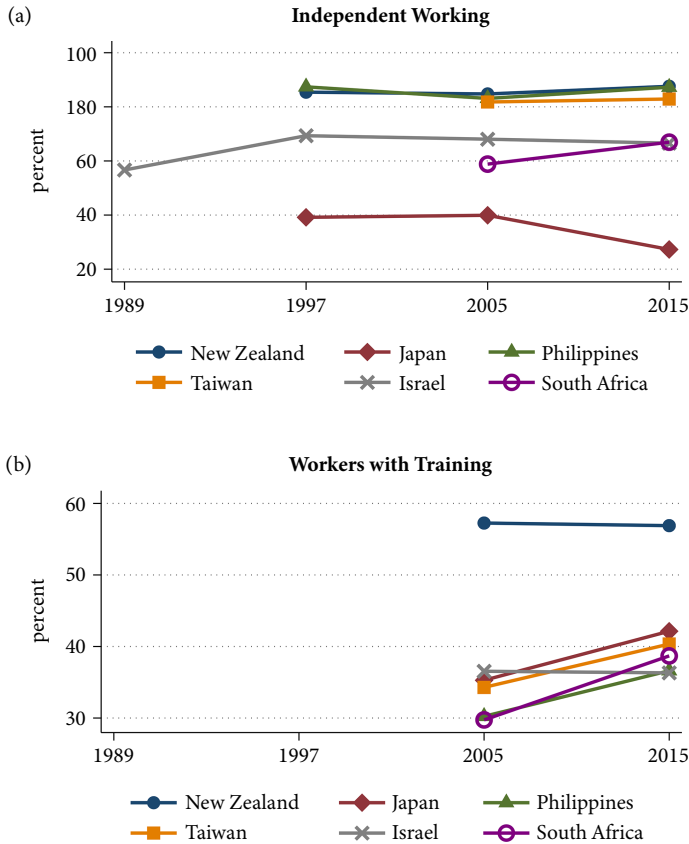


Figure 7.5 Elements of Autonomy and Skill in New Zealand, Israel, Japan, Philippines, South Africa, and Taiwan

Source: ISSP

an assessment of the trends in the separate elements. The key proximate reason behind these trends has been the increasing skill requirements, as measured by multiple indicators such as task complexity, education requirements, and the increasingly sophisticated use of computers and information technologies.³⁰ Complementing these optimistic trends, there is evidence that, increasingly, workers across Europe are reporting that the challenges posed in their jobs are a good match for their own competences; this result suggests an increasing satisfaction of this fundamental need, which would be expected to contribute to achieving a rising sense of meaning from work.

Yet it is striking that while skill utilization and autonomy are associated, in several countries they have been trending differently. There is an almost universal tendency for skill requirements to rise, but there is no such general tendency for job autonomy. Even though in many countries an increase in skill is matched by a commensurate increase in autonomy, such as Ireland, in other countries, such as Malta, the level of autonomy declined sharply at the same time as the skill requirements were rising. In such countries employers are evidently tightening their control over workers, even in some of the more skilled jobs. In Britain, which has detailed data from the British Skills and Employment Survey, autonomy and skill diverged for up to two decades. There are hints of the same divergence occurring outside Europe—for example, in Japan. Given the central importance of job autonomy, these trends portray a far more pessimistic perspective on how jobs are developing during this century than is suggested by the perspectives of the knowledge economy and affluence theory.

These contrary trends in several countries amount to a partial decoupling of skill and autonomy trajectories, raising the question of whether, in addition, the correlation between skills and job autonomy may be declining. Table 7.1 shows that, in Europe as a whole, the correlation between the *Skill* and the *Autonomy* indices grew somewhat between the mid-1990s and the mid-2000s, but after that it began to fall. Analysis of individual countries finds a similar hump shape, in some cases quite sharp, in 10 out of 15 countries, indicating a recent process of decoupling in these countries. That description does not, however, apply to all European countries; moreover, no such trend is found in South Korea, where the correlation has been

Table 7.1 Correlation between Skills Index and Autonomy Index by Year: EU15 and South Korea

Country	Year	Correlation*	Country	Year	Correlation*
EU15	1995	0.30	South Korea	2006	0.08
	2000	0.33		2010	0.20
	2005	0.35		2011	0.15
	2010	0.33		2014	0.21
	2015	0.31		2017	0.23
				2020	0.26

Note: * $p < 0.05$; only the EU15 countries are included in the analysis. Survey weights applied.
Source: EWCS; Korean Working Conditions Survey

increasing. Indeed, there are inherent limits to how far job autonomy and job skills could diverge, given the benefits to employers of allowing skilled workers the leeway to innovate with complex production processes. In the age of increasing automation of complex tasks through AI-driven technologies, however, forecasting where those limits are will not be easy.

Notwithstanding the divergent trends, they have not been accompanied by predominant reductions in inequality in autonomy. Rather, there have only been small changes in inequality in some countries, reflecting that where autonomy has been declining, it has been falling across the spectrum. Meanwhile, a moderate gender gap favoring men for Autonomy and Skill persisted in most countries, though in a few (Belgium, Italy, and the United Kingdom) it was falling slowly and by 2015 had become insignificant.

In the age of the so-called knowledge economy, the fact that job autonomy has diverged in many places from the skills trajectory over the first part of this century is not at all promising. Indeed, workers' task discretion has been declining, or has not significantly improved, in 16 countries in Europe; elsewhere there is further depressing evidence of a significant decline in the United States, Australia, and South Korea, with no other country to balance this story with any indication of rising autonomy. Any such trend is disconcerting, because the scientific evidence has been mounting that autonomy—as predicted both by the capability approach and in theories of meaningful work—is a strong determinant of workers' health and well-being. One could go further, indeed, and recall that job autonomy is the crucial element that distinguishes human labor from the operation of machines. If the bulk of employers across the many countries examined in this chapter have been opting, as the data suggest, for closer control, whether because of a reasoned profit-maximizing process or because of a fear of slacking workers in low-trust workplaces, the contemporary outlook for work is quite bleak.

Yet a decline in autonomy is not inevitable, even within modern capitalism's constraints. Especially if employees can acquire more influence over the design and implementation of jobs as AI-driven digitization spreads, robots can be used to do the more mundane tasks. AI-driven systems can then be developed to augment human productivity rather than replace it, and in so doing, render work more meaningful.³¹ A better understanding among policy-makers, engineers, and managers of the importance for workers being involved in the implementation or design of innovation could make it more likely to happen.

Social Support and Workplace Abuse

The Workplace as Community, Source of Identity, and Locus of Divergent Interests

One of the reasons why unemployment has such detrimental effects is that it results in being excluded from the community of workers. For those with jobs, that community, however large or small, can be highly significant; indeed, when those in work are asked about their jobs, it usually does not take them long before they talk about the atmosphere in their workplace, whether good or bad.¹ The social environment of jobs has been taken up by social science as something to forensically investigate only relatively recently in psychology and sociology and is barely touched on in mainstream economics. Now, however, 21st-century research into job quality treats the social environment as a distinct and important dimension of job quality, with major effects on wellbeing.

Some features of the social environment of jobs concern social relationships that are not peculiar to the workplace—for example, gender and ethnic relations. Nevertheless, the space of social relations in jobs is imbued with a particular type of power hierarchy that gives the social environment of work its specific character. Our occupation and our place within the organizational hierarchy convey status and identity. In the workplace, power is vested in the contested authority ceded in the employment contract. That authority is the locus of the encounter—whether conflictual or consensual—between the divergent interests of employer and employee, manifested in the relationships between employees and their managers.

With the early 2020s pandemic lockdowns and the switch to hybrid home working for many, workplace social relations encountered significant disruptions. The aim of this chapter is to confirm the importance of the social environment of jobs as a distinct dimension of job quality, to examine the role of organizational and economic factors in promoting good jobs in this dimension, and to investigate the trends that have emerged during this

century. The data suggest that an intriguing difference may be emerging between the trends on either side of the Atlantic.

The Social Environment, the Capability for Support and Good Social Relations, and Wellbeing

The social environment of a job consists of the relationships it brings with other people, whether with coworkers, with managers and supervisors, or with customers and clients. A good social environment is one that affords the capability to engage productively with the community of the work establishment. That capability is a bounded agency freedom for workers to choose, flourish through, and develop the relationships and friendships that they value. Theorized in psychology as a “resource” for meeting workers’ needs, workplace social support helps workers to develop and experience this capability, enabling reinforcement in both good and bad times and helping workers to deal with stress.²

The two key sources of support are coworkers and line managers, the latter founded also on a platform of leadership and institutional backing from the organizational hierarchy. Family and other nonwork sources can also be significant for work support, especially for the self-employed and for employees working from home. Conversion factors that moderate the extent to which social support enables the capability for relationship agency include gender and social insurance.³ Conversely, the capability for community engagement is diminished where the social environment involves toxic relationships that inhibit worker agency, lower self-esteem, and bring direct harms. Regular bullying, sexual harassment, and workplace violence have severe effects on worker wellbeing and health; they are minority experiences but are common enough to warrant proper organizational attention and management to minimize their occurrence and to mitigate their effects on victims.

The beneficial effects of social support are predicted, in psychological theories, to be greater in bad job situations, specifically where workers are facing high levels of job demands and a low degree of autonomy. This “buffer hypothesis” is an extension of the “demand-control-support” model of job strain, which is the workhorse of a large number of studies. I will return to these in the next chapter when considering the impact of high work intensity on worker wellbeing.

Evidence of Direct Effects

The direct effects of social support on wellbeing have been detected in a variety of work settings. Typically, evidence is gleaned from cross-sectional surveys, with samples drawn from relatively homogeneous contexts. In one study, social support is negatively associated with burnout among social workers in southern India.⁴ According to another investigation, social support from supervisors of nurses in southern Spain reduced the negative effects on nurses' daily wellbeing from the "incivility" of coworkers, which was "fostering a toxic dynamic of relationships within the workgroups."⁵ According to a third study, support from supervisors and colleagues had a "profound" effect on the work-life balance of female bank workers in Bangladesh; here, the support of supervisors was more important than that of coworkers.⁶ Other studies reporting similar beneficial associations of social support with wellbeing concern local government workers in Britain, salespeople in the United States, and tunnel construction workers in Italy.⁷ In yet another study, supervisor support is found to be associated with better work-life balance and, through that, greater wellbeing among millennial finance sector employees in Turkey.⁸ In some cases, the effects reported are of considerable magnitude: For example, research on service company workers in Switzerland found that a lack of supervisor support is an especially strong risk factor for several health outcomes (an odds ratio up to 3.8), including poor self-rated health, musculoskeletal disorders, stress feelings, and burnout symptoms.⁹ While almost all such reports of social support's effects retain the limitations of a cross-sectional methodology, studies using other methods have not refuted the connection. For example, one investigation found, using quasi-experimental methods, a significant association between lack of support—specifically, unanswered requests for support—and lower wellbeing. Another found a strong association between workers' job satisfaction and the competence of their supervisors.¹⁰

The evidence on the detrimental effects of bullying, violence, and sexual harassment is similar, in that it is also often based on cross-section studies. The range and scope of the evidence is, nevertheless, impressive and expanding.

Substantial negative associations are reported between bullying and mental wellbeing or job satisfaction among nurses in Armenia and Canada, travel industry workers in New Zealand, defense workers in Australia, doctors in

China, and workers in a range of occupations in Portuguese service companies and in Malaysia. In prisons, bullying has been found to be the source of stress and accompanying physical, psychological, and behavioral symptoms in Britain, as well as in the American states of Ohio and Kentucky, where it was found to be partially alleviated by support from coworkers.¹¹ A meta-analysis of research in the Nordic countries reveals substantive effects of bullying on sickness absence; a systematic review found an association between bullying and suicidal ideation.¹² A rare longitudinal study, using a large representative survey of Swedish workers, found unequivocally that workplace bullying increases sleep problems and enhances depressive symptoms.¹³ This study gives some optimism that the findings reported from the cross-section-based investigations reflect genuine causal effects from bullying. It also recalls the urgency of the issue, given its finding that the consequences of bullying are severe.

Substantive evidence has also accumulated that workplace sexual harassment is associated with decreased mental wellbeing, including psychological distress and emotional disorder, and with impaired physical health, including sleep deprivation, headaches, gastric and respiratory complaints, musculoskeletal pain, and weight change.¹⁴ For example, harassment from coworkers and supervisors has been linked with poor mental health among Dutch police officers, while sexual harassment from customers is significantly linked with poor mental health among Norwegian fitness instructors. The negative association with wellbeing is found to be especially strong when combined with racial harassment.¹⁵

There is also growing evidence of systematic variation in the impact of a poor social environment on wellbeing. The effects have been found to be stronger or weaker, depending on the resilience of the targets of bullying and the coping strategies that they adopt. Workplace incivility seems to lessen the benefits of workplace autonomy discussed in the previous chapter; management policies—including both “high involvement” practices and conflict management practices—can lessen the negative impacts of bullying.¹⁶ Organization leaders matter in particular, there being growing evidence of a negative link between leaders’ bullying behaviors and employees’ psychological health.¹⁷ Such findings can in principle inform organizational strategies to improve the social environment of jobs.

This direct evidence of the effects of a bad social environment on wellbeing is complemented by strong indirect evidence of the impact on labor market outcomes such as employment and earnings. The findings confirm

that the effects are large and persistent. For example, one remarkable high-quality study of violence in Finnish workplaces shows that female victims were losing over 20 percent of their earnings some five years after violent workplace incidents, and males about 11 percent. Considerable health and wellbeing consequences could be inferred from this and similar evidence. Violence perpetrators lost more income than victims in the case of male-male violence but less than victims in cases of male-female violence. Another study shows that sexual harassment in Sweden bolsters sex segregation in workplaces and consequent gender inequality.¹⁸

In sum, this body of research is growing, with several details to be elaborated that may be important for policy purposes and with room for methodological improvements, including those dealing with issues surrounding precise definition and measurement. Can it be confirmed, for example, that line manager support is the single most important positive aspect of the social environment, as some studies suggest? As for the negative aspects, uncovering and calibrating the far-reaching and persistent effects, including those external to the immediate victims, remains an ongoing task. The key overarching finding, however, already established on solid foundations, is that the social environment of jobs is a distinct dimension of job quality, given its demonstrated substantial effects on health and wellbeing.

Factors Shaping the Social Environment of Jobs

From a managerial perspective, the character of the social environment in jobs is seen primarily as the consequence of how well each work organization is managed. Leaders and their senior management teams develop the organization's culture, design the jobs, and decide on the resources devoted to the promotion of positive social support and the prevention of abusive behaviors.¹⁹ Through suitable design of jobs (allowing for employee involvement) and choice of working spaces, good social relations between colleagues can normally be maintained. By devoting enough resources, managerial support can be improved through training and leadership. Fair human resource practices can be developed and engaged in—including procedures to monitor, minimize, and alleviate abusive behaviors—for example, through well-functioning complaint procedures.

One might therefore anticipate finding the best social environments in successful, well-resourced organizations and in the richest countries: a

further application of the affluence theory of job quality. Against that expectation, however, from a sociopolitical perspective, managerial strategies are conditioned by power and bargaining relationships, which are themselves embedded in gendered behaviors, societal norms, legal regulation, and the idiosyncratic personalities of managers and supervisors. Thus, the development of a good social environment, rather than being determined by an efficient allocation of resources, is primarily the consequence of organizational behaviors (and misbehaviors), overlaid by cultural norms that, notwithstanding the supra-national resonance of the “MeToo” movement originating in the United States, differ widely across the globe. The legal backdrop also varies, with sexual harassment proscribed in at least 75 countries, though few cases are reported to legal authorities and even fewer prosecuted anywhere.

Comparing these economic and sociopolitical perspectives, the empirical evidence firmly favors the latter. Any connection with affluence is, at best, weak. Some of the most profitable global companies find themselves accused of having toxic workplace environments. Workplace bullying and sexual harassment are each notoriously found across all occupations and classes. And across countries, as seen in Chapter 3, there is no correlation within Europe between a country’s GDP per capita and the *Social Environment* index. Beyond Europe, adverse social behavior in the workplace is reported to be especially high in the United States, though it is impossible to say how much of that excess abuse is genuine and how much is attributable to sociocultural differences in reporting of similar behaviors.²⁰

The accumulated social science of recent decades finds that “organizational climate” (or “organizational tolerance”) is the key to understanding the variation in social support and in the prevalence of abuse in workplaces.²¹ In particular, the social environment is better in organizations where strict management norms are expected, where offensive behavior is not tolerated, and where managers are trained to provide support for those under them. Strong workplace policies inhibit harassment behaviors even for those individuals prone to them. Some studies attribute great importance to organizations’ leaders: For example, in a study of schools in South Africa, poor leadership accompanied by a lack of transparency was found to be a breeding ground for bullying behavior; a similar conclusion was reached in a study of nurses in Canada. Another study, of employees in the United States, found a direct link between a leader’s personality and workplace bullying.

Other factors that increase the prevalence of negative behaviors include the excessive segregation of workplaces (especially for women working in male-dominated occupations and performing historically masculine tasks) and labor market insecurity.²²

In light of these findings, we cannot expect or hope for progress in improving the social environment of jobs simply as a consequence of long-term economic growth. Rather, no ambiguous predictions can be made about the direction of change. An optimistic projection would rest on progress in management learning from the above-mentioned findings of how important their organizational climate is for employee wellbeing: If managers become more knowledgeable about the expected gains from a healthier and more committed workforce, including reduced costly turnover, if workers and unions demand more fair treatment of employees, or if gender segregation declines, the social environment could be expected to progressively improve. Such an optimistic projection could be supported by collective pressure and by legal enforcements. Against that, however, it remains very possible that organizational strategies will continue to be based on an adversarial, power-based philosophy of industrial relations and that cultural evolution in this age of social media may even facilitate an increasing tolerance of controlling and abusive behaviors. Such an outcome is more likely where labor market security for workers is in decline and where industrial relations are increasingly one-sided and confrontational rather than consensual.

The evidence of strong consequences for workers' health and wellbeing is sufficient to press the point that the difference between these optimistic and the pessimistic projections is very significant for social progress. The key research question for this chapter, then, is whether the social environment of workplaces around the world during this century has been improving, deteriorating, or just marking time in an otherwise turbulent era for sociocultural relations.

Trends in the Social Environment of Jobs

Prior Evidence

Notwithstanding the well-established findings noted above, full understanding of the social environment of jobs remains a work in progress, with

particular difficulty present in the formation of usable definitions and measures of bullying and sexual harassment. Supervisors monitor and occasionally reprimand the people they manage, leading to encounters whose interpretation as bullying can easily be contested. In the few cases of sexual harassment that come to court, the interpretation of behaviors is also contested. In most cases, sexual harassment is not reported to managers and often not even discussed by victims. It is unsurprising, therefore, that surveys generate a considerable range of estimates of the prevalence of both bullying and sexual harassment. An authoritative verdict is, unfortunately, that “no one knows how widespread harassment is.”²³

Perhaps for the same reason, rather little has been said about how the social environment may be changing. Nevertheless, if the exact same indicator is used at different time points in representative surveys, the trend direction can be observed subject to the caveat that discrepancies between reported and actual harassment are assumed not to change substantially over time. For example, taking the formal, consistent definition set by its Equal Employment Opportunity Commission (EEOC), one study in the United States found a 40 percent decline in cases of sexual harassment between 1997 and 2017; it also found that the decline in the likelihood of sexual harassment was substantially sharper for white women than for African American women.²⁴ Since the propensity to report harassment would be expected, if anything, to increase, the declining EEOC rate is reasonable evidence of progress, at least for white women.

New Global Evidence

Europe

To gauge the positive aspects of the social environment in European workplaces, European Working Conditions Survey (EWCS) respondents were asked to report how often their manager and their colleagues supported them.²⁵ For each source of support, Figure 8.1 shows trends in the proportion of workers across Europe who said that they received support “most of the time” or “always.”

Remarkably, in *all* 15 countries for which data are available since 1995, there is a significant increase in social support from colleagues since that time (Figure 8.1A). Not shown in the diagram, in seven of these countries

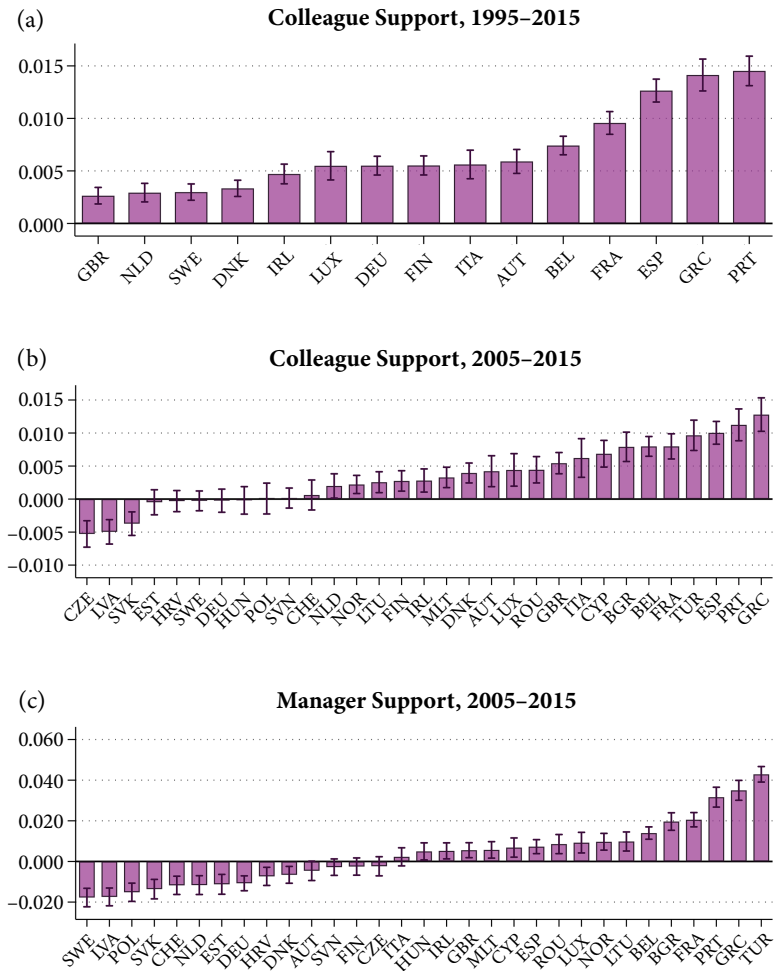


Figure 8.1 Social support from colleagues and managers in Europe

Note: Estimated annual changes are from a linear probability model regression of the dichotomous variable (“all” or “most of the time”) against year.

Source: EWCS

(most notably in France) it is males who report most support from colleagues, though in three of these, the gender gap was narrowing over the following 20 years.

Figure 8.1B shows a wider range of countries, from 2005. From that time, there still remains a clear preponderance of 20 countries with increasing coworker support, notably from southern Europe (Greece, Portugal, and

Spain). However, eight countries show no change, and in three transitional countries—the Czech Republic, Latvia, and Slovakia—coworker support declined. Figure 8.1C shows a more mixed picture regarding manager support, with increases in 16 countries (led by Turkey, Greece, and Portugal) and falls in 10 (led, perhaps surprisingly, by Sweden and again by two transitional countries [Latvia and Poland]). In two countries, the Netherlands and Denmark, falls in managers' support counterbalance rises in coworker support. Females reported somewhat greater support than males in just nine countries, and there were few changes in this gender gap.

To assess the negative aspects of the social environment, EWCS respondents were asked whether they had received “unwanted sexual attention” in the previous month; they were also asked whether they had experienced bullying in the previous 12 months. On average, just under 2 percent of Europeans reported “unwanted sexual attention” over the past month, with

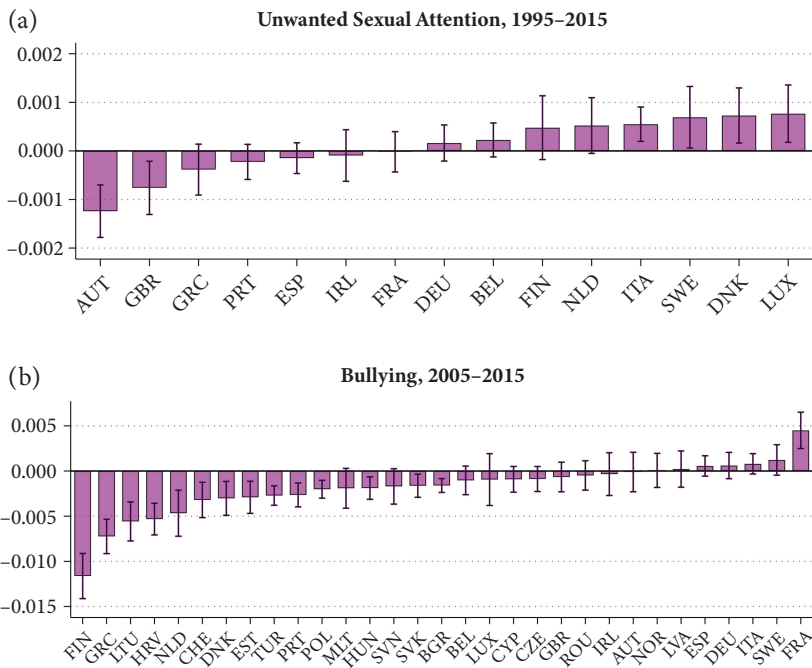


Figure 8.2 Adverse social environments at work in Europe

Note: The figure shows the estimated annual changes, from a regression of the dichotomous variable against year.

Source: EWCS

no predominant trends. Figure 8.2 shows that there were small improvements in the two decades following 1995 in Austria and Britain but a modest deterioration with rising harassment in Luxembourg, Denmark, Sweden, and Italy. In most countries there was no significant change, and in most countries this harassment is entirely a female experience. Meanwhile, there was a notable decrease, between 2005 and 2015, in reports of bullying at work in 11 countries (mostly in Finland, from 17 percent to 5 percent) and a rise in only 1 (France, from 8 percent to 12 percent).²⁶ There were few changes in the gender gap, with bullying being experienced by females more than males in 10 out of the 35 countries.

On balance, this analysis portrays a somewhat positive narrative for the social environment of jobs in Europe. In 17 countries, there were significant improvements in one or more aspects of the social environment without any counteracting deterioration. Only in three countries—the Czech Republic, Latvia, and Slovakia—does the opposite story emerge: a deterioration in one dimension (coworker support) without mitigation by improvement in another. All of these were previously members of the Soviet bloc of countries and arguably are still in transition for at least some part of this century. Elsewhere, it was a mixed picture with counteracting indicator trends.

The United States

To gauge the positive aspects of the social environment in US workplaces, respondents to the General Social Survey were periodically asked questions about relationships with managers and coworkers. Their responses are shown in Figure 8.3.

There was a declining trend in the proportion of both male and female workers who trust their management at work (Figure 8.3A) and a substantive decline until 2014 in the proportions who said that relations between management and employees were “very good,” followed by a partial rise in the period up to 2018 (Figure 8.3B). Figure 8.3C shows declines for both males and females in the proportions of workers who say that they are treated with respect; by 2018 this proportion had reached as low as 35 percent. Taken together, these three trends present a striking picture of declining social support from managers over this period. None of the decline could be accounted for in terms of changing industrial composition. Social support from coworkers, by contrast, remained relatively steady for both sexes (Figure 8.3D).

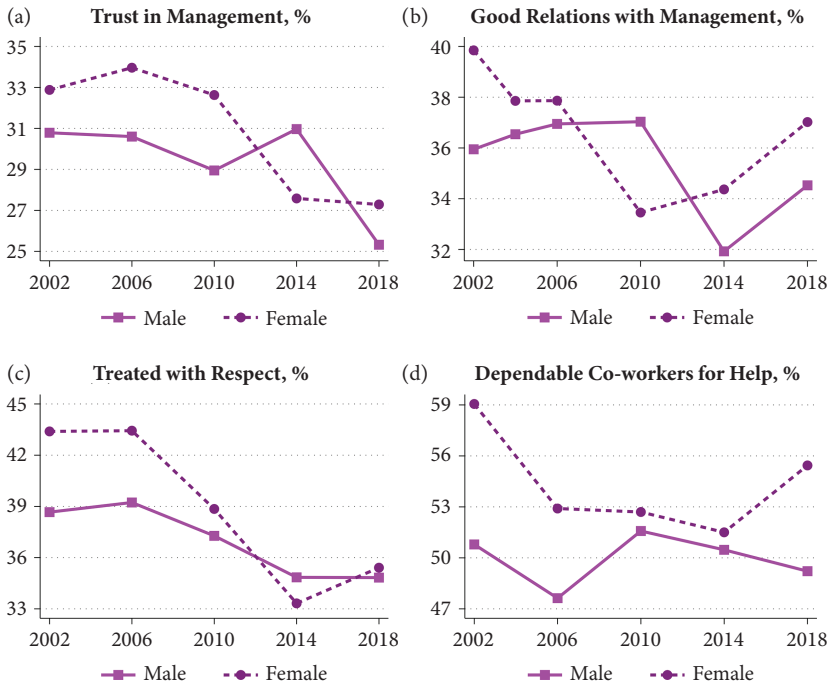


Figure 8.3 Workers' relations with management in the United States

Note: (A) Workers who trust management at work. (B) Respondents whose relations between management and employees are very good. (C) Workers who are treated with respect at work. (D) Respondents who say coworkers can be relied on when they need help.

Source: US General Social Survey

During this period, women benefited somewhat more than men from social support, notably by being more able to rely on coworkers; there was no sign of a trend in this gender gap. There was also no indication of any general polarization; if anything, the overall inequality of social support fell modestly.

As for the negative side of the social environment, there were very small decreases in the proportions of Americans reporting that they had been threatened while working. There was also a fall in reports of sexual harassment at work between 2002 and 2006, but this was partially mitigated by rises since 2014. As noted above, however, such rises could be due to growing awareness bias in the wake of public debate. The changes are too small to substantially alter the on-balance deteriorating social environment of workplaces in the United States.

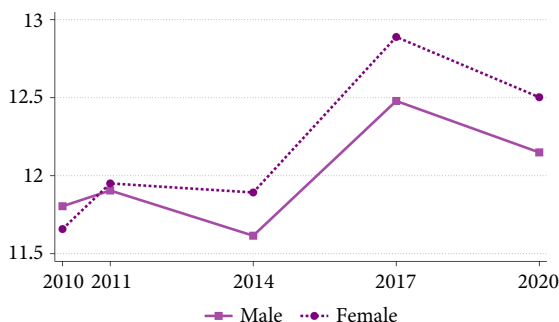


Figure 8.4 The *Social Environment* index in South Korea

Note: The *Social Environment* index is normalized to a scale of 1–100.

Source: Korean Working Conditions Survey

As found in previous research, sexual harassment was much more common for women, though the gender gap was falling slowly.

Australia

The International Social Survey Programme (ISSP) data indicate that there was little change between 2005 and 2015 in the proportion of workers reporting “good relations with colleagues.” Unfortunately, the Household, Income and Labour Dynamics in Australia survey does not track any elements of the social environment at work.

South Korea

For South Korea, Figure 8.4 shows a full composite *Social Environment* index, encompassing measures of social support from managers and coworkers and an indicator of not having experienced bullying or sexual harassment. Over the whole period there was a modest improvement in the index, amounting to approximately a tenth of a standard deviation. This change was derived from slightly improved support from coworkers and managers, but there were no changes in the prevalence of abuse at work.

Other Countries

Among other countries for which we have any data at all on the social environment of work, there was a serious deterioration in Japan in the proportion reporting good relationships with colleagues, from 82 percent in 2005 to 70 percent in 2015. Otherwise, there were no major changes, just some small declines in Israel and the Philippines (see Figure 8.5).

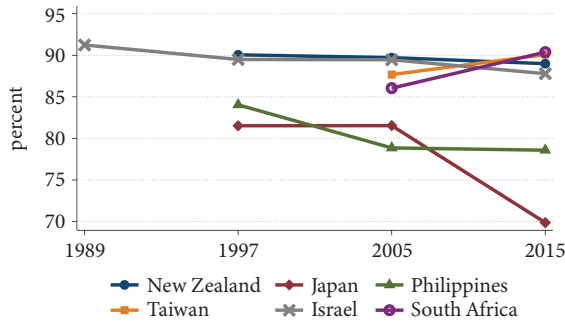


Figure 8.5 Good relationships with colleagues in New Zealand, Israel, Japan, Philippines, South Africa, and Taiwan

Source: ISSP

Conclusion: A Contrast Between Changes in Europe, the United States, and Elsewhere

The accumulating evidence confirms what one might have suspected: the character of the social environment makes a substantial difference in the extent to which workers can derive the capability to benefit from social support and friendship in the work community. It unquestionably warrants its place as a dimension and focus of study in job quality research.

Among the factors that drive and potentially improve the quality of the social environment, economic imperatives are minor at best. Although, for example, it would involve some cost to set up a complaint procedure for sexual harassment, the benefits for companies from minimizing the consequences for victims—such as in terms of reduced labor turnover—would reduce or eliminate the net costs to the company. Failure to act on sexual harassment, therefore, is likely in most cases to be an organizational failure rather than a rational, efficient cost saving measure. The same is true with regard to bullying behaviors: Failure to do anything to stop it can hardly save much in the way of human resource management costs.

If growing affluence and better-resourced companies are unlikely, therefore, to improve matters, gains in the social environment will depend on serious alterations in the methods and cultures of management, complemented by juridical changes. The evidence for this century paints a picture of opposing trends on either side of the Atlantic. Across much of Europe, moderate improvements in the quality of the social environment of workplaces can

be observed. In most countries, the social environment has been improving according to one or more of the available indicators, while decreasing in none. Only in a few still-transitional eastern European countries is there evidence of decline. This European experience contrasts strikingly with that of the United States—the home of the hire-and-fire workplace, with relatively few employees covered by unions or by anything other than weak regulatory controls—where we see a decline in more than one indicator of management support for workers, without mitigating rises in social support from coworkers. The only positive American news is the aforementioned evidence that reports of sexual harassment—if they are to be accepted—were falling. Japan, another large economy, also evidenced a decline in the quality of social relations with coworkers.

Overall, there remains a positive balance of countries where the social environment of jobs has been improving this century. Among 39 countries examined, it improved in 18 and declined in 7, while in the remaining 14 countries there were counterbalancing trends or only insignificant changes in the indicators. Yet it is necessary to be more than usually cautious in the interpretation of conclusions about trends in some aspects of the Social Environment, because the scope of this dimension is only patchily measured outside Europe and South Korea. For want of data on jobs in developing countries, enquiry is focused, as with most of this book, on countries in the developed world. Even there, however, it is important to recall that reports of abuse (or its absence) may need to be interpreted in the light of cultural expectations.

Sustained changes in the Social Environment of jobs could be expected if, as seems likely, hybrid working becomes enduringly established postpandemic as a norm for a substantive proportion of nonmanual jobs. Home working can improve conditions for those groups attempting to avoid workplace harassment. Moreover, if digital technologies reduce drudgery in a way that affords more human interaction, the positive aspects of the social environment could be enhanced. However, those same technologies that facilitate off-site working also provide a channel for online bullying, and their effect might be to minimize social interactions. Home working reduces the scope for receiving good social support from coworkers. Loneliness, in particular, is a potential issue for those working through online platforms. Despite the balance of advances reported in this chapter, the future of the Social Environment remains uncertain.

More Demanding Work

“Hard Work”

“Happiness is achieved through hard work.” So advised President Xi Jinping in his New Year message in December 2017. It was a phrase that, according to the *China Daily*, became a buzzword among the Chinese people, even encouraging those who worked on public holidays.¹ There is nothing new here for those who recall the many propaganda posters, art forms in themselves, that idolized the hard workers (*Stakhanovites*) of the Soviet Union and urged all to “save every minute.” Strangely enough, you can find the same sentiment from business leaders in the West.² They can scarcely be disappointed, because indeed, most jobs require workers to operate at a fast pace, as a minimum, and most workers normally put in more than what is required. The problem to be addressed in this chapter, however, is that many jobs require *highly* intensive work: surveys reveal, for instance, that in the late 2010s one in three South Koreans, two in three Britons, and as many as three in five Americans said that their job involved working “at very high speeds” or to “tight deadlines” for at least three quarters of their time at work.³

As we have seen in Chapter 2, being “hard at work” might be lauded as somehow noble if that work can be experienced as meaningful. Indeed, a well-rewarded quality job doing useful tasks at a reasonable pace, allowing adequate autonomy and convenient working hours in a safe and supportive environment can be the source of much inner satisfaction.

But what does the subtly different phrase “hard work” signify in 21st-century jobs? Distinction must be made between the extrinsic dimension of work effort—the (implicitly or explicitly) contracted hours—and Work Intensity. The former is part of a job’s Working Time Quality, treated in Chapter 6; the latter is the subject of the current chapter. In common parlance, when someone says that they are required to “work very hard,” it might be interpreted in either or both of these dimensions. This phrase is used sometimes to indicate working long hours. But more commonly “hard

work” is used to signify working with high intensity. In whichever way, the idea that hard work normally brings happiness seems debatable. As we saw in Chapter 6, there is good evidence linking very long working hours to health risks. As we shall see in this chapter, the problems of highly intensive work—including loss of wellbeing, stress, exhaustion, and burnout—are being laid bare by a growing body of 21st-century research.

Work intensity is the rate of physical and mental input to work tasks performed during the work day.⁴ The tasks may be physical—requiring strength, endurance, or dexterity—or mental, encompassing both cognitive activity, including learning tasks, and exertion of emotional labor, and sometimes both in conjunction with physical labor.⁵ Inputs to carrying out those tasks vary both with the totality of tasks and with their regularity and continuity through the work day. Some jobs require multitasking; others involve constant interruptions. All inputs and their rhythms place demands on a person’s resources. Work intensity thus comprises the “workload”—the totality of the inputs to each job’s tasks—in relation to working time. It is manifested across jobs and occupations in various ways, depending on the tasks.

Shared across all jobs is the logic of the tension between employers who aim to maximize the tasks done in the agreed working time and workers who have to draw on their resources to accomplish them. This tension is shaped by the universal fundamental relationship between employer and worker and brings common potential problems for health and wellbeing. Work Intensity is thus treated as a separate dimension in its own right within job quality research.

Work Intensity, Capabilities, and Wellbeing

It might seem obvious that more intensive work affects people negatively, but a moment’s reflection suggests that, at low levels of work intensity, the opposite might be true: workers with little to do all day long are likely to be bored and unengaged and to gain no sense of intrinsic satisfaction from work. Yet we rarely observe jobs that require only very low work intensity—unsurprisingly so, because few employers could survive long through such an inefficient management of work. At normal and higher levels of work intensity—that is, where people could be described as being hard at work—the marginal effect of work effort on their wellbeing becomes negative, and

increasingly so as the pace of work intensifies further.⁶ Unlike other dimensions of job quality, therefore, greater Work Intensity normally implies lower rather than higher job quality. In comparison with reasonably paced work, highly intensive work generates worker fatigue and job strain; it therefore inhibits the development of a range of capabilities—including for social relationships, good health, and a good work-life balance—all of which can contribute the freedom and agency to engage in a flourishing work and non-work life. In the demand-control-support model advanced in occupational psychology, high work intensity is a “demand” that drains a worker’s physical and emotional resources and impinges negatively on the satisfaction of intrinsic needs to conserve those resources.⁷

For much of the 21st century the evidence has been building up, supporting this expectation of a harmful effect of highly intensive work, finding substantial effects, and showing a variety of potential negative outcomes, with some detail on how this effect varies among different groups. According to one study, variations in work intensity among jobs have notably stronger links with psychological wellbeing than with variations in work hours.⁸ Many other studies found predicted physical effects of high work intensity on fatigue and psychological effects on depression, workplace stress, and burnout (a state of mental, physical, and emotional exhaustion). General detrimental effects on work-family conflict and on job satisfaction have also been also confirmed. The psychological impact engenders further detriment to physical health, such as through the consequences of stress for the development of musculoskeletal disorders. One or more of these outcomes has been reported in a wide variety of occupational and industrial settings in modern workplaces—including among teachers (and, in particular, school principals in Canada and assistant principals in Turkey), ambulance workers in England, engineering service workers in South Africa, social workers in Germany, cargo drivers in Spain, grocery chain workers in Greece, nurses in Canada, personal support workers in Canada, health care professionals in Turkey, auto workers in Brazil, and public sector workers in Australia.⁹ The effects are detected across whole populations in New Zealand, Slovenia, Germany, and Britain and among older workers across all of Europe.¹⁰ Other specific health effects include higher suicide rates, as found for a sample living in the Nord Pas-de-Calais region of France, and lower-quality sleep, itself with attendant consequences for health and wellbeing, which is reported in Australia.¹¹

Among the nuances of this body of evidence, one study suggests that it is not just high work intensity that is associated with lower wellbeing but also recent work intensification (increases in work intensity)—because this amounts to a psychological loss. Another study illustrates that, even if the pace of work is so high that it is leading to employee burnout, some high-intensity jobs are redeemed in part by providing a challenge with which workers can engage: Such is the verdict of those working alongside alcohol and other substance users in Australia. A third study reports that the effects of work intensity on depression are notably worse for those who are already experiencing poor mental health—a significant finding with implications for the direction and prioritization of policy.¹²

The major nuance introduced by occupational psychology concerns how the strength of the work intensity–wellbeing relationship may vary according to the level of job autonomy or social support. According to an extension to the demand-control-support model termed the “buffer hypothesis,” it is suggested that more autonomy is especially effective in raising wellbeing in jobs with high work intensity. The idea behind this hypothesis is straightforward: When your pace of work is high, it is easier to manage your tasks and so conserve your personal resources if you can at least control how you do things and if someone supports you in doing so. Some research studies support this hypothesis. For example, in one recent study of a lean production system in a manufacturing plant in China, the detrimental effects of high work intensity on wellbeing were significantly reduced by good line-manager support; the study indicated the need for appropriate line-manager training.¹³ Yet while there is strong overall evidence (noted in previous chapters) showing the association of both autonomy and social support with wellbeing (including negatively with job strain), the overall body of evidence for the interactions implied in the buffer hypothesis is contested and remains relatively weak.¹⁴ There is a shortage of decisive evidence, possibly because in most studies, sample sizes are too small to detect interactive effects. To counteract this problem, a 2024 study deployed a large and representative data set in Britain with this and strongly confirmed the buffer hypothesis.¹⁵ The moderating effects of job control in high-work-intensity situations are, moreover, found to be enhanced by teamwork, which can be interpreted as providing social support. The buffer hypothesis still appears to be applicable, but it requires further high-quality evidence in varied settings across the world to solidify and generalize its intuitive appeal.

Emerging research also shows how the effect of work intensity on wellbeing depends on worker characteristics. For example, there is some evidence from a survey in China that for those addicted to working long hours (“workaholics”), the impact of high work intensity is lessened. Another study, set in a large Greek grocery chain, shows that high-intensity work that is driven by intrinsic motives is less detrimental for job satisfaction than high-intensity work that is driven by external incentives; in turn, the latter has less-damaging effects than high-intensity work that is driven by excessive job demands.¹⁶

Taken together, the evidence for the substantial negative effects of high work intensity is pervasive. The effects are large enough to support the case for treating work intensity as a distinct dimension of job quality.

Nevertheless, there remains much to find out in this area. From the economics perspective, observed relationships between work intensity and wellbeing may be influenced by workers’ job choices, which depend on their personal characteristics. That selectivity ought to be taken into account in order to derive unbiased estimates of the effects. To be more confident of the exact magnitude of the causal effects, further studies that use instrumental variable or quasi-experimental methods, though difficult, are needed. The scope of what we know about the effects of Work Intensity also needs to be expanded. There remains little or no evidence surrounding the hypothesized nonlinearity in the relationship. Not enough is known about the impact of prolonged exposure to highly intensive work: Do workers adapt, or conversely, do they eventually crumble? Is highly intensive work sustainable, in the sense that you could continue doing it until reaching a normal retirement age? Some occupations—for example, dealmakers in financial institutions—are said to be so intense as to lead to career burnout by the age of 35.¹⁷ Most importantly, there is only limited evidence about the potential external effects (that is, effects on other people besides the hard-pressed worker). Such phenomena have been documented in the health care industry, where fatigue and exhaustion brought on by highly intensive work are shown to be the source of medical care errors, with significant impacts on patient care and public health; other evidence on the extent of external harms is scarce.¹⁸ I suspect that this scarcity arises not because there is no effect but because it is a difficult topic to investigate, and researchers have not yet looked deeply into it.

Origins of Work Intensification and De-intensification

While our understanding of the effects of high work intensity on wellbeing and health has developed most rapidly during the current century, theories of trends in work intensity began to emerge much earlier. Sociological theory from the mid-twentieth century argued that managers were striving for and achieving ever-increasing control of the labor process and thus predicted ongoing work intensification.¹⁹ Nuances were later acknowledged, including the segmentation of labor markets into good and bad jobs and the introduction of different forms of control. The concept of “responsible autonomy” recognized that committed workers need not be very closely controlled if they are motivated to work hard. An evolution was also proposed from “simple” control of work tasks (that is, through direct orders from supervisors) to technical and bureaucratic forms of control.²⁰ Arising from these later theories was the prospect that work intensification would be sustained, even while work processes were becoming more complex with the onset of the knowledge economy and new forms of control. And this focus on rising work intensity persisted through the flowering of late-20th-century research on the contradictions embodied in the labor process in a variety of particular settings.²¹

Yet this expectation was the converse of what would have been predicted from the affluence theory of job quality, as discussed in Chapter 3—namely, that work intensification would decline with economic growth. According to that theory, with increasing productivity, the pressure of employers’ demand for workers would elevate not only wages but also the quality of other dimensions; it would thereby raise workers’ capabilities, including the capability to work at a reasonable pace, with enhanced worker freedom emerging from avoidance of fatigue and burnout. When my earlier book was published in 2006, the tendency for work intensity to be rising in Britain did not appear to conform with an economy in which wages were rising. To explain this apparent paradox, one has to consider the changing balance of power over the long term. Set against the optimistic scenario of rising all-around job quality, the increased power of employers was manifested with special force in the management of the labor process, with the consequence that work intensity rose pervasively across many workplaces. There is some evidence that work intensification across Europe was strongest in countries where trade union density had declined the most.²²

The weakened power of workers in many countries since the closing decades of the 20th century is reflected at the workplace level in less resistance to impositions of increased workloads. Global competitive forces push firms into trying to raise productivity through streamlining work practices. One fairly general source of increased workload stems from the knowledge economy, which brings the requirement for many more workers to spend time upskilling if companies are to remain competitive; if that time is not made available by reductions in other tasks, the overall load rises.²³ A trend toward self-employment in some countries adds self-managerial tasks to the normal workload of the job. Another source of rising workloads emerges in service sectors from the growing demands of ageing populations. Public sector organizations such as hospitals, schools, and universities find themselves squeezed between such demands and modern-day fiscal conservatism (driven in part by the increased relative political power of conservative political forces); in the absence of sufficiently improved technologies to meet delivery requirements with the same effort, they resort to work intensification to meet increased service demands and are able to do so through worker consent and weakened powers of resistance.²⁴ Often, such jobs have come to be staffed by migrant labor with limited labor market alternatives.

Effort-Biased Technological and Organizational Change

The way in which intensification is brought about is not, however, always so direct. In previous papers I (and coauthors) have proposed that the power to design and implement “effort-biased” technologies—those which disproportionately increase the productivity of workers who work more intensively—forms an important channel through which such work intensification is affected. New information and communication technologies achieve this in either of two ways. First, they streamline workflows, reducing the pauses and gaps (what Marx referred to neatly as the “porosity” of the work day) and facilitating multitasking; thereby, they raise the efficiency with tasks are organized during working time.²⁵ Those consenting to perform the harder work, or who are coerced into it, can then be more productive and even be compensated with higher wages for doing so.²⁶ Second, information and communication technologies—in the form, for example, of CCTV cameras or computer logs—can be used to step up the surveillance, monitoring, and disciplining of workers, enabling employers to pay

lower efficiency wages and implement greater work intensity.²⁷ Evidence for the importance of effort-biased technological change as a mechanism through which work intensification is driven is shown in a number of studies. One study reported, for example, that work intensification among men was associated with the use of mobile phones for work in Australia; another showed that technological change contributed significantly to generic work intensification in Britain over a 16-year period.²⁸

Complementing and supplementing technical innovations, it is hypothesized that organizational changes during this century have also been effort-biased. Some workplace changes involving work intensification follow industrial reorganizations stimulated by global competitive forces, including relocations, joint ventures, the outsourcing of subsidiary functions to foreign or domestic companies, and the emergence of “fissured” workplaces with multiple employers on each site.²⁹ Other changes follow from the evolution of management practices. Organizational innovations that are hypothesized to have been effort-biased are decentralization, the spread of teamworking, and an increasing requirement for worker polyvalence (multiskilling).

The mechanisms of effort-biased organizational change are similar to those of effort-biased technological change: Intensification can come about in either or both of two ways. First, changes in work organization may result in disproportionately increasing the productivity of the more hard-working workers; efficiency can thus be raised by selecting or engaging workers who accept working harder. Teamworking, polyvalence, organizational flexibility, and decentralization, all in their own ways, enable industrious workers to become more productive; eliciting increased work intensity may also involve an explicit link of pay with performance.³⁰ Second, higher work intensity may stem from the control over workers enabled by modern organizational forms, including total quality management, just-in-time practices pioneered in Japan, high-performance work practices (including teamwork), lean production systems, and management through target-setting.³¹ One way that employers impose this increased work intensity is through dictated reorganizations of working time.³² These organizational forms, and their links with high work intensity, are documented mainly in the for-profit sectors of economies but are also found in public sectors. Most of this evidence confirms the link, but not all does so unequivocally—a weakness reinforced by the scarcity of longitudinal evidence.³³

In sum, despite the growing affluence of most economies this century that is conventionally evidenced in their GDPs, which might have been

expected to lessen the extent to which workers have to endure burnout and exhaustion at work, powerful forces have acted in the converse direction. Employers' increased strength at the bargaining table and in policy-making enable increased workloads to be imposed directly on employees, while the major technical and organizational changes of the current era have been harnessed to the same end. Teams, target-setting, incentive pay mechanisms, and other components of lean production and "high-performance" management systems can all play a part in channeling a reduction in job quality in this dimension.

All this does not imply that work intensification is a universal or even inevitable trend in modern workplaces. With the decline in the bargaining power of labor in an economic context and in the political arena over the long term, a plausible expectation is that, across the developed world during this century, there has been a *predominant* tendency toward work intensification. However, one can also reasonably expect to find regions, countries, or sectors where work is de-intensified, reflecting a degree of social progress in the workplace befitting a more affluent economy. Employees can exert power either collectively or individually (sometimes through mobility, where labor markets permit) in search of reasonable levels of work intensity. Perhaps, too, there are inherent limits to the viability of work intensification as a long-term strategy for capital accumulation and economic development. There is therefore considerable interest in understanding the direction of change for work intensity in as wide a range of settings as possible.

Trends in Work Intensity

Prior Evidence

Several researchers, myself included, have been absorbed for some time by the mounting evidence of modern-day work intensification. It has been documented widely in specific occupations (including among nurses, managers, school teachers, university lecturers, IT workers, care workers, and domestic service workers)³⁴ and within specific sectors (including the apparel industry in North Carolina, government service workers in the United Kingdom, the meat processing and confectionery industries in France, and the automobile and aerospace industries in Britain and Italy).³⁵ Across whole nations, work intensification is evidenced for the United States between 1997

and 2006, for Britain from the early 1990s to 2017, for France from the mid-1980s until 1998, for New Zealand and Australia in the 1990s, for Ireland between 2003 and 2009, and for Finland since 1977; in the European Union as a whole, work intensification is reported for most (but not all) countries between 1995 and 2010 and separately for countries with all types of employment regimes between 2004 and 2010.³⁶

The scope and quantity of this evidence might seem to suggest that work intensification is a general, even universal, tendency in modern developed nations, but considerable caution is needed before making this conclusion. First, the periods covered are often patchy, based on the available data, and do not carry the comprehensiveness of many other social statistics that are reported on every year. Second, there is a risk of publication bias, in that instances of stasis in work intensity—or even episodes of de-intensification—may not seem so eye-catching to researchers or editors, with the result that such episodes are ignored and a false overall picture emerges from the totality of published research papers.

Measurement

In order to gain a picture of overall trends in work intensity through the opening decades of this century, I deploy the usual method, comparing responses on identical scales to identical questions in nationally representative surveys at different time points.

As noted at the start of this chapter, the work intensity required in a job is manifested in somewhat different ways across industries and occupations. It is therefore useful to have a composite index that brings in this variety. One common indicator, with a wide application used in the literature, refers directly to the pace of work, specifically, the frequency with which the job requires workers to operate at very high speeds; a second picks up high work intensity for those many jobs where tasks come in service-oriented bundles such as projects to be accomplished, and where work intensity is therefore imposed by pressing deadlines. Respondents may also be asked about the emotional demands they must cope with and to report which sources of work compulsion they face, whether and how much they are under pressure to get their workload done during working hours, or simply whether their job requires them to work very hard (though for this last item it is important to note and net out the role of long hours in this perception).

New Global Evidence

Europe

Using the above-described principles, a comprehensive composite *Work Intensity* index is constructed using the European Working Conditions Surveys, from indicators of working to tight deadlines, at high speeds, time pressure, emotional pressures, and other sources of work compulsion.³⁷ Among the 15 countries that participated since 1995, *Work Intensity* increased significantly in 8 (Belgium, Denmark, France, Greece, Ireland, Italy, Luxembourg, and Spain) between then and 2015 but decreased in 3 (Austria, Finland, and the Netherlands)—in other words, a picture of predominant work intensification. The general inequality of *Work Intensity* fell notably in a few countries: Belgium, Denmark, and Greece. The gender gap is somewhat positive in 11 countries (meaning men are required to work harder than women); in Italy, Greece, and Portugal this gap increased after 1995, but in France it decreased.

Figure 9.1 shows the full picture for all countries that participated from 2000 to 2015. Some eastern European countries that were still undergoing the long process of transition from communism—notably Bulgaria, the Czech Republic, and Poland—show a welcome decline in high work intensity over this period. Overall, work de-intensification occurred in eight European countries. However, others in eastern Europe—notably, Slovenia, Lithuania, and Romania—show significant work intensification; they are among 13 countries where work intensity increased over this period. A more detailed and longer-term picture, deploying larger sample numbers, can be constructed for Britain using the British Skills and Employment Survey. Figure 9.2 shows a significant longer-term trend toward greater work intensity.

Thus, overall across Europe, work intensification is confirmed as the predominant trend in the first part of this century.

United States

Though the data are less adequate, a reasonable outline of the trend can be obtained from some limited items in the US General Social Survey. Figure 9.3 shows a picture of comparative stability between 2002 and 2018 in one measure of work intensity, the proportion of workers who report that their job requires them to work fast. There is also a very small but stable gap between women and men, with the pace of work being slightly lower for

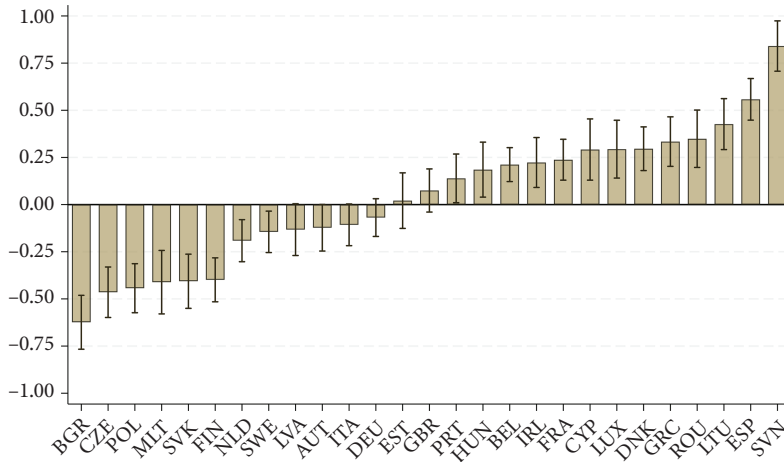


Figure 9.1 The *Work Intensity* index in Europe, 2000–2015
Note: The *Work Intensity* trend is estimated from a regression of the index on year for each country.
Source: European Working Conditions Surveys

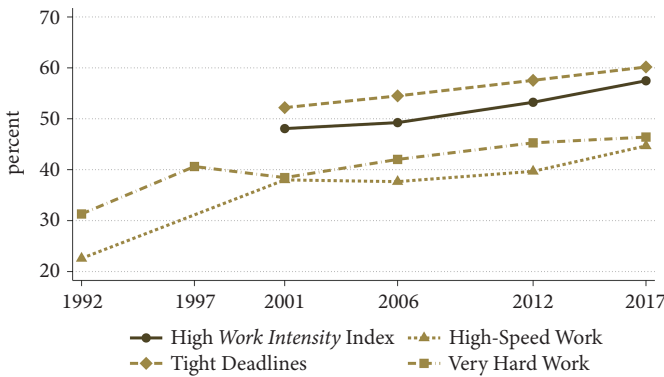


Figure 9.2 Work Intensity in Britain, 1992–2017
Note: The percentage of respondents whose *Work Intensity* index is above zero (“High *Work Intensity* Index”); the percentage of respondents who indicated “at least three-quarters of the time” (“High-Speed Work,” Tight Deadlines”); and the percentage of respondents who reported “strong” agreement that the job requires working very hard (“Very Hard Work”).
Source: British Skills and Employment Survey and Green et al. (2022).

men than for women. While not shown in the figure, there is also no trend in the proportions reporting that they “had enough time to get the work done.” This picture of unchanging work intensity in the United States is supported (but only loosely) by evidence from the International Social Survey Programme data, which shows no change in the proportions stating that

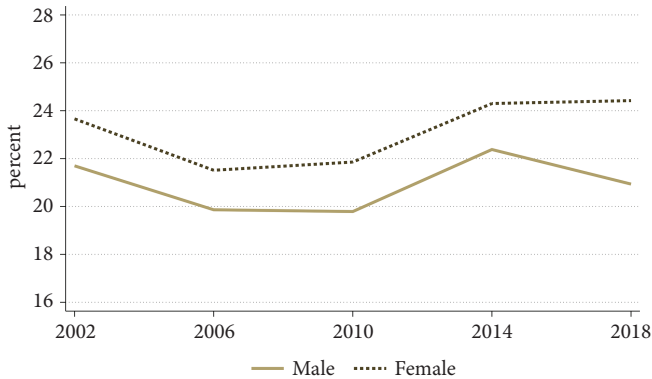


Figure 9.3 Work Intensity in the United States, 2002–2018

Note: The figure shows the percentage of workers whose job requires them to work fast.

Source: US General Social Survey

they are suffering from work stress until 2005, and just a small (downward) change between then and 2015.

Thus, unlike in many other countries, US workers' pace of work was not rising in the first two decades of this century, at least as measured by these two indicators.

South Korea

Figure 9.4 presents the same work intensity index that is constructed for European countries. Although there are obvious fluctuations, overall it shows a period of work intensification. Since, by comparison, the level of work intensity in South Korea is reported as distinctly lower than that in Europe (as noted in Chapter 3), this upward trend could be interpreted as a process of catching up with the pace of work of most developed countries. Equally, it could be interpreted as a reaction in the workplace to the sharp downward trend in working hours in this country over the same period, as recorded in Chapter 6: There is a parallel here with the increased work intensity in France that occurred in reaction to working time legislation in France introduced around the turn of the century.³⁸ There remains a gender gap, with men required to work harder, but there was no trend in this or other more general indicators of inequality of work intensity.

Australia

In Australia, two out of three indicators show distinct increases in work intensity between 2005 and 2019. According to Figure 9.5A, the proportions

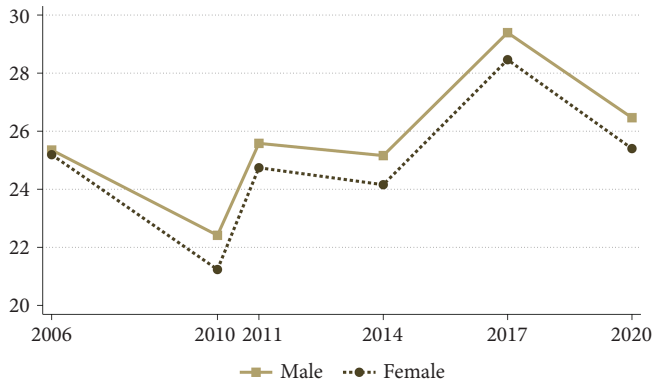


Figure 9.4 The *Work Intensity* index in South Korea, 2006–2020

Note: The *Work Intensity* index is normalized to a scale of 1–100.
Source: Korean Working Conditions Survey

of workers who report that they have to work fast in their job fluctuated somewhat from year to year but trended significantly upward, for men from 14 to 18 percent and for women from 16 to 22 percent. Thus, as in the United States, women are in jobs with higher work intensity. Here, however, the gap is trending slightly upward. The intensification is confirmed by the trend in the proportion who report being required to work “very intensively,” shown in Figure 9.5B: By 2019 this was being reported by 16 percent of men and 19 percent of women. The third measure, the proportion reporting that they did not have time to get their work done, shows a distinct rise, but only for women.

There is also a tendency for the overall level of inequality (as measured by the coefficient of variation) in these measures to be on the increase.

Work Well, Not Too Hard

Overall, therefore, together with earlier studies of a range of occupations, industries, and whole countries, there is confirmation of a predominant trend toward work intensification this century. In this respect, job quality has been falling. The evidence shown in this chapter detected work intensification in 17 out of the 30 countries with enough data to enable a conclusion to be drawn. However, the picture is also mixed, with some polarized trends among the countries in eastern parts of Europe. Unlike the general tenor

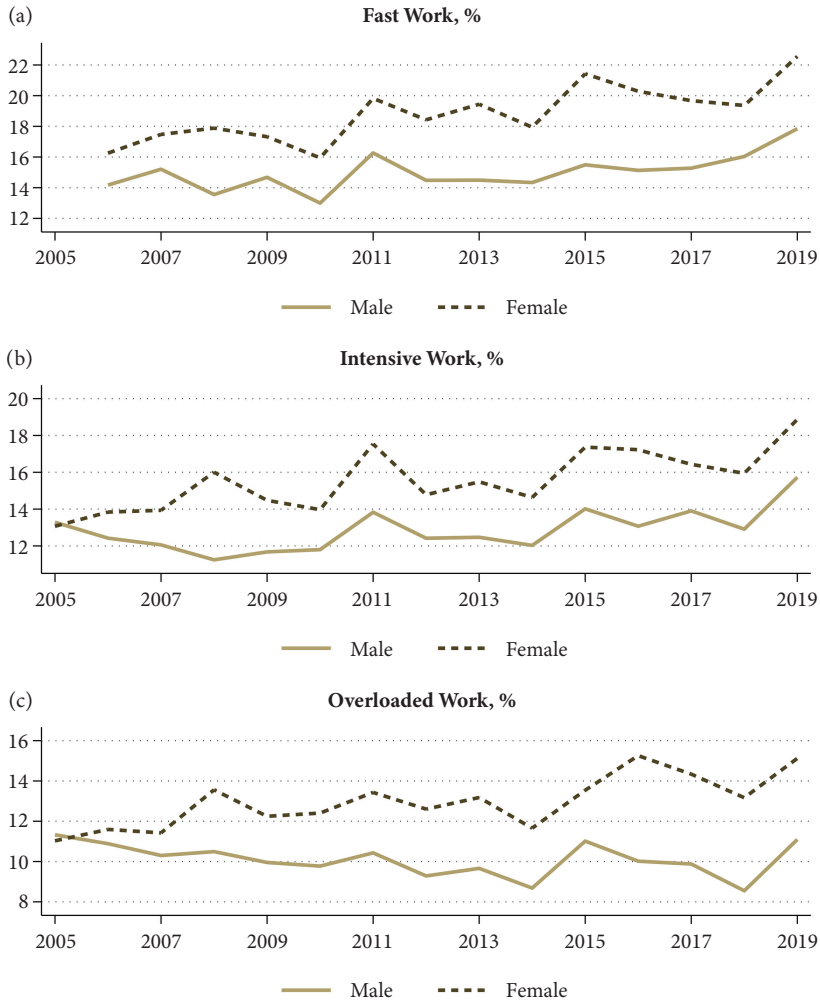


Figure 9.5 Work Intensity in Australia, 2005–2019

Note: (A) Percentage of workers who have to work fast. (B) Percentage of workers who have to work very intensively. (C) Percentage of workers who do not have enough time to get their work done.

Source: Household, Income and Labour Dynamics in Australia

of the published literature, which almost without exception speaks of work intensification everywhere, instances of work de-intensification in seven countries are revealed. There is also a mixed picture of inequality: Work intensity appears to have been greater in the jobs performed by men in some countries, but the reverse is true in others; in some countries, inequality was

increasing and the gender gap was widening, but in other countries, work intensity was becoming more equally spread.

The most direct consequence of work intensification, where it occurs, is likely to be the growth of worker stress (discussed in Chapter 2). Though stress is also affected by other factors, it is notable that Slovenia and Spain, where workplace stress rose, are two of the countries that experienced high levels of work intensification. Given what research reveals about the detrimental effects of high work intensity on a range of wellbeing measures, there should be a growing urgency to find ways to limit at least the extremes of highly intensive work, whether through forms of regulation or through collective action in workplaces to push back on excess workloads relative to the paid working time available. Future research could usefully investigate what factors may have underpinned those cases of de-intensification of work and whether there are policy lessons or practices that could be generalized.³⁹

One hypothesis is that there are certain natural limits to work intensification, determined by human physical, mental, and emotional endurance capacities. While it would be foolish to try to specify where those limits lie, there can be no viable long-term trajectory for technology, work organization, and economic development that involve indefinite work intensification. As a mode of accumulation, productivity can and does keep on rising as long as investment and innovation keep coming; by contrast, the human frame can only take and give so much. It could be speculated that in some cases, where work intensity has been found to be stationary or in decline, the limit has already been reached. Even before the limit of maximum work intensity is reached, the health of many workers may have deteriorated to the point where they are forced to quit the labor force and join the long-term sick. As noted above, more research on the effects of long-term exposure to high work intensity on sustainable employability is awaited.

Future historians will surely regard the late 20th and early 21st centuries as an extended age of work intensification, with accompanying private and public health risks. Perhaps, though, future generations will also have found ways to contain this health hazard, just as workplace smoking and some other health hazards have been regulated in the current era. As a start, it would at least be helpful if leaders in the East and West were to cease calling for unrelenting highly intensive work. The evidence of this chapter suggests that there remains a long way to go before people can be protected from the capability-limiting consequences of jobs that require them to work so

intensively all day long. It is nearly a century since the plea first appeared to “work smart, not hard,” one that has appeared in many languages and cultures and appeals to a logic of success through productive efficiency rather than through drudgery. From what we now know about the effects of good and bad jobs on our health and wellbeing, it may not suffice merely to be smart. A more human-centered invocation would be to “work well, not too hard.”

Hazards and Harms of the Second Place

The Specter of Workplace Harm

When historians and novelists portray the first century of the industrial revolution, they often tell of disasters—of collapsing mine shafts, toxic gases, burning mills, or deaths by machine. They speak, too, of multitudes of non-fatal injuries. In the factory spinning industry, hand and arm injuries from machinery accidents were commonplace, often brought on by fatigue. Limbs and lives were lost. Women's and girls' hair became caught up in moving parts. Most such injuries were not recorded, because they were neither insured against nor regulated; we do not know how many were hurt in these ways.¹

Major accidents are much rarer in modern workplaces. Nevertheless, there were still over 5,000 fatalities at American workplaces in 2022 and nearly 3 million nonfatal injuries, about the same as happened across the European Union.² Though only a fraction of workers have to deal with any one specific hazard, such as working with toxic chemicals, many more are likely to encounter one or another hazard. In France one in four employees in 2017 was exposed to multiple constraints from the physical working environment.³ More still experience the fear of harm: across Europe more than one in three workers in 2015 thought that their work affected their health mainly negatively or that their health was at risk because of their job. This apprehension was, curiously, most acute in Sweden, where the proportion was one in two!⁴

Today the reduction and elimination of workplace risks is the central aim of the occupational health and safety profession, whose primary zone of concern is the so-called second place—that location where work is done—normally separate premises, but sometimes, especially since the pandemic lockdowns, in the “first place,” which is the home. The reduction of workplace risks also lies within the sphere of public health policy and thus of national and international labor regulation.

This chapter is concerned with this last (but not least) of the seven dimensions of job quality: that collection of environmental features having in common that they carry a risk of harm. To what extent, if at all, has there been any progress toward reducing these risks in the 21st century? Could future workers anticipate a world in which jobs are properly designed for a virtually risk-free physical environment?

Risks, Capability Deprivation, and Wellbeing

Taking a step back, an ideal physical environment for a job is one whose architecture and design are purposed for human flourishing—an environment that affords the capabilities for workers to choose and experience the conditions for satisfying and meaningful work. However, the good environment has most commonly been pictured more narrowly and pragmatically in negative terms—that is, through the absence of harm. In this perspective, it can be conceived as one that affords the capability of being safe and healthy while at work. The absence of harms, and the fear of harms, affords the capability to exercise agency—to formulate options, make choices, and carry out tasks without hindrance. Without that capability, workers’ freedoms and activities are curtailed, by both the apprehension and the actuality of harm. Seeing physical environmental risks as inhibitions to capability signals a potential loss of agency when workers experience harmful conditions or the fear of hazards and allows for the valuation of those harms to be socially as well as psychologically influenced. This conception encompasses, but is broader than, the view of psychology that sees physical risk as a “demand” in the job demands–resources model—that is, as a drain on workers’ psychological resources.⁵ It also includes, but goes deeper than, the economist’s concept of workplace risk, which sees it as the source of “disutility,” whose magnitude is set by each individual’s distaste for risk.

Scientific knowledge has been accumulating about health and safety at work for many decades. While that knowledge is still growing, it is already sufficiently advanced to support much of the protection that is required, in principle, for safe working. The risks may be categorized in two types: those that stem from ambient physical hazards and those that relate to workers’ postures.⁶ Working with chemical or biological materials, or with industrial fumes and vapors, brings obvious dangers to physical health unless workers are equipped with effective protective materials. The evidence suggests

that exposure to workplace hazards is detrimental to job satisfaction and to mental as well as physical health.⁷ Among the physical risks is exposure to very high or very low temperatures, something that, for outdoor workers, will become more common with climate warming. Studies show the effects of these extremes on accidents, injuries, mental health, heat-related diseases, urinary systems, and reproductive systems. One study shows, for example, the health impairments among workers in South Korea resulting from exposure to extreme temperatures.⁸ Another risk is second-hand smoking (SHS), which is established as a risk for the respiratory, immune, cardiovascular, nervous, and endocrine systems. A Europe-wide study, for example, shows that SHS is a significant risk factor for atrial fibrillation and for stroke among European workers.⁹ Another physical risk comes from high noise levels, which impacts tinnitus and other types of hearing loss. For example, one study found significant effects of loud noise among workers in orthopedic operations in hospitals in Britain.¹⁰ Epidemiological evidence also suggests that loud noise exposure has effects on sleep and on hypertension and cardiovascular disease.¹¹

Posture-related risks are also a widespread concern. Lifting heavy objects for prolonged periods brings risks of injury. In one study covering the general population across Denmark, those lifting heavy objects for a half or more of the work day were found to be 36 percent more likely to take long-term sick leave than those who did not, other things being equal.¹² Forward-bending, also found more commonly in blue-collar jobs, is another source of long-term sick leave in Denmark.¹³ Another risk is prolonged standing: This is found to be associated not only with fatigue and discomfort but also with lower-back and leg pain, cardiovascular and other health problems, and pregnancy-related health outcomes.¹⁴ Yet sitting down for long periods is not the answer to the dangers of standing. Australians sit for an average of 3.75 hours a day when at work.¹⁵ But prolonged sedentary behavior brings musculoskeletal symptoms and affects both general physical and mental health.¹⁶ Alternating sitting and standing appears to be best.

Many of these environmental effects are enhanced through interactions with each other or with the effects of other dimensions of job quality. To illustrate, the risks of extreme high temperatures (above 40°C) are more detrimental to health among those working with high work intensity; and general physical hazards have more of an impact on workers' sick leave in situations of low job control.¹⁷ One high-quality longitudinal Danish study

found that frequent, combined ergonomic exposures over time occasioned a large rise in lower-back and shoulder pain.¹⁸

Such interactive effects on health and wellbeing should remain on the research agenda for some time as ergonomists and other social scientists continue to develop knowledge of good practice in this era of changing AI-driven digital technologies. The capability approach suggests in addition another avenue for research that has not yet been adequately explored, namely, the extent to which workers' agency—as seen in their work aspirations and in their ability to make reasoned choices—is inhibited by the fear or actuality of environmental hazards in the workplace.

Development, Regulation, and the Composition of Industry

The safety of a workplace depends on the resources and know-how that an employer devotes to constructing the workplace, maintaining the ambient conditions, designing the tasks, and providing the appropriate training in work methods and safety procedures. How much a profit-seeking employer allocates for this purpose would depend, in the absence of social intervention, on a benefit-cost calculation—where the benefit to the employer is the ability to attract a supply of labor from workers with the desire for safe and healthy working conditions. It can be expected that as companies' productivity grows, so does their demand for labor. Thus, along with wages, they must increase their expenditure on these resources, with the consequence that in the aggregate, the Physical Environment of jobs is related to the economy's overall product. As seen in Chapter 3, the Physical Environment is one of the job quality dimensions where there *is* a positive—if loose—relation across European countries between the *Physical Environment* index and per capita GDP. It could be expected, then, that as economies grow, the average quality of the physical environment of jobs would also improve over time.

Employers the world over are rightly constrained, however, by the enactment of minimum standards and regulations. They are also constrained by the extent to which these standards and regulations are enforced. That enforcement can be a problem even in some of the richest countries. For example, one study in Germany and Switzerland found pervasive breaching of permissible levels of UV radiation among employees involved in the building of high-flux solar simulators: The authors found themselves

calling for renewed structural health and safety measures to ensure compliance.¹⁹ However, lax enforcement is likely to be more endemic in developing countries and in states with more corrupt bureaucracies. Nowhere was this better illustrated than by the shocking collapse of a poorly constructed garment factory in Dhaka, Bangladesh, in 2013, with hundreds of deaths and casualties. That event led to controversy in the United States over whether regulations should be less constraining in a developing country. Yet the issue was not an absence of regulation but a lack of enforcement. Sadly, major workplace disasters are not just historical relics; and with global integration, all of us are potentially connected by accidents along the value chain.

From the perspective of pure economics, standards and regulations are conceived as distortions leading to suboptimal spending on averting risks. Workplace health risks would be predicted to engender compensation through market competition: As workers move to less risky jobs, employers offering dangerous jobs would be obliged to raise wages above the rate for safer jobs in order to maintain their supplies of labor. Yet while there is good evidence for pay differentials, the mistake of pure economics is to conclude that the presence of *some* compensation is sufficient to justify a free market in accident risks.²⁰ Just because wages may, in some instances, be higher does not imply that all or even most of the loss of wellbeing from the extra risk to health is fully balanced by higher pay. The labor market is nowhere a utopia of workers and firms, each infinitely well informed about alternative jobs, and with costless mobility between jobs. Normally, workers have insufficient information to fully assess risks in their own jobs, let alone in potential alternative jobs, even if such alternatives were available in their neighborhoods. With the built-in power imbalance between workers and employers, most people cannot choose between multiple jobs. The harms from workplace illnesses and accidents, moreover, are not just to the individual worker but to others in their families and neighborhoods, including future employers for whom the supplies of unharmed labor are diminished. Some industrial harms, moreover, are long-term, hard to detect, and hard to attribute to their source; exposure to asbestos dust is a case in point.

The restraints and resistance from regulation and from union representation are therefore socially desirable and, in principle, can be regarded as corrections of the market rather than distortions. Whether such restraints are enacted into national or local law and whether they are properly enforced depends, however, on the balance of power between employers and workers, both at the workplace level and in national politics. As with the other

dimensions of job quality, unions, works councils, and enforced regulations provide complementary countervailing forces affecting the strictness of safety regulations and procedures. Every country has a long, mixed history of conflict, consensus, and progress with occupation health and safety regulations and enforcement. In the United States, the federal government's Occupational Safety and Health Administration oversees the regulatory process. In Europe the European Agency for Safety and Health at Work gathers and disseminates the research and promotion of good health, while regulation is provided by each sovereign government. In all advanced countries, there are similar state-funded institutions to monitor, promote, advise, and sometimes to enforce regulation on private and public employers. Regulatory developments can stem from the advancement of ergonomic knowledge but also from the changes in workplace design wrought by new technologies. Typically, regulations place obligations on employers to identify hazards, to assess their likelihood of happening, and to minimize or eliminate the risks. Sometimes, regulations amount to an outright ban, such as for tobacco smoking on work premises.

A second potential source of change, therefore, is the evolution in the effectiveness of such institutions (and of the governments behind them) in progressively raising the bar for health and safety standards. Conversely, as union power has weakened in many countries, so has their ability to bargain for and otherwise support employee safety.

A third source of aggregate change in the physical environment of jobs arises from the evolution of the industrial composition of the economy. More than any of the other dimensions of job quality, the physical environment is determined by the specific tasks being carried out in each sector of the economy.²¹ Forestry, for example, is an industry known in the United States for its physical, chemical, ergonomic, and other hazards in a range of occupations.²² Occupational noise exposure is a prominent problem for transport and manufacturing workers in China's Jiangsu Province.²³ Specific risks are perhaps most evident in the mining industry. Even in the modern day, in a relatively affluent economy—Poland—we find reports of dangerous noise levels, dustiness, vibrations, high temperatures, and poor lighting in a coal mine.²⁴ With changes in the industrial composition that stem from technological progress and the maturing of economies, it is expected that the proportion of jobs in some of the riskier industries will fall. Thus, the proportions of people working in heavy industry (including manufacturing and construction) fell over the two decades following 1995, from around 27 to

19 percent in the European Union and from 23 to 17 percent in the United States.²⁵ Similar trends are happening all over the developed world. With this relative decline of sectors that sport the worst physical environments comes a seemingly built-in upward trend in job quality, consistent with the fall in industrial accidents noted in Chapter 2, which has been attributed to the same process of de-industrialization.

Nevertheless, it would be a mistake to assume that *all* the problems of the physical environment were concentrated in the manufacturing and construction industries. There are areas of significant physically demanding working conditions in administrative and support services, in personal care services, and in nursing services.²⁶ Whether the process of gradual deindustrialization is a significant factor leading to improvement in the physical environment of jobs remains, therefore, an open question. Moreover, where any deindustrialization in developing countries is the consequence of outsourcing high-risk tasks to jobs in low-income countries, the overall global trend would remain uncertain.

Trends in Risk Exposures

Prior Evidence

One positive trend in workplace hazard exposure relates to SHS, with substantial reductions in exposure during the 21st century. In Japan, for example, workplace SHS exposure among nonsmokers fell dramatically from 33 percent to 11 percent between 2002 and 2012.²⁷ In Europe, exposure among all workers fell from 19 percent to 10 percent between 2005 and 2015; the most spectacular decline was in Spain—from 29 percent to 8 percent. These decreases are attributable at least in part to the introduction of smoking bans of various strengths. All European countries ratified and committed to the World Health Organization's Framework Convention on Tobacco Control, but workplace smoking bans were implemented and enforced with various degrees of strictness, with the result that exposure to SHS fell less in some countries than in others. Exposure remained highest in Turkey, Romania, Greece, and Lithuania. Downward SHS trends associated with workplace smoking regulations are also widely reported outside Europe—for example, in China, California, Myanmar, the Philippines, and South Korea.²⁸

From prior evidence, there is a more mixed, and far less dramatic, picture of changing exposure to all other elements of workplace hazard. According to one study, the *Physical Environment* index across 15 European countries rose significantly in just 3 countries and fell in 2, but for the majority there was no change between 1995 and 2010. Later evidence suggested just a slight, overall improvement between 2000 and 2015 across the whole European Union, with reduced exposure to smoke, dust, and machine vibrations almost balanced by increased contact with chemical substances and infectious materials. Separate evidence from Finland also presents a picture of little change in physical risks, bar a small increase in noise hazards.²⁹

New Evidence

Europe

To assess country trends within Europe, I make use of the rich data on environmental risks in the European Working Conditions Survey (EWCS). Consistently since 2000, respondents report exposure to vibrations, loud noise, very high temperatures, low temperatures, smoke/fumes/powder/dust, chemical substances or infectious materials, working in tiring or painful positions, carrying/moving heavy loads, and repetitive arm or hand movements.³⁰ Exposure to each hazard was rated on a reverse frequency scale ranging from 1 (all the time) to 7 (never). These exposure frequencies are summed to generate a consistent composite index from 2000.

Figure 10.1 shows that over this period, the *Physical Environment* index increased in 18 countries. The largest increases were in Greece and Cyprus. To illustrate the factors underpinning the rises in the indices, the proportion of workers obliged to work in surroundings breathing smoke, fumes, powder, or dust fell in Greece from 14 to 4 percent, and in Cyprus from 12 to 2 percent. In Greece the proportion of workers who never had to carry heavy loads rose from 40 to 47 percent between 2000 and 2015—tangible progress. One of the countries with a smaller but nevertheless significant improvement is Britain, where some separate corroborative evidence of a small improvement in this dimension, pertaining to workers' perceptions of physical risks, is available from the British Skills and Employment Survey. In 2001, some 32 percent of British workers felt that their health and safety was at risk because of their work; by 2024 this had fallen steadily to 22 percent.

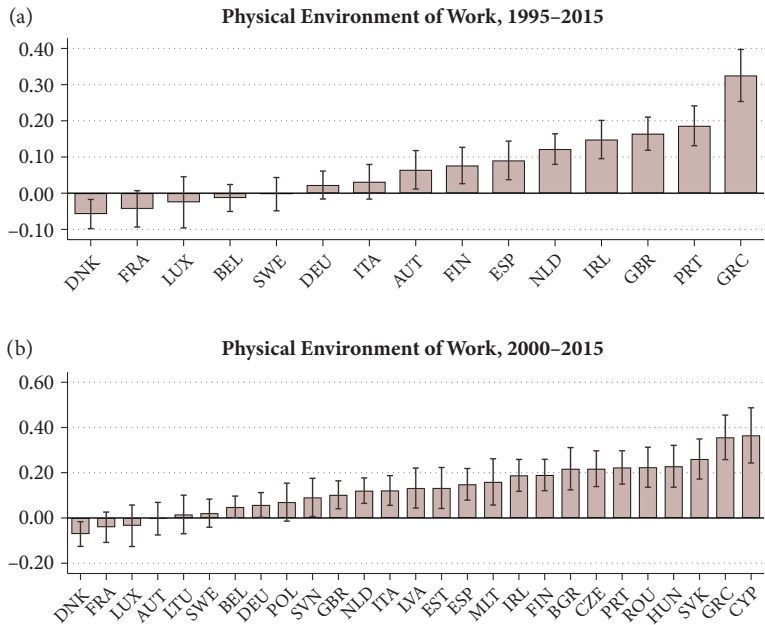


Figure 10.1 Trends in the *Physical Environment* index in Europe

Note: (A) A “slim” index is constructed using 9 items available since 1995. (B) The index is constructed from 13 items as in Eurofound 2012. The scales are normalized to between 0 and 100. The annual trend is estimated from a regression on year.

Source: EWCS

In another eight countries, however, there was no statistically significant change, while in one country, Denmark, the index fell very slightly.

Unsurprisingly, and consistent with earlier studies, in every country, men experience a worse physical environment, on average, than women. Moreover, there was no predominant trend for this gender gap to rise or fall between 2001 and 2017.

To see the extent to which these small improvements in the *Physical Environment* index derived from the changing industrial structure, I computed the average within-industry trends in each country, after allowing for the effects of 11 industry dummy variables to remove the average impact of industry sector. As expected, given the strong link of this dimension with industrial tasks, these suggest that a part of the trends pictured in Figure 10.1 are indeed associated with ongoing industrial evolution. For example, in Latvia, the trend coefficient becomes very small and insignificant once these industry dummies are included, implying that the small

rise (a trend of 0.13 per year) could be accounted for in full by industrial change. In Greece, the trend coefficient is reduced by half from 0.36 (as in Figure 10.1) to 0.18, implying that the country-wide change was twice the average within-industry change, because of the decline of some of the more hazardous industries. In France, there was a within-industry decline in the physical environment (trend of -0.10 per year), but the industrial recomposition meant that in that country overall, there was no change, as shown in the diagram. Overall, only 12 countries out of 27 showed significant within-industry improvements.

The United States

The picture on the other side of the Atlantic is less clear, but the extant if limited evidence is negative. While there are no trend data on physical and ergonomic risks, respondents to the General Social Survey reported their perceptions of health and safety risks at intervals between 2002 and 2018. As shown in Figure 10.2, there was a decline, more markedly for women, in positive perceptions about their physical environment. Specifically, the proportion of female workers who perceived that their safety and health conditions were good declined from 42 to 36 percent. There was also a rise in the proportions of women who have to do repeated lifting at work, somewhat closing the gap with men. This evidence is quite thin, but taken together, these two series provide no sign of improvement for American workers and indications of a possible decline.

South Korea

In South Korea, the composite *Physical Environment* index was constructed from the rich data on risks and hazards in the Korean Working Conditions Survey (KWCS), in a manner similar to that for Europe.

Figure 10.3 shows the same unchanging gender gap in the index as reported in Europe: Women consistently experience a better physical environment. For both men and women, there is a steady decline in the index up to 2017, followed by an upward turn in 2020 during the pandemic lockdown. Taking the whole period, there is a small trend decline. The decline was not associated with the evolution of the industrial composition over the period, implying that the decline originated on average within industries. Looking behind that decline, there was an increase in the fraction of workers who were exposed to dangerous chemical and physical hazards.³¹

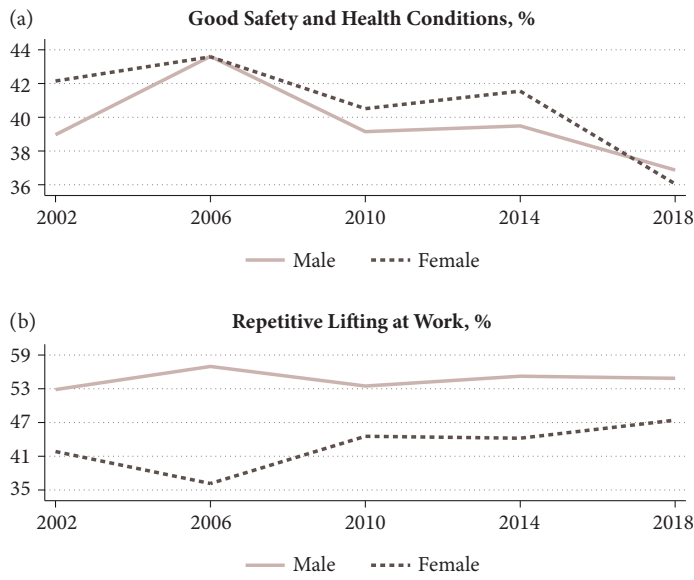


Figure 10.2 The Physical Environment in the United States, 2002–2018

Note: (A) Percentage of workers who perceive that safety and health conditions are good. (B) Percentage of workers who do repetitive lifting at work.

Source: US General Social Survey

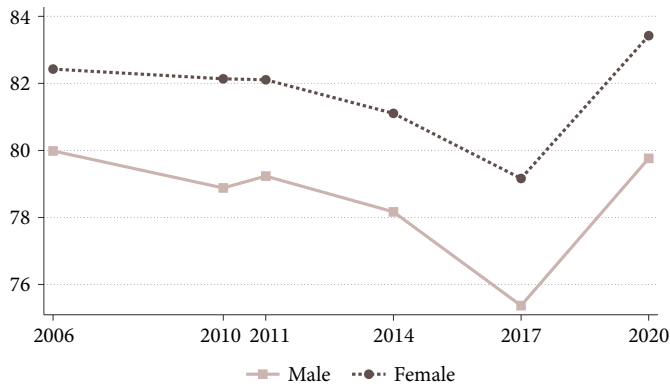


Figure 10.3 The *Physical Environment* index in South Korea, 2006–2020

Note: The index, which is normalized to a scale of 0–100, is a combined index of exposure to vibrations, noise, high temperatures, low temperatures, smog and dust, vapors, chemical substances, tobacco smoke, infectious materials, painful positions, lifting people, carrying heavy loads, standing, and repetitive hand movements.

Source: KWCS

No More Hazards?

The overall picture that is painted by the existing data shows small but statistically significant increases occurring in the quality of the Physical Environment on average for workers in 20 out of 29 countries: a predominant but far from overwhelming upward trend. In a few cases the increases are substantial, and there are some common positives stemming from the widespread diffusion of workplace smoking restrictions. Some, but by no means all, of this change is down to the maturing of the industrial structure.

There may be some ultimate limits to the minimization of physical hazards. Yet a cursory glance at industrial injury rates, as in Chapter 2, is enough to convince one that there remains some way to go in this regard, not only to eliminate risks but also to remove the fear that work surroundings may be prejudicial to health.

Despite the unsolicited help that comes from industrial evolutionary change, it is unlikely that policy-makers and ergonomists can properly sit back and hope for further transitions away from the so-called heavy industries in order to make progress with reducing industrial injuries and illnesses. In the age of automation, AI and digital machines might continue to remove some of the burdens and hazards of physical surroundings and tasks; whether these transitions will raise job quality remains an open question, and is dependent on the involvement of employees. By the same token, it will be no use waiting for some future with all white-collar work and the disappearance of blue-collar occupations. Indeed, according to International Social Survey Programme data, the requirement to undertake “hard” physical tasks has been rising overall in 8 European countries, and fallen only in 2, but in 14 other countries there has been little change. There is not the slightest sign of the disappearance of manual work.³² It should be the hope or intention for such work not to fade away but to be always designed using informed ergonomic principles and guided by the objectives of occupational safety and health. Jobs with hard physical tasks, if well conceived, can result in deeply satisfying work.

Summing up the conjuncture at the end of the first two decades of this century, the European Foundation for Living and Working Conditions stated that “the progress of health and safety knowledge, and evolving regulation, has improved workplaces in Europe substantially in the last 50 years, but further progress is needed and requires monitoring.” I would add that this judgment holds everywhere and that social progress in respect to the

physical environment of work awaits further advancements in ergonomic knowledge, alongside the refinement and enforcement of regulatory policies and the maintenance of collective resistance to working unprotected in dangerous places. Looking forward beyond the minimization of risks and hazards, progress can also come from a renewed focus for research and development on human-centered design of the physical environment of workplaces for good work in multiple dimensions.³³

PART C

BAD JOBS, JOB QUALITY POLICY,
AND THE FUTURE OF WORK

The Conjunction of Job Quality in the Early 21st Century

From “More and Better Jobs” to the Onset of the AI Revolution

From early declarations of a desire to press for “more and better jobs” and for “decent work” for all at the beginning of this century, significant progress has occurred in the way such aspirations should be expressed and investigated. The concepts themselves are clearer than ever. Data-gathering on working conditions has expanded, extending to a wider range of countries. In parallel, qualitative investigations of working conditions in specific settings have proliferated among academic scholars. The experiences of the COVID-19 pandemic have highlighted aspects of working conditions that had for years hovered below the radar of public discourse, including the quality of working time and space and the ways in which work is monitored and rewarded by employers. This final part comprises two chapters. In this chapter, I first take stock of the big picture of job quality trends that has emerged from my empirical analysis of multiple survey series. I then supplement this picture with a specific consideration of jobs at the lowest and darkest end of the spectrum, before considering the future of job quality. This paves the way for an analysis, in the next and final chapter, of whether and how workers, employers, and governments could make a difference to the ongoing trends.

Overarching Findings

In the first two decades of the 21st century, despite the major interruption of the 2008–2009 Great Recession, most countries experienced economic growth; the average citizen is conventionally deemed to be notably “better off.” Among the member countries of the OECD, the so-called rich club,

GDP per citizen was 24 percent higher in 2019, on the eve of the pandemic, than it had been at the start of the century. But if that metric were to be accepted uncritically as an assessment of economic progress, would that not be expected normally to translate into better working conditions? Has the world really become a better place for workers? Building on the progress that has been made in considering these matters conceptually and empirically, I have attempted in this book to build up a detailed description of change in a large number of countries and thence to develop a coherent narrative about how job quality has been evolving during the course of the first two decades of the century.

I have focused mainly on two specific questions: What are the average trends for the various dimensions of job quality in different countries? How, if at all, is the inequality of job quality changing, including those differences based on gender? To address these in each country, I have primarily made use of nationally representative survey data, occasionally supplemented with official statistics (themselves usually derived from surveys). Notwithstanding the imperfections of this method, noted in Chapter 3, for the purpose of gauging change, it easily beats small-scale, unrepresentative qualitative enquiries (even though the latter compensate and contribute enormously through depth and scope of questioning), much less anecdotal accounts.

The overarching findings of the book have been striking:

a) The failure of affluence theory

The theory that rising affluence in the form of increased GDP will automatically bring about improved job quality in all dimensions through rising demand for better conditions and the operation of market forces does *not* receive support. The standout conclusion is that economic growth is poorly correlated with changes in job quality. Growth is, as expected, fairly closely linked with the growth of wages—though this century there has appeared a large gap in many countries between wages and productivity growth, described as a “decoupling,” which research suggests is related to declining bargaining power for labor. But the growth of GDP is only loosely associated with the other extrinsic dimensions of job quality and not at all linked with changes in any of the intrinsic dimensions of job quality.

b) Predominant trends are mixed

For two dimensions—Earnings and the Physical Environment—the countries registering improvement substantially outnumber those

showing deterioration, though improvement is far from universal among countries in either dimension. The reverse is true for Work Intensity, where the predominant trend is work intensification. For the remaining four dimensions there is a net balance of countries showing improvement, but there are nearly as many countries with no change as there are those showing a rise in job quality.

- The most widespread positive narrative is that there has been a rise in wages in 28 of the 34 countries examined, even though in most cases by less than productivity gains. In most countries, the gender wage gap was narrowing, though slowly. There have been no widespread rises in earnings inequalities, as occurred in the last decades of the 20th century, though there have also been no reversals towards greater equality.
- There was also a predominant improvement in the Physical Environment, with modest gains in 20 out of 29 countries. A part, but by no means all, of this improvement came from the changing industrial structure. Everywhere, the Physical Environment dimension was better for women than men, with no predominant trend in this gap. An important step forward in regulation has been the prohibition of smoking at work premises, thus reducing the prevalence of second-hand smoke pollution.
- These gains are set against a negative narrative in the problem of work intensification, which is an ongoing widespread phenomenon. The pace of work rose in 17 out of 30 countries examined; this remains the main dark spot for job quality during this century. Mention should be made, however, of the minority of six countries that witnessed some de-intensification of work. Moreover, there have been no consistent trends toward either increasing or decreasing inequality in this dimension.
- The particular problem of work intensification—its consequence for worker stress—is made worse in situations of low autonomy, so it is unfortunate that, even in countries where skill requirements were increasing, autonomy failed to also rise, and in several cases declined—suggestive of a second decoupling. From the perspective of the capability approach, falling job autonomy implies a singular loss of the wellbeing that comes through agency, with potential negative consequences for work meaningfulness. Nevertheless, job

autonomy remains correlated with skill utilization. Autonomy and Skill increased in 15 out of 30 countries, largely because required skills rose, and in most countries skills became better matched to job requirements. In most countries men continued to experience somewhat greater Autonomy and Skill in their jobs than women.

- As for Working Time Quality—a key dimension behind the affordance of a capability for a good work-life balance—the still-falling total volume of work hours in most countries is the proximate reason why, in 18 out of 37 countries, there has been improvement. Nevertheless, the long-term historical reduction of working hours has slowed down during this century. In the United States total annual working hours have barely changed for four decades. And no country was able to seriously breach the 1,400-hour barrier. Everywhere, men work more on average than women, but there is no indication that this gap has narrowed or that working hours became generally more equal. There has also been a disappointing story surrounding the worker-controlled scheduling and flexibility of work hours, with few countries showing any signs of great improvement. The health problems of night shift working are coming to light through the developing research, but there is little sign of this practice being brought under control.
- The Prospects of jobs also, on balance, rose moderately in half of the 40 countries examined. Some of that improvement reflects business cycle movements in insecurity and promotion prospects. The evidence refutes one of the “rising precariousness” hypotheses, the one claiming that the probability of job loss has been increasing in a *secular* fashion. As for the additional precariousness hypothesis that the cost of job loss is rising on a broad front, it is telling that social insurance against unemployment risk has been weakened in some countries. More evidence is needed, however, to evaluate trends in the financial and psychological costs of unemployment for households in a range of countries, especially given the amassing verification of the deleterious effects of employment insecurity on health.
- Finally, there has appeared a geographical split between Europe and the United States in the Social Environment of jobs: in Europe the Social Environment has predominantly improved, mainly because of a perceived widespread increased social support from colleagues;

in the United States, however, there has been a downturn in trust and relations between workers and their managers. In some countries there is better social support for women, but this is offset by the greater likelihood for women of experiencing bullying and sexual harassment; few countries showed any significant changes in these gaps.

c) Coherence is lacking

The final overarching finding from the empirical analysis is that the dimensions of job quality have not changed in a consistent fashion within countries during the current century: In other words, the seven dimensions of job quality have not moved together. Thus, other than a correlation between movements in Earnings and movements in Prospects, if one dimension of job quality in a country is improving, it does not mean that other dimensions are as well. Not least, this means that it will not do to treat Earnings changes on their own as an adequate proxy for changes in job quality. More generally, the lack of coherence implies that the dimensions of job quality should be investigated separately.

These findings, taken together, constitute a disappointing assessment of the social progress that has been made in improving the working lives of people across much of the developed world. While its peoples were supposed to be becoming much richer, at least on average, their working lives have only improved in some ways, and have deteriorated in others or have just stood still. In one respect, the findings are better than anticipated—namely, that there have been no predominant increases in job quality inequality in any of its dimensions and have been some, albeit slow, reductions in gender wage gaps. Nevertheless, considering the amount of time spent at work, the mediocrity of this performance is nontrivial in its implications. Its seriousness is emphasized still more by the knowledge of how job quality relates to wellbeing and health: Our knowledge of such effects has swelled and is still being enriched—the result of considerable research effort from job quality and health experts. This effort serves, above all, to reaffirm and elaborate the foundational proposition that all dimensions of job quality normally contribute substantively toward the satisfaction of what workers need from their jobs. Indeed, taken together, variation in job quality matters greatly for workers' wellbeing, much more so than variations in education, age, or other demographic factors.

This conclusion adds to the critique of GDP per capita when it is used as an indicator of a country's welfare. Some of the deficiencies of GDP are well known: its failure to capture environmental degradation and to properly allow for inequalities and for many externalities in economic activity. The finding here—that trends in GDP do not correlate with movements in many working conditions—provides further rationale for going beyond GDP in order to evaluate the genuine social and economic progress (or decline) of a nation. Moreover, if sustained high levels of work intensity are leading to declines in the health and productivity of working people, such losses are missed in the statistics, with the result that the recorded gains are overstated or even illusory.

Forced Labor and “Bad Jobs” as Multiple Capability Deprivation

An important limitation to these conclusions should be recalled, however. It is virtually impossible yet to answer my general research question about the whole global capitalist economy, for the simple reason that we do not have the relevant data for large swathes of it—including for almost all developing countries. Even for many rich nations, we have little real evidence. I have only attempted an answer, therefore, for the limited number of developed nations for which enough relevant data could be readily assembled from surveys that have been carried out consistently at intervals. While assuredly not exhausting all avenues, these have included all of Europe, the United States, Australia, South Korea, and a number of other countries that contribute data to the International Social Survey Programme—some 42 countries altogether. I have deemed this sufficient to narrate a story worth telling, to provide a provisional picture of change in the developed part of the world.

Nevertheless, this partial coverage of global change may miss the consequences of economic activity and, concomitantly, bad jobs being redistributed between richer and poorer countries through trade and multinational production enterprises. To begin to address this limitation, it will be useful to consider what can be said about trends in bad jobs. In this section I first review what is meant by the term “bad job,” deploying the lens of the capability approach. Although low pay is of course a crucial element, all dimensions of low job quality come into play with bad jobs.

Forced Labor

At the nether end of the job quality multidimensional spectrum are those “jobs” where working conditions are normally so bad that they typically slide off the end of the visible scale. Historically, enslaved people were the legal property of their owners; they could be bought and sold, had to submit to forced labor, and endured extremely poor living and working conditions. Despite its formal abolition, the specter of extreme deprivation is evoked anew in the emergence of “modern slavery”—a broad term that includes forced labor, debt bondage, the sale and exploitation of children, forced marriages (with subsequent coerced in-home work), and human trafficking. The tradability of humans is not an inherent feature of modern slavery, but common to all these forms is the presence of extreme compulsion. In this sense the work done is not technically a job, which should be a free exchange. In most of its forms modern slavery implies criminality on the part of its controllers. The majority of the latter are private operators, yet sometimes it is nation states who are the agents of forced labor.¹

We have the human rights group Walk Free and the International Labour Organization to thank for compiling estimates of how many people may be classed as being in modern slavery. It is estimated that the prevalence has risen fast—by as much as a quarter—just between 2016 and 2021. In all, around 50 million people—1.5 percent of the world’s workforce—were in forced labor or forced marriages in 2024; 12 million of these were children. Many more will have endured forced labor and somehow escaped it but still be suffering the consequences. While the largest number of modern-enslaved people live in India (11 million) and China (5.8 million), the prevalence is proportionately greatest in North Korea, Eritrea, Mauritania, Saudi Arabia, Turkey, Tajikistan, United Arab Emirates, Russia, Afghanistan, and Kuwait. Among richer countries, the largest number are to be found in the United States (1.1 million).²

These forms of coerced work persist and evolve within global value chains alongside work in law-observing paid jobs. They are often hidden below the radar of international oversight and of consumer sentiment in richer countries, reported on only by those who manage to escape to a refuge, surfacing to public consciousness only through the occasional break-out scandal. Even those instances in developed countries are not reached through conventional surveys of working conditions, the main observational tool that has

formed the backbone of this book. Research suggests that modern slavery is most likely to appear in global value chains with especially complex supply networks and where downstream companies are under pressure to raise or defend their profit margins and opt to take little responsibility for ensuring that their suppliers are free of criminal practices.³ Regions with strong patriarchal cultures and laws are likely seeds for working in forced marriages. War zones and other crisis areas where displaced peoples flee with no means of support make for vulnerable people, susceptible to submission or to being tricked into forced labor and trafficking.

Forced labor is typically the site of the very worst working conditions, including exceptionally long hours; violent, abusive, or hazardous environments; close surveillance; and bare subsistence living quarters. The conditions are thus extremely poor across all dimensions of job quality.⁴ Like the enslaved people of earlier centuries, those doing forced labor in the 2020s face a near-total deprivation of the capabilities that would normally be afforded to people through their work. The conditions severely limit what they can do and be; the coercion is an extreme limitation on their agency. Among the most deprived victims are children born into slavery through their parents' debt bondage and children who are trafficked and then coerced into drug dealing, begging, or sexual exploitation or, in war zones, into violence and combat.

Low-Wage and Dead-End Jobs

Unlike those doing forced labor, workers in what commentators conventionally refer to as “bad jobs” do at least have jobs—formally, an exchange that they could if necessary walk away from. However, the variety of forms and circumstances of modern slavery in which coercion occurs are matched by a continuum of low-end working conditions that can merge into those found in visible but bad jobs. Thus, very poor working conditions are not restricted to situations of forced labor. Indeed, competition from businesses that utilize forced labor may depress conditions in adjacent legitimate enterprises. Those in bad but legal jobs also experience serious capability deprivations.

In referring to bad jobs, commentators typically imply low job quality. But where might one draw the line between bad jobs and other jobs? It will be helpful, first, to consider where to place this threshold. What specifically are

the characteristics of bad jobs that one might want to focus any intervention strategies on?

The phrase “wage slavery” has since Roman times captured the situation of those who are free to move from one job to another but are compelled to take some job or other in order to survive, even though all available jobs are at subsistence level. Echoing that evocation, bad jobs are often analyzed in the modern day as simply low-wage jobs.⁵ Yet, with wages and earnings being continuous variables, what exactly is “low”? The common response is that the dividing line may either be inferred from the threshold for absolute poverty in use in each particular context or arbitrarily set by a relative pay cutoff, typically two-thirds of median hourly wages.⁶ This concept of bad jobs seems less than ideal. For one thing, the relation between personal earnings and household poverty depends on the makeup of the household. For another, focusing solely on pay runs in the face of all the evidence showing that job quality has many dimensions, all of which have an impact on capabilities and need satisfactions.

A distinct improvement would be to introduce the dimension of the Prospects of jobs, defining a bad job as one that has both low pay and poor chances of advancement and continuity. The evidence reviewed in Chapter 5, showing the large impact of insecurity on health and wellbeing, is sufficient to motivate this extension. The coupling of low pay and insecurity is reflected in the concept of the “dead-end job,” the job with no future, and a prime location of precarious work. A dead-end job likely entails acquiring few transferable skills.

Dirty Jobs

Another concept of a bad job, focused on intrinsic dimensions, is one that involves “dirty work,” where the tasks involved are morally, socially, or physically tainted.⁷ Morally compromised jobs involve carrying out tasks that many people would consider wrong (such as debt collection or sex work); socially compromised jobs entail working with socially stigmatized people (e.g., AIDS workers). On account of the stigma, dirty work is undervalued by others and conveniently overlooked in public discourse, but the workers who perform it are subject to an excess of “moral injury”—the guilt that stems from doing, failing to prevent, or just witnessing things that feel wrong. Moral injury is the antithesis of that matching of organizational

vision and personal values that is brought about through doing meaningful work. Striking examples are found in the Florida prison service, in the “joystick warriors” who from the safety of Virginia control the drones attacking human targets in Afghanistan and Pakistan, in the unhealthy abattoir jobs peopled by undocumented immigrants, and on the Gulf of Mexico’s oil rigs. Many of the jobs that involve dirty work would be termed bad in anybody’s book, since they come with low pay, long hours, close monitoring, and poor safety conditions. Indeed, the term is also used to describe tasks that are literally dirty or have a high risk of contamination and injury, such as are evidenced among the jobs of toilet cleaners in certain Belgian cities.⁸ Those involved in dirty work do not necessarily have poor job satisfaction, because they sometimes gain compensating benefits in other dimensions—for example, through better job autonomy, higher wages, or social support. Yet they are less likely to benefit from these compensations and more likely to experience health impairments where they have fewer alternative labor market options, which is often the case.

Accounting for Multiple Deprivations

Dirty work is limited, however, as a concept of a bad job, because its compass is restricted to the dimensions of the physical and social environment. Definitions of bad jobs *solely* in terms of low pay or insecurity or the performance of dirty work are thus all potentially restrictive and hence misleading.

The multidimensional character of capability deprivation is recognized explicitly in the concept of “unacceptable work” proposed by the International Labour Organization: “conditions that deny fundamental principles and rights at work, put at risk the lives, health, freedom, human dignity and security of workers or keep households in conditions of extreme poverty.”⁹ Unacceptable work is, in essence, the antithesis of decent work, located at or near the lower ends of the multidimensional spectra of job and societal features that encompass everything from forced labor to very good jobs. To help operationalize the idea for practical purposes, the concept has been usefully developed into a 12-category framework that can be applied in different ways in various regional contexts to frame the development of regulatory and enforcement practices in every dimension.¹⁰

The implication of that crucial word “or” in the above definition is that jobs that are unacceptable in any dimension would be judged overall unacceptable, seemingly equivalent to the violation of a human right. Yet while some dimensions are, indeed, categorical human rights, that aspiration does not, however, allow for the possibility that some features of jobs may compensate for others. A job that is poor on the dimension of working time, for example, might not be unacceptable if its wages were high.

Arguably, a better definition of a genuinely bad job—where the needs for regulation and enforcement are most pressing—is one that recognizes the *collective* effect of failing to meet minimum standards in multiple dimensions. Two potential methods have been developed to identify bad jobs in such a multidimensional context. These first combine the indicators of multiple dimensions into a single index of job quality and then dichotomize that index.¹¹

The Alkire-Foster Method

In this mold a very practical approach that has been applied to both middle- and low-income countries draws on a protocol that has been widely deployed in poverty analysis: the Alkire-Foster method.¹² Each dimension of job quality is initially transformed (if not already in this form) into a dichotomous index, in which 1 represents deprivation and 0 is satisfactory. Then, all the dichotomous indicators are combined in a weighted sum to form a single index that captures the cumulative level of multiple deprivations. Typically, the weights of different dimensions are assumed to be equal, though that assumption could be altered. Finally, to determine whether a job is a bad job, a threshold is specified for the single index, in effect setting out the minimum number of deprivation dimensions that define whether the job is regarded as a bad job overall. One outcome of this method is the proportion of the employed population who are deemed job quality deprived—that is, in a bad job. Another outcome is the average extent to which each person in a bad job is deprived. A third outcome is the product of these two, termed the quality of employment index, essentially a bad job index.

This method has the advantage that it is often feasible to implement with existing data, and it permits analysis of subgroups within populations.

However, it does not obviate the need for judgment on the part of analysts: decisions must be made as to where the cutoffs are for each dimension, what weight to assign for each dimension of deprivation, and where to set the threshold minimum number of deprivations. The decision as to what constitutes deprivation in each case is typically based either on convention and using experts' normative judgments, on some existing regulation (such as a working time regulation limiting working hours to a given maximum), or with reference to a derived minimum standard (such as for wages, as determined by the cost of a standard food basket).¹³

Using this method, studies have identified distinct differences in the prevalence of bad jobs among Central American countries and more broadly across Latin America and have identified how women in Chile are more likely than men to become trapped in multidimensional bad jobs. Perhaps most ambitiously, a World Bank study deploying this method investigated the distribution of a bad job index across 41 developing countries, using a broad range of job quality dimensions that included, in addition to those listed above, limited indicators of the physical and social environment and of autonomy and skills. It found consistently that bad jobs are more prevalent among younger people (under 25) and those with lower levels of educational achievement. There were no overall differences between men and women; behind that fact lay the ubiquitous advantage for men in respect to earnings but a balance in respect to other working conditions.¹⁴

The method has also been used to examine the trend in bad jobs in two contrasting middle-income countries. Using dimensions covering earnings, employment stability, and certain employment conditions, one study derived a bad job index for Chile, an upper-middle-income country. It highlighted variation in the presence of bad jobs between different regions of the country but also showed a process of convergence driven by public policy and regulation rather than economic growth. The overall proportion of people in bad jobs fell from 67 percent in 1996 to 41 percent in 2017—a distinct indication of progress, in line with Chile's growth over this period. In contrast, a study of Egypt, a lower-middle-income country, found that the proportion of workers in bad jobs, experiencing severe deprivations, increased from 71 percent in 2006 to 90 percent in 2018, despite ongoing economic growth.¹⁵ This patchy evidence on trends in bad jobs in two contrasting developing countries, taken together with the apparent upward global trend in extreme forced labor, is far from sufficient to complete the

picture of worldwide trends in job quality. But it is enough to suggest that the story taken from the mainly developed and relatively rich countries should not be taken as a proxy for a fully global picture.

The Wellbeing Method

An alternative systematic approach to defining bad jobs also begins by generating a single index of job quality, but in this case without initially dichotomizing each dimension. Then, avoiding recourse to normative judgments, a threshold for bad jobs is set using the relationship between the single index and wellbeing. The idea is that, below the threshold, any increments to job quality have a large effect on wellbeing, but that above the threshold, further improvements in job quality are not so large. Analysis of European data from 2015 shows that there is a skewed long tail of bad jobs at the bottom end of the job quality range. A recent study I led indicates that there is a distinct jump in wellbeing between those in the very lowest decile and those in the second lowest; it therefore defined bad jobs using this threshold as being those below the 10th decile of job quality. Those in bad jobs, using this definition, are not all the same people as those in the lowest decile of the wage distribution. Nor are they the same people as those caught in dead-end jobs that couple low wages with high insecurity. Rather, those in bad jobs combine low earnings and insecurity with deprivations across all the five other dimensions of job quality. Thus, this wellbeing-based method offers a vindication of the proposition that job quality and bad jobs must be examined—and remedied—from a multidimensional perspective.

With this classification, the study found that bad jobs in Europe were 5 percentage points more prevalent among migrants and nearly 3 percentage points more likely in large establishments of more than 250 workers. Bad jobs were more likely to be found in the agriculture, forestry, and fishing sector and in countries with a low GDP per capita. In addition, and relevant to potential interventions, the prevalence of bad jobs in a country was substantively reduced by the presence of institutional constraints, including mandatory works councils, a national minimum wage, and high union density. This method can also be used to trace the trend in bad jobs (keeping the threshold constant), where consistent job quality indices for all dimensions are available across time.¹⁶

The Future of Work and Job Quality

Another gap, of a different kind, in the big picture of job quality that has emerged from the surveys analyzed in this book concerns the future, a consideration of which—informed by previous history—is of value when envisioning potential policy interventions. Most discussion of work futures has concerned the quantitative predictions of the effects of technological change, in particular the dramatic effects expected from the application of AI in many sectors of the economy. There has been, in contrast, relatively little debate about the future of job quality.

The same drivers that were reviewed in Chapter 3 are likely to continue to apply: economic growth, the balance of power resources, changing preferences, technological progress, and evolving managerial cultures. With ongoing economic growth, one could expect there to be some improvements in earnings. Growth may be limited worldwide, however, by the onset of global trade wars, renewed economic and financial crises, and climate change. The latter will also cause substantive industrial and occupational disruptions with uncertain consequences for job quality; it will impinge directly on many countries and some sectors, those in the line of fire, and indirectly on all, including through the mitigating strategies that countries will put in place.¹⁷ Extrapolating the trends from the early part of this century, the decoupling of wages from productivity growth may persist. The evidence of this book is also that changes in other extrinsic dimensions, such as the progress of Working Time Quality, are only very loosely related to economic growth and that the trajectories of the intrinsic dimensions of job quality are quite separate.

Behind this dissonance lies the importance of power resources and their reflection in regulatory control of jobs or in organizational collective voice. Working hour regulations, for example, historically reflect but also hasten the long-term decline in working hours. Any future improvements for employees in working time schedule control are less likely to materialize without social regulation. Future improvements in the physical environment will require scientifically informed and legally enforced controls on workplace hazards. Equally, a better social environment awaits not only the universal proscription and enforcement of harassment protections but also an improved and generalized system of manager and supervisor training on how to provide support for the employees that they manage.

Job Quality with AI and in the Aftermath of the Trauma of the COVID-19 Pandemic.

Two additional considerations applied in the conjuncture in the first half of the 2020s decade: an acceleration in the deployment of AI at work and a seismic shockwave impacting on workplace location—and hence to job quality—arising from the pandemic lockdowns of 2020 and 2021.

The ambiguous potential effects of digital technologies on every dimension of job quality were noted in Chapter 3 and have been relevant throughout recent decades in which computing became pervasive among a large majority of jobs worldwide. The concern of the 2020s lies with AI. At the start of the decade AI was being utilized in only a small minority of jobs: It was most prevalent in the manufacturing and financial services sectors, where it was used most commonly for data analytics, fraud detection, production processes, maintenance tasks, design, and planning; even in those two sectors its use was confined to about a third of the workforce in just a minority of enterprises. Yet adoption of AI had been accelerating from small beginnings since the late 2010s. While upstream, the surge in demand for AI-ready silicon chips (and shares in the companies that made them) had turned by the mid-2020s into something of a modern goldrush, downstream, the applications of AI were being rapidly diffused to many sectors of the economy.¹⁸ Its publicized successes in a range of activities thought previously to be a purely human prerogative renewed long-standing anxieties about the future of employment at the mercy of technological displacement.¹⁹ Though forecasts vary, few commentators doubted that AI was set to become far-reaching in its effects on the structure of employment through the coming decades.

Concern then broadened to projections of job quality in the future world of work. As with other digital technologies, the potential was there for either improvement or detriment in all dimensions of job quality. It was argued that the more that employees became involved in the introduction and deployment of AI technologies at the workplace, the better would be the outcome. Early research pointed to positive perceptions and a wage premium on the part of high-skilled workers developing and applying AI (especially for those in management occupations), but only minor effects on other workers' wages. This conclusion was qualified, however, for the many jobs where AI was being used for algorithmic management that had less-positive effects on workers further down the hierarchy.²⁰ Ambivalence

over the effects of AI on job quality seemed likely to persist as it becomes diffused more widely through the decade.

The second huge factor driving job quality in the 2020s was the worldwide COVID-19 pandemic with its associated population lockdowns. For the duration of the pandemic itself, the most striking effects on job quality across the world were experienced by frontline, “critical” workers and in the informal sectors of the developing countries where most workers were unprotected by social insurance.²¹ Frontline workers providing direct, essential services were commonly expected to attend their workplaces in the midst of the pandemic. They therefore were doubly affected, both by the risk of income loss due to hour reductions or job loss and by the increased risk of infection at work. Because these groups were disproportionately drawn from occupations with lower job quality, the aggregate effect of the crisis was to exacerbate inequalities (a common characteristic of generalized economic and financial crises). In Europe, the groups most affected were in health and social care, while cleaners, refuse workers, food system workers, transport workers, and protective service workers also suffered from high levels of job strain during the crisis. Across the developed nations of the OECD, ethnic minorities and low-skilled sectors were badly hit, especially migrant workers.²² In the developing country context, a study of ride-hailing platform workers in Nairobi illustrates the dramatic impact that the pandemic had in the informal sector.²³

The pandemic had striking effects on physical and mental health, potentially scarring for the long term, for significant sections of the population across many countries. Yet the most significant lasting impact of the lockdowns on job quality was the jolt to the normal presumption that employees should attend a common workplace five days a week. Before the pandemic, only a small minority could work from home. Most employees still had to attend at a fixed location away from home every day or be on the move, with little flexibility. Requests to deviate from this norm were hard to push through against entrenched assumptions and the evident difficulties for other employees when one of them is absent: a case of social ossification, with past practices ruling over the present. The shock deviation imposed by the lockdown, and the accompanying accelerated development of the necessary digital software and technologies to permit home working, forced through a potential seismic shift in the established norm for attendance at a central workplace. The years following the pandemic saw a collective search for a new norm, driven by rapid learning about

the possibilities and productivity effects of home working. That search was extensive, simultaneous, and contested—evolving across suppliers, customers, and networks—and therefore social: It had the power, therefore, to break the social norms of working practices inherited from before the pandemic.²⁴

Many considerations apply to the new settlement for home working. From the employees' perspective, the benefits included greater autonomy, more control over working time schedules and reduced commuting times, though possibly at the expense of reductions in the quality of the social environment. From the employers' perspective, there may be extra difficulties in direct monitoring of performance (though digitalization mitigates this problem) and a potential deficit from loss of face-to-face employee cooperation and learning; against this, employers save on the costs of office provision, shifting them onto employees, who must use space at home. In the event, hybrid working (mixing home working with workplace attendance across days of the week) became the modal form of work in many occupations in the aftermath of the pandemic. Among workers with at least primary school education, the average time working from home, across 27 countries, had risen by 2022 to 1.5 days a week.²⁵

What, then, were the outcomes for job quality in the years following the pandemic? With the labor market volatile, swinging between endemic uncertainty to labor market shortages in a short time, overshadowed by the war in eastern Europe with its effects on global energy supply, real wages also varied drastically over short periods of time, bringing hardship. The cost-of-living crisis took most by surprise, and inflation leapt far ahead of the labor market. In consequence, earnings and labor costs moved decisively in employers' favor: between the first quarters of 2022 and 2023 real wages declined in almost all countries that belong to the OECD, led by Hungary, where real wages fell by a striking 16 percent.²⁶ Nevertheless, subsequent wage gains were possible when widespread labor shortages appeared. With respect to nonpay job quality, one study in Britain found this had shifted modestly upward by mid-2022 compared with just before the pandemic. As expected, the improvements were concentrated among those working in an occupation where remote working was feasible.²⁷

Thus, the aftermath of the pandemic and subsequent war saw a mixed outcome for overall job quality. With job quality then poised for uncertain changes in the second quarter of this century, the next chapter will analyze what can be done by individuals, employers, and governments to influence the trends in positive ways.

Making Jobs Better

Agents of Change

I showed in Chapter 3 that the macroeconomic and macrosocial factors behind trends in job quality are many-layered, with the involvement of multiple agents, including both private and public employers, the workers themselves who do the jobs, trade unions, employers' organizations, and the various branches of the state. I have presented a mixed, less-than-positive empirical narrative of job quality trends across many countries from the start of this century. With all the uncertainties of global warming and a potential retreat from globalization surrounding our futures, and with the ongoing digital revolution offering an ambiguous prospect for wages and working conditions, the outlook for job quality is unclear.

And so, a big issue arises: If we cannot rely on economic growth or technological change to usher in improvements to job quality, or even to safeguard the selective gains that have been made since the start of this century, what actions can and should be taken to influence the future direction of change? The main aim of this final chapter is to consider the possibilities that three key agents—employers, workers, and the state—either separately or in combination, might consciously and purposefully affect ongoing trends in job quality. As a subsidiary aim, I also review salient themes for the future of research on job quality, holding to the aspiration and optimistic belief that more enlightenment from this nascent subfield of social science can ultimately help these agents make jobs better.

Employers, “Mutual Gains,” and the Corporate Wellness Industry

I begin with employers. Although the evidence remains somewhat scarce, as discussed in Chapter 3, differences in behavior between employers

account for a substantive amount of the variation in job quality that workers experience, over and above their particular occupation, the industry they work in, the available technologies, and the prevailing labor market institutions. Employers normally have monopsony power in labor markets.¹ For workers who find themselves in low-quality jobs, a lack of information about job quality in alternative employment, the costs of retraining and relocation, and the power asymmetry between themselves and employers all constrain their quitting options. There is thus substantial scope for employers to make a difference, for better or for worse, to their employees' job quality.

Could employers therefore prove to be prime “agentic” drivers of improvements in job quality—that is, the people that bring about change, independent of the market circumstances and technologies they face in their industry and of the social context?

There are many aspects of work life that managers can influence. Management practices, as resolved upon by senior management in every organization, affect job quality, not only through their decisions on wage settlements, working time arrangements, and the physical environment but also through their management style, job design, deployment of human resource management practices, and the training and support they provide to their middle managers and other line managers further down the hierarchy. Much of the scholarly literature surrounding human resource management practices has been focused on how those practices affect organizational goals by changing the attitudes, behavior, and productivity of workers. But evidence also exists for the effects of such practices on job quality and wellbeing. For several interventions, the findings are positive, implying the possibility for significant improvements if managers make the right decisions.² Conversely, interventions may be negative—for example, where high-performance work practices lead to work intensification (noted in Chapter 9). While studies have tended to focus on these negative developments, British human resource management scholar David Guest has pressed for a normative refocusing of research effort to identify innovative management practices and contexts that are beneficial for job quality.³ Relevant policies that raise job quality and thereby their employees' welfare are, *inter alia*, fair wage policies to raise earnings quality, training and mentoring for career development to raise Autonomy and Skill, employee-influenced flexible working time policies to raise Working Time Quality, zero tolerance of sexual harassment or other workplace abuse, management training to improve the

support given to employees and to enhance the Social Environment, proper attention to health and safety measures to improve the Physical Environment, appropriate skills policies to accompany decentralization of control (thereby aiding workers to participate in daily decisions about their work), diversity and antidiscriminatory policies to support equality, and decarbonization policies to conform with and match employees' environmental aspirations.

Before considering whether such policies are likely to be favored by management, mention must be made of one of the ways in which some employers try to raise wellbeing *directly* (that is, without raising job quality), namely, via workplace health promotion as a complement to public health promotion schemes—a connection accelerated by the COVID-19 pandemic. The resources for such promotion are increasingly devoted to corporate wellness programs, which are marketed by a flourishing wellness industry specifically as a business benefit. That industry has expanded substantially during this century, particularly in the United States, where spiraling health care costs can lower profitability. To mitigate the moral hazard associated with social insurance, participation in wellness programs is strongly incentivized with price discrimination in favor of diligent participants. There is some patchy evidence that wellness programs can be beneficial for worker health; overall, however, the evidence is decidedly mixed, and their effectiveness in purely economic terms is contested. Critics argue that the programs retain their popularity with businesses because they foster increased control over the private lives of their employees, beyond the workplace door. Corporate wellness programs are seen by such critics as a neoliberal *alternative* to making improvements to job quality and as a poor substitute for proper consideration of public health programs—for example, on the reduction of tobacco smoking.⁴

Having established that employers do nevertheless have the leeway to improve job quality if they choose, can they be expected to do so or to be harnessed by social regulators to this purpose? One school of thought adopts a skeptical and realist perspective. On the face of it, improving job quality for workers—and thereby their wellbeing—is not the normal objective of employers or their managers, both of whom are constrained by financial imperatives to pursue profit and thus to maximize the rate of return for shareholders. Implementing policies for job quality improvement is costly. Only in exceptional cases, where employers and their managers are altruistic and have resources to spare, might

management practices be framed with this objective of doing good for workers.

Another school of thought, however, theorizes that improving job quality may increase organizations' productivity by raising worker commitment and engagement, improving social relationships in the workplace, engendering creativity, and aiding recruitment and retention. The effect on commitment is exemplified by the notion of a psychological "efficiency wage," whereby raising pay above what is necessary for employee retention induces additional effort and commitment. For each of these channels there is growing empirical support.⁵ If, moreover, improvements in wages and working conditions are found in reality to raise organizational productivity *substantially*, enough so that their increased revenues exceed the higher costs, then profitability improves. Managers will have identified a mutual gain, "win-win," scenario.

Is this a plausible scenario in practice? A small but growing body of evidence finds that, on average, corporations that have a workforce with greater wellbeing are not sacrificing profit; indeed, estimates suggest a significant, if modest, positive impact on rate of return.⁶ This impact is not necessarily reflected fully in the short term in listed company stock prices because investors have limited information about employees' wellbeing and its effects. One can even infer from this evidence a potential public policy case for advocacy to employers, in order to persuade them to introduce job quality improvements in their own long-term interest. Such a policy might include a requirement for transparency through publication of company audits of job quality and wellbeing.

However, this average impact leaves much room for the positive effects in some sectors to be balanced by negative effects in others. What, then, are the circumstances in which a genuine mutual gain perspective for job quality might prove to be a realistic avenue for raising job quality in coming years? Research identifies the fertile context for mutuality to be one where high skill levels are required and where employees need a positive work environment, where commitment from employees is matched by fairness and good prospects. This social exchange can be fostered, it is argued, where there is a positive employment relationship, imbued with trust, fair procedures, and security, all implying a high-quality job. The good employee health that comes from high-quality jobs is then repaid with engagement, creativity, and all the ingredients for a sustained, innovative enterprise (the "healthy organization").⁷ In countries or regions with more consensual employment

relationships, opportunities for further mutual gains might be revealed by the future refocusing of human resource management research suggested above.

Yet, absent such conditions of reciprocity and trust, any neutral, universal advocacy of management practices that are good for employees faces substantive challenges: It seems a false utopian hope.⁸ Mutual gain scenarios are especially unlikely in sectors where employment relations are far from consensual, in the absence of a transformation of industrial relations. Only in a minority of individual enterprises might employer initiatives serve as a viable route to improvement.⁹ In the main, detailed analyses of job quality policies in US low-wage industries point to the need for institutional support and stronger trade unions, including to enforce existing law and prevent wage theft and to protect any employers who offer better jobs from being undercut by “low-road” competition.¹⁰

In short, though employers and their senior managers have the capacity to emerge as serious independent agents for making jobs better, it is difficult to be optimistic that most employers could be persuaded to this end, when it will often be—or seem to be—at the expense of short-run profitability or of the targets set within public organizations. It is more plausible that improvements in job quality can be widely sustained only when employers are obliged to provide a voice for employees and to concede ground in the power bargains over wages and working conditions, to which I turn below.

Workers’ Exit and Voice

Can workers make a difference to the quality of the jobs they do? If so, might their actions in the aggregate bring about significant trends in job quality as employers compete for their services in a growing economy?

The choice between “exit” and “voice” is the ultimate, most significant backstop for this competition.¹¹ Those in forced labor are denied both: they cannot compete or complain and must endure extreme capability deprivation. Those in bad jobs also normally have limited opportunities to move to other jobs. Further up the chain, however, people can learn something about other jobs, whether through online agencies and media or through personal contacts. To increase their chances in the labor market, they can actively seek training to acquire new skills, albeit constrained by the learning

opportunities available at their existing jobs and the costs of participating in external education and training. Alternatively, they can exercise their individual voice—for example, to try to change their daily work schedules or affect other dimension of their jobs. They may be able to reconfigure their tasks and methods of working (job-crafting) if they already have sufficient autonomy to do so.¹²

Aggregate trends in worker behavior might thus become relevant drivers for trends in some features of job quality—in particular, those that are sufficiently transparent to act as a pull or disincentive in the labor market. Yet the scope for such a process is strongly bounded by the aforementioned power imbalance between employers and their employees, both in the labor market and at the workplace. As a generalized source of change, therefore, neither individual workers' voices nor job mobility are likely sources of job quality progress in the main. Individualism is ultimately limited as a force for change.

Instead of moving between jobs or improving them, an alternative for individual workers is to take steps to “get tough”—to increase their own self-efficacy and resilience at work—thereby mitigating the impact on their health of poor working conditions, including job insecurity, and improving their subjective wellbeing.¹³ They might enhance their personal psychological resources by enrolling in resilience training and stress management programs, if these are provided by their employer, or follow a self-help course with the same purpose. Such courses can be moderately effective, though some studies find they have little effect.¹⁴ Yet even if this alternative were viable, enhancing workers' resilience provides no impetus to employers to improve job quality.

Workers are more likely potential agents of substantive change in job quality through the exercise of their collective voice. Traditionally, most trade unions in the Anglo-Saxon world have focused their primary attention on wage bargaining, leaving most other dimensions to managers—a mode of behavior that has been termed the “right to manage” model of union-employer bargaining.¹⁵ Nevertheless, unions often contest nonwage aspects of job quality—for example, working hours. They also provide case-by-case support for individual workers in dispute with their employers, often concerning aspects of their working conditions. In corporatist states, unions situate themselves at the heart of apprenticeship systems and affect the governance of occupational skills. Empirical evidence suggests that unionization has a significant link with nonwage aspects of job quality, including

in liberal market economies, even if its association with job satisfaction is ambiguous, internationally variable, and changing.¹⁶

As frequently noted in this book, the effectiveness of collective worker voice for representation at the organization level and for bargaining over working conditions, has been weakened in recent decades by declining union density and coverage. That decline has formed part of the neoliberal resurgence in policy-making in many developed countries; it has also been driven by the decentralization of bargaining and, in many countries, by the expansion of the informal sector.¹⁷ Nevertheless, a resurgence of trade union power is possible. Unions remain resilient in many countries and retain their bargaining strengths in many sectors. For any such resurgence to become a significant driver of future change in job quality, unions would need to further expand their bargaining scope to encompass all dimensions of job quality and to use their influence as one of the social partners in the development and enforcement of job quality regulations.

Regulation of Job Quality in the Social Democratic State

We are thus led to an explicitly political question: Should the nation-state strive to be an agent for making jobs better in the 21st century and thereby make a real difference to the trend?

There is little doubt that state actions *can* make a difference to many distinct elements of job quality. For example, governments can proscribe child labor and criminalize trafficking. More generally, they provide the legal framework for institutions, including labor unions, that regulate skill acquisition and the operation of labor markets. They sometimes mandate forms of consultation through works councils, which are known to benefit job quality. They legislate for minimum wages and maximum hours, and they provide jobs, sometimes good ones, for notable minority proportions of the workforce. New regulations, or better enforcement of existing regulations, could make an incremental change in job quality. In a globally integrated world, states may be constrained by treaties or by global competition for business investment which induce them to provide subsidies to firms and a loose regime of controls; they may occasionally find themselves caught in a race to the bottom. Yet, for the most part, states are powerful enough to retain agency, even in the face of competitive forces.¹⁸

Principles for Social Intervention in the Determination of Job Quality

Rationale

If the state is to be involved in the determination of job quality, a rationale is needed to delineate the loci of intervention, but also as a counter to the presumption that what goes on between the employer and the employee is entirely a private matter between the two parties. Repudiation is further needed against the prescription of neoliberal employment policy, which emphasizes “flexible employment” policies to insure against market “distortions” imposed by unions and existing regulations. Why and where are these presumptions wrong?

These arguments drawn from free-market and libertarian philosophies against state interventions are erroneous, first, because of the impossibility for individuals to be adequately informed of the working conditions they will face, either when they enter into a labor contract or, later, when they are doing the job. This inability compounds their power inferiority in the labor market, which limits their capacity to avoid risks—including the health and wellbeing hazards of job insecurity, of an excessive work pace, or of low autonomy and a lack of access to learning opportunities. Some of the working conditions that workers are less than fully knowledgeable about may involve significant toxic risks. Some dimensions of job quality are also likely to have both contemporaneous and sustained external effects on others outside the organization, such as members of their family or local community. Poor Working Time Quality, for example, may inhibit parenting and education of young children; toxic work environments that impair worker health raise health care costs, with long-run fiscal consequences and broader threats to the sustainability of social protection systems if many workers become long-term disabled. The external effects of poor job quality also include the costs borne by future employers, who can find themselves deploying workers whose health and productivity are scarred by past work experiences. These externalities, together with the problems of imperfect information and power imbalance for workers, provide the potential rationale for interventions in job quality to protect public health.

Intervention can also be warranted from the state on the grounds of social justice, in pursuit of fair work policies and procedures.¹⁹ This imperative is most pressing where there is wide acceptance of the need to mitigate

extremes of inequality. In cases of exceptionally poor working conditions, human rights are violated and a democratic state must intervene to proscribe such conditions. This criterion is decisive with respect to the prevention of forced labor through trafficking, forced marriages, debt bondage, and child labor.

Evaluation

The second principle for social intervention in job quality is the requirement to evaluate its effects. The benefits of intervention should normally be weighed against the costs to the public purse and against the possibility of unintended, adverse implications. Unfortunately, the theoretical possibility that adverse implications might be decisive is often misconstrued by ideologues as a certainty. Rather than rely on the voices of self-interest, on the dogma of free-market economics, or conversely, on a utopian presumption that there are no limits to the imposition of improvements in job quality, the role of evidence is paramount. This principle is seen up front in debates over the introduction of minimum wage regulation, an intervention dating back more than a century across many developed countries.²⁰ Beyond a certain limit, an imposed very large increase in wages for low-skill workers will reduce employment, since employers will reduce their demand for labor or go out of business. Small or moderate increases, typical of what happens when minimum wages are imposed, are likely to have neutral or even positive effects on employment, because for most enterprises the market for labor is monopsonistic; most of the evidence suggests that the effects of minimum wages on employment are small.²¹ A well-run minimum wage system regularly monitors the actual effects on employment and job quality. A similar imperative applies to other interventions, such as proscribed limits on the length of the work week: To understand the full effects, the government should consider, above all, the verdict of empirical evidence, not the sound of self-interested parties.

Priorities

A third general principle concerns the need for prioritizing some social interventions over others. The state must look to intervene first and foremost on the dark side. From the perspective of social justice, sharp inequalities at work, with minorities enduring inexcusably poor-quality jobs and, at the extremes, forced labor, imply life course deprivations that violate human rights—inequities that should and can be remedied. Beyond this extreme,

there is a strong case for prioritizing social regulation of bad jobs. Improving job quality is likely to raise wellbeing sharply for those in low-quality jobs, owing to the potentially curvilinear nature of the relationship between job quality and wellbeing. Moreover, collective bargaining is typically not available for those workers caught in very-low-quality jobs. There is good cause to strive for better jobs across the spectrum, but government intervention is needed most at the foot of the hill.

The Loci of Intervention

Dealing with Modern Slavery and Extreme Capability Deprivation

Following the principle of prioritizing action for the worst jobs, it is unfortunate to have to report that, as of the early 2020s, up to one in three countries had insufficient laws criminalizing forced labor and human trafficking, imposing adequate penalties, and enforcing them. Nation-states are, of course, far from neutral arbiters of international capitalism, but the desire for moral legitimacy may engender efforts to support human rights. Through Target 8.7 of the United Nations Sustainable Development Goals, governments committed in principle to eliminating modern slavery among children by 2025 and among all people by 2030. Yet the still-growing problem of modern slavery in the early 2020s testified to the inadequacy of protections in the face of the forces driving its expansion in a world beset by multiple crises. To reverse the upward trend and then to keep future targets in sight is a human rights legislative project that needs to be underpinned by a massive global enforcement effort, a quest for transparency, and the promotion of incentives that enable individuals to resist.

Legislative extensions are needed, for example, to criminalize forced marriages and child marriages and to proscribe recruitment-related abuses such as high fees, document retention, and deception. Four out of every ten people across the world inhabit countries that have yet to ratify the conventions of the International Labour Organization (ILO) that establish for workers the rights to organize and bargain collectively. The best up-to-date data, along with open reporting through media coverage by knowledgeable journalists and influencers, are needed to expose abuses.

To ramp up enforcement, more resources need to be allocated to public labor inspectorates and engage the participation of local agents.

Well-intentioned governments can co-opt responsible businesses to undertake due diligence investigations of their own supply chains, requiring this as a condition for public procurement or for provision of export credits; they can make loan agreements with finance institutions conditional on human rights observances. Enforcement can be enhanced, too, through bilateral or international agreements between national authorities to formalize shared responsibilities and practices—especially through adequate international supervision of regular migration channels. States can also help by extending social insurance protection to all groups without discrimination, especially migrants and other vulnerable workers, thus enabling people to refuse abusive jobs that they would otherwise be obliged to accept and thus risk slipping into bondage.

Generalized Interventions in Normal Jobs

State interventions in normal jobs are both direct and indirect, and they vary in the intensity of their expected effects on job quality. Such interventions operate at local or national levels but may sometimes be mandated or promoted internationally, as with the European social model, or through the ratification and adherence to labor standards agreed to by member states of the ILO.²²

The prime instance of a direct intervention is to enact laws, such as equal pay legislation, which proscribe discrimination based on gender, ethnicity, age, and other characteristics. Direct intervention is also concerned with constrictions and regulations surrounding the uses of hazardous chemicals and building safety, typically coming under the remit of national health and safety agents. Employers can be obligated to take responsibility for minimizing instances of sexual harassment. In large parts of the developed world, they must meet minimum wage standards. In many countries job security is bolstered through prevention of arbitrary dismissal and mitigation of redundancy threats. To extend this support, states need to catch up with protection for those working in platform jobs and other forms of sham self-employment, through ensuring proper employment classifications and serious enforcement; in this, the experience of Chile suggests that the regulation of platforms may need to be reinforced by trade unions wherever possible.²³ Throughout Europe there are maximum working time rules, limiting normal hours to 48 per week on average, complying with the directive emanating from the European Commission; similarly, employers have no option but to provide a minimum of 28 days paid vacation leave. These minimum

standards affect job quality at the bottom end of the normal spectrum, but in only some dimensions. Proposals to guarantee minimum standards in other dimensions have been mooted, with agents of the state monitoring job quality and enforcing compliance.²⁴ Governments can also influence working conditions directly in the public sector in which they are the employers, subject to the constraints of the labor market and of the public finances.

The state has its greatest indirect influence on job quality through the legislative support it gives to, or withholds from, trade unions, which depends on the strength of the latter's political voice. The state can determine strict or, conversely, only weak obligations on employers to recognize unions for negotiating; it can facilitate arbitration processes and legitimize industrial action, or impede these; it can require employers to set up consultative voice procedures within organizations or leave employers to do what they want. A second way a democratic state can affect working conditions indirectly is through incentives, linked to its procurement of supplies and services. By attaching wage and working condition standards to contract specifications, firms wishing to compete for government business can be induced to comply and raise the quality of their employees' jobs. A third way to bring about change is through regulations that compel transparency—for example, by requiring that employers publish the gender wage gap in their businesses. To widen the scope, companies could be obliged to report on the working conditions in their workplaces in their annual company accounts. The idea behind such transparency initiatives is that they raise the intensity of competition in the labor market and thus tilt the power balance a little in the direction of workers. Finally, the state can intervene to support beneficial employer practices, championing mutual gains for firms (innovation and market leadership) and workers (better job quality), or through support for the development and maintenance of Kitemarks that enhance corporate reputations.²⁵

In conclusion, social intervention potentially makes a substantive difference to job quality. There must always, however, be a valid reason for interventions and an awareness of the extended consequences so as to sustain their legitimacy in a conflicted political arena. Whether such new regulations will emerge widely within and across countries in the coming decades, and thereby become significant drivers of change, is a matter of political will and the evolving distribution of political power both nationally and internationally.

A Future for Job Quality Research and the Aspiration for Better Jobs

Whatever the prospect for political progress with regulatory innovation and enforcement, there is an assured future for job quality research in the service of better understanding and, ultimately, better jobs. Ongoing evidence on postpandemic job quality may reveal if selected gains from hybrid working have been generalized and established in a lasting manner. However, for a global picture, such understandings will depend on analysts tracking future changes in job quality in wider settings, more regularly, and more comprehensively than has been sketched in this book. In turn, this aspiration, motivated by the known implications of job quality for the health and wellbeing of nations, places new obligations on survey designers and statistical offices to ensure an ongoing expansion of job quality data availability. Guidelines have been produced, and by the early 2020s statisticians were beginning to address the data scarcity, even if attempts were hampered by the pandemic lockdowns.²⁶ A potentially rich future source of job quality data will be the mining of administrative data, which can be hitched to ongoing surveys of job-holders, subject to ethical protocols. A perennial theme will be that looking at wages alone, or any other single index of job quality, is inadequate. The United Nations has produced guidelines for the collection of official statistics on the quality of employment, including most of the key elements of job quality.²⁷ In time this should bear fruit with data from many more countries (not just in Europe), though the collection of official data is far from complete. The United Nations and other agencies meanwhile turned their attention to the problems of measuring platform work. Further consideration is needed in respect of people's second jobs (which are often not included in surveys). Ultimately, a way must be found to track the quality of jobs in the informal sectors of the economy in poorer countries.

Unfortunately, the efforts of international statisticians are not yet matched in most general social surveys, which continue to collect, at best, only patchy information about job quality, which is too frequently displaced by areas of enquiry that matter less. Specialized working condition surveys continue to provide the most comprehensive data sources for ongoing research. Yet the centrality of jobs and their quality in most people's lives implies that the research on jobs should not be separated in this way, as though these had little relevance for the rest of our lives. Perhaps the designers of social surveys may take note in future.

A Research Agenda

Apart from tracking the trends in each of the job quality dimensions within nations and regions, there is much to be learned about how achieved job quality varies by education level, migration status, ethnicity, gender, and social class and how this variation depends on a country's labor market institutions. High-quality research will be needed to evaluate the effects on job quality of social interventions. The ongoing research program should also aim to increase our understanding of the complex and nuanced ways that job quality relates to capabilities for wellbeing and health, including how these relationships are moderated by personal, social, and institutional factors. One lacuna in contemporary research surrounds the potential long-term impacts of poor job quality on health and on sustainable employment. Moreover, research is needed to better understand the effects of each job quality dimension on worker quitting and retirement patterns, as mediated by the effects on wellbeing and moderated by the socioeconomic context. Another gap concerns the theoretical curvilinear nature of relationships: Few studies so far have investigated whether job quality features have larger incremental effects on wellbeing at the low end of the spectrum than at the high end. There is room, too, for further investigation of interactions between job quality dimensions in their effects on wellbeing or behavioral outcomes, beyond just the interactions implied by the buffer hypothesis (see Chapter 9). Finally, difficult though it is with current data, research is needed to address the potential external effects of a job's quality on the health and wellbeing of others in the job-holder's family or community.

A common theme in many of the chapters has been the desirability of developing quasi-experimental studies, preferably utilizing longitudinal data, to help to solidify the estimates of the magnitude of these effects by avoiding or controlling for selection bias. The issue is that workers are often nonrandomly channeled into jobs with varying job quality, partly through their skills and preferences but also by how employers see them or by other hard-to-observe factors; similarly, people are typically nonrandomly treated by social interventions.

The ongoing research must maintain a pluralist perspective on what are the desired outcomes, not necessarily prioritizing any one particular indicator of general wellbeing or health. This imperative is relevant, whether or not one applies the capability approach to wellbeing, with its emphasis on agency. A focus should be given not only on job strain but also on the

meaningfulness of the work that jobs require; not only on hedonic indicators of happiness at work but also on the relationship of work to eudaemonic and evaluative measures of wellbeing and on the potential for multiple health impairments from poor job quality. Perhaps most salient, however, is the need for job quality research within subject areas to maintain open doors to the findings and methods of other scientific disciplines. A respect for interdisciplinary perspectives is a paramount concern in this subfield of enquiry.

Renewing the Aspiration for Better Jobs

Both those engaging in this future research and future policy advisers and politicians who will be grappling with their nation-specific strategies can be reassured that their endeavors are at the center of what matters in the 21st century. While capitalism lasts, most of us will continue to be hard at work, occupied doing jobs of some kind for a substantive part of our waking hours. Social progress in a nation has many frontiers, and the nature of work is among the most important. Getting better decidedly does not mean trying to eliminate jobs, or even to minimize work to the point where it becomes a trivial, minimal part of people's lives. Rather, social improvement must be made to involve jobs getting better, as was aspirationally proclaimed by the ILO and the OECD more than two decades before I began this book. The lens of the capability approach frames it as follows: If jobs improve, they will deliver to those performing them the rising capabilities to follow their goals through work and to gain what they have reason to value from work, raising their wellbeing and health. I have emphasized at several points that what happens at the workplace is an important part of the welfare of each nation. Social statisticians should be urged to recognize this reality, alongside the other big themes of how much income we receive, the quality of our lives outside the workplace, and how long we live.

An aspiration for social and democratic progress stood behind the 19th-century movements calling for an end to the extreme work hours prevalent in the early stages of industrialization. In the 21st century, a call for better job quality across any or all of the seven dimensions analyzed in this book can be couched in the same terms. Most of all, perhaps, social progress must include a trend toward our jobs becoming more human-centered. Yet, after studying what happened in the first two decades of this century, prior to the

shocks brought on by COVID and by the prospects of an AI-transformed global economy, what are the social democratic possibilities for a future with better jobs? Can we expect improvements in the years ahead for this sphere of life?

Getting to the United Nations' Sustainable Development Goal 8 of decent work for all by 2030—including, therefore, adequate job quality for all by that date—seems an unattainable target from the vantage point of the mid-2020s. Looking further ahead, my conditional scenario for the 2040s is that if governments take no further substantive deliberative actions, the overall quality of peoples' jobs will have barely improved, even if the global economy is spared from crises and trade disruptions and the massive structural employment losses linked to AI have been avoided.

Employers could make a big difference if they wanted to, but there are low expectations for that to happen unless they are pressured into doing so by the actions of the other main agents—unions and governments. Employees and the self-employed on their own can sometimes raise their own job prospects, with luck and judgment, but can only bring about aggregate change in concert with others and if they can be included in the innovation and implementation of the new technologies. The state is a potential agent of change for many dimensions of job quality, and through multiple channels; yet whether governments will step up to make that change happen is another matter, deeply embedded in the complexities of political economy. If jobs are to become better, it will happen through a combination of drivers, with for example, economic development being accompanied by regulatory progress and enforcement and by a renewed and more equal balance between employees and employers. Such improvements, if they materialize, will be aided by the expanding scientific evidence of health and job quality experts. Even if the contemporary targets for sustainable development of workplaces are unattainable, they can be renewed and amended beyond the 2030s in the light of the emerging evidence and then supported with an action plan for governments. An enlightened movement toward better jobs is assuredly possible.

APPENDIX

Data Sets and Sources

European Working Conditions Survey (EWCS)

Description	The EWCS is a cross-sectional probability sample survey normally conducted every five years by Eurofound (the European Foundation for the Improvement of Living and Working Conditions). In each country the survey is administered face-to-face to a nationally representative, random sample of employed persons. Sample sizes are a minimum of 1,000 per country in each wave, totaling 43,850 in 2015. All analyses use the provided weights for Europe-wide analyses.
Source	Eurofound (2022). "European Working Conditions Survey, 2015." [data collection], 4th ed. UK Data Service. SN: 8098, DOI: 10.5255/UKDA-SN-8098-5

US General Social Survey (USGSS)

Description	The USGSS is a cross-sectional survey of people living in the United States that has been conducted since 1972 at one- or two-year intervals. For most years it used probability sampling and, with the use of appropriate weights, can be regarded as representative of those aged 18 and above. Questions about some working conditions were asked not every time but at regular intervals.
Source	Smith, Tom W., Davern, Michael, Freese, Jeremy, and Morgan, Stephen L. "General Social Surveys, 1972–2018" [machine-readable data file]. Principal Investigator: Tom W. Smith; co-principal investigators: Michael Davern, Jeremy Freese, and Stephen L. Morgan, NORC ed. Chicago: NORC, 2019.

Korean Working Conditions Survey (KWCS)

Description	The KWCS is a repeated cross-sectional survey of employed people over 15 years old in 2006 (first), 2010 (second), 2011 (third), 2014 (fourth), 2017 (fifth), and 2020 (sixth). The questionnaire was based on the 2020 European Working Conditions Survey (EWCS). The sample size for the first and second waves was 10,000 and increased up to 50,000 for the third to sixth waves. The interview was conducted fully face-to-face until the fifth wave before the pandemic, and a hybrid method was used for the sixth wave due to the pandemic.
Source	https://www.kosha.or.kr/eoshri/resources/KWCSDownload.do

Household, Income and Labour Dynamics in Australia (HILDA)

Description	The HILDA survey is a structured, annual, household-based longitudinal study following the lives of more than 17,000 Australians. Data are collected through face-to-face interviews, though during the pandemic, around 10 percent of the interviews were conducted by telephone.
Source	https://melbourneinstitute.unimelb.edu.au/hilda

International Social Survey Programme (ISSP)

Description	The ISSP organizes annual comparable social surveys across countries on a range of topics of interest in the social sciences. Its founding members in 1984 were Australia, Germany, Britain, and the United States. By the 2020s, 45 countries had joined. The topics vary from year to year, and working conditions have been focused on at intervals. Data are always made available free of charge.
Source	issp.org

British Skills and Employment Survey (BSES)

Description	The BSES is a series of nationally representative probability sample surveys of individuals in employment in Britain aged 20–60 years old (since 2006, the surveys have also sampled those aged 61–65). Though not originally planned in this way, continuity in questionnaire design has created an integrated data series since 1986, approximately every five years. All analyses use the provided weights.
Source	UK Data Service. For the 2017 survey, see: https://beta.ukdataservice.ac.uk/datacatalogue/studies/study?id=8581

Other Data Sources

GDP per capita: [International Statistics from the UK Data Service \(jisc.ac.uk\)](https://jisc.ac.uk)
HDI: Human Development Index| Human Development Reports (undp.org)
OECD Statistics: <https://data-explorer.oecd.org/> and its predecessor

Notes

Chapter 1

1. ILO 1999, preface opening lines.
2. “Presidency Conclusions Lisbon European Council, 23 and 24 March 2000,” www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm
3. OECD 2003, 2017.
4. Raveaud 2007; Burchell et al. 2014.
5. Berg et al. 2023.
6. Moen et al. 2020; Chacaltana et al. 2022. In China, the proportion of people working in informal employment grew rapidly in the 1990s to reach around six in ten workers in the mid-2000s (Zhou 2013). In recent progress with global statistics, the ILO estimates approximately the same proportion globally. The worldwide proportion has been falling since 2004, though progress stalled with the pandemic and its aftermath. Source: ILOSTAT.
7. Williams et al. 2020 (47) put it this way: Job quality is the “potential of a job to be satisfying for the average worker.”
8. Sen 2000.
9. In a quest to expand research on decent work within psychology, some writers have narrowed the concept down very substantially to job quality, and within that to a selective rather than comprehensive list of features (see, e.g. Duffy et al. 2020); while that project has its purposes within psychology, it risks closing off the wider vision that is inherent and indivisible in ILO’s vision of decent work (Sen 2000).
10. Doyal and Gough 1991; Sayers 1998.
11. Balme 1984.
12. Smith 1776; Malthus 1798.
13. Spencer 2009, Chapter 4.
14. Except, that is, for a few outsiders (see Spencer 2009).
15. Braverman 1974; Noble 1979; Edwards, 1979.
16. Walton 1973, 1974; Parker and Grote 2022; Hancke et al. 1990, 59; Guest et al. 2022.
17. Hamermesh 1977; Freeman 1978.
18. Hackman and Oldham 1976.
19. Karasek 1979; Karasek and Theorell 1990.
20. Piore and Sabel 1984.
21. I call it a subfield rather than a field because it is not concerned with a self-contained system of determination, interwoven as it is with family, community, and political and economic regimes.
22. Walton 1976; Guest et al. 2022.
23. Akerlof 1982.
24. For example, Erhel and Guergoat-Larivière 2016; Bryson et al. 2017. Empirical literature on the implications of workers’ reciprocity on wage formation under conditions of incomplete contracts, where effort cannot be enforced without cost, is also supportive (Fehr and Gächter 2000).
25. Befort et al. (2022) propose that “efficiency” be included in the concept of job quality on the grounds that it would be consistent with a pluralist industrial relations perspective, which “balances” all interests. However, they cannot say how good job quality is to be defined when interests are opposed, as is normally the case. Such a redefined concept would be analytically intractable in most instances.
26. Verbeek et al. 2009.
27. I return in Chapter 12 to the role of employers as potential agents for job quality improvement.
28. To conflate job quality with the quality of the products or services that are the outcome of work would also be a conceptual error.

29. European Parliament Resolution on creating labor market conditions favorable for work-life balance (2016/2017(INI)), clause 46. See [Eurofound \(2012, 2021\)](#) for typology details. Examples of wider use are [Chen and Mehdi 2019](#); [Berg et al. 2023](#); [Bolliger et al. 2022](#); [Choi et al. 2020](#); [Riva et al. 2022](#).
30. Thanks to Professor Colette Fagan of the University of Manchester, who proposed this nomenclature.
31. Autonomy and Skill is a retitling of the dimension Skills and Discretion used in [Eurofound 2012](#). This retitling reflects the heightened emphasis I wish to give to autonomy in the light of empirical evidence and of the capability approach to job quality set out in Chapter 2. This dimension is also expanded to include skills match.
32. [Green 2001](#), p56.
33. Recent proposals come from [Cascales Mira 2021](#) and [Steffgen et al. 2020](#).
34. See endnote 31.
35. [Gundert and Leschke 2023](#).
36. [Green 2006](#), 13.
37. In traditional neoclassical economics, market-revealed—not stated—preference is deemed the only true test of value. Stated preference, by contrast, is an indirect way of elucidating what people say they value in their jobs along a monetary scale. For examples of the stated preference approach, see [Mas and Pallais 2017](#) and [Vij et al. 2024](#). Such studies add to the stock of empirical support identifying job quality dimensions. Yet this literature may also prove to be unscientifically restrictive if it proceeds to exclusively privilege trade-offs with wages over trade-offs with other job quality dimensions and to ignore the amassing wellbeing-based evidence of valuation, along with the theories of other social sciences.
38. A picture similar to Figure 1.1 is found for every individual country taken separately.
39. United Nations Development Programme, “Data Center, Human Development Reports.”
40. [Eurofound 2022](#).
41. A common approach uses arithmetic or geometric averaging of dimension scores, treating dimensions equally ([Ghai 2003](#); [Muñoz de Bustillo et al. 2011](#); [Yu 2020](#)). An alternative approach is to set deprivation thresholds for each dimension and sum to generate an overall index of job quality deprivation ([Sehnbruch et al. 2020](#)).
42. [Williams et al. 2020](#); [Cottini and Lucifora 2013](#); [Peckham et al. 2022](#). What is largely missing from this literature on the significance of job quality is much systematic discussion of its effects on worker behaviors, such as quitting and retirement; for an exception see [Gusoff et al. 2025](#).
43. This variation should give pause when using the correlation with wellbeing to design a single index of job quality from weighted multiple dimensions.
44. [Green 2011](#); [Gallie and Russell 2009](#).
45. [Green et al. 2024](#).
46. The index is the first principal component of the seven dimensions.
47. For an exception see [Matthews et al. 2022](#).
48. [Lakatos 1970](#).

Chapter 2

1. Edgworth 1881, cited in [Colander 2007](#).
2. [Bryson and MacKerron 2016](#). Making love came in at the top of the happiness list. See also [Kahneman et al. 2004](#).
3. [Van Raaij and Antonides 1991](#); [Clark 2003](#); [Blanchflower and Oswald 2011](#); [Clark et al. 2018](#), Chapter 4.
4. [Diener 1984](#); [Darity and Goldsmith 1996](#). The unemployed are less happy moment by moment than the employed when engaged in the same activities ([Knabe et al. 2010](#)).
5. [Green 2011](#).
6. Included among key texts are: [Sen 1985, 1993, 1999](#); [Nussbaum 2000, 2003](#).
7. [Green 2006, 2026](#).
8. [Cazes et al. 2015](#), 13, footnote 12. Others have also drawn on the capability approach: [Sehnbruch 2004](#); [Leßmann 2012](#); [Soffia 2018](#); [Suppa 2019](#); [Ilieva-Trichkova and Boyadjieva 2021](#). [Annink \(2017\)](#) applies the capability approach to understanding the work-life balance of independent professional workers in a variety of settings. Some aspects of job quality are incorporated, using the capability approach, in the concept and measurement of “sustainable employability,” that quality of workers and context that facilitates ongoing employment

- throughout working lives. It is unclear, however, why the concept should include only a limited range of dimensions in the proposed scale.
9. Bonvin 2012; Subramanian and Zimmermann 2013; Egdel and McQuaid 2016; Van der Klink et al. 2016; Mantouvalou 2019; Suppa 2019; Egdel and Beck 2020; Stoilova et al. 2020; Fernando-Urbano and Orton 2021; Bueno 2022; Gürbüz et al. 2022.
 10. See Soffia et al. 2023 for a review.
 11. Sen 1999.
 12. Koggel 2005.
 13. Sehnbruch 2004, 2009; Leßmann and Bonvin 2011; Bryson 2015; OECD 2017; Soffia 2018.
 14. Leßmann 2012; Suppa 2019.
 15. Monteith and Giesbert 2017.
 16. Stephens 2023.
 17. Annink 2017; Rao and Min 2018; Ilieva-Trichkova and Boyadjieva 2021; Van Casteren et al. 2021.
 18. Abma et al. 2016; see also Murangi et al. (2022), whose characterization of special education teachers in Namibia using the same list of capabilities also seems partial.
 19. See also Green 2021.
 20. Sen 1987, 1993. See also Robeyns 2017, Chapter 4, for an excellent account of the implications of the capability approach for welfare economics.
 21. Nikolova and Cnossen 2020; Williams et al. 2022.
 22. Ryan and Deci 2000.
 23. Van Casteren et al. 2021. Note also that the term “capability,” an (admittedly) unfortunate choice of nomenclature that has stuck, should not be confused with “skill.”
 24. Karasek and Theorell 1990.
 25. Eurofound 2021, 42.
 26. Nussbaum 2003.
 27. For example, in 2024, the correlation between satisfaction with hours of work and being able to determine start and finish times was 0.28 for those who rate choice in hours of work as very important or essential but only 0.15 for other workers. Source: BSES, my analysis.
 28. Sutherland 2012; Kalleberg and Marsden 2013; Gallie et al. 2012. Figure 2.2 is an update of the latter study.
 29. My analysis of International Social Survey Programme data.
 30. E.g. Eurofound 2012.
 31. Warr 1994, 2007.
 32. Cassar and Meier (2018) consider incentive implications from just one additional set of job quality characteristics—namely, that set which affords the opportunity for meaningful work; their arguments should be extended to all the nonwage dimensions that job quality scientists have found to be important for well being.
 33. Nahrang et al. 2011; Bakker and Demerouti 2017.
 34. Knox et al. 2015; Clark 2015; Irvine et al. 2018; Taylor 2017, 103; Myhill et al. 2021.
 35. I confess that my views against the use of job satisfaction as part of a measure of job quality have hardened since 20 years ago, having become more convinced that workers’ aspirations, expectations, habituation, and comparative judgments significantly affect how they report job satisfaction.
 36. Piasna et al. 2017.
 37. As the conceptual review by Piasna et al. 2017 proposes, to compare job quality across different social settings, it is important to use consistent definitions while not conflating different levels of analysis (the job, workers, employers, legal frameworks, and the macroeconomic environment).
 38. Kalleberg and Marsden 2013; Brown et al. 2012; Belardi et al. 2021; Léné 2019.
 39. See Green (2026) for further detail on this argument.
 40. A few examples among many: Gallie 2007b; Osterman 2008; Leschke and Watt 2008; Enchautegui 2008; Holman and McClelland 2011; Eurofound 2012; Holman 2013; Okay-Somerville and Scholarios 2013; Cazes et al. 2015; Greenan et al. 2014; OECD 2017; Piasna et al. 2017; Eurofound and International Labour Organization 2019; Dütsch 2022.
 41. See, for example, Stevenson and Wolfers 2008. The US case was among the first to be studied. It embodied what became known as the “Easterlin paradox” and occasioned much puzzlement among economists (Easterlin 1974).

42. Deaton and Kahneman 2010.
43. Deaton and Kahneman 2010; Helliwell et al. 2020.
44. Inglehart et al. 2008.
45. Easterlin et al. 2012.
46. Petterson et al. 2005.
47. OECD (2022).
48. Gallup. State of the Global Workplace 2022 Report.
49. Nussbaum 2000, Chapter 2.
50. Diriwaechter and Shvartsman 2018.
51. Nie et al. 2020; Pagan and Malo 2009; Léné 2019; Sardadvar et al. 2017.
52. Bowling et al. 2005.
53. Analysis using the US GSS, Australia's HILDA, and Britain's panel studies (BHPS and UKHLS).
54. Brown et al. 2012.
55. Warr 1990.
56. Green et al. 2016.
57. Rosso et al. 2010; Bailey and Madden 2016; Bailey et al. 2019; Nikolova and Cnossen 2020.
58. Steger et al. 2012.
59. Graeber 2019; Soffia et al. 2022.

Chapter 3

1. Auerbach 2016, 277–318.
2. Rosen 1986.
3. Rodríguez and Lucio 2023.
4. Benton and Kim 2022.
5. There are no definitive measures of the proportion of workers doing at least some platform work; estimates vary from as little as 0.4 percent to 10 percent, depending on the definitions used. Countries differ, and in Europe platform work is commonest in the United Kingdom, Germany, the Netherlands, Spain, Portugal, and Italy (Bogliacino et al. 2020).
6. Kalleberg and Dunn 2016; Henley 2022.
7. OECD 2015, 2018a.
8. Stirati and Meloni 2021; Guschanski and Onaran 2022; Henley 2022; Meloni and Stirati 2023.
9. Cheng et al. 2019; Acemoglu and Restrepo, 2020.
10. Schwab 2016; Acemoglu et al. 2021.
11. Delbridge et al. 1992; Sewell and Wilkinson 1992; Baldry et al. 1998; Harley 1999; Ramsay et al. 2000; Bain et al. 2002; Handel, 2005; Stewart et al. 2010; Rees and Gauld 2017; Awano et al. 2018.
12. Berg et al. 2018; Moore and Hayes 2018; Kellogg et al. 2020; Cirillo et al. 2021; Gilbert and Thomas 2021; Baiocco et al. 2022.
13. Huo et al. 2022.
14. Rodríguez-Modrono and Lopez-Igual 2021; Felstead 2022.
15. Fairwork 2024.
16. Parker and Grote 2022; Berg et al. 2023; Baiocco et al. 2022.
17. Autor et al. 2003.
18. Kalleberg 2011; Batt and Appelbaum 2017.
19. Green et al. 2013.
20. Dütsch 2022; Davies and Felstead 2023.
21. Hall and Soskice 2001; Gallie 2007a, 2007b, 2007c, 2009.
22. Tählin 2007.
23. Pulignano 2018.
24. Deguilhem and Frontenaud 2016.
25. Green et al. 2013.
26. That management decisions are important is suggested by evidence of how approximately four-fifths of the increasing wage inequality in the United States between the 1970s and the 2010s is attributable to increasing wage inequality between establishments, while only about a fifth is down to increasing wage inequality among workers in the same establishment Barth et al. 2016. See also Osterman 2017, for a review of evidence of the importance of firms in determining wages.

27. Arrighetti et al. 2022
28. Artz et al. 2020.
29. Bryson et al. 2025.
30. Leschke and Scheele 2024.
31. OECD, "Job Quality," <https://www.oecd.org/statistics/job-quality.htm>.
32. Handel 2005. For the same reason, I have not included other analyses in this discussion that cover only brief periods.
33. Kalleberg 2011.
34. Howell and Kalleberg 2019.
35. Howell and Kalleberg 2019.
36. Lowe 2007.
37. Greenan et al. 2014.
38. Green et al. 2013; Gallie 2013b; Kirchner 2016; Rigo et al. 2021; Eurofound 2016a.
39. Green et al. 2022.
40. Tählin 2007; Gallie 2007a, 2007b.
41. Green et al. 2013.
42. Green 2009.
43. Green et al. 2013; Kalleberg 2011.
44. Antón et al. 2023a.
45. Olsen et al. 2010.
46. Antón et al. 2023b.
47. Syk 2022; Le Grand and Tählin 2017.
48. Gallie 2003.
49. Lehto 2004, 2010; Sutela et al. 2019.
50. Sehnbruch et al. 2020.
51. Gonzalez et al. 2021.
52. Apablaza et al. 2023.
53. Prieto et al. 2022.
54. Brummund et al. 2018.
55. Canavire-Bacarreza et al. 2024.
56. Eurofound and International Labour Organisation 2019. Unfortunately, not all these data sets are available for public use.
57. Some job features might also be reported on by supervisors or managers, but the use of such reports to study job quality is relatively restricted.
58. Scraped data from online job advertisements is a potential addition for future analyses.
59. With the introduction of online surveys, mode effects must also be accounted for when examining trends.
60. Descriptions and source references are provided at the end of the book. Owing to the size of the task, I have not been able to include all national-level surveys with some data on job quality in my analyses.
61. Analyses proceed either with the responses to individual questions or, where sufficient items are available, on consistently constructed indices of the job quality dimensions. Where several data time points are available, the trend is estimated through a regression of the variable against the year of observation. In the case of nonwage dimensions, for many countries I computed the trend in the mean of a composite index for each dimension. Where the data are less than complete, however, I consider the trends of individual items within each dimension.
62. Each cell is left blank if the correlation is less than 0.3. Even if one were to assume that the mean changes were distributed normally (which is unlikely), a coefficient of less than 0.3 would in practice be statistically insignificantly different from zero. Those shown in the table would, however, be deemed significant at least at the 10 percent level. But this fact is definitely not offered as proof of any theory of change; rather, the table is just a way of describing the tendencies in a complex country pattern with imperfect though informative data.
63. See also Drobnic et al. 2010.
64. Though great care is taken with question framing in the EWCS, international comparisons of the *levels* of job quality remain more open than international comparisons of *trends* to influence from cultural factors.
65. Eurofound and ILO 2019, 34–37.
66. Eurofound and ILO 2019, 26–7.

67. Eurofound and ILO 2019, 22.
68. Eurofound and ILO 2019, 33.
69. Eurofound and ILO 2019, 23–24.

Chapter 4

1. Sen 1999. For an application of the capability approach to the issue of specifying the contribution of wages to decent living standards, see Rao and Min 2018.
2. For example, Kahneman and Deaton 2010; Sacks et al. 2012; Stevenson and Wolfers 2008; OECD 2014b; Thomson et al. 2022. A proviso is that other elements of job quality are not always adequately controlled for in this literature.
3. Tibesigwa et al. 2016.
4. Siegrist 1996, 2017.
5. Gallie et al. 2021.
6. Green and Heywood 2023.
7. Freeman 1995.
8. The theory remains subject to the proviso that neither economic growth nor increases in real wages reveal the full picture of economic progress for workers because of the environmental degradations that have not been accounted for in prices.
9. Armstrong et al. 1991.
10. These late 20th-century trends are shown in detail in my earlier book (Green 2006).
11. Baaquie et al. 2017.
12. Huang and Huang 2020.
13. Guschanski and Onaran 2022; Henley 2022.
14. Schwellnus et al. 2017.
15. Meloni and Stirati 2023.
16. Atkinson 2003; Green 2006.
17. Schnabel 2020; Visser 2024.
18. Precise comparisons of earnings between countries at any one time are complicated by differences in the ways in which social security and health care costs are paid for; but trends are easier to compare if the funding for social security and health care do not drastically change over time (even though some funding changes do occur, as for example, in the United States (Howell and Kalleberg 2019).
19. Boeri et al. 2020.
20. Gustafsson and Wan 2020.
21. Huang and Huang 2020.
22. OECD, “Publications: Insights and Context to Inform Policies and Global Dialogue,” <https://www.oecd-ilibrary.org/sites/ad47bc5e-en/index.html?itemId=/content/component/ad47bc5e-en#section-d1e7500>, accessed December 8, 2023.
23. Gould and Kandra 2022. Some people at this level may be better treated in the income distribution as quasi-equity holders rather than salary earners (Mohun 2016).
24. For the UK, see Teichgraber and Van Reenen 2021.
25. Howell and Kalleberg 2019.
26. It is important to recall that the 90/10 decile does not capture trends in extremely high incomes or in wealth inequality, which for some countries has continued to rise.
27. Blau and Kahn 1997.
28. OECD 2014a.
29. Sen 1973.
30. Gould and Kandra 2022.

Chapter 5

1. Source: EWCS.
2. Sennet 1998.
3. Source: my analysis of the British Skills and Employment Survey and the ISSP. Economists who might be skeptical of direct statements of preferences might alternatively be convinced by experimental evidence, which shows that high-ability US students would be prepared to give up 28 percent of their salary in any career job they take in return for a 10 percentage point lowering in the probability of job loss (Wiswall and Zafar 2018).
4. See The International Panel on Social Progress. Accessed December 19, 2023.

5. Gallie et al. 2017a.
6. Greenhalgh and Rosenblatt 1984; Sverke et al. 2006; Bakker and Demerouti 2007.
7. OECD 2014a.
8. Kalleberg and Vallas 2018.
9. Leschke and Scheele 2024.
10. Sennett 1998.
11. Bourdieu 1998.
12. Dickerson and Green 2012.
13. The risk of automation has been found to be greater among those with already-poor health (Hessel et al. 2018). Urbanaviciute et al. (2019) demonstrate reciprocal causality between insecurity and poor health and consider how this can sustain a reinforcing cycle of deprivation.
14. For a somewhat more detailed review of these issues and of some high-quality studies, see Green (2020).
15. See Eurofound 2019. Kong et al. (2015) find that career expectations are positively associated with job satisfaction; in qualitative research Van der Weijden and Teelken (2023) report large negative effects from poor career prospects among postdoc researchers.
16. Kim et al. 2017.
17. Green 2011. The descriptor “large” would seem apt for changes above 20 percent of the standard deviation.
18. E.g., Cottini and Ghinetti 2018; Caroli and Godard 2016.
19. Horowitz 2016; Boini et al. 2020.
20. Kopasker et al. 2018, 191.
21. Llosa et al. 2018.
22. Rajani et al. 2016
23. Högnäs et al. 2022.
24. Burchell 1994; Green 2011; Kim and von dem Knesebeck 2015; Otterbach and Sousa-Poza 2016; Rosa et al 2018; Watson and Osberg 2018.
25. Bertoni et al. 2023.
26. Iliescu et al. 2017.
27. Cheng and Chan 2008; Otterbach and Sousa-Poza 2016; Kim et al. 2020.
28. Glavin 2015.
29. Law et al. 2020
30. Guarnaccia et al. 2018; Menendez-Espina et al. 2019; Minnotte et al. 2018.
31. Utzet et al. 2020.
32. Piotrowski et al. 2015; Lim 2018; Kalleberg 2018.
33. Jahoda et al. 2002.
34. Green 2011.
35. Bhatti et al. 2015.
36. Kalecki 1943.
37. Bowles 1985; Shapiro and Stiglitz 1984; Green and Weisskopf 1990; Campbell et al. 2007.
38. Green 2009; Emerson et al. 2018.
39. Standing 2011.
40. Armstrong et al. 1991; Glyn 2006; Kalleberg 2018.
41. Kalleberg and Vallas 2018.
42. OECD 2018b.
43. Source: OECD statistics. The ratio and its trend depend on family circumstances and on the duration of unemployment. My illustration is for a couple at the low end of the wage spectrum whose finances are more likely to be precarious.
44. Eurofound 2021.
45. Green 2006, 131–142; Brochu and Zhou 2009; Manning and Mazeine 2024.
46. Green 2009; Inanc and Kalleberg 2022.
47. Ribar and Wooden 2020.
48. Choonara 2020.
49. Piasna 2020; also see “Platform Work, a Booming Economy of Unknown Scale with Agnieszka Piasna,” Digital Future Society, November 18, 2020, <https://digitalfuturesociety.com/qanda/platform-work-a-booming-economy-of-unknown-scale-agnieszka-piasna>.
50. Kalleberg 2018; Murphy and Turner 2023; St Denis 2021, 2023.

51. An alternative defense of the view that that this is an era of falling job stability derives from figures about the form and stability newly created jobs. These show much larger proportions of workers in less stable forms of employment. However, to use the data surrounding new jobs to predict how the overall composition of jobs is changing, one must also take account of the jobs that are terminated, many of which are also unstable.
52. [St-Denis 2021](#).
53. For Europe the composite index, described in [Eurofound \(2012\)](#), is included in the public data file. For South Korea very similar methods were followed; see [Lee and Green \(2025b\)](#). A limitation of some of this evidence, for a small minority, is that it covers each worker's main job. A proportion of cases of new forms of employment, including platform work, might be missed if they are performed as a secondary job.
54. Source: British Skills and Employment Survey.
55. [Sutela et al. 2019](#).
56. Inequality is measured here by the coefficient of variation of the index.
57. [Green 2006](#), 119; [Brochu and Zhou 2009](#).
58. [Pfortner et al. 2019](#)
59. [Moffit et al. 2023](#).
60. [Manning and Mazeine 2024](#).
61. [Kalleberg 2018](#).

Chapter 6

1. Historians now attribute the stunted growth trajectories in the early industrial age of English factory workers in part to their very long work hours and poor nutrition (e.g., [Nicholas and Steckel 1991](#)).
2. [Reick 2019](#).
3. [Sassoon 2019](#), 367–364.
4. [Keynes 1930](#).
5. [Wang et al. 2022](#).
6. [Choi et al. 2020](#).
7. In some cases, higher hourly pay might lead to a preference for fewer hours because people may find they can earn what they need in a shorter time—known in economics as the “backward-bending labor supply curve.”
8. [Rubery et al. 2005, 2016](#); [Cassar and Meier 2018](#); [He et al. 2021](#); [Piasna 2024](#).
9. [Härmä 2006](#).
10. [Kivimäki et al. 2015a](#); [Kivimäki et al. 2015b, 2020](#); [Avgoustaki and Frankort 2023](#). See also [Virtanen et al. 2012](#) and, specifically for health-care occupations, [Michie and Williams 2003](#).
11. [Buxton and Okechukwu 2015](#).
12. [Wang et al. 2022](#).
13. Data from the US General Social Survey.
14. [Boini et al. 2022](#).
15. [International Agency for Research on Cancer 2020](#)); [Sweeney et al. 2020](#); [Szekiela et al. 2021](#).
16. [Gilbert 2011](#), 340.
17. [Okulicz-Kozaryn and Golden 2018](#).
18. [Müller et al. 2018](#).
19. [He et al. 2021](#).
20. [Albertsen et al. 2014](#).
21. [Tammelin et al. 2017](#).
22. [Henly and Lambert 2014](#)); [Scholarios et al. 2017](#).
23. [Wooden et al. 2009](#); [Angrave and Charlwood 2015](#).
24. [Wunder and Heineck 2013](#).
25. [Belloni et al. 2022](#); [Choi et al. 2020](#).
26. [Green and Potepan 1988](#).
27. Implementation was not immediate in member countries, and the directive was amended and enlarged in 2003.
28. [Askenazy 2013](#).
29. [Green and Potepan 1988](#); [Green 1997](#); [Fakih 2014](#); [Forth and Bryson 2018](#).
30. [Piasna 2024](#).
31. [Campbell and Brosnan 1999](#).

32. Felstead 2022.
33. Rodriguez-Modrono and Lopez-Igual 2021; Berg et al., 2023; Yang et al. 2022.
34. Green et al. 2013; Eurofound 2021; Venn et al. 2016.
35. OECD Statistics publishes data derived from national accounts; see <https://stats.oecd.org/index.aspx?DataSetCode=ANHRS>; consulted April 30, 2024 (later archived). Average annual hours worked is defined as the total number of hours actually worked per year divided by the average number of people in employment. The statistic covers employees and the self-employed, allows for overtime and for leave of multiple types and for the changing proportions of part-time workers. The trends can be observed with confidence, but precise comparisons between nations are unsafe, owing to differing accounting conventions. Moreover, although “actual” working time is the measured concept, I do not feel confident that all unpaid working time is always included, given the blurred boundaries between work and nonwork spheres.
36. Notwithstanding small-scale experiments with a four-day week, see The-results-are-in-The-UKs-four-day-week-pilot.pdf
37. Eurofound 2012; Green et al. 2013.
38. Sutela et al. 2019.
39. Source: British Skills and Employment Survey, author’s analysis.
40. Total working time will be greater for those with multiple jobs.
41. See appendix tables.
42. Lee and Green 2025b.
43. Eurofound 2016b, 62–64.
44. Davies and Felstead 2023.

Chapter 7

1. Sayers 1998, 2005; Spencer 2009; Grote and Guest 2017; Guest et al. 2022.
2. Ryan and Deci 2000; Martela and Riekkki 2018; Zhao et al. 2022. I need not engage here with the debate as to whether this need is historically contingent or universal.
3. Bonvin 2012.
4. Tortia 2008; Benz and Frey 2008; Gallie et al. 2017b.
5. Attewell 1990; Green 2013.
6. Martela et al. 2018.
7. Examples include Warr 2007; Chung-Yan 2010; Gallie et al. 2012; Gallie 2013a; Chen et al 2015; Wheatley 2017; Belloni et al. 2022.
8. Duijts et al. 2007.
9. Martela and Riekkki 2018; Nikolova and Cnossen 2020; Saari et al. 2022.
10. Bartling et al. 2014; Ferreira et al. 2020; Buffat et al. 2023; Reis et al. 2023; Vij et al. 2024.
11. Allen and van der Velden 2001; Okay-Somerville and Scholarios 2013; Ilieva-Trichkova and Boyadjieva 2021; Heyes and Tomlinson 2021.
12. Chung-Yan 2010; Arntz et al. 2024.
13. Tählin 2007; Gallie and Zhou 2013; Le Grand and Tählin 2017; Williams et al. 2024. See my earlier books (Green 2006, 2013) for an analysis of the contrasting perspectives of economics, sociology, and psychology to autonomy and to skills.
14. I find that this proposition is in the same spirit as Kaufman and Miller (2011), who argue that the choice to expend resources on high-involvement human resource management should be analyzed as the outcome of a profit maximization decision, rather than an unenlightened guess by managers.
15. This summary and the next paragraph owe much to the excellent, interdisciplinary assessment and overview by Boxall and Winterton (2018).
16. See Green (2008) for a formal model and some evidence of how decision latitude can be higher for more committed workers.
17. Bartling et al. 2012.
18. Friedman 1977; Abgeller et al. 2024.
19. Autor et al. 2003; Goos and Manning 2007; Kalleberg 2011.
20. Osterman 2000.
21. Batt and Appelbaum 2017; Weil 2019.
22. Interestingly, one of the 21st century’s recent innovations, algorithmic management, seems to signal a return to form, with evidence that it is being used differentially to lower the autonomy of low-skilled workers (Gensler and Abendroth 2021).

23. Verhaest and Van der Velden 2013; Kiersztyn 2013; Green and Henseke 2016; Holmes and Mayhew 2016; Mok and Neubauer 2016.
24. Sutela 2019; Kalleberg 2011; Wegman et al. 2018; Gallie et al. 2004, 2018; Green et al. 2016.
25. Green and Zhu 2010; Rohrbach-Schmidt and Tiemann 2011; Kiersztyn 2013; Green 2013; Habibi 2019; Habibi and Kamis 2021; Green and Henseke 2021.
26. Eurofound 2012. As noted there, the composite indices are somewhat incomplete. They do not include all aspects of skill use that contribute to this dimension of job quality, which is partly why I have included a separate analysis of skill match.
27. I call the trend “notable” where the coefficient of variation changed by at least 0.03.
28. Gallie et al. 2025.
29. Note that for both South Africa and Israel, further research is suggested to address potentially different trends within a bimodal population.
30. This judgment is reinforced by country-level analyses that connect rising education requirements to changing tasks (e.g., Henseke et al. 2025a).
31. Daugherty and Wilson 2018; Smids et al. 2020.

Chapter 8

1. Observation from Eurofound and International Labour Organization 2019, 33.
2. Bakker and Demerouti 2007.
3. Annink 2017.
4. Stanley and Sebastine 2023.
5. Carmona-Cobo and Lopez-Zafra 2022.
6. Uddin et al. 2023.
7. Collins et al. 2016; Kemp et al. 2013; Sommovigo et al. 2021.
8. Nabawanuka and Ekmekcioglu 2022.
9. Hämmig 2017.
10. McIlroy et al. 2021; Artz et al. 2017.
11. Alshehri et al. 2023; Laschinger et al. 2012; Bentley et al. 2012; Steele et al. 2020.; Zhou et al. 2022; Cerdeira et al. 2023; Neto et al. 2017; Hassan et al. 2015; Brewer and Whiteside 2012; Steiner and Wooldredge 2015.
12. Nielsen et al. 2016; Leach et al. 2017.
13. Törnroos et al. 2020.
14. Fitzgerald and Cortina 2018.
15. De Haas et al. 2009; Mathisen et al. 2021; Buchanan and Fitzgerald 2008.
16. Törnroos et al. 2020; Zhou et al. 2022; Timming et al. 2024; Bernstein and Trimm 2016.
17. Tokarev et al. 2017.
18. Adams-Prassl et al. 2024; Folke and Rickne 2022.
19. Such connections should not be conceived as deterministic: organizations do not function like clockwork, and organizational misbehaviors and behaviors form a distinct and important area of study (Ackroyd and Thompson 2022).
20. Eurofound and International Labour Organization 2019.
21. Fitzgerald and Cortina 2018; Fitzgerald et al. 1997; Hersch 2015. For a review of theoretical perspectives on sexual harassment, see also McDonald 2012.
22. de Wet 2014; Laschinger et al. 2012; Tokarev et al. 2017; Cassino and Besen-Cassino 2019.
23. Fitzgerald and Cortina 2018, 216.
24. Cassino and Besen-Cassino 2019.
25. Unlike with other dimensions, the comprehensive *Social Environment* index is not available on a consistent basis from 2005. I therefore discuss only those main components of the *Social Environment* index that were available consistently over time. However, it is worth noting that, as expected, workplace bullying is negatively correlated with both manager and coworker support.
26. The improvement in Finland comes after a modest deterioration over much of the previous decade according to the Finnish Quality of Life Survey (Lehto and Sutela 2009; Sutela et al. 2019).

Chapter 9

1. Xinhua, May 1, 2021. Xi also held that “all work is glorious no matter what the occupation.”
2. E.g., Bob Chapman, CEO of manufacturing conglomerate Barry-Wehmler, Happiness is Hard Work, January 1, 2014.

3. Data extracted from Korean Working Conditions Survey, the British Skills and Employment Survey, and the American Working Conditions Survey.
4. Green 2001.
5. Warhurst and Nickson 2009; Green et al. 2022.
6. This is the economist's traditional assumption of diminishing marginal utility being expressed here as increasing marginal disutility.
7. Bakker and Demerouti 2007.
8. Wang et al. 2022.
9. Creagh et al. 2025; Wang et al. 2018; Cansoy et al. 2021; Granter et al. 2019; Engelbrecht et al. 2020; Hollederer 2022; Montoro et al. 2022; Avgoustaki and Frankort 2023; Zeytinoglu et al. 2007; Sayin et al. 2021; Ozutku and Altindis 2013; Omari and Paull 2015.
10. Boxall and Macky 2014; Pina and Stotz 2015; Čehovin Zajc and Kohont 2017; Müller et al. 2018; Belloni et al. 2022; Henseke (2018).
11. Younès et al. 2018; Lyons et al. 2022.
12. Franke 2015; Skinner and Roche 2021; Doan et al. 2021.
13. Huo et al. 2022. For an earlier study showing some evidence of both interactions, see Parkes et al. 1994.
14. Häusser et al. 2010; Schaufeli 2017.
15. Zou et al. 2024.
16. Li et al. 2020; Avgoustaki and Frankort 2023.
17. Kahn and Cooper 1993.
18. Sutherland et al. 2023.
19. Friedmann 1946; Braverman 1974.
20. Friedman 1977; Edwards 1979.
21. Littler 1982.
22. Green and McIntosh 2001.
23. Forrester 2002; Adams et al. 2000. Dysvik et al. 2014; Green et al. 2022.
24. For an illustration from nursing see Ackroyd and Bolton 1999; or from academia, see Rotenberg and Carlos 2018.
25. Illustrated in Ferni and Metcalfe 1998; Boggis 2001.
26. Cottini et al. 2023.
27. Bain and Taylor 2000; Skott and Guy 2007.
28. Green and McIntosh 2001; Green 2006; Bittman et al. 2009; Felstead et al. 2019; Chesley 2014; Bigi et al. 2018; Green et al. 2022.
29. Grimshaw et al. 2002; Ramioul 2008; Weil 2019.
30. Weitzman and Kruse 1990; Gallie et al. 1998; Appelbaum et al. 2000; Green 2004b; Maschino 2008; Ogbonnaya et al. 2017.
31. Delbridge et al. 1992; Sewell and Wilkinson 1992; Baldry et al. 1998; Harley 1999; Ramsay et al. 2000; Stewart et al. 2010; Rees and Gauld 2017; Bain et al. 2002; Awano et al. 2018; Garcia et al. 2017; Carter et al. 2013; Kalleberg et al. 2009; Omari and Paull 2015.
32. Piasna 2018.
33. Lindsay et al. 2014; Stanton et al. 2014; Felstead et al. 2019.
34. Ackroyd and Bolton 1999; Adams et al. 2000; Zeytinoglu et al. 2007; Hassard et al. 2009; John 2008; Wotherspoon 2008; Beck 2017; Braun 2017; Ogbonna and Harris 2004; Kelly and Moen 2020; Cooke and Bartram 2015; Teeple Hopkins 2017.
35. Taplin 1995; Carter et al. 2013; Caroli et al. 2009; Stewart et al. 2010.
36. Maume and Purcell 2007; Kalleberg 2011; Green 2001, 2006; Burchell 2006; Green and Whitefield 2009; CIPD 2013; Green et al. 2013, 2022; Gollac and Volkoff 1996; Valeyre 2004; Morehead et al. 1997; Allan et al. 1999; Russell and McGinnity 2014; Mustosmaki et al. 2017; Sutela et al. 2019; Gallie and Zhou 2013.
37. Eurofound 2012.
38. Askenazy 2013.
39. See Willis et al. 2008 for an example of de-intensification brought about through union activism among nurses in New Zealand.

Chapter 10

1. Schneider 2022.
2. Source: US Bureau of Labor Statistics; Eurostat.
3. Havet et al. 2020.
4. Source: EWCS.

5. See Chapter 2.
6. Eurofound 2019.
7. Kwon et al. 2021; Kim 2022; Lu et al. 2022; Seo et al. 2024.
8. Lee et al. 2019, 2022.
9. Wang et al. 2023.
10. Mistry et al. 2023.
11. Salazar 2023; Yazdanirad et al. 2023.
12. Bláfoss et al. 2023.
13. Gupta et al. 2022.
14. Waters and Dick 2015.
15. De Cocker et al. 2014.
16. Garza et al. 2023. Kallings et al. 2021; Kilpatrick et al. 2013.
17. Hu et al. 2019; Helgesson et al. 2020.
18. Andersen et al. 2021.
19. Dibowski and Esser 2017
20. For one example among many of pay differentials, see Cole et al. 2009.
21. To illustrate, across Europe some 16 percent of the variation in the *Physical Environment* index in 2015 can be accounted for by just 11 industry dummy variables; this proportion is substantially greater than for the other dimensions of job quality.
22. Knecht et al. 2024.
23. Zhang et al. 2024.
24. Strzemecka et al. 2019.
25. Source: EWCS and US Department of Commerce, Bureau of Economic Analysis <https://www.bea.gov/>.
26. Havet et al. 2020; Bush et al. 2020.
27. It fell also, but by less, among smokers; see Tabuchi and Colwell 2016.
28. Schneider et al. 2021.
29. Eurofound 2021; Sutela et al. 2019.
30. Surveys subsequent to 2000 added additional hazards, including SHS. Any improvements in the composite index from 2000 are understated by a small amount because they do not include the reduced exposure to SHS from 2005.
31. Lee and Green 2025.
32. Source: ISSP, my analysis. Males everywhere report a greater likelihood of hard physical work, but in two countries—the United States and Israel—this gap has been diminishing.
33. Guest et al. 2022.

Chapter 11

1. Lewis and Blitz 2023.
2. Global Slavery Index 2023 <https://www.globallslaveryindex.org/>; ILO, Walk Free, and IOM 2022.
3. Boersma and Nolan 2022; Caspersz et al. 2022.
4. E.g., Garreto et al. 2021.
5. Acemoglu 2001.
6. Lee and Sobeck 2012; Fusaro and Shaefer 2016.
7. Deery et al. 2019; Press 2022.
8. Adriaenssens and Hendrickx 2019.
9. ILO 2013, para. 49.
10. McCann and Fudge 2017, 2019.
11. See Muñoz de Bustillo et al., 2011 and the discussion in Chapter 1. Examples of single-index measures can be seen in Williams et al. 2020 and Eurofound 2021.
12. Alkire and Foster 2011.
13. Rao and Min 2018.
14. Apablaza et al. 2023; González et al. 2021; Sehnbruch et al. 2020; Prieto et al. 2024; Hovhannisyan et al. 2022.
15. Sehnbruch et al. 2021.
16. Lee and Green 2025a.
17. Mathieu and Holmberg forthcoming.
18. Henseke et al. 2025b.

19. Acemoglu and Restrepo 2019.
20. Berg et al. 2023; Green et al. 2023; Lane et al. 2023.
21. OECD 2022; Eurofound 2022.
22. Kowalik et al. 2024; Liu and Renzy 2025.
23. Anwar et al. 2023.
24. Aksoy et al. 2022; see also Walker and Quinio 2024.
25. Aksoy et al. 2022.
26. OECD Employment Outlook 2023.
27. Davies and Felstead 2023; a picture of the impact of the pandemic on job quality across European countries will emerge from the publication of findings from the European Working Conditions Survey 2024.

Chapter 12

1. Manning 2003. In parallel, evidence has accumulated, also, showing that management practices, as well as individual managers, make significant differences to workers' productivity (Roberts and Shaw 2022).
2. Michie and Williams 2003; Bernstein and Trimm 2016; Li et al. 2024.
3. Guest 2017.
4. Murphy et al. 2022; Maravelias 2009; Hull and Pasquale 2018; Harvey 2019; Fida et al. 2022. This negative assessment of corporate wellness programs is not intended to downplay the significance of corporate social responsibility in public life.
5. De Neve et al. 2024.
6. Edmans 2012; De Neve et al. 2024.
7. Lowe 2010; Guest 2017.
8. American human resources and management scholar Paul Osterman (2018) nicely dissects the problems of pursuing a "high-road" strategy in low-wage industries, including lack of evidence of mutual gain potential except in special case studies.
9. A rather hopeful blueprint for such a mutual gain scenario was set out in 2022 by the Biden Administration in the United States, through the adoption of a "job quality toolkit," intended as a guide for progressive employers.
10. Osterman 2020.
11. Hirschmann 1970.
12. Li et al. 2020.
13. Sweet and Moen 2012; Harms et al. 2018.
14. Fleming 2024.
15. Hirsch and Schnabel 2014.
16. Green and McIntosh 2001; Hipp and Givan 2015; Bryson and Green 2015; Hoque et al. 2017; Simms 2017; Artz et al. 2022; Jin 2023.
17. Schnabel 2020.
18. Wajcman 2018; Berg et al. 2023.
19. For an example of this social justice rationale as a distinctive moral perspective on policy, see Sisson (2019).
20. Deakin and Green 2009.
21. Dickens et al. 1999; Schmitt 2013.
22. See International Labour Standards| International Labour Organization (ilo.org). <https://www.ilo.org/international-labour-standards>
23. de Luna 2024.
24. This proposal would require, first, the development of a robust measurement infrastructure. Warhurst and Knox 2022.
25. Press release, US Department of Labor 2021 www.commerce.gov/news/press-releases/2021/09/department-commerce-kicks-new-job-quality-initiative-help-ensure.
26. OECD 2017; UNECE 2015; Eurofound 2024.
27. UNECE 2015.

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Index

For the benefit of digital users, indexed terms that span two pages (e.g., 52–53) may, on occasion, appear on only one of those pages.

- accidents, 37–41, 77, 99, 103, 120, 122, 198–204
- adaptation, 34, 38–41
- affluence theory, 46–48, 54–55, 59–60, 64–71, 77–81, 100–102, 130–133, 151–155, 162–165, 170–171, 179–180, 186, 220–221
- Afghanistan, 219, 221–222
- AI, 49–51, 116, 162–165, 201, 213, 226, 227–230, 245–246. *See also* Artificial Intelligence
- Albania, 66
- algorithmic management, 49–50, 132, 227–228, 257 n.22
- alienation, 147
- always-on culture, 132
- American, *See* United States
- anxiety, 39, 95–97, 129
- Argentina, 19–20, 59, 67
- Aristotle, 5–6
- Artificial Intelligence, 3–4, 43–44, 80–81
- Atkinson, Tony, 88, 254 n.16
- Australia, 17, 38–40, 218
 - Autonomy and Skill in, 160–161, 165
 - Earnings in, 79–80, 82, 86
 - Physical Environment in, 200
 - Prospects in, 97, 104–107, 113, 114
 - Social Environment in, 167–170
 - Work Intensity in, 187–190, 193–194
 - Working Time Quality in, 122–123, 129, 132–134, 140, 141, 144
- Austria, 38–39, 51–52, 57
 - Work Intensity in, 191
 - Working Time Quality in, 134
 - Social Environment in, 175–176
- automation, 50, 92, 97, 132, 164–165, 209, 255 n.13 *See also* AI
- autonomy, 4–5, 7–8, 25, 26–27, 32–33, 37–38, 50, 51, 56, 57–60, 92, 97, 124, 147, 167, 169, 181, 184, 186, 217, 223, 224, 229. *See also* Autonomy and Skill
- Autonomy and Skill, 8, 11–13, 15–16, 26–27, 31, 39–40, 55–60, 62, 64, 66, 147, 214, 224, 232–233, 250 n.31
- availability heuristic, 100–101
- bad bosses, 53
- bad jobs, 13, 19–21, 24–25, 34, 42, 186, 196–197, 219–221, 235–236, 239–240
 - Alkire–Foster method, 223–225
 - dead-end jobs, 220–221
 - dirty work, 221–222
 - multiple deprivation, 222–223
 - unacceptable work, 222–223
 - wellbeing method, 225
- Bangladesh, 168, 201–202
- bargaining power, 47–48, 59–60, 77–81, 104–105, 189, 214
- Belgium, 15, 57, 122–123, 134, 156, 165, 191
- Braverman, Harry, 154
- breast cancer, 127
- Britain, 28–30, 38–39, 51–52, 57, 229. *See also* United Kingdom
 - Autonomy and Skill in, 155–156, 164
 - Earnings in, 80, 91
 - Insecurity in, 97, 106, 107, 109
 - Physical Environment in, 199–200, 205
 - Social Environment in, 168, 175–176
 - Work Intensity in, 183–184, 186–192
 - Working Time Quality in, 122–123, 129, 130, 138, 145–146
- buffer hypothesis, 27, 167, 168–169, 244
- Bulgaria, 38–40, 66, 86, 191
- bullying, 10, 53, 61, 67, 167–173, 175–176, 178, 179–180, 214. *See also* harassment
- bureaucratic control, 154
- burnout, 26–27, 32–33, 168, 182–186, 188–189
- business cycle, 35–36, 101, 102, 116, 214
- Canada, 56–57, 79–80, 88, 105–106, 131–132, 168–169, 171–172, 183

- Capability approach, 4–5, 19–22, 43, 54–68, 149, 165, 201, 214, 218, 244–245, 254 n.1
- cardiovascular disease, 125–127, 199–200
- career advancement, 97, 99–100, 102, 105, 108, 109, 112, 115–117
- child labour, 4, 237, 238–239
- Chile, 19–20, 59, 86, 149–150, 224–226
- China, 19–20, 35–39, 219
- Earnings in, 77–78, 82
- Physical Environment in, 203–204
- Social Environment in, 168–169
- Work Intensity in, 181, 184, 185
- Working Time Quality in, 128
- circadian rhythms, 127
- climate change, 3–4, 43–44, 46–47, 116, 199–200, 226, 231
- collective voice, 226, 236–237
- commitment, 7–9, 49, 78–79, 94, 102, 152, 234–235
- commuting, 50, 229
- competence, 5, 26–27, 97, 147–149, 162–163, 168. *See also* skill
- competition, 11, 77–80, 152, 202, 220, 235–237, 242
- conversion factors, 31, 33, 34, 124, 167
- corporatist economy, 51–52, 152, 236–237
- cost of job loss, 93–100, 105, 117–118, 214
- Costa Rica, 19–20, 59, 67
- COVID–19 pandemic, 20, 42, 43–44, 49, 51, 86, 91, 116, 133, 145–146, 152, 166–167, 213, 227–230, 233, 243, 245–246, 249 n.6, n.27
- Croatia, 86, 158
- Cyprus, 40, 67–68, 86, 156, 205
- Czech Republic, 40, 109, 158, 174–176, 191
- dead-end job. *See* bad jobs
- decent work, 3–4, 18, 21, 31, 117–118, 120, 148, 222, 246, 249 n.9
- decision latitude, 32–33, 53, 152, 257 n.16
- See also* autonomy
- de-intensification of work, 64, 186–191, 194–196, 214, 259 n.39
- demand-control-support model, 7–8, 27, 151, 167, 182–184
- demands-resources model, 23–24, 94, 199–200
- dementia, 127
- Denmark, 40, 57, 58, 66, 128, 134, 140, 174–176, 191, 200, 206
- depression, 39, 97, 99, 129, 182–185
- economic, 101–103, 120
- deprivation of capabilities, 199–201, 218–223—225, 235–236, 240–241, 250 n.41, 255 n.13
- deprivation of job quality. *See* deprivation of capabilities
- deregulation, 47–48, 103–104, 133–134
- deskilling, 5–6, 154
- de-standardization of work times, 133. *See also* standardized model of working time
- diabetes, 125–127
- digital control of work, 154. *See also* algorithmic management
- dirty work. *See* bad jobs, dirty work
- disutility, 6–7, 123, 124, 199. *See also* utility
- marginal, 124, 259 n.6
- Earnings, 10–13, 15–16, 26, 27, 54–57, 63, 64, 68, 75, 118, 147–148, 169–170, 214, 218–223
- future earnings, 10, 93–95, 97, 104–105, 118, 226
- earnings inequality, 80, 86, 87, 90–91, 214
- earnings quality, 55, 75, 232–233
- Easterlin paradox, 43, 76, 251 n.41
- Eastern Europe, 82, 88, 105–113, 118, 133–134, 136, 144, 179–180, 191, 229
- economic growth, 3, 24, 35–36, 43–48, 51–52, 55–60, 62, 64–68, 213–218, 224–226, 231. *See also* GDP, growth of
- and Autonomy and Skill, 153
- and Earnings, 77–86, 90–91, 254 n.8
- and Prospects, 100–101, 116
- and Social Environment, 172
- and Work Intensity, 186
- Edgeworth, Francis, 22
- education, 5–6, 16, 29, 34, 43–44, 151, 155–156, 217, 224, 229, 235–236, 238–239, 244
- field of, 24
- higher, 154–155
- policy, 153
- requirements, 258 n.30
- special, 251 n.18
- system, 47
- effort-biased organizational change, 187–189
- effort-biased technological change, 187–189
- effort-reward imbalance, 76–77, 94
- Egypt, 224–225
- eight-hour day, 122–123, 138
- El Salvador, 19–20, 59
- emotional exhaustion, 97, 183
- employability, 24–27, 97, 196–197

- employment insecurity, 57, 92, 93–102, 214
- employee involvement, 58, 148, 159, 170, 209, 257 n.14. *See also* [high involvement work organization](#)
- employment policy, 3–4, 52, 238
- employment regimes, 52, 58, 59–60, 189–190
- employment security, 27, 94–95. *See also* [employment insecurity](#)
- engagement, 26, 32–33, 39–40, 50, 167, 234–235
- Equal Employment Opportunity Commission, 173
- Eritrea, 219
- Estonia, 82, 86, 136
- ethnicity and job quality, 70, 76–77, 102, 151, 166, 169, 228, 241–242, 244
- eudaemonic wellbeing, 4–5, 22–23, 39–40, 244–245
- European Trades Union Institute, 35
- European Working Conditions Survey, 19–20, 40, 55, 173, 191, 205
- European Agency for Safety and Health at Work, 202–203
- European Foundation for Living and Working Conditions, 9, 27–28, 209–210
- European Trades Union Institute, 35
- European Union, 3, 35, 49, 58, 91, 103–104, 131, 133–134, 136–138, 156, 189–190, 198, 203–205
- European Working Conditions Survey, 19–20, 40, 55, 60–61, 66, 158, 175–176, 190, 205
- EWCS. *See* [European Working Conditions Survey](#)
- exit and voice, 235–237
- external effects, 18, 95, 120–121, 127, 185, 238, 244
- externalities. *See* [external effects](#)
- financial crisis, 35–36, 44, 52, 57, 59–61, 80–81, 116, 118, 140, 160. *See also* [Great Recession](#)
- Finland, 15, 17, 19–20, 57, 58–59, 66
 - Autonomy and Skill in, 149–150, 155, 156–157
 - Insecurity in, 109
 - Physical Environment in, 205
 - Social Environment in, 175–176, 258 n.26
 - Work Intensity in, 189–191
 - Working Time Quality in, 134, 136–138
- fissured workplace, 48, 53, 154, 188
- flexibility for employers, 128, 188
- flexibility for workers, 10–11, 29, 46, 122, 147–148, 214, 228–229, 232–233
- flexible employment policies, 47–48, 103–105, 238
- flexicurity. *See* [flexible employment policies](#)
- forced labor, 20, 218–223, 224–225, 235–236, 238–241
- Ford, Henry, 6–7
- Fordism, 6–7, 49
- fragmentation
 - of work, 124–125, 132
 - of working time, 132, 144
- France, 19–20, 52, 57, 67, 80
 - Autonomy and Skill in, 150, 156–157
 - Social Environment in, 174–176
 - Work Intensity in, 184, 189–191, 193, 198, 206–207
 - Working Time Quality in, 122–123, 131–132, 136
- Franco, Francisco, 79–80, 82
- Freeman, Richard, 77–78
- fringe benefits, 29
- Front Populaire, 131
- GDP, growth of, 43, 84, 214. *See also* [economic growth](#)
- Gender differences, 8, 27–29, 34, 47, 57–58, 62, 70, 214–217, 241–242, 244
 - in Earnings, 80–81, 86, 90–91
 - in Prospects, 97, 102, 107, 109, 113–117
 - in Working Time Quality, 124, 136, 139–140, 142–144
 - in Autonomy and Skill, 151, 156–157, 159–161, 165
 - in Social Environment, 166–167, 169–178
 - in Work Intensity, 191, 193, 194–196
 - in Physical Environment, 214, 217
- Germany, 38–39, 51–52, 57, 58, 252 n.5
 - Autonomy and Skill in, 150, 155–156
 - Earnings in, 80, 86
 - Physical Environment in, 201–202
 - Prospects in, 99, 105–106, 117–118
 - Work Intensity in, 183
 - Working Time Quality in, 128–129, 134
- gig work, 48, 103–104. *See also* [platform work](#)
- global warming. *See* [climate change](#)
- Great Recession, 39, 82, 104–105, 117–118, 136, 213–214. *See also* [financial crisis](#)
- Greece, 57–58, 66
 - Earnings in, 82, 84, 86, 88
 - Prospects in, 118

- Greece (*Continued*)
 Physical Environment in, 204–207
 Social Environment in, 174–175
 Work Intensity in, 183, 191
 Working Time Quality in, 138
- Greenan, Natalie, 57
- Guatemala, 19–20, 59, 67
- Guest, David, 232–233
- Habituation. *See* adaptation
- happiness, 22–24, 35–36, 76, 77, 128, 181–182, 244–245, 250 n.2
- harassment, 10, 34, 61, 67, 166, 214, 226, 232–233, 241–242. *See also* bullying
- Hartz reforms, 117–118
- hazard, 10–11, 37, 127, 198, 220, 226, 238, 241–242
 public health, 120–121, 196–197
- HDI. *See* Human Development Index
- heart disease, 125–126. *See also* cardiovascular disease
- hedonic wellbeing, 4–5, 22–23, 244–245
- Herzberg, Frederick, 7–8
- high involvement management practices. *See* high involvement work practices
- high involvement work organization. *See* high involvement work practices
- high involvement work practices, 49, 53, 153, 169, 188–189, 232–233, 257 n.14
- holidays. *See* vacations
- home working, 43–44, 50, 51, 132, 133, 145, 152, 166–167, 180, 198, 228–229. *See also* hybrid working
- Honduras, 19–20, 59
- Household Income and Labour Dynamics in Australia, 60–61, 113, 160, 178
- Howell, David, 56
- Human Development Index, 13, 43, 66, 70, 134
- human resource management, 46, 120–121, 179, 232–235
- Hungary, 17, 109, 156, 229
- hybrid working, 43–44, 50, 51, 133, 145–146, 166–167, 180, 229, 243. *See also* home working
- hypertension, 127, 199–200
- Iceland, 82
- identity, sense of, 22–23, 92–94, 166–167
- ILO. *See* International Labour Organization
- India, 77–78, 168, 219
- Indonesia, 77–78
- industrial revolution, 43–44, 49, 54, 80–81, 122, 198
- inequality
 Autonomy and Skill inequality, 57–58, 154, 156, 159–160, 165
 Earnings inequality, 56–58, 80, 85–91
 Income inequality, 35–36, 43
 job quality inequality, 19, 47, 50–51, 58, 214, 217, 238–239
 Physical Environment inequality, 57–58
 Prospects inequality, 109, 113, 117, 256 n.56
 Social Environment inequality, 170, 177
 Work Intensity inequality, 191, 193, 194–196
 Working Time Quality inequality, 57–58, 136, 139, 144
- informal employment, 24–25, 120, 228, 237, 243, 249 n.6
- interdisciplinary perspective, 7, 23, 68, 245
- internal labor market, 102, 104
- International Labour Organization, 3, 21, 31, 148, 219, 222, 240–241, 245, 249 n.6, n.9
- Ireland, 57, 67–68, 82, 85–86, 104–105, 164, 189–191
- Israel, 84–86, 115–116, 142, 143, 160–161, 163, 178–179, 258 n.29, 260 n.32
- Italy, 38–39, 57, 66–67, 252 n.5
 Autonomy and Skill in, 156, 165
 Earnings in, 82
 Prospects in, 108–109
 Social Environment in, 168, 175–176
 Work Intensity in, 189–191
 Working Time Quality in, 134
- Japan, 15
 Autonomy and Skill in, 150, 160–161, 163, 164
 Earnings in, 82, 84
 Physical Environment in, 204
 Prospects in, 115–116, 118
 Social Environment in, 178–180
 Work Intensity in, 188
 Working Time Quality in, 136, 143, 144
- job crafting, 45–46, 147–148, 235–236
- job insecurity, 16, 36–37, 92, 236, 238. *See also* job security
- job quality framework, 9
- job satisfaction, 7–9, 29, 33–35, 37–41, 94, 149–151, 168–169, 183, 185, 199–200, 221–222, 236–237, 251 n.35, 255 n.15
- job security, 8, 10, 27, 51–52, 55–56, 92, 241–242. *See also* job insecurity

- job stability, 106–107, 255 n.51
- job strain, 13–14, 32–33, 42, 57, 68, 94–95, 133, 167, 183–184, 228, 244–245
- job tenure, 92, 96, 107
- job–person fit, 24–25, 149. *See also* skill underutilization
- Just–In–Time production, 188
- Kalecki, Michal, 101–102
- Kalleberg, Arne, 56, 120
- Karasek, Robert, 32–33
- Keynes, John Maynard, 101, 123
- Keynesianism, 103, 134–135, 146. *See also* Keynes, John Maynard
- knowledge economy, 153–155, 157–158, 164, 165, 186, 187
- Korean Working Conditions Surveys, 60–61, 160, 207
- Kuwait, 219
- Labour market deregulation, 47–48, 103–104, 132, 133–134
- labor market insecurity, 94–95, 105–117, 119, 171–172. *See also* employment insecurity
- labor supply, 31–32, 101, 124–125, 129–130, 146, 256 n.7
- labor unions. *See* unions
- Latvia, 67–68, 82, 109, 156–157, 174–176, 206–207
- lean production, 50, 154, 184, 188–189
- liberal market economy, 51–52, 79–80, 88, 118, 134, 152, 236–237
- life satisfaction, 15, 18–19, 22–23, 35–36, 44, 75–76, 97, 149–150
- Lithuania, 67, 82, 84, 109, 136, 191, 204
- long hours of work, 15, 125–126, 128, 131, 133–134, 136–141, 143–144, 181–182, 185, 190, 220, 221–222. *See also* working time duration
- Luxembourg, 57, 175–176, 191
- Malaysia, 168–169
- Malta, 60–61, 164
- Malthus, Thomas, 5–6, 44
- Marienthal, 99
- Marx, Karl, 6, 31, 44, 101, 154, 187–188
- Mauritania, 219
- meaningful work, 15–16, 26–27, 31, 39–40, 147–149, 165, 199–201, 221–222
- meaningfulness, 7–8, 27, 37–41, 56, 92, 150–151, 160–163, 214, 244–245. *See also* meaningful work
- Mexico, 82, 88, 221–222
- migrant worker, 38–39, 187, 221–222, 225, 228, 240–241
- minimum standards, 201–202, 223–224, 241–242
- minimum wage, 47–48, 56, 78–79, 104–105, 223–225, 237, 239, 241–242
- Mitterand, François, 131
- modern slavery. *See* forced labor
- monopsony power, 56, 231–232
- Montenegro, 66
- motivation, 7–8, 32–33, 39–40, 70, 120
- mutual gain, 8–9, 231–235, 242, 261 n.8, n.9
- Myanmar, 204
- neoclassical economics, 7–8, 250 n.37
- neo–Fordism, 49, 55–56
- Netherlands, 43–44, 81–82, 86, 88, 156, 157–158, 174–175, 191, 252 n.5
- New Zealand, 40, 79–80, 115–116, 122–123, 142, 143, 160–161, 163, 168–169, 179, 183, 189–190, 259 n.39
- Nicaragua, 19–20, 59
- night shift, 10, 50, 126–127, 132, 136, 138–141, 143–144, 146, 214
- nonstandard work, 106–107, 128, 133
- Nordic countries, 51–52, 58, 59–60, 66, 88, 118, 134–135, 152, 168–169
- North Korea, 219
- Northern Europe, 52, 109
- Norway, 58, 66, 67, 136–138
- Nussbaum, Martha, 24
- obesity, 127
- Occupational Safety and Health Administration, 202–203
- OECD. *See* Organization for Economic Cooperation and Development
- Okun's law, 100–101
- Organization for Economic Cooperation and Development, 3, 24, 35, 37, 55, 80, 82, 84, 86, 88–90, 104–105, 118, 120, 148, 213–214, 228, 229, 245
- organizational climate, 171–172
- overeducation, 150–151, 154–156
- overemployment, 129
- overqualification. *See* overeducation
- Pakistan, 221–222
- Panama, 19–20, 59

- participation at workplace. *See* [employee involvement](#), [high involvement work organization](#)
- participation in labor force, women's, [47](#), [107](#)
- part-time jobs, [82](#), [102](#), [106–107](#), [131](#), [257](#) n.35
- pay, [12](#), [24–25](#), [29](#), [39](#), [43–44](#), [46–47](#), [50–51](#), [54–55](#), [75](#), [102](#), [124–125](#), [128](#), [132](#), [185](#), [188–189](#), [202](#), [221](#), [234](#), [241–242](#), [256](#) n.7
See also [Earnings](#)
- high pay, [8](#), [10](#), [49](#)
- low pay, [8–10](#), [23](#), [38–39](#), [47–48](#), [80–81](#), [218](#), [220–222](#), [225](#), [235](#), [261](#) n.8
- pay gap. *See* [gender differences in Earnings](#)
- personality, [27](#), [61](#), [97](#), [171–172](#)
- Philippines, [115–116](#), [142](#), [143](#), [160–161](#), [163](#), [178–179](#), [204](#)
- Physical Environment, [15–16](#), [25](#), [26](#), [37](#), [54–55](#), [57–60](#), [62](#), [67–68](#), [97](#), [198](#), [214](#), [226](#), [232–233](#)
- platform work, [11–12](#), [48](#), [49](#), [78](#), [92](#), [103–104](#), [106–107](#), [124–125](#), [132](#), [180](#), [228](#), [241–243](#), [252](#) n.5, [256](#) n.53
- Plato, [5–6](#)
- Poland, [40](#), [104–105](#), [155–156](#), [174–175](#), [191](#), [203–204](#)
- polarization, [50–52](#), [56](#), [57–60](#), [113](#), [145–146](#), [153](#), [177](#), [194–196](#)
- Portugal, [40](#), [57–58](#), [67](#), [82](#), [109](#), [136–138](#), [156](#), [168–169](#), [174–175](#), [191](#), [252](#) n.5
- power resources, [48–49](#), [103–104](#), [144](#), [152](#), [226](#)
- precariousness, [68](#), [92](#), [214](#)
- preferences, [12](#), [33–34](#), [42](#), [46](#), [104](#), [150](#), [226](#), [244](#), [254](#) n.3
- productivity, growth of, [78–81](#), [90–91](#), [214](#), [226](#)
- promotion, [29](#), [33](#), [109](#), [113](#), [214](#)
- Prospects, [8](#), [10](#), [25](#), [27](#), [36–37](#), [57–58](#), [62](#), [64](#), [66](#), [68](#), [92](#), [214](#), [221](#), [234–235](#), [246](#)
- performance-related pay, [77](#)
- psychological contract, [76–77](#), [94](#)
- psychological wellbeing, [15–17](#), [35–36](#), [77](#), [123](#), [183](#)
- racial harassment. *See* [harassment](#)
- reciprocity, [32–33](#), [235](#), [249](#) n.24
- regime theories, [51–52](#), [66](#)
- regulation, [24–25](#), [45–47](#), [53](#), [97](#), [152](#), [170–171](#), [196](#), [198](#), [201–205](#), [209–210](#), [214](#), [223–225](#), [237–242](#)
- of working hours, [122–123](#), [125–126](#), [131–133](#), [145](#), [146](#), [223–224](#), [226](#)
- See also* [deregulation](#)
- relative income theory, [76–77](#)
- Republic of Korea, [19–20](#). *See also* [South Korea](#)
- responsible autonomy, [152](#), [186](#)
- robots, [49–50](#), [54–55](#), [80–81](#), [165](#)
- role conflict, [26](#), [123–124](#), [146](#)
- Romania, [136–138](#), [191](#), [204](#)
- routine tasks, [50–51](#), [81](#), [153](#)
- Russia, [91](#), [109](#), [122–123](#), [219](#)
- safety at work, [7–9](#), [15–16](#), [26](#), [46](#), [48](#), [53](#), [198](#), [199–203](#), [205](#), [207](#), [209–210](#), [221–222](#), [232–233](#), [241–242](#)
- Saudi Arabia, [219](#)
- SDG8, [3](#). *See also* [Sustainable Development Goal](#)
- second job, [243](#)
- security, [3](#), [26](#). *See also* [employment insecurity](#), [job insecurity](#), [job security](#), [labor market insecurity](#)
- segmented labor markets, [8](#), [102](#)
- self-determination theory, [4–5](#), [26–27](#)
- self-efficacy, [97](#), [236](#)
- self-employment, [132](#), [140](#), [144](#), [187](#)
- Sen, Amartya, [23–25](#)
- Sennett, Richard, [95](#)
- sexual harassment. *See* [harassment](#)
- Siegrist, Johannes, [32–33](#)
- Singapore, [155–156](#)
- Single Index of job quality, case for or against, [13–14](#)
- skill, [8](#), [25](#), [50–53](#), [78–79](#), [101](#), [102](#), [235–237](#), [244](#), [251](#) n.33 *See also* [Autonomy and Skill](#), [competence](#)
- firm-specific, [104](#)
- managerial, [53](#)
- occupational, [236–237](#)
- policy, [233](#)
- requirements, [57](#), [92](#), [214](#), [234–235](#), [258](#) n.26
- transferable, [221](#)
- underutilization, [150–151](#)
- skill-biased technological change, [153](#)
- skilled worker, [91](#), [102](#), [149](#), [164–165](#), [227–228](#)
- skills match, [149–151](#), [155–156](#), [158](#)
- Slovakia, [86](#), [174–176](#)
- Slovenia, [40](#), [156–158](#), [183](#), [191](#), [196](#)
- Smith, Adam, [5–7](#), [11](#), [46](#)
- smoking, [196–197](#), [199–200](#), [202–204](#), [209](#), [214](#), [233](#)
- social class, [8](#), [52](#), [70](#), [151](#), [154](#), [244](#)

- social cohesion, 3, 52, 95
- social dialogue, 148
- Social Environment, 10, 12–13, 15–16, 22–23, 25, 26, 37–40, 55–56, 64, 67–68, 126, 149, 151, 166, 222, 226, 229, 232–233
- social exclusion, 94
- social insurance, 27, 94–96, 104–105, 117, 120, 167, 214, 228, 233, 240–241
- social justice, 120–121, 239–240, 261 n.19
- social progress, 18–19, 42, 60, 70, 93, 122, 147, 153, 172, 189, 209–210, 217, 218, 245–246
- social support, 8, 25, 26–27, 37–38, 97, 151, 166, 184, 214, 221–222
- social trust, 35–36
- socio–technical systems, 7–9
- South Africa, 40, 115–116, 142, 160–161, 163, 171–172, 179, 183, 258 n.29
- South Korea, 15, 17, 66–68, 218, 254 n.5
 - Autonomy and Skill in, 155–156, 160, 164–165
 - Earnings in, 79, 85–86
 - Physical Environment in, 199–200, 204, 207–208
 - Prospects in, 97, 107–108, 113, 116, 118
 - Social Environment in, 178, 180
 - Work Intensity in, 181, 193, 194
 - Working Time Quality in, 122–123, 129, 136, 140–144
- Southern Europe, 47–48, 82, 88, 91, 120, 174–175
- Spain, 38–40, 57–58, 66
 - Earnings in, 78–80
 - Physical Environment in, 204
 - Prospects in, 99, 109
 - Social Environment in, 168, 174–175
 - Work Intensity in, 183, 191, 196
- Sri Lanka, 24–25
- standard work week, 133–134
- standardized model of working time, 130, 132.
 - See also* standard work week
- standards for job quality, 18–19, 201–203, 223, 241–242
- stress, 7–8, 26–27, 37–41, 42, 58, 77, 92–95, 97, 147–149, 167, 168–169, 181–183, 196, 214, 236
- subjectivism, 4–5
- suicide ideation, 97
- Sustainable Development Goal, 3, 240, 246
- Sweden, 19–20, 36–37, 40, 57–59, 66, 86, 109, 134, 169–170, 174–176, 198
- Switzerland, 66–67, 79, 86, 109, 136–138, 143–144, 150, 168, 201–202
- Taiwan, 79–80, 82, 115, 142, 143, 160–161, 163, 179
- task discretion, 33, 58–59, 155, 156, 158, 165.
 - See also* Autonomy and Skill
- Taylorism, 6–7, 49
- teamwork, 49, 147–148, 184, 188
- temporary contract, 23, 50–51, 96, 106–107
- Theorell, Töres, 32–33
- Total Quality Management, 188
- training, 10, 22, 27, 47–48, 58–59, 66, 102, 105, 117, 149, 150–151, 154–158, 160–161, 170, 184, 201, 226, 231–233, 235–236
- trust at work, 94, 165, 176, 214, 234–235
- Turkey, 67, 86, 108, 136–138, 144, 168, 174–175, 183, 204, 219
- Uganda, 24–25
- Ukraine, 91
- underemployment, 129
- unemployed, 22–24, 26, 97, 101. *See also* unemployment
- unemployment, 6, 24–25, 35–37, 43, 47–48, 59, 94–95, 99, 100–106, 109, 112–113, 116, 117–118, 120, 166, 214, 255 n.43
- unions, 39, 48, 71, 81, 122–123, 131, 132–133, 144–145, 172, 187, 202–203, 231, 235–238, 241–242, 246
 - anti–union practices, 56, 103–104
 - de–unionization, 103–104
 - membership, 47–48, 56, 80–81, 180, 186, 225, 237
 - power, 48–49, 56, 129, 152, 203, 237
- United Kingdom, 38–39, 57–58, 81–82, 84, 88, 104–105, 134, 156, 165, 189–190, 252 n.5
 - See also* Britain
- United Nations, 3, 13, 240, 243, 246
- United States, 6–8, 15, 17, 19–20, 29, 35–40, 47–48, 51–52, 56–60, 66, 67, 214, 218–219, 233, 252 n.26, 261 n.9
 - Autonomy and Skill in, 155–156, 159, 165
 - Earnings in, 79–80, 84–91, 254 n.18
 - Physical Environment in, 201–204, 208, 260 n.32
 - Prospects in, 93–95, 103–106, 112–113, 117–118
 - Social Environment in, 168, 170–173, 176–180
 - Work Intensity in, 189–194
 - Working Time Quality in, 122–123, 127, 128, 131–132, 134, 138–140, 143–144
- Uruguay, 19–20, 59

- US General Social Survey, 55–56, 128, 159, 176, 191–193, 207
- utilitarianism, 22, 26, 88
- utility, 30–31, 33, 42. *See also* disutility
marginal, 31–32, 46, 124, 259 n.6
- vacations, 7, 122–123, 130, 131–132, 138–139, 181, 241–242
- value chain, 201–202, 219–220
- Veblen, Thorstein, 76–77
- violence, 10, 127, 167–168, 170, 220
- wages. *See* Earnings, pay
high wages. *See* high pay
low wages. *See* low pay
- Warr, Peter, 31–32
- wellness programs, 231–235, 261 n.4
- Western Europe, 44, 88, 118, 122–123, 134
- WHO–5, 15–16
- Work
complexity of, 26–27, 57, 58–60, 149–151, 153, 156, 162–163
fairness at, 46, 76–77, 148, 170, 172, 232–235, 238–239
future of, 20, 43–44, 54, 71, 146, 226–230
hard, 102, 181–182, 188. *See also* work effort
human-centered, 147–148, 196–197, 209–210, 245–246
low-skilled, 57, 106–107, 228, 257 n.22
monitoring of, 23, 49, 50, 132, 133, 151–152, 172–173, 187–188, 213, 221–222, 229
skilled, 50–51, 76–77, 154–155
work effort, 6–7, 32–33, 49, 76–79, 151–152, 181–183, 234, 249 n.24
- work intensity, 10, 12–13, 15–16, 25, 32–33, 36–40, 50, 57–58, 64, 67–68, 77, 99, 124, 126, 149, 151, 167, 181, 200–201, 214, 218. *See also* work intensification, de-intensification of work
- work intensification, 56–60, 64, 68, 181, 214, 232–233. *See also* de-intensification of work
- work values, 34–35
- workaholics, 185
- worker agency, 4–5, 24–27, 30–31, 42, 123–124, 146, 147–149, 167, 182–183, 199, 201, 214, 220, 244–245
- Working Time Directive, 131–132, 136–138
- working time duration, 10, 51–52, 107, 122, 147–148, 228, 255 n.43
- Working Time Quality, 11–13, 26, 39–40, 50, 54–55, 57–60, 62, 66–68, 122, 181–182, 214, 226, 232–233, 238
- working time scheduling, 106–107, 122, 214
- work–life balance, 16, 24–28, 123–124, 127, 128–130, 145, 168, 182–183, 214, 249 n.29, 250 n.8
- work–life conflict, 16, 97. *See also* work–life balance
- workload, 109, 123, 182, 187, 188–190, 196
- workplace violence, *See* violence
- work-related affect, 37, 39, 149–150
- works councils, 148, 152, 202–203, 225, 237
- World Health Organization, 127, 204
- zero-hours contract, 128

