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# INTRODUCTION TO THE SPECIAL ISSUE ON JOB QUALITY: WHAT DOES IT MEAN AND HOW MIGHT WE THINK ABOUT IT?

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Scholars, employers, and certainly many employees share a perception that how work is organized has radically changed. The long period of relative stability that followed World War II began to erode in the 1970s with the multiple shocks of the oil crisis and accelerating international competition. Many also believe that the computer revolution, which transformed possibilities for managing firms and work processes, hastened change. Diffusion of new organizational models such as the Toyota Production system, not simply into automobiles but into a wide range of service as well as manufacturing industries, also remade employment systems. Distinctive organizational designs, such as the networked model found in the Silicon Valley, emerged. Firms redefined their relationship to their workforce as witnessed by the rise of contingent work and reduced mutual commitment.

These developments are well known and add up to a transformation of work as experienced by employees. What is much less understood is the implication of these developments for job quality. We have yet to arrive at a coherent answer to this essential question. Nor do we understand how outcomes vary across national settings that differ substantially in their labor market institutions.

To begin to answer these questions, in November 2011 the Cornell ILR School and the *ILR Review* sponsored a conference on job quality. That conference brought together scholars from a diverse range of disciplines and countries to assess changes in the job market and the attendant consequences for the workforce. The articles in this special issue were presented at the conference and have subsequently been revised in response to discussions at the conference and suggestions coming out of the *ILR Review*'s review process.

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## Thinking about Job Quality

Jobs have numerous facets and any effort to generalize regarding job quality will be complicated and potentially incoherent. But at the same time the widespread view that we are living through an era of significant shifts in how work is organized demands that we make some effort to characterize what is happening.

Job quality is determined by decisions made by employers regarding the range of working conditions. What drives those decisions? At the risk of over-simplifying, distinguishing between two schools of thought is useful: 1) economic models that emphasize compensating differentials and 2) more institutional perspectives that give weight to sociological and political considerations as well as to more straightforward economic pressures.

The theory of compensating differentials holds that employees trade off all attributes of a job. For example, higher wages (all else constant) are required to compensate for some undesirable job characteristics while, in contrast, an employee would accept lower wages if other characteristics of the job were seen as desirable. Considerable empirical evidence validates compensating differentials, and the implication is that employers must meet a given level of employee utility to attract workers (their "reservation utility"). Just how that is divided up across job attributes is determined by the tradeoffs that the workforce makes. Changes in job quality over time are attributable to the forces that drive the reservation utility required to attract a workforce and therefore are ultimately not determined by considerations internal to the firm.

The more institutional approach also views the classic elements of job design as part of a larger package. In this perspective, firms establish Internal Labor Markets (ILMs), which are administrative rules governing employment practices (Doeringer and Piore 1971; Osterman 1987). These ILMs are bundles of practices—wages, promotions, job content, training, and due process—that cluster together in logical and self-reinforcing ways. Considerable variety occurs across firms in their ILMs, and a good deal of research has gone into understanding how firms decide their overall strategy and what role economic considerations play relative to political and institutional factors such as internal firm politics, countervailing power from unions, slowly changing norms within the firm, and governmental policy (Baron, Dobbin, and Devereaux Jennings 1986; Osterman 2011). This discussion has also bled into public discourse with a debate about how to encourage firms to follow "high road" employment strategies. The core point, however, is that a mixture of forces—economic, social, and political—drive changes in job quality.

When it comes to measuring levels and changes in job quality, one approach is to utilize a summary measure such as job satisfaction or a quality-of-work index. We will discuss these efforts below, and while they certainly provide some information we will also argue that inherent conceptual

limitations render any summary measure problematic. Given this, it seems helpful to begin by stepping back to develop a narrative.

# The Trajectory of Job Quality

The past several decades can be characterized by an increased diversity of circumstances, a pulling apart of job characteristics that used to be bundled together, and a growing inequality along multiple dimensions. Diversity, deconstruction, and inequality: these are in some respects different ways of describing the same phenomenon. To speak of any average or central tendency regarding the trajectory of job quality is increasingly difficult, and, when it comes to describing many specific categories of jobs, the fact that they are "good" on some dimensions is no guarantee that they are high quality on others.

A case can readily be made regarding increased diversity and pulling apart when it comes to outcomes such as wages or benefits—voluminous literature documents the growth of wage inequality. A core fact is that inequality grew within occupational categories, not just across them. In addition, in the United States the decline in the share of employees covered by firm-based pensions, of either the defined benefit or defined contribution flavors, adds to the pattern of rising inequality (Munnell, Fraenkel, and Hurwitz 2012).

A case for pulling apart can also be made by examining other trends within occupations. Consider tendencies in two quintessential occupations: managers and automobile assembly workers. Classic ethnographies of managerial work, such as *The Organization Man* by William Whyte in 1956, *Men and Women of the Corporation* by Rosabeth Moss Kanter (2nd edition in 1993), and *Moral Mazes* by Robert Jackall in the 1980s (with updates since then), described an occupation with a great deal of job security, high pay, and only a moderate amount of pressure. The circumstances of managers today are quite different (see Osterman 2008). Job security is much less common and as organizations have "delayered," work intensity has increased. Set against this, compensation is still well above average and the flip side of organizational flatness is that managers enjoy more discretion about how to do their jobs and have more opportunities to take initiative. In short, the bundle of attributes that used to characterize managerial work has been disassembled.

Similar deconstruction characterizes the circumstances of auto assembly workers. In the past these employees were the royalty of blue-collar workers in terms of pay and benefits but they labored in a Tayloristic assembly line with little variety or discretion. Today the situation is in many ways reversed. Under recent UAW contracts new hires are paid well below the rates of more senior employees, and pay levels are scraping the bottom of what might be considered middle class. The spread of teams and quality programs, however, has given the job itself more intrinsic interest and scope (data on surveys of employees are presented below). Indeed, in general the spread of

these High Performance or High Commitment systems have transformed the content of a great deal of traditionally drab work without necessarily changing other attributes of work.

Researchers working with representative data on employees in Europe have reached a similar conclusion regarding increased diversity and inequality in job quality. Andrew Clark (2005) summarized his findings as follows:

There is evidence of increasing inequality in some measures of job outcomes. . . . the young and the highly educated have been insulated against downward movements in job quality. . . . union members have fared better with respect to job security and hours of work. . . . there is some tentative evidence that falls in trade union density are associated with diminishing job quality.

## Components of Job Quality

If the main story regarding job quality is pulling apart and increasing inequality then this can best be seen by examining specific components in greater detail. In discussion that follows we will briefly review trends in compensation, the content of work, and the nature of the employment contract.

#### Compensation

As is well known, earnings inequality exploded in the 1980s. Although the spread of wage differentials slowed down in the late 1990s and the early 2000s, the fact is that today's wage distribution is substantially more unequal than that which characterized the postwar period through the end of the 1970s (Piketty and Saez 2003). This development has been extensively documented in the literature and a sharp debate has emerged regarding the extent to which it is due to "market" forces such as technological change and the extent to which it can be laid at the door of more political developments such as the decline of unions, the erosion of the minimum wage, and changing norms regarding wages and fair play.

Inequality has grown within occupations and a growing body of evidence suggests that a substantial portion of increased overall wage inequality is attributable to "within" firm developments as opposed to "across" firms. The spread of pay for performance and other incentives seem to have played a major role in this development (Lemieux, MacLeod, and Parent 2009). Another factor is the diffusion of outsourcing and subcontracting, which impacts jobs at the bottom of the wage distribution (Dube and Kaplan 2010). The discussion about inequality can have a somewhat abstract feel. A more immediate way of seeing the problem is to note that in the United States a very large proportion of the working adult labor force—slightly higher than 20%—hold jobs that pay poverty level wages (Osterman and Shulman 2011).

The spreading apart of the wage distribution is not limited to the United States. As an example, one of the most striking recent developments has been the rapid growth of low-wage work in Germany, a nation long known

for its strong and solidaristic collective bargaining system. The incidence of low-wage work (defined as jobs paying less than two-thirds of the median) has been increasing in Germany since 1995 and is not due to unification. For example, in West Germany among full-time workers, 14.2% were low wage in 1995 and 17.3% in 2004 (Bosch and Weinkopf 2008: 33). In 2004, if we include both East and West Germany and full- and part-time workers, then 20.8% of the workforce was low wage, a figure that surprisingly is very close to the U.S. number (ibid.: 35). In addition, inequality is growing along other dimensions, notably a growing gap between the wage structure of large and small firms with small employers dropping down in the wage distribution (ibid.: 44). A growing literature seeks to explain these developments in Germany (Bosch and Weinkopf 2008; Streeck 2009) but the broad outlines of the story focus on a decline in union strength and labor market reforms, which encouraged the growth of temporary jobs and so-called mini-jobs.

#### Diversity in the Substance of Work

When scholars talk about the substance of work, they most commonly focus on three attributes: skill levels, autonomy, and intensity or stress. These concepts are all difficult to measure with any precision because, unlike wages, they are fundamentally subjective. Skill would appear to be the "hardest" of these but most available data come from questions directed to employees who are asked to subjectively assess the capacities involved in their work or the time it takes to learn their job. Autonomy and stress are inherently judgment calls, again typically measured by employee responses in surveys.

The discussion of the trajectory of skill has been important in social science discussion at least since Harry Braverman (1974) famously argued that managers consciously seek to de-skill employees in order to maintain control and a monopoly of knowledge. A rich historical literature (Edwards 1979) suggests that the emergence of the factory system was accompanied by an attack on craft-worker control, and in modern times examples of technology de-skilling jobs can certainly be found. Nevertheless, the spread of High Performance Work Systems—in both blue- and white-collar jobs—points in just the opposite direction as employees are asked to contribute their ideas to the production process and to take on greater responsibility for quality. Even in more traditionally organized settings the need to utilize information technology in various forms may well have raised skill levels.

There have been a number of studies of changes in skill that survey a broad population or are case studies of workplaces in transition. An example of a workplace study is Roberto Fernandez (2001) who studied technological change in a food processing factory. The factory totally redesigned its production process implementing continuous processing and control systems. Fernandez collected numerous direct measures of skill changes and these show generally increased skill demands in the new jobs (although not hugely dramatic). Worth noting: the firm kept its old workforce and

retrained them despite the fact that average education was below the 12th grade.

Other researchers have examined skill changes by means of representative surveys of employees. Michael Handel surveyed a nationally representative sample of American employees and found a steady growth in skill demands but no evidence of acceleration in recent decades. He concluded that "Overall, it seems that rather basic levels of math, corresponding to two years of ordinary high school instruction, are sufficient for most jobs" (2010: 12). Osterman and Weaver (forthcoming) surveyed a nationally representative sample of American manufacturers and asked very concrete questions about skill requirements. They too found a modest growth in skill demands but nothing that put jobs out of reach of the vast majority of employees. In a recent analysis of British survey data that contain measures of both skill and work organization, Francis Green (2012) found that skills have indeed increased and that a strong link exists between skill level and the adoption of elements of High Performance Work Systems.

A more abstract line of thinking about skill also points to upgrading on average. Research by David Autor, Frank Levy, and Richard Murnane (2003) centered on the distinction between routine and nonroutine skills. The argument is that computers are increasingly performing tasks that can be programmed and hence are substituting for human labor that previously did this work. It follows then that a growing share of the remaining jobs are becoming nonroutine (i.e., not programmable) either at the high end (managers, brain surgeons) or the low end (hotel room cleaners, home health aides).

Autor, Levy, and Murnane found that from 1960 to 1998 the share of work in the economy that was nonroutine interactive and nonroutine analytical rose and the share that was nonroutine manual, routine manual, and routine cognitive fell. In general, they found these trends occurred across all industries. They also found that much of the shift takes place within education groups. They argue that the pattern is largely due to the adoption of computers and not to other forms of capital investments. This set of findings points to a shift in the demand for skill, which is consistent with other work, drawing on different explanations that show a steady up-skilling of employment in recent decades.

#### Control

How much say do employees have over how they do their jobs? Two forces are pushing in the direction of increased discretion. First, the spread of High Performance Work Systems with the attendant use of teams and quality programs seems likely to offer employees greater voice in the organization of work. Second, and perhaps ironically, as firms lay off employees the responsibilities and scope for action of those who remain has likely increased. Set against these considerations is the greater potential that information technology offers for control and surveillance.

Surveys and fieldwork point in both directions. Accounts of work in call centers, an important sector employing large numbers of Customer Service Representatives (CSRs), describe unrelenting electronic control of the activities of these employees. By contrast, repeated surveys such as the Quality of Employment Survey and the General Social Survey show a growing proportion of positive answers to questions such as "I have a lot of freedom to decide how to do my own work," "work is meaningful to me," and "I have a lot of say" in how to do the job (Kalleberg 2011: 139).

Less direct, but suggestive, evidence comes from surveys that ask employees their reactions to new work systems. In a survey of private sector nonsupervisory workers and low- and mid-level managers, a universe representing 70% of all private sector employees, Richard Freeman and Joel Rogers (1995) reported that "some 79% of non-managerial, nonunion participants in employee involvement programs report having 'personally benefited from [their] involvement in the program by getting more influence on how [their] job is done.' . . . Among those without EI programs, 64% 'would like to have a program like this' at their company." In a difficult unionized environment the findings are similar. For example, in their survey of Chrysler employees working in plants organized by "modern operating agreements," Larry Hunter, John Paul Macduffie, and Lorna Doucet (2002) found that 76% preferred teams to the old system. European research points to a similar conclusion. Working with the German Socio-Economic Panel, Rene Fahr (2011) found a clear positive correlation between job designs that increase autonomy and control, which are characteristic of new high performance work systems, and reported job satisfaction.

#### Stress/Intensification

If new production systems, in both blue- and white-collar settings, offer employees more interesting work they would also seem to entail more intense and stressful employment. Indeed, a standard complaint against teams is that they represent a subtle form of speed up due to both increased responsibilities and peer pressure. Add to this increased workloads caused by thinning out of employment ranks and it seems likely that workplace stress is on an upward trajectory.

As an example, Laurie Graham's (1995) ethnographic research at a Subaru-Isuzu plant found that while employees enjoyed the work more than traditional factory employment, under pressures of the intensification of work pace and health and safety concerns they also came to be cynical and critical of just how "new" was the system and how committed was the firm to their welfare.

The survey evidence on stress is less extensive than that on skill but what we have supports this interpretation. Green (2006) reported that in British survey data in 1992, 48% of employees reported they were under considerable stress at work while in 2001 the figure had increased to 58%. Green also reported similar trends in the rest of the European Community. For the

United States, Arne Kalleberg (2011) reported that between 1977 and 2006 there was a significant increase in the fraction of respondents in representative surveys who agreed with statements such as "I have too much work to do everything well," "My job requires that I work very fast," and "My job requires that I work very hard."

## The Employment Contract

The third important dimension for assessing trends in job quality is the nature of the employment relationship itself. Recent decades have witnessed a very substantial decline in the mutual commitment between firms and their employees and also changes in the actual contractual or structural nature of the employment contract. These shifts have clearly led to a wider dispersion of employment forms as the prototypical or canonical model has given way to a diversity of arrangements.

For most of the postwar period, two "standard" employment models were in play: the traditional unionized model and the nonunion alternative exemplified by well-known blue chip firms such as IBM, Kodak, or General Electric. Although the details differed across the union and nonunion sector, they actually shared a great deal in common: People made their careers within the enterprise and jobs came in standard packages. By contrast, today more configurations of jobs can be seen, such as the high turnover Silicon Valley model (Fallick, Fleischman, Rebitzer 2006), occupational as opposed to firm-centered labor markets, the growth of virtual work, and the spread of temporary and contingent employment.

One clear indication of these developments is the erosion of job security. Henry Farber (2008: 23) summarized the evidence as follows:

The overall pattern of results regarding mean job tenure and the incidence of long-term employment relationships suggests that there has been a substantial decline in long-term employment opportunities and a concomitant reduction in job security in the private sector. . . . I conclude that the nature of the private-sector employment relationship in the United States has changed substantially in ways that make jobs less secure and workers more mobile.

A second important shift is the nature of the employment contract itself. In Europe nonstandard contracts have grown considerably as witnessed by the spread of so-called mini-jobs in Germany and the explosion of temporary employment in Spain. In the United States considerable attention has been paid to the growth of temporary and contingent employment. This development is in reality a diverse set of arrangements spanning temporary help firms, in-house temporary pools, limited term contracting out, and independent contractors. No definitive data sources offer confidence about numbers (Dey, Houseman, and Polivka 2009, 2012) but all observers agree that the importance of these patterns has increased. An important point is that measures of the stock of contingent jobs at a point in time is substantially less than the flow of people who experience these jobs over the course of a year. Also worth noting is that limited term employment has extended

to occupations that were previously shielded from the ebbs and flows of the market. For example, there has been an explosion of adjunct employment among university professors (Inside Higher Education 2008).

While most independent contractors prefer their employment arrangement to a standard alternative, the vast majority of employees with other forms of limited term contracts would prefer a more standard arrangement (Osterman 1999; Barley and Kunda 2004).

# A Summary Measure of Job Quality?

The foregoing discussion focused on aspects of jobs that many people would consider the most important elements of job quality. Nonetheless, the choices were to some extent arbitrary. A long list of the attributes of a job can be generated, but no simple way to assign weights or priorities is available (see Jencks, Perman, and Rainwater [1988] for an effort to solve this problem via a hedonic equation on wages). Furthermore, for many attributes no generally acceptable standard is used to determine what makes for improved or worsened job quality. It may seem straightforward to assume that high wages are preferable to low ones but, as an example, what about work intensity? Some people may enjoy and seek out a high pressure environment while others may detest it. As a result, how to assess any increase in intensity that might be observed is not clear. This point can be generalized to many components of job quality.

One answer to these challenges is to focus on reported job satisfaction as a useful summary measure. The intuition behind this approach is that we, the observer, cannot list all the relevant attributes of a job nor assign relative weights to those attributes nor always know what shifts are considered to be improvements or worsening of jobs. But while researchers cannot do any of this with confidence, people regularly assess how they feel about their own work and perhaps their degree of job satisfaction is in effect an accurate summary measure of their circumstances. It can be argued that trends in average job satisfaction for the workforce as a whole or for subgroups are the most reasonable measures possible of job quality.

A very large literature, mostly in psychology but to some extent also in economics and sociology, can be found on job satisfaction. For the United States, the Quality of Employment Survey shows no trend over several decades when the overall means and variances are examined. The General Social Survey does suggest a decline in overall satisfaction between 1972 and 2006 but Kalleberg (2011) reported that the pattern suggests the trend is due to changes in expectations of successive cohorts rather than to objective shifts in the nature of work. Remarkably, he also found that over these decades there was no decline in job satisfaction for blue-collar workers despite what we know to have been a substantial deterioration of wages and job security. This observation—along with the fact that cohort effects and expectations are important—is a clue that job satisfaction is a very imperfect measure of objective shifts in work.

In Europe trends appear to vary, not surprisingly, by country. Green (2006) reported that Britain and Germany witnessed a decline in job satisfaction from the early 1980s to the late 1990s, whereas in Italy and Norway the trend was positive. Clark found that overall in Europe there was a mild downward trend on reported satisfaction (2005). A striking feature of these studies is that wages prove to be relatively unimportant determinants of satisfaction whereas intrinsic interest, discretion, and job security weigh more heavily.

Just what should we make of trends in job satisfaction? A person's report of his or her job satisfaction is a useful predictor of subsequent behavior such as quits but this does not imply that comparisons over time in job satisfaction provide useful information on trends in job quality. Nor does it imply that it is meaningful to compare reported job satisfaction across individuals or nations. The fundamental problem is that the characteristics of jobs that people consider salient may change over time as also may the relative weights that people give to these characteristics. When we compare trends in reported job satisfaction or when we compare across people or countries, we do not know what drives the data: changes in objective job quality or changes in what is considered salient or in the weights that are applied.

A simple way to see the problem is to think about the following analogy. What if I were surveyed about my perception of my physical attractiveness? My answer would likely depend on my expectations, which in turn would be shaped by my environment. Has there been a great deal of attention paid in the press and advertising to body weight as opposed, for example, to strength? My assessment of my own attractiveness may well depend on this context and, of course, this context may well change over time as societal values shift. Furthermore, different countries may have quite different values with respect to what constitutes physical attractiveness. The bottom line is that surveys of peoples' assessment of their attractiveness might predict some behaviors (e.g., do people join fitness clubs) but what they tell us about actual physical characteristics is very unclear. In the same sense job satisfaction may predict some aspects of behavior (e.g., probability of quitting) but has very unclear value with respect to measuring the objective nature of jobs.

The literature suggests that these concerns are valid. Many years ago Robert Blauner (1964) criticized job satisfaction measures on the grounds that people who are in demonstrably bad jobs still report high levels of satisfaction. James Lincoln and Arne Kalleberg (1990) showed that Japanese and American employees in objectively similar jobs report very different levels of satisfaction, a pattern that the researchers believe was connected to differences in expectations.

Other paradoxes raise questions about job satisfaction measures. Clark and Oswald (1996) found that education is negatively related to job satisfaction yet common sense suggests that better educated people are in objectively better quality jobs. In addition, as already noted, a common finding in

the literature is that measures of job satisfaction correlate more strongly with autonomy and stress than they do with wages and job security (in addition to earlier citations see Handel 2005). Certainly conditions of work are important, but this pattern makes it difficult to treat job satisfaction as an adequate measure of job quality.

#### The Articles in This Issue

A research program around job quality should begin by measuring levels and shifts in job quality over time and examining how these indicators vary across countries and industries. The next step would be to understand the forces that drive trends in job quality. Finally, asking how aspects of job quality affect the well-being of employees is important. The articles in this special issue provide useful analysis of each of these questions.

Francis Green, Tarek Mostafa, Agnès Parent-Thirion, Greet Vermeylen, Gijs Van Houten, Isabella Biletta, and Maija Lyly-Yrjanainen utilize the European Working Conditions Survey to construct measures of nonwage job characteristics for 15 countries between 1995 and 2010. They focus on four indices: work quality, working time quality, work intensity, and physical environment. They find a surprising level of stability in these measures over the span of the surveys but they also observe variation across countries that are attributable to broad institutional differences in how labor markets are organized, the role of social partners, and public policy.

These findings set the stage for asking in depth what lies behind variation in job quality. The articles in this special issue give weight to both economic and institutional considerations in examining what drives job quality. The role of politics and interest group conflict is emphasized in Aruna Ranganathan's account of the conflict between pressures for "modern" plumbing standards and traditional ethnic and craft organization of the plumbing profession in India. Her analysis contributes importantly to modern theories of occupational structure and formation. In the United States and elsewhere, two new ways of organizing work—contingent jobs and outsourcing of employment—are widely thought to have affected job quality. Peter Cappelli and JR Keller utilize novel data to describe the uneven diffusion of contingent work across American firms and then ask what characteristics of the firms determine the use of contingent employment. As noted earlier in the introduction, recent years have witnessed the diffusion of new forms of work organization broadly based on the Toyota model with its emphasis on teams, quality programs, and continuous improvement. Alex Bryson, Erling Barth, and Harald Dale-Olsen examine the impact of these innovations on employee welfare in Britain. They find that stress rises and job satisfaction declines when the new systems are implemented but that the effect is substantially mitigated if unions are involved in the implementation process.

When it comes to job quality, the low-wage sector is of particular concern particularly given its surprising reach among adults (Osterman and Shulman 2011). Two papers examine the dynamics of the low-wage job sector in

the United States. Annette Bernhardt, Michael Spiller, and Nik Theodore analyze an original survey of low-wage workers in three cities to study the differential patterns of low-wage work and violations of employment standards across industries. They find an important role for industry features even after controlling for worker characteristics. Natasha Iskander and Nichola Lowe utilize their detailed field-based study of Mexican immigrants in the construction industry to study how skills are learned and transmitted within groups that are typically thought to have little power or access to formal systems for upgrading their capacities. In their account, seemingly powerless workers are able to develop their capacities and improve job quality although how much they can achieve is constrained by the institutional features of the labor market in which they operate.

Government policy and regulation of the job market clearly impact job quality yet there has been considerable controversy about whether such regulation is effective. Yana van der Meulen Rodgers and Nidhiya Menon take up this question in the context of the manufacturing sector in India by comparing outcomes across Indian states, which vary in their regulatory structure. They find that regulations regarding employment security and dispute settlement improve job quality for women but not for men.

There has been considerable interest in the role of entrepreneurship in job creation but an important unanswered question concerns the quality of these jobs. We know that wages and benefit levels in small firms are below average but what about in new firms? Adam Seth Litwin and Phillip Phan address this important topic using novel survey data for the United States and find that the strong record of entrepreneurial job creation has a flip side in that newly created jobs on average are of poor quality with respect to wages and benefits.

Poor-quality jobs can have an obvious impact when it comes to wages and living standards but how do variations in job quality affect other dimensions of welfare? Elena Cottini and Claudio Lucifora utilize survey data on 15 European countries to study the impact of job quality on mental health. They find a strong relationship and also observe that the impact is mediated by national differences in health systems.

#### Conclusion

The quality of work is a fundamental concern to anyone who studies labor markets. Some facts are clear: In the United States there has been a substantial pulling apart as the spread of new work systems increased the demand for skill and made work more interesting for many people but, at the same time, work has become more intense, the low-wage labor market has remained persistently large, and wages have stagnated for many and grown less equal for the job market as a whole. Trends are even more complicated in other nations due to the wide variety of labor market institutions that shape the outcomes that interest us.

The goal of this special issue is to add more meat to the bare-bones description just laid out, to understand the drivers of job quality at the firm and national levels, and to examine the consequences of variations in job quality for employee welfare. These articles go a long way toward accomplishing these objectives. They are also notable for their geographic breadth: international in scope and coverage and touching upon both developed and developing countries. As a result, this special issue offers a rich and fruitful examination of a topic that concerns us all.

#### References

- Autor, David, Frank Levy, and Richard J. Murnane. 2003. The skill content of recent technological change: An empirical exploration. *Quarterly Economic Journal* 118(4): 1279–1333.
- Barley, Stephen, and Gideon Kunda. 2004. Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy. Princeton, NJ: Princeton University Press.
- Baron, James N., Frank Dobbin, and P. Devereaux Jennings. 1986. War and peace: The evolution of modern personnel administration in U.S. industry. *American Journal of Sociology* 92 (September): 350–83.
- Blauner, Robert. 1964. Alienation and Freedom: The Factory Worker and His Industry. Chicago: University of Chicago Press.
- Bosch, Gerhard, and Claudia Weinkopf, Eds. 2008. Low-Wage Work in Germany. New York: Russell Sage.
- Braverman, Harry. 1974. Labor and Monopoly Capital; the Degradation of Work in the Twentieth Century. New York: Monthly Review Press.
- Clark, Andrew. 2005. Your money or your life: Changing job quality in OECD countries. British Journal of Industrial Relations 43(3): 377-400.
- Clark, Andrew, and Andrew Oswald. 1996. Satisfaction and comparison income. *Journal of Public Economics* 61: 359–81.
- Dey, Matthew, Susan Houseman, and Anne Polivka. 2009. What do we know about contracting out in the United States? Evidence from household and establishment surveys. Upjohn Institute Staff Working Paper No. 09-157, September.
- . 2012. Manufacturers' outsourcing to staffing services. ILRReview 65(3): 533-559.
- Doeringer, Peter B., and Michael J. Piore. 1971. Internal Labor Markets and Manpower Analysis, 2nd ed. Lexington, MA: Heath.
- Dube, Arindrajit, and Ethan Kaplan. 2010. Does outsourcing reduce wages in the low wage service occupations? Evidence from janitors and guards. *Industrial and Labor Relations Review* 63(2): 287–306.
- Edwards, Richard. 1979. Contested Terrain: The Transformation of the Workplace in the Twentieth Century. New York: Basic Books.
- Fahr, Rene. 2011. Job design and job satisfaction: Empirical evidence from Germany. Management Revue/ The International Review of Management Studies 22(1): 28–46.
- Fallick, Bruce, Charles Fleischman, James Rebitzer. 2006. Job-hopping in Silicon Valley: Some evidence concerning the microfoundations of a high-technology cluster. *Review of Economics and Statistics* 88(3): 472–81.
- Farber, Henry. 2008. Employment insecurity: The decline in worker-firm attachment in the United States. Princeton University Industrial Relations Section, Working Paper No. 530, July.
- Fernandez, Roberto M. 2001. Skill-biased technological change and wage inequality: Evidence from a plant retooling. *American Journal of Sociology* 107(2): 273–320.
- Freeman, Richard, and Joel Rogers. 1995. Worker representation and participation survey; First report of findings. In Paula Voos, Ed. *Proceedings of the Forty-Seventh Annual Meeting*, p. 340. Madison: Industrial Relations Research Association.
- Graham, Laurie. 1995. On the Line at Subaru-Isuzu: The Japanese Model and the American Worker. Ithaca, NY: ILR Press/Cornell University Press.

- Green, Francis. 2006. Demanding Work: The Paradox of Job Quality in an Affluent Economy. Princeton, NJ: Princeton University Press.
- ———. 2012. Employment involvement, technology, and evolution in job skills: A task-based analysis. *ILR Review* 65(1): 36–67.
- Handel, Michael. 2005. Trends in perceived job quality, 1989–1998. Work and Occupations 32: 66–94.
- ———. 2010. What do people do at work? A profile of U.S. jobs from the survey of workplace skills, technology, and management practices (STAMP). Boston, MA: Northeastern University, Department of Sociology, June.
- Hunter, Larry W., John Paul Macduffie, and Lorna Doucet. 2002. What makes teams take? Employee reactions to work reforms. *Industrial and Labor Relations Review* 55(3): 448–72.
- Inside Higher Education. 2008. Accessed at http://www.insidehighered.com/news/2008/12/03/adjunct, and http://www.historians.org/perspectives/issues/1998/9801/9801NEW.CFM.
- Jencks, Christopher, Lauri Perman, and Lee Rainwater. 1988. What is a good job: A new measure of labor-market success. *American Journal of Sociology* 93(6): 1322-57.
- Kalleberg, Arne. 2011. Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970–2000s. New York: Russell Sage.
- Lemieux, Thomas, Bentley MacLeod, and Daniel Parent. 2009. Performance pay and wage inequality. Quarterly Journal of Economics 124(1): 1-49.
- Lincoln, James R., and Arne L. Kalleberg. 1990. Culture, Control, and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan. New York: Cambridge University Press.
- Munnell, Alicia H., Rebecca Cannon Fraenkel, and Josh Hurwitz. 2012. The pension coverage problem in the private sector. Boston College Center for Retirement Research, Number 12-16, September.
- Osterman, Paul. 1987. Choice of Employment Systems in Internal Labor Markets. *Industrial Relations* 26(1): 46–67. doi: 10.1111/j.1468-232X.1987.tb00693.x.
- ——. 1999. Securing Prosperity: The American Labor Market: How It Has Changed and What to Do about It. Princeton, NJ: Princeton University Press. (A Century Foundation Book)
- ———. 2008. The Truth about Middle Managers: Who They Are, What They Do, What Has Changed. Boston, MA: Harvard Business School Press.
- ——... 2011. Institutional labor economics, the new personnel economics, and internal labor markets: A reconsideration. *Industrial and Labor Relations Review* 64(4): 637–53.
- Osterman, Paul, and Beth Shulman. 2011. Good Jobs America: Making Work Better For Everyone. New York: Russell Sage.
- Osterman, Paul, and Andrew Weaver. Forthcoming. Skills and skill gaps in manufacturing. In Richard Locke and Rachel Wellhausen (Eds.), *Production in the Innovative Economy* (tentative title). Cambridge, MA: MIT Press.
- Piketty, Thomas, and Emmanuel Saez. 2003. Income inequality in the United States, 1913–1998. Quarterly Journal of Economics 118(1): 1–39.
- Streeck, Wolfgang. 2009. Re-Forming Capitalism Institutional Change in the German Political Economy. New York: Oxford University Press.

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