



Organization Science

Publication details, including instructions for authors and subscription information:
<http://pubsonline.informs.org>

Outside Insiders: Understanding the Role of Contracting in the Careers of Managerial Workers

Tracy Anderson, Matthew Bidwell

To cite this article:

Tracy Anderson, Matthew Bidwell (2019) Outside Insiders: Understanding the Role of Contracting in the Careers of Managerial Workers. Organization Science 30(5):1000-1029. <https://doi.org/10.1287/orsc.2018.1275>

Full terms and conditions of use: <https://pubsonline.informs.org/Publications/Librarians-Portal/PubsOnLine-Terms-and-Conditions>

This article may be used only for the purposes of research, teaching, and/or private study. Commercial use or systematic downloading (by robots or other automatic processes) is prohibited without explicit Publisher approval, unless otherwise noted. For more information, contact permissions@informs.org.

The Publisher does not warrant or guarantee the article's accuracy, completeness, merchantability, fitness for a particular purpose, or non-infringement. Descriptions of, or references to, products or publications, or inclusion of an advertisement in this article, neither constitutes nor implies a guarantee, endorsement, or support of claims made of that product, publication, or service.

Copyright © 2019, INFORMS

Please scroll down for article—it is on subsequent pages



With 12,500 members from nearly 90 countries, INFORMS is the largest international association of operations research (O.R.) and analytics professionals and students. INFORMS provides unique networking and learning opportunities for individual professionals, and organizations of all types and sizes, to better understand and use O.R. and analytics tools and methods to transform strategic visions and achieve better outcomes.

For more information on INFORMS, its publications, membership, or meetings visit <http://www.informs.org>

Outside Insiders: Understanding the Role of Contracting in the Careers of Managerial Workers

Tracy Anderson,^a Matthew Bidwell^a

^a The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania 19104

Contact: tracya@wharton.upenn.edu,  <http://orcid.org/0000-0001-8481-5781> (TA); mbidwell@wharton.upenn.edu,

 <http://orcid.org/0000-0003-3593-5036> (MB)

Received: October 10, 2016

Revised: September 7, 2017; April 17, 2018;
September 18, 2018

Accepted: October 30, 2018

Published Online in Articles in Advance:
July 19, 2019

<https://doi.org/10.1287/orsc.2018.1275>

Copyright: © 2019 INFORMS

Abstract. We explore the role that contracting plays within the careers of managerial workers. Contracting distances workers from organizational coordination and politics, aspects of organizational life that are often central to the managerial role. Nonetheless, managerial workers make up a substantial proportion of the contracting workforce. Qualitative interviews with managerial contractors indicate that the tension between the natures of contracting and managerial work means that managerial contractors carry out substantially more bounded work than regular employees, and that this boundedness can shape the role that contracting plays in their careers. Examining the employment histories of MBA alumni of a U.S. business school, we show that workers with fewer subordinates and greater personal demands are more likely to enter contracting. We also find that contractors report better work–life balance but receive lower pay both while contracting and in subsequent regular employment. Whereas prior research has highlighted the financial benefits and temporal demands of contracting for highly skilled workers, our findings introduce important boundary conditions to our understanding of high-skill contracting: the nature of the occupation is critical.

Keywords: contracting • careers • managerial work • contingent work

Modern careers tend to involve movement through a variety of roles, as people seek to establish themselves, develop their skills, and find the kind of job that fits them best (Spilerman 1977, Rosenfeld 1992). Those moves do not just take people in and out of different kinds of jobs, but also in and out of different kinds of employment relationships as they move between regular employment and independent contracting (Barley and Kunda 2004, Ashford et al. 2007, Katz and Krueger 2016). To better understand contemporary careers, we need therefore to assess the role of those contracting assignments, exploring the kinds of people that enter contracting, the kinds of work they do, and the kinds of immediate and longer-term rewards that are associated with contracting roles.

Research on contracting has tended to emphasize the more distant relationship that it creates between workers and organizations. Where regular employees are subject to their employers' authority and tend to have open-ended responsibilities, contractors are treated as arm's-length suppliers of services to the firm and are responsible only for the activities that are stipulated in their contracts (Parks et al. 1998, Cappelli and Keller 2013). Ethnographic and survey studies, particularly within technical occupations, have documented how contractors use this distance to carve out rewarding careers, capturing more of the value of their expertise while maintaining their distance

from the intense coordination, process, and politics that can make up the frustrations of organizational life (Abraham and Taylor 1996, Barley and Kunda 2004, Bidwell and Briscoe 2009, Osnowitz 2010).

Yet, although contracting may serve to distance workers from the details of organizational coordination, other evidence suggests that contracting is also prevalent among the kinds of workers that specifically deal with such coordination—notably managerial workers. Popular press articles suggest that managerial contractors are now “increasingly trusted by corporations to do mission-critical work that in the past would have been done by permanent employees” (Miller and Miller 2012, p. 6; see also Overman 2011, Rossheim 2015). Statistics from a 2015 RAND survey (Katz and Krueger 2016) as well as analyses of the 2005 Current Population Survey (CPS) corroborate those accounts, showing that between 10% and 14% of all independent contractors now work in managerial occupations. Indeed, these statistics suggest that there are approximately five to seven times more contractors in managerial occupations than are found in the frequently studied information technology (IT) occupations, reflecting not only the much larger number of managers in the workforce overall but also a higher rate of contracting among managerial workers than IT workers.

Such prevalence of contracting among managerial workers represents a strong theoretical tension.

Contracting involves arm's-length relationships that reduce workers' responsiveness to the open-ended needs of the employer and distance them from organizational coordination. Yet managers' roles tend to involve integrating the activities of others, often requiring them to play a prominent role in the organizational coordination, politics, and processes that contractors escape. This tension suggests that contracting may play a different role in managerial workers' careers compared with those of other highly skilled occupations. Where contracting may often allow technical workers to better profit from their occupational expertise, that same contract status may hinder managerial workers in the exercise of their own occupational skills. Moreover, where technical workers may be using contracting to escape the frustrations of organizational coordination, that coordination is central to what managerial workers do. It therefore seems likely that what managerial workers are able to get out of contracting, and the reasons that they might do it, could be quite different from the populations of contractors that have previously been studied. As a consequence, we believe that further research is necessary to understand how contracting fits into the careers of this sizable and theoretically important group of workers.

In this paper, we combine abductive and deductive approaches (Behfar and Okhuysen 2018) to explore how the apparent tension between contracting and managerial work affects the role that contracting plays in the careers of managerial workers. Drawing on qualitative interviews with MBA alumni who contract, we first examine how the tensions between managerial work and contract status affect the kinds of work performed by managerial contractors. Although our informants continued to fulfill important aspects of the managerial function while working as contractors, we found that they often had less responsibility for directing people and organizational units and a more tightly focused role. The more bounded nature of these roles helped to improve contractors' work-life balance by limiting the demands for responsiveness that are inherent in managerial work. At the same time, though, that boundedness was in conflict with many of the broader expectations of the managerial role, potentially limiting the value that employers placed upon contracting roles and experience. We argue that these differences in control over work time and the kinds of roles that contractors can perform help to shape the role that contracting plays in managerial careers—specifically who will enter contracting, how they will be rewarded, and what the longer-term consequences for their careers will be. We test these arguments using data from a survey of MBA alumni who graduated from a single U.S. business school between 1990 and 2010, as well as data from the CPS 2005 Contingent Worker

Supplement. Consistent with our arguments about the tradeoffs inherent in managerial contracting, we find that entry into contracting is associated with lower levels of managerial responsibility and greater prior work-life conflict. We also find that workers in contracting report better work-life balance but lower wages, reflecting both their limited responsibility for directing others and the lower hours they report working. Workers who have contracted also report lower pay when they return to regular employment.

The rest of the paper is structured as follows. We begin by briefly reviewing the literature on managerial work and contracting. We then describe our qualitative study of managerial contractors. We go on to develop specific hypotheses about which workers will contract and how they will be rewarded. Next, we present tests of these hypotheses using our alumni survey data. We then describe confirmatory analyses using the CPS contingent worker supplement, before discussing the implications of our studies and our contributions to the contracting literature.

Theory Background: Managerial Workers and Contractors

The Nature of Managerial Work

The standard definitions of managerial work are very broad, encompassing a variety of roles from chief executive officer (CEO) to financial controller or marketing manager. According to the Bureau of Labor Statistics (2010), the central functions of managers are to plan, direct, and coordinate aspects of organizational activity, integrating the work done by others in the organization. For many managers, the role will involve supervising other workers (the "direct" component of the job), but such supervision is not a necessary component of managerial jobs (Stewart 1976, Bureau of Labor Statistics 2001); managers can integrate the work of others in different ways, by administering core organizational processes or by helping to set the organization's direction through strategic planning. As a consequence, managerial roles involve a wide range of activities that can be bundled in different ways within different roles. Although managerial jobs are very diverse, their combination within a single category reflects the lack of clear boundaries between different managerial roles and career paths. Instead, managerial workers will often expect to move through a variety of these different types of jobs over the course of their careers.

The emphasis on planning, direction, and coordination in the typical managerial role can place particular demands on managers and shape employers' expectations of their behavior. When they manage work, administer processes, set plans, or devise strategy, managers are often heavily reliant on the inputs and efforts of others in the organization, be they subordinates, peers, or superiors (Mintzberg 1973, Hill 1992, Mintzberg 2009).

As a consequence, the average managerial job is often highly interdependent, as evidenced by data on job content in the O*NET database. Although there is substantial variation across different managerial jobs (and across jobs in other occupations), managerial jobs have substantially higher scores than any other occupational group for “coordinating the work and activities of others,” “communicating with supervisors, peers, or subordinates,” “developing and building teams,” and “guiding, directing and motivating others” (author calculations; see Peterson et al. 2001 for more details on the data). These demands for coordination can require managers to have nuanced contextual knowledge and extensive social capital (Dalton 1959, Pfeffer 1992, Huy 2001, Schein 2004, Osterman 2008, Mintzberg 2009) and can also make managerial roles very political, as managers navigate competing agendas within the organization (Dalton 1959, Cyert and March 1963).

The increased influence that often accompanies directing and coordinating others can also create strong expectations of organizational commitment from managers (Osterman 1987, p. 56). Those expectations of commitment are enshrined in labor law within the United States, which specifically forbids managers from unionizing (Lichtenstein 2002). Expectations of loyalty also traditionally shaped managers’ career trajectories; in the postwar period, managers’ careers were expected to take place solely within internal labor markets, as managers climbed job ladders within firms (Whyte 1956, Kanter 1977, Osterman 1987). Although managerial careers can now span across organizations, recent evidence suggests that moving jobs within firms is still associated with greater increases in managerial responsibility and larger long-run increases in pay than external moves (Bidwell and Mollick 2015).

The interdependence that is a frequent feature of the average managerial role and the strong demands for commitment can also pose particular work–life challenges for managerial workers. Managers must often be responsive to the needs of those around them as they seek to integrate and coordinate the activities of others, making distractions and interruptions a common feature of managerial life (Milliken and Dunn-Jensen 2005, Mintzberg 2009). Perhaps as a consequence, management occupations report the longest working hours of any occupational group.¹

The Nature of Contracting

Where the literature on managers emphasizes the interdependence that managers often have with the rest of the organization and the commitment that is expected of them, research on contracting suggests that contract relationships tend to distance contractors from the organizations that they serve, limiting their engagement in day-to-day organizational life (Pfeffer and Baron 1988, Ashford et al. 2007).

Such distancing can occur because the legal nature of contracting limits the administrative control that employers can exert over contractors (Masten 1988, Cappelli and Keller 2013). Contractors can also be psychologically distanced from the organization, because they take on more “transactional” psychological contracts than regular employees, leading them to engage only in work that is clearly specified in the contract and not make broader contributions to the organization (Rousseau 1995, Millward and Hopkins 1998, Van Dyne and Ang 1998, Parks et al. 1998; but for contrary findings see Pearce 1993, Guest 2004).

A variety of studies have explored how these differences between contractors and employees might shape the nature of the work that contractors do. Some studies find that contractors are more likely to perform work that is easier to monitor and less interdependent, reflecting organizations’ reduced authority over them and the contractors’ lower expected commitment (Pearce 1993, Ang and Slaughter 2001, Masters and Miles 2002, Mayer and Nickerson 2005). Other studies, though, emphasize how frontline managers often treat contractors and employees similarly (Smith 2001, Barley and Kunda 2004, Bidwell 2009, 2010), creating “blended workgroups” (Davis-Blake et al. 2003, Ashford et al. 2007) that serve to blur the differences between employees and contractors.

These two literatures therefore suggest important tensions in the roles of managerial contractors. Managerial work is often characterized by higher levels of interdependence and stronger expectations of responsiveness and commitment compared with other kinds of occupations. Such characteristics, though, are at direct odds with the arm’s-length relationships to deliver prespecified services that are supposed to characterize contracting. Prior research has also emphasized the high degree of heterogeneity that exists in managerial roles on the one hand and contracting on the other, further complicating our ability to draw inferences about managerial contractors.

To understand the role that contracting plays in the careers of managerial workers, it is necessary to first understand how these tensions shape the work and experiences of managerial contractors. We therefore conducted a number of interviews with managerial contractors, seeking to understand in more detail the kinds of work that they did, as well as the differences between contracting and regular employment that were most salient in this context. We describe those interviews and our tentative findings on the differences between managerial contractors and employees below.

A Qualitative Exploration of Managerial Contracting

We undertook semistructured qualitative interviews with 12 MBA alumni who had both embarked on a

managerial career and worked independently on a contract basis since graduation. Interviewees were identified through the alumni database of one U.S. business school and had between 5 and 26 years of post-MBA experience. Further information on our interviewees is provided in Appendix A (Table A.1). The interviews were conducted by telephone and lasted between 24 and 56 minutes, with an average length of 37 minutes. In these interviews, we explored workers' routes into and out of contracting, the type of work that they performed, and their experiences as contractors.

All of our interviewees had been regular employees in managerial roles before working as a contractor. Three of them were working for management consulting firms immediately before becoming a contractor, three of them worked in marketing or as brand managers, and others had been working as financial controllers, strategic planners, or investment managers. In those roles, they often had responsibility for overseeing important areas of the organization.

Our interviewees also occupied a variety of managerial roles once they had moved into contracting, as detailed in Appendix A (Table A.2). The most common role was as a project or program manager, a role that five of them occupied. Others acted as interim chief financial officers (CFOs) or directors of portfolio companies; another common role was to set up and manage business processes for small companies. Some of the interviewees took on more analytical roles, reviewing and developing corporate strategies. Although only a few of our contractors were actively involved in directing subordinates, all of their roles involved important elements of managerial work: many of them described the intensive coordination that they were called on to do as project managers; others described how they implemented core financial and business processes or helped to set organizational strategy. In each case, their work furthered the integration of others' activities and would have substantial impacts on others throughout the organization. Like other managers, they also usually reported directly to very senior people in the organization, up to and including C-suite executives and firm founders.

Our interviews suggested that there were two primary reasons why employers had chosen to hire these managers as contractors. In many cases the employers only needed their expertise for a limited period of time or for a string of short-term projects with varied hours. In some cases, the interviewee had not been prepared or able to work for that firm on a regular, full-time basis, leading the client to engage them as a contractor instead.

The main focus of our analysis was to understand how our interviewees' contractor status affected their roles within the organization and the work that they did. Our findings emphasized the ways in which their

status distanced them from the organization and affected the work that they did, as we outline below and in Appendix A (Table A.3, which provides excerpts from our interviews).

The Distancing Nature of Contracting for Managerial Workers

Many of the themes that contractors discussed revolved around the way that contracting affected different aspects of their relationship with their clients, introducing more distance. Although many of our interviewees described heavy involvement with their clients, often working for them for long periods and collaborating intensively with particular counterparts, their accounts also described various ways in which contract work could reduce the scope and quality of their engagement with the client, as the illustrative quotes in Table A.3 demonstrate.

Some of the sources of that distancing are well explored in prior literature. For example, seven of our respondents discussed negotiations over the *scope of contracts*, which could limit the flexibility and breadth of their involvement in the organization. Issues of *bounded psychological involvement* also came up, albeit surprisingly infrequently, with just two of our respondents reporting that their contract relationship left them less invested in the results of their work than they otherwise would be.

Other sources of distancing between contractors and regular employees seemed to take on particular salience within the managerial context. One of these was the *physical distance* between the contractors and their clients. Although some of our interviewees did much of their work at the client site, half of them (six people) described how most of their work was done from home, often in sharp distinction to the work that they had done as an employee. Contractors were also distanced from the organization by their *lack of a long-term formal role in the organization*. Seven of our respondents described how the lack of an expectation of continuity or clearly defined role gave them increased control over their work, allowing them to turn down projects that they did not want to do. Three respondents also described how this lack of a long-term formal role was perceived by others at the organization, shaping the terms of their interactions.

Overall, our respondents confirmed that contract status affected their relationship with clients in a variety of ways, creating more distance than they would have had as employees. This distance then had important implications for the details of the specific work that the contractors performed.

The Bounded Nature of Contract Work: How Distance Shapes What Contractors Do

We found that the roles that our interviewees worked in were also shaped by their contract status, becoming

more bounded than those of employees in various ways. Those differences partly reflected the hiring of contractors into different kinds of roles than those offered to regular employees. They were also in part a consequence of the way that both workers and employers managed the boundaries of contractor roles more tightly than employee roles on an ongoing basis. Specifically, three differences were particularly salient.

Reduced Managerial Responsibility. As we have noted, an important managerial function is to direct others, overseeing their work and being accountable for their output. Perhaps the most salient difference between prior employment roles and contracting was the loss of such responsibility for directing others. Four of our interviewees described managing teams as an important part of their prior roles. Only one of them described managing a team as a contractor. Often their contract work would involve substantial lateral coordination and influence of others, but those people would not report directly to them. Hence, one contractor described how, in the contracts that she had been involved in:

You're the middle of the wheel and you have all these people who are cross-functional who you're managing but you have no. . . . They all report up to their leadership team. I would say I've always been in those kinds of roles, leading people indirectly but not having a team of people where you're really 100% responsible for them.

Similarly, the interviewees had often been responsible for overseeing particular organizational functions in their prior work, as a brand manager or a financial controller. Their roles as contractors were less likely to involve such ongoing responsibility for overseeing a particular function. Instead, they would coordinate or provide inputs.

This ability to engage in high-level managerial work without having responsibilities for directing others and managing a unit could be an attractive feature of contracting. One contractor told us how she used her contractor status to avoid getting pulled into "the weeds" of execution-related work, rather than the strategic work that she preferred. Another interviewee told us how being a contractor gave her the opportunity to do high-level strategic work without responsibility for managing others:

All my jobs have been more strategy, consulting, more independent contributor-type roles versus management. I haven't led a thousand person team. I haven't led a twenty person team. At this point, that's fine with me. I actually also prefer just doing more interesting kind of challenging work, but working for myself, having the flexibility, having autonomy, being able to pick like okay, this sounds interesting, I think I'll enjoy this. I feel like I can actually help and add some value, and then do it and then be done and move on. I think in organizations there's probably fewer of those kinds of opportunities,

kind of mixing . . . I think within organizations it tends to be more lower level individual contributors or higher level management.

For others, though, the lack of direct responsibility for organizational outcomes could be more of a challenge. One contractor told us how she was struggling with only being able to provide advice:

One of the reasons I left professional services when I went to business school was that I would be part of the team and owning the success or failure. You have to be ready to know you're being paid for your advice, and people may or may not take it, and that's their prerogative.

However it was experienced, this reduction of direct responsibilities was one of the clearest features of contracting to emerge from our interviews.

More Focused Roles. A second way in which the contractors' roles tended to be more bounded was that the boundaries around their roles were much clearer than for regular employees. As employees, they would become involved in many different aspects of the organization, often straying far from their primary role. The way that their roles were now defined by contract served to keep their work more focused. Six of the contractors described how being a contractor enabled them to focus on one aspect of the work by removing those extraneous tasks. For example, one informant (who, like many contractors, referred to herself as a consultant [Barley and Kunda 2004, Osnowitz 2010]), told us the following:

Honestly, part of why I wanted to be a consultant because I felt I could be much more effective that way. As an employee, you get all sorts of other stuff on your plate. You've got to be on this working group or this advisory group or you've got to do performance reviews, and a whole bunch of other things that take your focus from that particular project. I didn't get sidetracked by internal staff stuff

Whereas the boundaries around employee roles tended to be fuzzy and relatively permeable, the distance created by contract status seemed to allow both employers and contractors to more easily police and preserve the boundaries of the role. Contractors appreciated this focus, although it came at the expense of their wider involvement in the organization.

Bounded Political Involvement. Finally, contractors were much less likely to get involved in the political aspects of the managerial role. Being a contractor allowed the respondents to escape organizational politics, as noted in studies of technical workers (Barley and Kunda 2004, Osnowitz 2010). Hence, five of our respondents described their discomfort with politics, and the reduced role that it played in their lives as contractors. The respondents recognized, though, that politics was

often an integral part of the managerial role. Hence, one respondent told us the following:

You're forced to give credence even if it's bullshit—excuse my language—to processes, when you're there, because you have to be a team player. Right? So, being a team player means putting up with a lot of this and managing it.

Whereas another told us that,

I'm very direct person as you may notice and I really hate corporate politics. Unfortunately that's how things get done in most big organizations so that was my experience before.

As these examples illustrate, contracting did not just affect workers' relationship with the organization. It also shaped the nature of their roles; although managers continued to work as contractors, the kinds of roles that they could fill as contractors were more limited than those they performed as employees.

The Challenges and Benefits of Bounded Work

The increased distance that contractors felt from their employing organizations, and the more bounded roles that they occupied as a consequence, shaped the costs and benefits of contracting. In addition to the challenges of instability and the ongoing need to find clients documented elsewhere (Barley and Kunda 2004, Osnowitz 2010), our respondents described other challenges that came from being a contractor. For example, the physical distance and lack of a formal role described above often served to limit the influence that contractors could have within the organization. Hence, three of our respondents suggested that the lack of a formal, continuing role within the organization made it more difficult for them to get information and help from others within the client organization. For example, one respondent told us how her temporary status limited her influence on one project:

Then this guy was just like, I feel like he was warning me so I finally, not confronted, but I was like, "Hey. What's going on?" He's like, "Well I think that because you're not going to stay in this company for very long, I don't want to waste my time talking to you."

Similarly, in discussing working from home, some of our interviewees described how it could hamper their ability to get things done. One respondent, for example, explained how regular employees were better placed to get things executed than she was:

Then they can chat with Mary next door in accounting, and truck on down to this, and they know all the people, and they can get it through the gates, and I can't. I don't work there, I work from my home office in [town name], it's not that far. I don't know all these people. I know a whole bunch of them but I don't know all these people.

More broadly, the way that contractors were generally excluded from roles that involved directing large groups of employees and functions also had the potential to keep them from some of the most highly valued managerial roles. Perhaps reflecting the reasons that they had chosen to become contractors, only one of our respondents directly expressed the lack of such responsibilities as a drawback of contracting. Two of them, though, discussed the lower status that contracting afforded them in the managerial world, particularly if they wanted to return to regular employment. In recounting her discussions about returning to a "corporate job," one respondent told us the following:

When you go back to corporate . . . they will look at that LLC on your resume and assume you're on unemployment. They assume you've been doing nothing. . . . Not that corporate recruiters are the most open-minded. They're thinking with a very specific mindset, and they're valuing a very specific subset of experience. Even now in my negotiations, the company solely wants to talk about my comp[ensation] with [former regular employer] two years ago.

Set against these challenges, our respondents were very clear about the benefits of contracting: control. Unlike the IT contractors interviewed by Kunda et al. (2002), none of our respondents saw contracting as a way to make more money. Instead, they valued the way that their contractor status gave them control over their work. Two aspects of this control stood out in particular. First, the lack of an ongoing, formal role in the organization made it much easier for people to turn down work or move to a different project if they did not like what they were doing. In describing one such experience, a contractor told us the following:

I said, "I'll finish up this project for you, but I'm not continuing." I left. Not the work I wanted to do. That's great as an independent contractor, because there's a stigma if you quit [as an employee], in general, I think there's a stigma you quit a job fairly quickly.

Second, and even more saliently, contracting gave contractors control over their schedule. This was particularly important to five of our respondents, three of whom explicitly cited the long hours and travel demands of their prior roles as a reason that they had moved into contracting. Without the responsibilities of managing global teams or functions, and with the capacity to say no to work, these respondents found it much easier to manage demands on their time as contractors. In describing her decision not to return to regular employment, one respondent told us the following:

Now that I've really gotten used to these flexible hours, I don't . . . because I also have opportunities to go work for a big firm again and all that, but that really does not appeal to me right now. . . . [interviewer: why not?] Yeah I think it's the flexibility. I think it's the vacation time. I think it's the . . . It's having to do a 60-80 hour week, or something. I certainly don't want that.

Our qualitative analysis therefore demonstrates that taking roles as contractors had substantial effects on what managerial workers did, putting distance into their relationship with their client and putting bounds around the roles that they could occupy within the organization. Moreover, these effects had both positive and negative effects, increasing contractors' ability to choose where they worked and what they did, but potentially limiting the extent of their involvement within the organization.

Because our interviews focused on people who had worked in contracting, though, they offer less insight into which workers will choose to pursue such a career and which will not. They also preclude a detailed examination of the kinds of rewards that workers are likely to receive in contracting versus regular employment. We turn to these topics next, as we develop a theoretical framework to understand the role that contracting plays within the careers of managerial workers.

The Role of Contracting in Careers: Hypothesis Development

In making predictions about which managerial workers are more likely to enter contracting and what rewards they might receive should they do so, we adopt a matching perspective. Matching theories of employment (Roy 1951, Rosen 1986, Logan 1996) highlight that the allocation of people to jobs involves decisions by both workers and employers: workers must choose which jobs to apply for and accept, and employers must decide which applicants to offer jobs to. The theories also emphasize that questions of who takes a given job and what rewards that job offers tend to be jointly determined, because the pay offered for a job helps to determine the kinds of workers likely to accept it. Fully isolating the direct, causal effects of contracting on either rewards or decisions to take a job is therefore extremely difficult, and not something

that we attempt in this paper. Instead, we explore how the nature of contracting work jointly affects both the kinds of managerial workers that are likely to enter contracting and the rewards that they receive from doing so. We believe that this approach can shed light on the role that contracting plays in managerial workers' careers, helping to establish whether it is generally a route toward financial success or other kinds of rewards, even when we cannot specify how much of the effects reflect who is entering contracting versus the effects of those jobs.

In particular, we argue that the costs and benefits afforded by contract work's bounded nature shape careers in two ways. First, limits on the kinds of roles that contractors are likely to occupy can render contracting incompatible with greater responsibility for directing others and managing organizational activities, affecting the rewards that contractors receive. Second, the greater ease that contractors experience in setting boundaries around their work can relieve some of the work–life conflicts experienced by managerial workers. We argue that each of these differences will shape who goes into contracting as well as the immediate and long-term rewards, as illustrated in Figure 1. We begin by examining the determinants of entry into contracting.

Who Enters Contracting?

Prior work on decisions to contract among highly skilled workers has focused on the insecurity inherent in contracting and the lack of access to employer-provided training. Hence, the study by Bidwell and Briscoe (2009) of IT workers found that married men were less likely to go into contracting than other men or women because of their increased financial responsibilities, whereas those workers with the most experience and skills were more likely to enter contracting. Ethnographic studies of contractors also

Figure 1. Summary of Hypotheses

Costs and Benefits of Contractors' Bounded Work	Who Enters Contracting	Immediate Rewards from Contracting	Long-term Rewards from Contracting
<i>Limits on Roles for Contractors</i> (Reduced involvement in directing organizational activities and extra-role coordination)	H1: Workers with less prior responsibility for directing others	H3: Reduced pay	H5: Lower pay in future jobs
<i>Increased control over work time</i>	H2a: Women with children H2b: Women leaving prior job for personal reasons	H4: Improved work-life balance	

highlight contractors' desire to take more control over their work and realize the full benefits of their expertise (Kunda et al. 2002, Barley and Kunda 2004). In the case of managerial contractors, we propose that decisions to enter contracting will instead reflect the more limited roles that contractors can play within the organization, as well as the implications for their work–life balance.

Limits on Roles for Contractors. As our qualitative analysis demonstrated, workers who take on contracting roles are limited in the aspects of the managerial job that they can perform, reducing their involvement in directing others and engagement in broader organizational life. These narrower responsibilities will in part affect which workers prefer contracting versus regular employment. Although some workers will prefer the narrower responsibilities that contracting involves, those workers whose skills and preferences make them well suited to directly managing people are likely to find little fit between contracting and the kinds of work that they are suited for. We expect that such workers would prefer to remain in regular employment.

The narrower responsibilities found in contracting will also affect how firms evaluate candidates for contracting roles versus regular employment. Where contracting roles are less likely to involve directing others, demonstrated competences in that area will be less important to employers.

Both of these factors suggest that contracting will be less common among those who have previously held jobs with more responsibility for directing others. Workers who have accepted and held such jobs in the past are more likely to have demonstrated an aptitude and a preference for roles that involve directing others, suggesting that they are less likely to prefer contracting and better qualified for roles in regular employment. They may therefore be less likely to take on contract work in the future. We propose the following:

Hypothesis 1. *The likelihood of working as a contractor will be negatively associated with the level of prior responsibility for directing others as a regular employee.*

Increased Control Over Work Time. As we found in our qualitative analysis, contracting was attractive to our respondents because of the increased control that it gave them over their work time. Such control was particularly important given the very high work–life conflict observed among managerial workers (Kanter 1977, Hill 1992, Jacobs and Gerson 2001). As a consequence, workers who are more likely to experience greater work–life conflict in regular management jobs are more likely to prefer contracting. Such workers may also be less attractive to employers in regular

employment roles than contracting, because they may be perceived to be less able to meet the inflexible role expectations of regular managerial roles.

One group for whom the ability to control their work schedule is likely to be particularly important is those with greater nonwork commitments (Meiksins and Whalley 2002). Parenthood is an important source of such nonwork commitments, and much prior work has emphasized that women generally bear the greater burden of childcare (Bianchi et al. 2012). We would therefore expect women with children to be more likely to use the greater control provided by contracting than men or women without children.

Hypothesis 2a. *The likelihood of working as a contractor will be positively associated with being female with children.*

Another clear signal of competing nonwork commitments is when a worker leaves a job for family reasons, such as child-rearing or other caring responsibilities. Once again, because women typically bear the burden of such responsibilities, we would expect female workers who have left a job for family reasons to be more likely to accept a contracting role than women who left their prior job for other reasons and than men. We propose the following:

Hypothesis 2b. *The likelihood of working as a contractor will be positively associated with being female and leaving the preceding job for family reasons.*

Immediate Rewards from Contracting

The same factors that shape who enters contracting should also affect the rewards that are received from doing so. Prior work on high-skill contracting has tended to highlight contracting as a way for skilled workers to increase their rewards, allowing them to capture more of the value of their expertise (Barley and Kunda 2004). Hence, 44% of the contractors that Kunda et al. (2002) interviewed saw money as an important reason to contract. Other research found IT contractors to earn similar amounts to employees (Bidwell and Briscoe 2009). We believe, though, that the tension between the bounded nature of contracting and the integrative nature of managerial work will lead managerial contracting to be associated with a different set of rewards.

Limits on Roles for Contractors. The limits that contracting places on managerial roles may reduce the pay that contractors receive, because of its effects both on how employers value their work and on what rewards workers will accept. First, employers may offer lower pay for the kinds of work that contractors do because they value those roles less. In particular, the way that contract work is less likely to involve directing other workers means that contractors are

less likely to end up in some of the most senior and rewarded roles in the organization. Although directing subordinates is only one possible responsibility that managerial workers take on, it is strongly related to the value that employers place on their roles. Because managers who direct more subordinates have the potential to affect a greater scope of activity within the organization, the number of subordinates is an important indicator of responsibility (Bidwell and Mollick 2015). To the extent that contractors are less likely to be involved in managing subordinates, they may therefore be less likely to end up in the roles that employers value the most.

The more focused nature of contractors' roles may also reduce their perceived value to employers. Where contractors tended to see the kinds of extra activities that employees get pulled into as a distraction, those same activities may be valued by employers who see those additional coordination and administrative activities as crucial to the smooth running of the organization. Such activities are also an indicator of the commitment to the organization that is expected of managers. Contractors not engaging in extra activities may also therefore reduce their value in the eye of employers.

It is also possible that those workers who enter contracting roles are willing to accept lower financial rewards than other workers. Our qualitative analysis found that some workers prefer the increased autonomy, more bounded roles, and greater control over their work time found in contracting. It is possible that they are prepared to accept lower pay to attain those other rewards. Putting these arguments together, we propose the following:

Hypothesis 3. *Working as a contractor will be associated with lower pay than regular employment among managerial workers.*

Increased Control Over Work Time. Our interviews showed that contractors' bounded work gave them increased control over their work time, suggesting that contractors should have better work–life balance than other managerial workers. Existing research on the work–life balance of highly skilled contractors tends to offer mixed results. Ethnographies of IT workers suggest that contractors' choice over when they work must be set against the additional demands created by operating in the open labor market (Barley and Kunda 2004, Evans et al. 2004, Osnowitz 2010). A survey of technology workers also found that contractors' control over their work could be offset by their lack of access to the family-friendly policies available to employees (Briscoe et al. 2011). That said, the particularly strong pressures that managerial work creates on work–life balance and the challenges

that managers face in benefiting from family-friendly policies (BIS 2014) may make contracting a more important route to work–life balance among managerial workers. We therefore propose the following:

Hypothesis 4. *Managerial workers in contracting positions will report having better work–life balance than those working as regular employees.*

Long-Term Rewards from Contracting

If contracting roles are more limited than regular employment roles, then working as a contractor may also be associated with different long-term career outcomes for managerial workers. Becoming a contractor is not necessarily a permanent decision, because periods of contracting are frequently followed by a return to regular employment (Bidwell and Briscoe 2009). The kinds of rewards that contractors receive on returning to regular employment may, however, be different from the rewards received by those who stayed in regular employment, reflecting both the way that contracting experience is perceived by employers and workers' own preferences. In part, workers who have spent time in contracting may receive different rewards because of the way that employers perceive that contracting experience. Where contracting roles are seen as more bounded and limited in scope, employers may be concerned that contractors will not have learned the skills necessary for roles that require the broader range of activities more typical of managerial work. This may limit the value that they place on those workers' skills, reducing the amount that they are prepared to pay them.

It is also possible that future employers will have concerns about why those workers had ended up in contracting. Where contracting is perceived as an activity that appeals to those who have less appetite or aptitude for directing others, or with more commitments outside their work, employers will be less willing to hire people who have been contractors into the more demanding, and more rewarding, managerial roles. Prior work shows that time out of the workforce is penalized by employers (Bertrand et al. 2009, Weisshaar 2018). It is possible that contracting spells receive a similar penalty.

On top of these employer perceptions, it is also likely that contractors will be interested in moving back into different roles than workers who did not contract. We noted that contracting is more attractive to those seeking more control over their time and who do not value managing others, exchanging financial rewards for work–life balance. Those factors are likely to shape their choices of future roles too.

Finally, contracting also seems to be at odds with the kinds of internal moves that most advance

managerial workers' careers. Bidwell and Mollick (2015) found that moves within internal labor markets were associated with greater long-run rewards than external moves, reflecting employers' greater willingness to advance workers that they know. By definition, contractors are spending time outside those internal labor markets, and prior work suggests that they can face challenges in upgrading their skills while contracting (O'Mahony and Bechky 2006). Their outsider status may also therefore retard their career advancement. On the basis of these factors, we propose the following:

Hypothesis 5. *Previous contracting experience will be negatively associated with starting pay in future regular employment jobs.*

Methods

We explored contracting among managerial workers using a survey of MBA alumni from a single, highly ranked U.S. business school. The central goal of the MBA is to prepare people for managerial careers, equipping them with the business knowledge and leadership skills required for such roles. These skills are then applied in jobs that deal with multiple different aspects of management, from functional leadership roles to management consulting to financial management. The vast majority of these pathways also eventually lead into managing groups of people: of those jobs entered by our sample between 5 and 10 years after graduation, 67% included the management of units of employees, rising to 77% among jobs entered 10 or more years after graduation. Beyond their managerial orientation, MBA alumni are also a group for whom contracting may be particularly viable, because their MBA qualification serves as a strong signal of managerial expertise. This sample therefore allows us to track a relatively homogeneous group of workers with similar qualifications as they pursue a managerial career, exploring which end up contracting and which do not.

Although the homogeneity of our sample aids within-sample comparison, it does reduce its representativeness of the broader managerial population. Analysis of the CPS suggests that only approximately one in five managerial workers has a Master's qualification or higher,² and the average compensation of our sample is considerably higher than the average for all managers. We seek to address these differences by replicating some of our analyses using the 2005 CPS. We also return to these issues of generalizability at the end of the paper.

Data

Our main analyses use data from a web-based survey of MBA alumni of a single U.S. business school,

conducted during the summer of 2011. We were able to contact approximately 25,000 alumni by mail and email to solicit their participation in the survey. A randomly selected subsample of 3,200 alumni who graduated between 1990 and 2005 was also contacted by telephone, to further encourage participation. For these analyses, we restrict our sample to alumni who graduated in or after 1990, owing to falling response rates among those who graduated before this date. The response rate among the approximately 16,000 contactable alumni in this subgroup was 32%, with 23% completing the survey.³ Overall, we have data on 2,855 respondents who provided usable data and were employed in some form after graduation in our analysis sample.⁴ To assess nonresponse bias, we compared the LinkedIn profiles of respondents and nonrespondents from a subsample of 3,000 alumni but found no significant differences in the response rates by gender or industry.

We structured the survey to gather a complete history of our respondents' post-MBA work history. First, respondents were asked about each of their different employment spells, where an employment spell is defined as a continuous period during which the worker remains with one employer as an employee, works as a contractor, is starting a company, or is unemployed for six months or more. We then gathered details about each of these employment spells, including pay, functional affiliation, and number of people managed in their first year, as well as usual hours worked.

Our analysis sample is based on 5,547 employment spells of these alumni. Although employees may take on a variety of different jobs while working for the same employer, we primarily focus on the characteristics of the first job in each employment spell because we are interested in job-worker matching in which both regular employees and contractors may participate—internal job moves are only open to employees.⁵ We provide the distribution of the employment spells across alumni in Appendix A (Table A.4).

Although the MBA equips people for managerial roles, our sample may include some alumni who did not pursue managerial careers. As a robustness check we therefore also replicated our analyses using a subsample that excluded any spells that occurred before a respondent had had responsibility for managing other workers, guaranteeing that those workers had embarked upon a managerial career. Our analyses of this subsample provided results very similar to those presented in this paper. Limiting our sample to those who have directed other workers is highly restrictive, though, because directing others is only one part of the definition of managerial work. We therefore use all spells in our main analyses in the paper. Our

results' robustness to both more and less restrictive definitions of managerial workers provides some reassurance that our findings are not sensitive to our operationalization of managerial careers.

Key Variables

Contracting Spell. Independent contractors offer their services to other organizations outside a formal employment relationship. Identifying those contracting relationships can often be complex (Bidwell and Briscoe 2009). Following prior work in this area, we used multiple survey questions to identify contracting spells and exclude anyone who was building a business rather than operating as an individual worker. For each employment spell, we asked respondents about the nature of their employment, providing a list of options: "employed by a private or public company, government, or a nonprofit organization," "an independent consultant, independent contractor, or a freelance worker," "a founder of a new business," "a self-employed worker," or "other." Those respondents who reported being either "an independent consultant, independent contractor, or a freelance worker" or "a self-employed worker" were then asked whether they personally had any permanent employees on their payroll during this spell. (Appendix B provides details of these and other key survey question used in our analysis.) We created a "Contracting" variable that took the value of 1 when respondents reported being either "an independent consultant, independent contractor, or a freelance worker" or "a self-employed worker" and had no employees on their own payroll.⁶ The variable took a value of 0 when respondents were "employed by a private or public company, government, or a nonprofit organization." Those spells for which the respondent described themselves as a company founder, had other workers on their payroll, or had some other arrangement were excluded from our analysis sample.

Log Earnings. For each employment spell, we asked respondents for their total earnings in dollars in their first year of that spell. We then took the log of this value because it was highly skewed.⁷

Log Number of Subordinates. For each job, respondents were asked to report "the total number of people who worked in the units that you managed when you first started the job." This captures general managerial responsibility for others, rather than simply direct reporting relationships.⁸ Because the values were highly skewed, we used the log of this value after first adding one, to compute a meaningful log value for jobs with no subordinates. We use this as our measure of responsibility for directing others. We also include

a dummy for spells with *zero subordinates*, because having no subordinates may be qualitatively different from having one or more subordinates.

Work–Life Balance. We measured respondents' work–life balance at the time of the survey (we did not ask about each individual employment spell because of concerns about retrospective bias). We used an adapted four-item scale based on an interrole conflict measure developed by Kopelman et al. (1983). Respondents were asked how much they agreed or disagreed with four statements using a five-point scale. Items included, "after work I come home too tired to do some of the things I'd like to do" and "my work takes up time that I'd like to spend with my family/friends." The mean score was calculated for those respondents who rated all four statements, with a higher value indicating better work–life balance. Cronbach's α for the four items was 0.89.

Family Responsibilities. We created two sets of variables to capture family responsibilities at the start of the employment spell. The survey asked respondents in which years since graduation there were children living in their household. Using these data, we created one set of dummy variables indicating the respondents' gender and whether they had any children in their household in that year. Being male without children is the omitted category in our analysis.⁹ Our second set of dummy variables indicates whether a respondent left their previous job for "childrearing or other family reasons," once again separated by gender. Male and did not leave prior job for family reasons is our omitted category.

Previous Contracting Experience. To explore the association between prior contracting experience and later employment outcomes, we created a variable set to 1 if the respondent had worked as a contractor in any employment spell since graduation from the MBA and before the start of the focal spell. This variable has a value of 0 in all other cases.

Control Variables

Individual Characteristics. We controlled for a variety of individual experience and career characteristics. We controlled for workers' post-MBA experience at the start of each employment spell. We also included the second power of this experience measure to account for possible nonlinearities. We also controlled for the number of employment spells since graduation.¹⁰ Furthermore, we included a dummy variable for whether the respondent was an alumnus/a of the executive MBA program, which tends to cater to more experienced students.¹¹ As a further measure of

workers' experience and achievements to date, we also controlled for the workers' annual earnings at the end of the previous employment spell¹² in our determinants of contracting and pay in contracting analyses. We took the log of this measure owing to its skewed distribution.

To further capture aspects of the respondent's career in our pay in contracting models, we included an indicator of whether the worker was let go from their previous job, because such workers may be viewed negatively by employers and have fewer options from which to choose (Farber et al. 1993, Bidwell and Briscoe 2009). Similarly, we also included a measure of whether the worker left a prior job for personal reasons.¹³ In our analyses looking at pay in regular employment after contracting, where it was inappropriate to control for prior pay to capture a worker's career achievements to date,¹⁴ we used a more comprehensive set of career-related controls. We included the number of times the worker has been let go from a job since graduating from their MBA and the number of times they have left a job for personal reasons. We also included controls for the number of industry and function changes that have occurred in the worker's post-MBA career to date because this may slow career progression. We considered a change to have occurred when a job is in an industry or function that is different from the industry or function of the job held immediately before. These career measures are set to 0 for the first post-MBA job.¹⁵

We also included control variables for gender and ethnicity in our analyses. Family responsibilities is a further control in our work-life balance analysis.

Work Characteristics. In addition to our subordinate measures, already discussed, we controlled for the function that the job was in. The respondents selected one of 37 different functional categories, such as marketing or operations, for each job. We included dummies based on these categories. We also controlled for the average number of hours worked per week.¹⁶ The analysis of the determinants of contracting also includes tenure in the prior job as a control. We also include a control for whether the job was based outside the United States (we also reran our analyses excluding all non-U.S. spells, with similar results).

Employer Characteristics. We controlled for organization size because of the previously documented relationships between organization size, self-employment, and pay (Hollister 2004, Elfenbein et al. 2010). For each employer, respondents were asked "Counting all locations where this employer operated, what was the total number of persons who worked for this employer at the time that you took the job?" and provided a set of

banded responses.¹⁷ We converted this into a single log scale, taking the log of the midpoint of each range. We also included dummies for industry using the 80 categories that were offered to respondents to describe their employing firms.

Time Effects. We included year dummies for the start of each employment spell to account for changes in pay and employment conditions over time.

Descriptive Analysis

Of all the employment spells in our sample, 4% were periods of contracting. Seven percent (7%) of respondents had at least one contracting spell after graduating from their MBA, a proportion that rises to 11% among those who had graduated between 1990 and 1994, and had had more opportunity to work in contracting. Of those respondents who had previously worked as a contractor, 86% returned to working as regular employees afterward. These rates of contracting are somewhat lower than the estimates of 8%–10% found in nationally representative surveys.¹⁸

Table 1 summarizes some basic characteristics of roles in contracting versus regular employment. As we found in our qualitative analysis, spells of contracting involve responsibility for fewer subordinates compared with regular employment spells, and most involve no subordinates at all. That said (and again consistent with our interviews), it is notable that a number of contractors do report having managed subordinates. Hours worked are also lower for contracting spells compared with regular employment. The incidence of contracting varies across functions, being most common among employment spells in business services (15%) and consulting (8%) and least common in finance and real estate (2%), marketing and sales (3%), operations (3%), and general management and administration (3%). This pattern is consistent with contracting roles being less likely to involve directing others and may also reflect the way that some respondents can self-identify their function as consulting when working as an independent contractor (Barley and Kunda 2004, Osnowitz 2010) rather than selecting the area of their functional expertise (e.g., marketing).

Table 1 also provides initial support for the argument that contracting jobs are less rewarding, showing that the median pay for contracting spells was 23% lower than the median pay for spells of regular employment. We explore this gap in more detail below.

Results of Analyses

Table 2 provides means, standard deviations, and correlations for the key variables used in our hypothesis testing. Although our overall sample includes 5,547 employment spells from 2,855 survey respondents, each

Table 1. Characteristics of Contracting and Regular Employment Spells

Variable	Regular employment spells	Contractor spells
Mean annual earnings (\$)	185,731	136,213
Median annual earnings (\$)	130,000	100,000
10th percentile annual earnings (\$)	74,000	20,000
90th percentile annual earnings (\$)	300,000	300,000
Responsibility for other workers		
Average number of subordinates	31.9	6.2
% with no subordinates	50.3	63.1
Average hours worked per week	59.7	41.1
Broad function	Proportion of all spells that are contracting (%)	% of all contractor spells
Finance & Real Estate	2	15.8
Marketing & Sales	3	18.1
Consulting	8	41.6
General Management & Administration	3	6.8
Operations	3	1.8
Technology	7	3.6
Business Services	15	5.0
Accounting & Control	7	1.8
Other	6	5.4
Employer size	%	%
Less than 10 workers	5.1	21.3
10–49 workers	9.9	21.3
50–99 workers	4.9	9.0
100–499 workers	10.9	4.9
500–999 workers	5.4	3.3
1,000–4,999 workers	14.9	10.7
5,000–9,999 workers	10.3	7.4
10,000–49,999 workers	19.1	9.0
50,000–100,000 workers	9.4	4.1
More than 100,000 workers	10.2	9.0
Base (varies with missing data)	5,326	221/122 ^a

^aJob and employer characteristics were not collected for the 99 contracting spells that involved working for multiple clients.

analysis uses only a subset of these spells owing to a variety of sample restrictions for each analysis, as we detail below. Because individual respondents have multiple employment spells in the analysis sample, we implemented robust standard errors, clustered by respondent, to account for nonindependence in errors (Froot 1989).¹⁹

Working as a Contractor

We explored who becomes a contractor using logistic regressions. Because we are interested in entry into contracting according to characteristics of the prior job, this analysis excludes employment spells that were not preceded by a regular employment job, either because they were the first post-MBA employment spell or because they were preceded by a spell in contracting or self-employment. We also drop spells in which the required data on prior job and organizational characteristics are missing. Table 3 shows the results. We find a significant negative relationship between contracting and the number of subordinates

previously overseen by the worker (model 1, $p < 0.01$), supporting Hypothesis 1. We also calculated the average marginal effect of the number of subordinates in the last job on contracting: a 1% increase in the number of subordinates in the last job reduces the probability of contracting by 0.00015. The negative relationship between having zero subordinates and contracting is also notable ($p < 0.01$). This effect runs counter to our theoretical expectations but may reflect a reduced need for contracting's increased temporal control when managers do not have responsibility for directing others. In model 2 we introduce our first set of family responsibilities variables. We do not find support for Hypothesis 2a, because the relationship between being a woman with children and contracting is not significant. In model 3 we examine the effect of having left the prior job for family reasons. We find support for Hypothesis 2b: women who left their prior job for family reasons are significantly more likely to enter contracting than men and women who

An
Org

Variable	<i>n</i>	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Contracting spell	5,547	0.04	0.20	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—
2 Log earnings at start of spell	5,547	11.82	0.74	-0.18	1.00	—	—	—	—	—	—	—	—	—	—	—	—
3 Work life balance	2,016	2.86	0.99	0.07	-0.16	1.00	—	—	—	—	—	—	—	—	—	—	—
4 Log size of employer	5,448	7.91	3.05	-0.10	0.03	-0.04	1.00	—	—	—	—	—	—	—	—	—	—
5 Zero subordinates	5,448	0.51	0.50	0.04	-0.25	0.12	0.12	1.00	—	—	—	—	—	—	—	—	—
6 Log number of subordinates	5,448	0.97	1.36	-0.01	0.29	-0.09	-0.02	-0.72	1.00	—	—	—	—	—	—	—	—
7 Hours worked	5,547	58.91	14.91	-0.24	0.24	-0.48	0.05	-0.09	0.07	1.00	—	—	—	—	—	—	—
8 Whether based outside of U.S.	5,547	0.19	0.39	-0.02	0.03	0.03	0.01	-0.15	0.16	0.05	1.00	—	—	—	—	—	—
9 Whether let go from last job	5,547	0.15	0.35	0.13	0.04	0.07	-0.12	-0.07	0.04	-0.14	-0.01	1.00	—	—	—	—	—
10 Whether left last job for personal reasons	5,547	0.03	0.17	0.10	-0.07	0.00	-0.03	-0.02	0.00	-0.15	0.02	0.00	1.00	—	—	—	—
11 Log earnings at end of last job	2,741	11.97	0.76	-0.06	0.62	-0.12	0.02	-0.17	0.25	0.14	0.04	0.06	-0.02	1.00	—	—	—
12 Log size of last employer	2,244	7.96	2.95	-0.08	0.10	0.00	0.27	0.01	0.02	0.07	0.06	-0.15	0.00	0.12	1.00	—	—
13 Zero subordinates in last job	2,244	0.38	0.49	-0.03	-0.19	0.07	0.06	0.41	-0.38	-0.06	-0.11	0.00	-0.02	-0.26	0.01	1.00	—
14 Log number of subordinates in last job	2,244	1.31	1.48	-0.02	0.26	-0.01	-0.03	-0.36	0.57	0.08	0.14	0.00	0.00	0.31	0.05	-0.69	1.00
15 Hours worked in last job	2,244	60.81	14.49	-0.05	0.19	-0.21	0.03	-0.08	0.07	0.46	0.07	-0.05	-0.02	0.24	0.08	-0.14	0.12
16 Tenure in last job in years	2,244	1.95	1.65	0.05	0.13	-0.01	0.00	-0.10	0.13	-0.05	0.01	-0.06	0.02	0.18	0.04	-0.09	0.11
17 Female	5,547	0.28	0.45	0.01	-0.13	0.02	0.08	0.12	-0.14	-0.11	-0.08	-0.03	0.12	-0.15	0.04	-0.09	-0.13
18 Female with children	5,547	0.05	0.22	0.08	-0.04	-0.01	-0.04	-0.04	0.03	-0.14	0.00	0.05	0.24	-0.06	-0.02	-0.02	0.00
19 Male with children	5,547	0.26	0.44	0.03	0.23	0.02	-0.06	-0.20	0.26	-0.06	0.01	0.12	0.01	0.26	-0.01	-0.20	0.26
20 Female without children	5,547	0.23	0.42	-0.02	-0.12	0.03	0.10	0.15	-0.16	-0.04	-0.08	-0.06	0.00	-0.12	0.06	0.11	-0.15
21 Female, left last job for family reasons	5,547	0.02	0.12	0.12	-0.09	-0.01	-0.02	0.00	-0.01	-0.16	0.00	0.00	0.73	-0.05	0.01	-0.01	0.00
22 Male, left last job for family reasons	5,547	0.01	0.10	0.02	0.00	0.02	-0.02	-0.03	0.02	-0.03	0.03	0.01	0.58	0.01	0.00	-0.02	0.01
23 Female, left last job for other reasons	5,547	0.27	0.44	-0.02	-0.10	0.02	0.08	0.12	-0.13	-0.06	-0.08	-0.03	-0.08	-0.13	0.04	0.09	-0.13
24 Nonwhite	5,547	0.39	0.49	-0.03	-0.04	0.04	0.08	0.03	-0.03	0.04	0.09	-0.02	-0.01	-0.05	0.04	0.06	-0.08
25 Post-MBA experience in years	5,547	3.25	4.02	0.14	0.29	0.04	-0.16	-0.29	0.34	-0.20	0.03	0.32	0.12	0.36	-0.03	-0.28	0.36

Table 2. (Continued)

Variable	<i>n</i>	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
23 Female, left last job for other reasons	−0.05	−0.04	0.96	0.28	−0.36	0.88	−0.08	−0.06	1.00	—	—	—	—	—	—	—	—
24 Nonwhite	0.04	−0.06	0.02	−0.03	−0.07	0.04	−0.01	0.00	0.03	1.00	—	—	—	—	—	—	—
25 Post-MBA experience in years	−0.16	0.36	−0.06	0.22	0.38	−0.18	0.10	0.05	−0.09	−0.12	1.00	—	—	—	—	—	—
26 Number of employment spells in career	−0.20	−0.03	−0.05	0.15	0.29	−0.13	0.07	0.05	−0.07	−0.07	0.78	1.00	—	—	—	—	—
27 Whether previously worked as a contractor	−0.08	−0.02	0.01	0.07	0.07	−0.02	0.01	0.00	0.01	−0.01	0.21	0.34	1.00	—	—	—	—
28 Number of times let go by an employer	−0.14	−0.06	−0.06	0.05	0.19	−0.09	−0.01	0.01	−0.06	−0.02	0.53	0.68	0.20	1.00	—	—	—
29 Number of times left employer for personal reasons	−0.10	0.02	0.11	0.27	0.05	−0.03	0.56	0.43	−0.05	−0.03	0.21	0.24	0.12	0.08	1.00	—	—
30 Number of function changes	−0.18	−0.02	−0.02	0.13	0.23	−0.09	0.07	0.04	−0.04	−0.05	0.62	0.75	0.27	0.53	0.17	1.00	—
31 Number of industry changes	−0.19	−0.03	−0.03	0.12	0.24	−0.09	0.07	0.06	−0.05	−0.06	0.62	0.83	0.18	0.57	0.22	0.73	1.00

did not (model 3, $p < 0.001$) and marginally significantly more likely to contract than men who left their last job for family reasons ($p < 0.1$). Average marginal effect calculations suggest that women who left their last job for family reasons had a probability of contracting that was 0.096 higher than that of a male who left their last job for nonfamily reasons. In model 4 we include all measures of both managerial and family responsibilities²⁰ with similar results to those in models 1–3.²¹

A number of our control variables are significantly associated with becoming a contractor. Having taken the EMBA is positively associated with contracting, as is having been let go from the previous job, similar to the findings of previous work (Bidwell and Briscoe 2009, Farber et al. 1993). Higher prior pay is negatively associated with becoming a contractor. This suggests the greater the gains afforded a worker by regular employment, the less likely that worker may be to opt into contracting.

Pay in Contracting

Table 4 reports ordinary least squares (OLS) regressions investigating the relationship between working as a contractor and pay. We again exclude initial employment spells from the sample for these models, because we use log earnings in last job as a control and exclude those spells for which these data are missing. The models in Table 4 also differ in which contracting spells were included. Data on job and organization characteristics were only collected for jobs held as an employee or as a contractor for which the worker spent more than 75% of their time working for a single employer.²² In models 1 to 3, we include all contracting spells but are not able to control for organization characteristics or job characteristics. Models 4 to 9 then exclude those contracting spells during which a contractor has multiple clients, allowing us to include controls for organization characteristics (models 4 to 9) and characteristics of the work done (models 6 and 9).²³

Model 1 includes all contracting spells and shows a significant negative association between contracting and pay ($p < 0.001$), supporting Hypothesis 3.²⁴ Model 2 includes hours worked. Unsurprisingly, this has a positive relationship with pay ($p < 0.001$) and reduces the size of the pay discount, yet the discount remains sizeable ($b = -0.353$, $p < 0.001$). Model 3 breaks out the contracting spells into those that involve a single client and those that involve working with multiple clients and shows that both types of contracting are associated with a pay discount compared with regular employment ($p < 0.05$ for single client contracting; $p < 0.001$ for multiple client contracting). The coefficients are also significantly different ($p < 0.05$) from one another, suggesting that

Table 3. Determinants of Working as a Contractor

Variable	Model			
	1	2	3	4
Prior managerial responsibility				
<i>Log number of subordinates in last job</i>	−0.346** [0.129]	—	—	−0.327* [0.130]
<i>Zero subordinates in last job</i>	−0.799** [0.305]	—	—	−0.750* [0.313]
Family responsibilities				
<i>Female with children</i>	—	0.382 [0.354]	—	−0.45 [0.426]
<i>Male with children</i>	—	−0.286 [0.278]	—	−0.309 [0.280]
<i>Female without children</i>	—	0.146 [0.307]	—	−0.029 [0.315]
<i>Female, left last job for family reasons</i>	—	—	2.170*** [0.393]	2.301*** [0.475]
<i>Male, left last job for family reasons</i>	—	—	0.722 [0.657]	0.832 [0.678]
<i>Female, did not leave last job for family reasons</i>	—	—	0.00639 [0.267]	
Individual characteristics				
<i>Nonwhite</i>	−0.356 [0.238]	−0.361 [0.239]	−0.332 [0.248]	−0.332 [0.242]
<i>Post-MBA experience</i>	0.124 [0.112]	0.133 [0.110]	0.0869 [0.109]	0.111 [0.115]
<i>Post-MBA experience squared</i>	−0.000879 [0.00551]	−0.00205 [0.00527]	−0.000917 [0.00535]	−0.000712 [0.00553]
<i>Number of spells in career to date</i>	−0.00674 [0.143]	0.0258 [0.137]	0.0794 [0.134]	0.0453 [0.140]
<i>EMBA</i>	0.788* [0.398]	0.824* [0.402]	0.816* [0.408]	0.944* [0.425]
<i>Whether previously worked as a contractor</i>	0.943* [0.452]	1.062* [0.487]	1.169* [0.469]	1.112* [0.461]
<i>Whether based outside of United States</i>	0.194 [0.272]	0.151 [0.275]	0.164 [0.272]	0.178 [0.270]
Characteristics of last employer				
<i>Broad industry dummies</i>	Yes	Yes	Yes	Yes
<i>Log size of last employer</i>	−0.0515 [0.0379]	−0.0605 [0.0371]	−0.0660+ [0.0384]	−0.0594 [0.0396]
Characteristics of last job				
<i>Broad function dummies</i>	Yes	Yes	Yes	Yes
<i>Hours worked in last job</i>	0.00332 [0.00794]	0.00301 [0.00757]	0.00469 [0.00771]	0.00438 [0.00807]
<i>Log earnings in last job</i>	−0.522** [0.164]	−0.478** [0.160]	−0.440** [0.145]	−0.408** [0.143]
<i>Tenure in last job</i>	0.124* [0.0605]	0.139* [0.0610]	0.158* [0.0634]	0.146* [0.0619]
<i>Whether let go from last job</i>	1.037*** [0.217]	1.065*** [0.215]	1.240*** [0.224]	1.234*** [0.225]
Observations	2,244	2,244	2,244	2,244

Notes. Base: all employment spells (either as a regular employee or contractor) that were preceded by an employment spell as a regular employee. Logistic regression—dependent variable: whether the employment spell is a contracting spell. All models control for the starting year of the spell. Robust standard errors, clustered by worker, in brackets.

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

contractors who work for multiple clients fare more poorly than those who have one main client. Most of our controls are also significant, including prior pay, whether workers were let go from a previous job, and

whether workers left their prior job because of personal reasons. The inclusion of these controls also suggests that the contractor discount is unlikely to simply reflect contracting being undertaken by lower-quality workers.²⁵

Table 4. Determinants of Pay

Variable	Model								
	1	2	3	4	5	6	7	8	9
Employment arrangement									
<i>Contracting</i>	−0.528*** [0.0923]	−0.353*** [0.0842]	— —	−0.266** [0.0865]	−0.179* [0.0810]	−0.212** [0.0816]	−0.194* [0.0809]	−0.178* [0.0813]	−0.116 [0.0753]
<i>Contracting with single client</i>	— —	— —	−0.166* [0.0817]	— —	— —	— —	— —	— —	— —
<i>Contracting with multiple clients</i>	— —	— —	−0.538*** [0.141]	— —	— —	— —	— —	— —	— —
Individual characteristics									
<i>Female</i>	−0.147*** [0.0246]	−0.104*** [0.0230]	−0.101*** [0.0228]	−0.119*** [0.0221]	−0.0961*** [0.0210]	−0.101*** [0.0224]	−0.0807*** [0.0214]	−0.0795*** [0.0213]	−0.0648** [0.0207]
<i>Nonwhite</i>	−0.0175 [0.0236]	−0.0238 [0.0228]	−0.0247 [0.0225]	−0.0459* [0.0202]	−0.0476* [0.0197]	−0.0424* [0.0195]	−0.0422* [0.0190]	−0.0434* [0.0189]	−0.0445* [0.0188]
<i>Post-MBA experience</i>	0.0277* [0.0124]	0.0392*** [0.0117]	0.0393*** [0.0116]	0.0333*** [0.00903]	0.0386*** [0.00871]	0.0351*** [0.00891]	0.0321*** [0.00860]	0.0312*** [0.00856]	0.0358*** [0.00838]
<i>Post-MBA experience squared</i>	−0.00107 [0.000698]	−0.00135* [0.000646]	−0.00133* [0.000634]	−0.000955+ [0.000550]	−0.00106* [0.000530]	−0.00108* [0.000545]	−0.00128* [0.000528]	−0.00122* [0.000525]	−0.00127* [0.000513]
<i>Number of spells in career to date</i>	−0.00425 [0.0158]	−0.00739 [0.0149]	−0.00757 [0.0149]	0.00533 [0.0131]	0.0039 [0.0124]	0.00731 [0.0122]	0.0124 [0.0116]	0.0119 [0.0115]	0.0104 [0.0112]
<i>EMBA</i>	0.120* [0.0607]	0.179** [0.0575]	0.170** [0.0572]	0.148** [0.0480]	0.181*** [0.0470]	0.154** [0.0475]	0.113* [0.0448]	0.115* [0.0444]	0.144** [0.0441]
<i>Log earnings in last job</i>	0.533*** [0.0562]	0.492*** [0.0548]	0.491*** [0.0560]	0.486*** [0.0307]	0.468*** [0.0297]	0.478*** [0.0296]	0.443*** [0.0288]	0.444*** [0.0286]	0.435*** [0.0279]
<i>Whether let go from last job</i>	−0.165*** [0.0248]	−0.137*** [0.0232]	−0.138*** [0.0229]	−0.145*** [0.0215]	−0.125*** [0.0207]	−0.151*** [0.0215]	−0.125*** [0.0208]	−0.123*** [0.0207]	−0.111*** [0.0202]
<i>Whether left last job for personal reasons</i>	−0.406*** [0.0777]	−0.302*** [0.0723]	−0.298*** [0.0717]	−0.340*** [0.0556]	−0.278*** [0.0524]	−0.307*** [0.0493]	−0.273*** [0.0468]	−0.274*** [0.0464]	−0.232*** [0.0442]
<i>Whether based outside of United States</i>	0.0462 [0.0284]	0.0327 [0.0277]	0.0305 [0.0276]	0.00191 [0.0280]	−0.000806 [0.0274]	−0.0133 [0.0274]	−0.0586* [0.0275]	−0.0590* [0.0275]	−0.0550* [0.0270]
Type of employer									
<i>Industry dummies</i>	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes
<i>Log size of employer</i>	—	—	—	0.0292*** [0.00359]	0.0295*** [0.00344]	0.0295*** [0.00357]	0.0281*** [0.00351]	0.0296*** [0.00353]	0.0293*** [0.00340]
Hours worked									
<i>Hours worked</i>	—	0.0123*** [0.00114]	0.0120*** [0.00113]	—	0.00826*** [0.000946]	—	—	—	0.00670*** [0.000912]
Type of work									
<i>Function dummies</i>	—	—	—	—	—	Yes	Yes	Yes	Yes
<i>Log number of subordinates</i>	—	—	—	—	—	—	0.0823*** [0.00877]	0.0649*** [0.0109]	0.0566*** [0.0108]
<i>Zero subordinates</i>	—	—	—	—	—	—	—	−0.0752** [0.0255]	−0.0604* [0.0246]
Observations	2,741	2,741	2,741	2,654	2,654	2,654	2,654	2,654	2,654
R ²	0.467	0.512	0.516	0.602	0.623	0.625	0.644	0.645	0.657

Notes. Base: all employment spells (either as a regular employee or contractor) that were preceded by another employment spell with earnings data. OLS regression—dependent variable: log of annual earnings at start of employment spell. All models control for the starting year of the spell. Robust standard errors, clustered by worker, in brackets.

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The Mediating Role of Hours and Type of Work. We have argued that the nature of contracting limits the kinds of roles that managerial workers can take on but provides greater control over work time. This raises the question of whether the discount that contractors experience reflects working in different kinds of jobs with different hours to employees. To explore this, we conducted separate mediation analyses for hours

worked and type of work. Model 5 includes hours worked and shows that the remaining pay discount is both sizeable and significant ($p < 0.05$) and is similar in magnitude to the discount in model 3 for contractors working for a single client. Analysis (not reported here) confirmed that contracting has a significant negative relationship with hours worked ($b = -10.47$, $p < 0.001$) and that there is a significant positive

relationship between hours and earnings ($b = 0.009$, $p < 0.001$). We tested the mediating role of hours worked using the Preacher–Hayes test and confirmed a significant indirect effect ($p < 0.001$), with hours accounting for 33% of the total effect of contracting on pay in this model. In models 6 to 8 we explore the mediating role of the type of work done, adding our type of work control variables in turn. Analysis (not reported) confirmed a positive relationship between contracting and having no subordinates ($b = 0.26$, $p < 0.001$), as well as a significant relationship between having no subordinates and earnings ($b = -0.19$, $p < 0.001$). The Preacher–Hayes test then confirmed a significant indirect effect of contracting on pay mediated through having no subordinates ($p < 0.001$ in a model excluding logged number of subordinates and hours worked).²⁶ We found no support for the logged number of subordinates mediating the relationship between contracting and pay. Including these measures, as well as function, reduces the pay discount associated with contracting compared with regular employment, but a significant discount remains (model 8, $p < 0.05$). Model 9 includes control for both hours and the type of work done, and although the coefficient for contracting remains negative, it is no longer significant. Taken together, using the coefficients from models 4 and 9 to calculate the percentage change in income associated with working as a contractor suggests that managerial workers are paid 23% less in contracting jobs compared with regular employment jobs and that 12 of these percentage points are accounted for by differences in hours worked and the broad type of work undertaken (with the remaining 11% not being significantly different from zero).²⁷

Work–Life Balance

We investigated the association between working as a contractor and work–life balance using OLS regression. Because of concerns about the validity of retrospectively assessing work–life balance in earlier jobs, respondents were only asked about their work–life balance at the time of the survey. We therefore restricted this analysis to spells that were current at the time of the survey, focusing upon the job held by the worker at the time of the survey. The results of the analysis are presented in Table 5. Model 1 shows a positive and significant relationship between contracting and work–life balance ($p < 0.001$), supporting Hypothesis 4. In model 2, we introduce our controls for the type of work undertaken. Although they reduce the strength of the relationship between contracting and work–life balance, a positive significant relationship persists ($p < 0.05$).

We also investigated whether the number of hours worked mediated the relationship between contracting and work–life balance. Analysis (not shown) confirmed

that being a contracting spell has a significant negative relationship with hours worked ($b = -11.32$, $p < 0.001$). Hours worked also has a significant negative relationship with average work–life balance ($b = -0.03$, $p < 0.001$). Model 3 in Table 5 includes both hours and whether the spell is a contracting spell and suggests that hours worked mediates the relationship between contracting and work–life balance: the contracting coefficient is much reduced and no longer significant. We tested the mediating role of hours worked using the Preacher–Hayes test and confirmed a significant indirect effect ($p < 0.001$) accounting for 83% of the total effect of contracting on work–life balance. This suggests that contractors primarily achieve improved work–life balance through managing the number of hours that they work.

Pay in Regular Employment After Contracting

Table 6 reports OLS regression analysis to explore the association between having previously worked as a contractor (since graduating from the MBA program) and the pay received by workers returning to regular employment. For this analysis we include all employment spells during which the worker was engaged as a regular employee, including initial post-MBA spells²⁸; all contracting spells are excluded from the analysis.²⁹

Model 1 includes controls for individual career characteristics and employer characteristics. The control for hours worked is included in model 2, and the controls for the type of work done are included in model 3. In all three models, we find a significant negative relationship between having ever previously worked as a contractor and pay in regular employment spells, supporting Hypothesis 5 ($p < 0.001$). Thus, even after controlling for hours, function, and responsibility for subordinates, having previously worked as a contractor is associated with lower pay in regular employment.³⁰

Given that contractors are more likely to work part time (i.e., less than 35 hours per week), we investigated whether the negative relationship between previous contracting and pay was being driven by some contractors having lower levels of experience as a result of working part time. In an attempt to capture this, we ran the same models including an indicator variable for whether worker had worked part time before the start of the focal spell and still found a significant negative relationship ($b = -0.126$, $p < 0.01$). Thus our findings seem to reflect something more than a pay penalty for previously working part time as a contractor.

Supplementary Analysis: Effects on Career Satisfaction

In supplementary analyses, we also explored how having worked as a contractor related to respondent's overall career satisfaction at the time of the survey,

Table 5. Determinants of Work–Life Balance

Variable	Model		
	1	2	3
Employment arrangement			
<i>Contracting</i>	0.595*** [0.176]	0.447* [0.183]	0.0755 [0.183]
Individual characteristics			
<i>Female with children</i>	−0.0461 [0.0836]	−0.0508 [0.0837]	−0.238** [0.0761]
<i>Male with children</i>	0.0435 [0.0527]	0.104+ [0.0534]	0.0488 [0.0490]
<i>Female without children</i>	0.0792 [0.0659]	0.0334 [0.0664]	−0.0187 [0.0600]
<i>Female, left prior employer for family reasons</i>	−0.0576 [0.188]	−0.131 [0.194]	−0.360+ [0.184]
<i>Male, left prior employer for family reasons</i>	0.0748 [0.153]	0.0849 [0.156]	0.103 [0.189]
<i>Nonwhite</i>	0.0940* [0.0458]	0.108* [0.0463]	0.109** [0.0421]
<i>Whether based outside of United States</i>	0.134* [0.0580]	0.166** [0.0591]	0.158** [0.0545]
Who worked for			
<i>Industry dummies</i>	Yes	Yes	Yes
<i>Log size of employer</i>	−0.00541 [0.00819]	−0.00832 [0.00819]	0.00194 [0.00746]
Type of work done			
<i>Function dummies</i>	—	Yes	Yes
<i>Log number of subordinates</i>	—	−0.0536** [0.0192]	−0.0219 [0.0182]
<i>Zero subordinates</i>	—	0.106+ [0.0637]	0.0886 [0.0587]
Working hours			
<i>Hours worked</i>	—	—	−0.0329*** [0.00198]
Observations	2,016	2,016	2,016
R ²	0.130	0.168	0.311

Notes. Base: all employment spells (either as a regular employee or as a contractor) current at the time of the survey. OLS regression—dependent variable: work–life balance score. Robust standard errors in brackets.

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

using a five-item Career Satisfaction Scale developed by Greenhaus et al. (1990). In analyses not shown here, we found that having worked as a contractor at some point before the survey was negatively associated with average career satisfaction, measured on a scale of 1 to 5 ($b = -0.205$, $p < 0.05$). Although working as a contractor seems to have immediate benefits for work–life balance, it seems to be associated with a negative overall impact on respondents' long-term evaluation of their careers.

Exploring Generalizability: Analysis of the CPS

To explore how our findings might generalize to the wider population of managerial workers, we undertook supplementary analysis of data from the CPS 2005 Contingent Worker Supplement (this was the last date for which data on contingent workers were

available). Although the CPS data did not enable us to examine the relationship between contracting and work–life balance or between contracting experience and subsequent employment outcomes, we were able to investigate the relationship between contracting and pay among this broader sample of managerial workers. Table 7 reports analysis using weekly log earnings as the dependent variable. Models 1 to 2 are restricted to managerial occupations. Controls for hours worked and detailed occupational categories capturing the type of work undertaken are included in model 2 (in addition to the results presented, we ran all of our models using the supplement weights calculated by the Bureau of Labor Statistics to correct for under-representation among key demographic groups, with similar results). These models show a significant negative association between contracting and pay among

Table 6. Determinants of Pay in Regular Employment

Variable	Model		
	1	2	3
Contracting experience			
<i>Whether previously worked as a contractor</i>	−0.176*** [0.0448]	−0.164*** [0.0428]	−0.146*** [0.0411]
Individual characteristics			
<i>Female</i>	−0.118*** [0.0164]	−0.105*** [0.0157]	−0.0683*** [0.0148]
<i>Nonwhite</i>	−0.0629*** [0.0158]	−0.0644*** [0.0155]	−0.0657*** [0.0147]
<i>Post-MBA experience</i>	0.0998*** [0.00739]	0.103*** [0.00729]	0.0901*** [0.00683]
<i>Post-MBA experience squared</i>	−0.00290*** [0.000497]	−0.00301*** [0.000488]	−0.00288*** [0.000446]
<i>Number of spells in career to date</i>	0.0994*** [0.0209]	0.0929*** [0.0204]	0.0899*** [0.0191]
<i>EMBA</i>	0.323*** [0.0390]	0.340*** [0.0380]	0.276*** [0.0346]
<i>Number of times let go from a job</i>	−0.110*** [0.0234]	−0.0969*** [0.0227]	−0.0747*** [0.0206]
<i>Number of times left job for personal reasons</i>	−0.274*** [0.0434]	−0.237*** [0.0410]	−0.207*** [0.0369]
<i>Number of function changes</i>	−0.0113 [0.0132]	−0.0122 [0.0127]	−0.0188 [0.0121]
<i>Number of industry changes</i>	−0.115*** [0.0207]	−0.112*** [0.0202]	−0.106*** [0.0195]
<i>Whether a non-U.S. spell</i>	−0.0183 [0.0250]	−0.017 [0.0245]	−0.0761** [0.0239]
Who worked for			
<i>Industry dummies</i>	Yes	Yes	Yes
<i>Log size of employer</i>	0.0265*** [0.00290]	0.0266*** [0.00281]	0.0275*** [0.00272]
Working hours			
<i>Hours worked</i>		0.00659*** [0.000643]	0.00495*** [0.000602]
Work done			
<i>Function dummies</i>	—	—	Yes
<i>Log number of subordinates</i>	—	—	0.0872*** [0.00966]
<i>Zero subordinates</i>	—	—	−0.0178 [0.0200]
Observations	5,326	5,326	5,326
R ²	0.495	0.511	0.555

Notes. Bases: all regular employee employment spells. OLS regression—dependent variable: log of annual earnings at start of employment spell. All models control for the starting year of the spell. Robust standard errors, clustered by worker, in brackets.

+*p* < 0.1; **p* < 0.05; ***p* < 0.01; ****p* < 0.001.

this broader sample of managerial workers, after controlling for hours worked and detailed occupational categories (*p* < 0.01).³¹ These analyses suggest that managerial workers are paid less as contractors compared with regular employment and that our findings, at least with regard to pay received as a contractor, may be applicable to other managers who are not MBA alumni.

We have suggested contracting may have particularly negative consequences for managerial workers because of the way that it conflicts with the nature of managerial work. We used the CPS data to explore whether the rewards associated with contracting were indeed different for managerial workers compared with workers in other occupations. Model 3 of Table 7 presents the results of the same pay analysis for workers in all nonmanagerial

Table 7. Determinants of Pay—CPS 2005 Contingent Worker Supplement

Variable	Model		
	Managerial occupations		Nonmanagerial occupations
	1	2	3
Employment arrangement			
<i>Independent contractor</i>	−0.322** [0.0986]	−0.323** [0.102]	0.0527 [0.0329]
Individual characteristics			
<i>Female</i>	−0.623*** [0.103]	−0.454*** [0.118]	−0.196*** [0.0357]
<i>Nonwhite</i>	−0.123 [0.118]	−0.109 [0.113]	−0.0386 [0.0345]
<i>Age</i>	0.0887** [0.0291]	0.0775** [0.0253]	0.0509*** [0.00593]
<i>Age squared</i>	−0.000872** [0.000317]	−0.000726** [0.000266]	−0.000541*** [7.00e−05]
<i>Master's degree or higher</i>	0.873+ [0.502]	0.798 [0.511]	0.460*** [0.0751]
<i>Bachelor's degree</i>	0.617 [0.506]	0.596 [0.509]	0.392*** [0.0542]
<i>Associate degree</i>	0.524 [0.525]	0.491 [0.531]	0.222*** [0.0630]
<i>Some college</i>	0.511 [0.515]	0.449 [0.525]	0.250*** [0.0466]
<i>High school graduate</i>	0.504 [0.512]	0.516 [0.519]	0.256*** [0.0443]
Who worked for			
<i>Industry dummies</i>	Yes	Yes	Yes
Working hours			
<i>Hours worked</i>	—	0.0161** [0.00550]	0.0324*** [0.00128]
Type of work done			
<i>Detailed occupation dummies</i>	—	Yes	Yes
Observations	550	550	4,607
R ²	0.173	0.261	0.498

Notes. Bases: jobs held by regular employees and independent contractors at time of survey (February 2005). OLS regression—dependent variable: log of weekly earnings. Robust standard errors, clustered by worker, in brackets.

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

occupations. This model provides no evidence of contractors in nonmanagerial occupational groups facing a pay discount similar to those in managerial occupations. Moreover, we find that the coefficient associated with contracting is significantly different for managerial workers compared with all other workers ($p < 0.001$). These results therefore support our arguments that managerial work is in particular tension with the nature of contracting.

Discussion

As contingent work continues to make up a substantial proportion of employment, this paper explores the role that independent contracting plays in the careers of managerial workers. There is a particular tension between the nature of contracting and managerial work: contracting involves arm's-length relationships between workers and firms, whereby contractors are intended to carry out well-defined

tasks; managers, by contrast, are expected to integrate the activities of others, playing a prominent role in organizational processes and politics and being highly responsive to external demands. We explore the implications of this tension for the kinds of workers who will enter managerial contracting and the kinds of rewards that they will experience if they do so.

We initially draw on qualitative interviews to better understand how the work performed by managerial contractors differs from the work of regular employees. The way that contracting distanced managerial workers from employing organizations resulted in them performing a subset of managerial roles—specifically, roles that were much less likely to involve directing others, were more narrowly focused and less influential. These findings suggest that the more limited nature of contracting roles could reduce their perceived value but also gives managerial contractors greater control over their work and their schedules. We then

hypothesize how these costs and benefits shape which managerial workers take contracting roles and the rewards that they receive from doing so.

Our analyses of survey data from MBA alumni largely support our arguments. We find that workers who have managed fewer subordinates and women who have left their prior job for personal reasons are more likely to go into contracting. Contrary to our expectations, we also found that workers who had no subordinates in their prior role are less likely to enter contracting. This may be because workers with the fewest responsibilities see less need to enter contracting to control their schedule. In our analyses of the rewards received in contracting, we find that contractors achieve better work–life balance than regular employees but receive significantly lower pay; those who worked as contractors also earn less in subsequent spells of regular employment. The reduced pay that contractors receive is largely mediated by their lower levels of managerial responsibility and reduced hours, indicating that the more limited roles available to managerial contractors have a negative impact on the compensation received. Once we control for these factors, contracting still has a negative effect on pay, albeit one that is insignificant. It is possible that other limits on their work, such as more limited extrarole involvement in organizational processes, also reduce the value that employers are prepared to place on contractors. That said, there are limits to the interpretation that should be placed on nonsignificant differences.

These findings stand in contrast to the existing literature on high-skill contracting, which has disproportionately focused on technical occupations. In their landmark qualitative study, Barley and Kunda (2004) reported that contractors often earned higher pay than regular employees within organizations and that those premia were an important motivation for workers to enter contracting. Interviews with employers also report highly skilled contractors earning more than regular employees (Pearce 1993, Houseman et al. 2003), whereas the only prior quantitative analysis that we are aware of found IT contractors earning the same amount as regular IT employees (Bidwell and Briscoe 2009). Our survey data demonstrate a very different set of results for highly skilled managerial workers, and our analysis of the CPS confirms that the discount experienced by contractors within managerial occupations is at odds with the parity achieved by contractors in other occupations. We believe that these differences reflect the stronger constraints that contracting places on managerial workers' ability to perform the core tasks of their occupational role.

These analyses of managerial contractors therefore add nuance to research on contingent work. Prior research has tended to differentiate the impact of contingent work based on workers' skill level

(Kunda et al. 2002, Marler et al. 2002), reflecting differences in why employers use high- versus low-skill contractors as well as enduring differences in the way that high- versus low-skill occupations experience work. Our results suggest that other occupational characteristics—most notably pressures for interdependence and coordination—also affect how contractors are rewarded relative to employees. Although technical workers may be able to fully leverage their expertise while operating as arm's-length suppliers of services to the organization, our findings suggest that this is not possible for managerial workers. Instead, the greater interdependence, coordination, and direction of others involved in managerial work makes it particularly difficult for managerial workers to simultaneously work as contractors and occupy some of the most rewarding roles within the organization. Given the fluctuating staffing demands that employers experience, we are likely to continue to see extensive use of contract workers in occupations like management that are heavily interdependent with the rest of the organization. Our findings, though, suggest that workers in those occupations who accept contracting roles will struggle to achieve the same kinds of rewards that they would expect in regular employment.

Our analyses also provide important quantitative evidence on the work–life balance of contractors. Existing qualitative work on the work–life balance of contractors suggests that some workers view contracting as a route to better work–life balance, whereas others experience contracting as a source of additional demands on their time (Barley and Kunda 2004, Osnowitz 2010). We find that managerial contractors have better work–life balance than regular employees, suggesting that escaping regular employment does provide a route to better temporal control for this group. These results stand in particular contrast to work on physicians that has found that employees have improved work–life balance (Briscoe 2006, 2007) and to research that has found that employees are better placed than contractors to benefit from employers' flexible working practices (Briscoe et al. 2011). We believe that these differences reflect the extreme demands that managers face to be accessible and responsive (Hill 1992, Mintzberg 2009). Becoming organizational outsiders by operating as contractors may be one of the few ways in which managers can successfully take back control over their time.

Our findings also show that workers who contract have different long-term career outcomes well after they have ceased working as contractors. Prior work sheds little light on what happens to contractors if they return to regular employment (Davis-Blake and Broschak 2009), despite evidence that people do move back and forth between the two (Bidwell and Briscoe 2009, Osnowitz 2010). Our finding that former

contractors face a pay penalty in later regular employment is consistent with what we learned in our qualitative fieldwork about employers viewing contracting experience as inferior to regular employment, as well as representing a possible signal of reduced occupational commitment. It may also reflect the different career preferences of those who opt into contracting. Further exploring these long-term effects of contracting, and how they vary across occupations, should be a priority for future research.

A further question for future research regards how and why organizations use managerial contractors. We have noted the presence of a tension between managerial roles and contracting and have examined how this shapes workers' careers. It is likely that the same tension will affect how and where organizations choose to use managerial contractors. Although a variety of work has explored the use of technical contractors (Lautsch 2002, Barley and Kunda 2004, Mayer and Nickerson 2005, Bidwell 2009), it is likely that the use of managerial contractors will be different. We hope that future work will elucidate those differences.

Our methodological approach has a number of limitations. The correlational nature of our data prevents us from drawing strong causal conclusions about the relationship between contracting and outcomes. Our theory has emphasized that the rewards received by contractors and decisions by particular individuals to work in contracting are jointly determined. This joint determination of employment outcomes makes causality particularly difficult to establish, because issues such as worker quality and preferences will determine both how workers evaluate job options and the rewards that employers are willing to offer them. Rather than attempt to definitively separate out the effects of selection into contracting and treatment by it, we have instead shown that both effects behave consistently, with contracting entered into by people who have managed fewer workers and who have more need for work–life flexibility, and those who work in contracting having lower current and subsequent pay and improved reported work–life balance. These results are therefore consistent with our argument that contracting work is less valued than regular employment in managerial occupations.

A further limitation is the lack of more detailed data on the work being performed. We capture the functions that people work in and the number of subordinates that they have, yet these measures are quite broad and capture only some aspects of the managerial role. Future work could benefit from the use of measures that more fully capture the nature and level of a worker's managerial responsibilities, as well as information on the responsibilities of those contractors who are working for multiple employers simultaneously. Our analyses suggested that those

contractors with many clients fare even more poorly in terms of pay than those who have one main employer. That lower pay is consistent with our arguments: we would expect contractors working across companies to have even more limited roles compared with regular employees (and even single-employer contractors), given their simultaneous commitment to multiple employers, and thus we would expect employers to value their work even less. In addition, it would be valuable in future work to gather data on the total number of weeks and hours worked per year by contractors versus employees. Although our CPS analysis, which uses weekly earnings, suggests that contractors earn less during weeks worked, working fewer weeks per year may be another aspect of flexibility that could benefit contractors but also reduce their pay.

Finally, although our survey sample allowed us to compare contractors and employees within a fairly homogeneous group of workers, our use of a highly qualified subset of managerial workers limits our ability to generalize to the broader population of managerial contractors. On the one hand, it is possible that possession of a prestigious MBA makes it easier for workers to signal their expertise, increasing the viability of a career in contracting. On the other hand, that same credential may also improve the opportunities available to them as regular employees, raising the costs of contracting. Our analysis of the CPS suggests that contracting may be more common among the broader managerial population, but found evidence of a similar pay penalty relative to regular employment. Further work is needed, though, to explore how contracting plays out among other groups of managerial workers.

Despite these limitations, our paper provides strong evidence that contracting roles offer managerial workers a very different set of rewards than regular employment. Managers often integrate the activities of others to allow the organization to function, a role that requires them to be “insiders,” highly responsive and committed. Operating as contractors makes people outsiders, putting tighter boundaries around their roles, limiting that responsiveness and commitment, and shaping the kinds of work that can be done. We show how these dynamics affect the consequences of contracting for managerial workers, shaping its benefits, its costs, and the choices by workers as to whether to contract.

Acknowledgments

The authors thank Peter Cappelli, Adam Cobb, Isabel Fernandez-Mateo, and J. R. Keller for invaluable feedback on early versions of this paper; Ethan Mollick for his role in collecting the data; our editor, Lisa Cohen; three anonymous reviewers for helpful guidance and feedback; and the individuals who were kind enough to agree to be interviewed and to complete the survey, without whom this research would not have been possible.

Appendix A. Exploratory Qualitative Interviews

We conducted qualitative interviews with 12 MBA alumni who were either working as independent contractors at the time of the interview or had done so at some point since graduating. The interviewees were identified on the basis of resume data that were available on the alumni database of a U.S. business school, and were engaged across a range of industries and

sectors, including food and beverages, media, finance, not-for-profit, healthcare, cosmetics, and clothing. We contacted 36 individuals in total, 14 men and 22 women, but experienced a lower response rate among the men we contacted, as is common when conducting research (Holbrook et al. 2007). The work and contracting experience of the interviewees are summarized in Table A.1.

Table A.1. Overview of Interviewees

	Gender	Years since graduating from MBA	Completed years as a contractor	Whether worked full time or part time as a contractor	Whether worked on one project at a time or multiple	Whether contracting at time of interview
1	Female	13	4	Part time	One project at a time	No
2	Female	5	2	Full time	One project at a time	Yes
3	Female	23	2	Part time	One project at a time	Yes
4	Female	12	2	Full time	Multiple projects	Yes
5	Female	17	6	Full time	Multiple projects	Yes
6	Female	24	3	Part time	Multiple projects	Yes
7	Female	6	1	Full time	One project at a time	No
8	Male	11	4	Full time	One project at a time	No
9	Female	9	2	Full time	Multiple projects	Yes
10	Female	24	16	Part time	Multiple projects	Yes
11	Female	26	7	Part time	One project at a time	Yes
12	Male	17	1	Part time	One project at a time	No

Table A.2. Descriptions of Contract Work Undertaken by Interviewees

	Example of type of work done as contractor
1	Sales process evaluation and improvement for digital marketing company. Manage cross-functional project to develop strategies to improve product position and sales.
2	Project managing the establishment of a new subsidiary of a company and a partnership with another company. Planning and monitoring across a range of work streams, including supply chain, marketing, and finance.
3	Market entry evaluation and strategy development for Fortune 50 company. Developing strategy for the launch of a beauty brand for a start-up.
4	Financial management work for early stage businesses. Developing strategies and processes for raising external equity. Developing business model and putting together business plans. Setting up organizational accounting processes. Ad hoc CFO support.
5	Strategic reviews, including brand review, competitive review, and channel strategy review. Organizational restructuring strategy development. Market entry/new product evaluation and strategy development. Interim financial management support.
6	Overseeing raising expansion financing for an infrastructure project. Managing the financial services license acquisition process for early-stage company.
7	Development of a leadership program. Project management for organizational change and development of HR strategy following organizational restructuring. Project management of HR strategy implementation.
8	Evaluation of the effectiveness of the antipiracy efforts and the organizational costs of piracy. Developing and aligning organizational strategies around pricing and positioning at a public relations firm.
9	Market evaluation and development of growth strategy for a global nonprofit. Program management.
10	Strategy development for new products and ventures. Strategic analysis for private equity firms.
11	Mental health services program development, and project management with staff reporting to respondent.
12	Developing and implementing accounting and financial management processes for a small business.

Table A.3. How Managerial Work Differs for Contractors

Themes	Illustrative quotes
Increased distance from the organization	
Scope of contracts	<p>“Again, they worked out a budget that it was going to take this many hours. Of course, very often the proposal of how many hours it’s going to take is entirely inaccurate in the end. It’s not because I was ripping anyone off, it’s because, no, this took much longer, and we needed to have all these meetings, and I needed to make all these phone calls, and this and that.”</p> <p>“As I got into this, realized this is broader than solving a problem for one specific client, and that really it was much broader, so then I talked to them and was like I can stay focused on this and just wrap that up, or I’m happy to go deeper and expand which means going above the initial cap, or whatever it was.”</p> <p>“Originally I contracted for a certain number of hours, and then as the project scope of course grew and the timeline shrank, they basically were like work and get this done. That’s what I did.”</p>
Reduced psychological involvement	<p>“Because [as an employee] you’re truly a part of the company and, seen in a way that, as an outsider, you’re not. My job is very clearly to serve my client. It’s easier not to take things personally when you’re not an outsider than when you’re an insider.”</p> <p>“Again, it can be kind of freeing because at the end of the day, you go home and you’re done with it. You don’t have the total 110% responsibility.”</p>
Physical distance	<p>“It was fairly similar, but the difference is that I didn’t have the day-to-day or face-to-face time with my colleagues that . . . of my group. You, I think when you’re working from home, you have to make an effort to stay in the forefront of their minds. It’s like before when I’d have to buy for board member time to press what we were going for, you know I was there in their face, but now I had to call and email and text them to say ‘Hey, a big meeting’s coming up and I need to know what our stance is,’ so you really have to be more aggressive in getting people’s attention because a lot of people, when they have a lot on their plate, it’s whoever that’s sitting in the chair in front of them that gets their attention.”</p> <p>“Again, you have the luxury of the flexibility of that [working from home], but then you definitely feel like an outsider. It’s the old adage about the water cooler chit chat. You miss out on a lot of that. Sometimes, again, that can be fantastic. You say, ‘I don’t have to sit around and listen to that, or waste my time with it, or whatever.’ Then you sometimes miss conversations and nuance and things that might be helpful to know about.”</p> <p>“I’m really kind of lonely working in my home office. I’ve had to dig into my network. Very different than how I did at [prior company], where you would just walk down the hall, or you had people that you met in person.”</p>
Lack of a formal long-term role	<p>“Actually the retainer was rolling over into this new area where the chairman and CEO would have been involved. That was where I realized like, okay he’s not going to want to work with me, and I certainly don’t want to work with him. That was where the point where I was like, well this is where this freelance stuff works really well. I can just say, hey you know what. I’m done.”</p> <p><i>[Do you think if you had been an employee doing this job, do you think there are particular ways it would’ve changed?]</i> “I think maybe I might have felt that I would’ve had a little more leverage, maybe. Not felt quite so much like an outsider a lot of the time.”</p> <p>“Sometimes I don’t want an ongoing relationship with people after I see what they’ve been doing, or I see how they handle some of the advice that I give them. . . . I only do deeper service work for the first phase of the project, so that we can easily separate if that’s what the right thing to do is.”</p> <p>“If you can afford it, you work as a contractor, a consultant, you don’t work with jerks. If you have choices or even say, ‘I’d rather not work.’ I don’t have to work than work with some of these people.”</p>
Bounded nature of the work	
Reduced managerial responsibility	<p>“I love having a different learning curve than what I had in corporate. After a while in corporate you’re really good at managing internal, and managing processes, but you’re not doing any dirty work on the ground after a certain level in your career.”</p> <p>“I was over this whole group. I wasn’t managing it day to day. I was providing, ‘Here’s some approaches. Here’s some tools that we should be using. Here’s the measurement frequency that we need to be checking again. Here’s what’s going to shoot. I think we need to monitor more carefully.’”</p> <p>“Most of the time I don’t do implementation and execution of strategy, I’m working on what is the strategy and all the way to either the point of we’ve launched the product or we’ve bought the new company, or we sold off the business, or whatever. I usually don’t work on the day-to-day operations of stuff, unless they suck me in, which they do every now and then.”</p>

Table A.3. (Continued)

Themes	Illustrative quotes
More focused role	“Well, it was a . . . I mean, I’d say this is much more discrete than when I was . . . I would say an element of it overlaps with what I’d done before. It is a little bit more discrete. When I worked at [regular employer] I was also helping them create some of the more different types of large deals, so at the front end as well. There was definitely a strategic sales aspect of the role.”
Less political involvement	“The biggest change I would say is that I was focused on projects only, so no more of the big corporate strategic planning or corporate, executive duties.” “I think the other big advantage is you’re out of the politics. You’re not anybody’s person and you’re not seen as having any sort of bias or interest in the outcome. I think that helps, as a consultant, to be much more effective.” “What was good for me, as a freelance, I really didn’t care about my future career at the company. I was really not interested in office politics, I wasn’t worrying about what people thought about me. I didn’t have to pretend I was a certain way or the other. I didn’t have a performance review. All the bad stuff of office politics was removed from my role.”
Costs and benefits of contracting	
Reduced influence and recognition	“I think in certain ways sometimes it’s harder to get responses from certain people within an organization because there is no clear reporting role or even accountability.” “ . . . because that’s the perception of that line on your resume saying, hey I’m doing stuff for myself. I’m independent, or I’m an LLC or whatever. Katie and I had talked about this once. Someone directly told her that, and I was like you haven’t heard that before? That you’re like this, mommy job perception. It’s tough.”
Increased flexibility	“I appreciate the flexibility, and also just the flexibility on a day-to-day basis, managing things, which is different when you are working full time or even part time at a company, where you still need to be there every day or most days. I don’t know, but I also like the flexibility of you know what, one week maybe I work forty hours, but then another week I work zero, but I can plan it all out. I’m still in control of it.” “I’m definitely very independent personally, so being in a situation where obviously your clients are your bosses, I have a little bit more control over your life and how you approach things, I definitely appreciate that.” “Another level of control is just my hours and where I am and when I work. Who I work with. Those are probably the main things. How I do my work, too. I’m not sure if I anticipated this before, but instead of having to make seventy-five decks, I can do my work the way I want to.”

Table A.4. Distribution of Employment Spells Across Alumni

Number of employment spells in sample	<i>n</i>	%
1	1,356	47.5
2	806	28.2
3	373	13.1
4	200	7.0
5	80	2.8
6	26	0.9
7	11	0.4
8	1	0.0
9	1	0.0
10	1	0.0
Total	2,855	100.0

4. A self-employed worker
5. Other

Asked if Answered 2 or 3 to the Above Question

- During this period as a self-employed worker/independent contractor, did you have any permanent employees on your payroll for over six months?
- Did you spend the majority (>75%) of your time providing services to a single organization?

Asked for Each Spell if an Employee or Self-Employed/Independent Worker and Have No Employees of Payroll

- What kind of business or industry was this organization in?
- Where were you based when you first started work with this company?
- Counting all locations where this employer operated, the total number of persons who worked for this employer at the time that you took the job
- What function was this job in?
- What year did you first start working in this job?
- What month, or approximate season, did you first start working in this job?
- How many hours per week did you usually work at this job?

Appendix B. Additional Details on the Careers Study Key Survey Questions

Asked for Each Spell of Paid Employment

- During this career spell, were you:
 1. Employed by a private or public company, government, or a non-profit organization
 2. An independent consultant, independent contractor or a freelance worker
 3. A founder of a new business

- When you first started on this job, what were your approximate annual earnings before taxes or other deductions?
- What was the total number of people who worked in units that you managed when you first started this job?
- Are you currently working at this job?
- When did you last work at this job? (MM/YY)?
- In your last year working at this job what were your approximate earnings?
- What were the reasons that you left this employer? (*employees*)
 1. To search for another job
 2. Position eliminated/downsizing
 3. Company, office, work place, or plant closed
 4. Discharged or fired
 5. Left by mutual agreement
 6. Temporary program/project/job ended
 7. Internship ended
 8. To return to school
 9. Child rearing, or other family reasons
 10. Ill health
 11. Retired
 12. To start a new venture
 13. To take another job that I had already been offered
- What were the reasons that you left this stopped working as an independent contractor, independent consultant, or freelancer? (*contractors*)
 1. To search for another job
 2. Main project I was working on ended
 3. I lost the work from my main client
 4. I was unable to find sufficient sources of new work
 5. To return to school
 6. Child rearing, or other family reasons
 7. Ill health
 8. Retired
 9. To start a new venture
 10. To take another job that I had already been offered

Work-Life Balance—Asked of All Respondents

- After work I come home too tired to do some of the things I'd like to do
- On the job I have so much work to do that it takes away from my personal interests
- My family/friends dislike how often I am preoccupied with my work while I am at home
- My work takes up time that I'd like to spend with my family/friends
 1. Completely agree
 2. Agree
 3. Neutral
 4. Disagree
 5. Completely disagree

Endnotes

- ¹ Analysis of CPS data from 2017 finds that the average number of hours per week worked by managerial occupations is significantly higher than that of any of the other 21 major occupational groups.
- ² The proportion of managerial employees in the CPS who have a Master's qualification or above (20%) is somewhat higher than the proportion of managerial contractors (14%).
- ³ This response rate is within the typical range for surveys of workers with MBAs and those in managerial and executive roles (Cycyota and

Harrison 2006, Bertrand et al. 2009). Furthermore, studies show that response rates are a very poor predictor of nonresponse bias (Groves and Peytcheva 2008).

⁴ The respondents are distributed across years of graduation as follows: 20% graduated in 1990–1995, 21% graduated 1996–2000, 29% graduated 2001–2005, and 29% graduated 2006–2010. Each year accounts for between 2.9% and 6.5% of our total sample of respondents. Those who only founded companies are not represented in our sample.

⁵ Our work-life balance analysis is the exception to this because we focus on the job held at the time of the survey, which may not be the first job of the employment spell.

⁶ Respondents identified themselves as self-employed in 11% of our contracting spells. A slight difference between our definition and that used by Bidwell and Briscoe (2009) is their use of employer size in determining contractor status of spells. They assigned spells to contracting status “when a job was described as self-employment taking place at a site with more than two other individuals where the respondent did not have anybody reporting to them” (p. 1154). We re-ran our analyses excluding 15 spells for which we were unable to determine the size of their employer with similar results.

⁷ One potential concern regarding the use of annual pay is that contractors may work fewer weeks during the year than regular employees. Although we do not have the data to calculate weekly pay for this sample, we ran our pay models including an indicator set equal to one if the spell lasted less than one year. Our results were unaffected.

⁸ For contractors, this could be people at the client firm or other external workers.

⁹ Unfortunately, our data do not provide information on the age or number of children in the household. We did attempt to test for the effect of young children by creating a different variable based on whether the spell started in the same calendar year as, or the two calendar years following, the year the respondent first had children in the household. Our results were substantively the same.

¹⁰ The inclusion of this control captures the extent to which a worker has changed employers, whereas the inclusion of the number of years of post-MBA experience accounts any variation in the length of time spent with each employer.

¹¹ As a robustness check, we re-ran our models excluding EMBA alumni, with similar results.

¹² Respondents were asked about their annual earnings in the first and last years of each employment spell.

¹³ Personal reasons include “childrearing or other family reasons,” “ill health,” “to return to school,” and “retirement.” Child rearing or other family reasons account for 89% of exits for personal reasons.

¹⁴ We do not include pay in last job in the analysis of longer-term effects of having been a contractor on pay because of the different nature of this analysis. The hypothesized negative impact of having worked as a contractor could be experienced in any spell after returning to regular employment. Controlling for prior pay would make it difficult to identify the effect of prior contracting after the first postcontracting job that the worker takes in which they experience a discount.

¹⁵ Although our reported analyses only include the most relevant of these career controls for each model in the interests of parsimony, our results are robust to the inclusion of all of our career controls.

¹⁶ We did not ask for the number of weeks worked per year in our survey. It is possible that people who regularly worked zero hours in some weeks incorporated this into their assessment of average of the number hours that they worked.

¹⁷ The responses were as follows: less than 10; 10–49; 50–99; 100–499; 500–999; 1,000–4,999; 5,000–9,999; 10,000–49,999; 50,000–100,000; 100,000+. In converting this into a single log measure, we choose a

value of 150,000 when respondents indicated that there were more than 100,000 employees.

¹⁸ Authors' analyses of CPS 2005 Contingent Worker Supplement data and more recent RAND survey data used by Katz and Krueger (2016). The estimates are similar for all managerial workers and for just those with a Master's qualification or above.

¹⁹ Of respondents, 48% had only one employment spell in the analysis sample. To ensure that our results were not affected by individuals with multiple observations having a disproportionate impact, we reran our analyses weighting each observation by the inverse of the total number of observations for that individual worker as a robustness check. These analyses produced results similar to those reported.

²⁰ In this model, we drop the "woman who did not leave last job for family reasons" category owing to its high correlation with the "woman with no children" category ($r = 0.88$).

²¹ We also ran our models excluding employment spells during which the worker had been a contractor at any point between graduating and the start of the spell with similar results.

²² Working for a single employer accounts for 55% of the contracting spells in our sample.

²³ The number of spells in these later models is somewhat higher than the number of spells in the models in Table 3. This is because the analysis in Table 3 excludes spells preceded by a contracting spell and spells with missing data for prior job and employer characteristics.

²⁴ The R^2 statistic increases from 0.440 to 0.467 with the inclusion of the contracting variable. The modest size of the increase reflects the low incidence of contracting spells (4% of all employment spells).

²⁵ One concern in including a control based on the prior job is that we are biasing our results by excluding the employment spells of those respondents who have only had one employment spell since graduation from this analysis. As a robustness check, we ran similar models excluding prior pay both for all employment spells in our analysis sample and for just those spells for which we had prior pay data. The contracting coefficients in both cases were significant and larger than those reported in Table 4.

²⁶ We tested the subordinate measures separately, excluding the other measure from the model in each case because of their interrelated nature.

²⁷ To accurately calculate the percentage change in income associated with working as a contractor in each model, we computed the exponential of the coefficient and subtracted it from one.

²⁸ We excluded these spells from the models reported in Table 4 because those models included pay in the job held before the focal spell as a proxy for the achievements of the worker before contracting. Our results are similar with and without these spells.

²⁹ The larger number of spells included in this analysis, compared with the analysis reported in Table 4, reflects the inclusion of spells of respondents who only have one employment spell; the inclusion of spells that were preceded by either a spell of contracting, a spell of self-employment, or a spell spent founding a company; and the inclusion of spells preceded by a spell of regular employment but excluded from the analysis in Table 4 owing to missing earnings data for that previous spell.

³⁰ We also ran the same models using years of prior contacting experience as our measure, with similar results.

³¹ We also ran the same models excluding workers with a Master's degree or higher as a robustness check and similarly found evidence of a pay discount, although the discount was not significant in the weighted model that controlled for the type of work done ($p = 0.106$).

References

Abraham KG, Taylor SK (1996) Firms' use of outside contractors: Theory and evidence. *J. Labor Econom.* 14(3):394–424.

Ang S, Slaughter SA (2001) Work outcomes and job design for contract vs. permanent information systems professionals on software development teams. *MIS Quart.* 25(3):321–350.

Ashford SJ, George E, Blatt R (2007) Old assumptions, new work: The opportunities and challenges of research on nonstandard employment. *Acad. Management Ann.* 1(1):65–117.

Barley SR, Kunda G (2004) *Gurus, Hired Guns and Warm Bodies: Itinerant Experts in a Knowledge Economy* (Princeton University Press, Princeton, NJ).

Behfar K, Okhuysen GA (2018) Perspective—discovery within validation logic: Deliberately surfacing, complementing, and substituting abductive reasoning in hypothetico-deductive inquiry. *Organ. Sci.* 29(2):323–340.

Bertrand M, Goldin C, Katz LF (2009) Dynamics of the gender gap for young professionals in the corporate and financial sectors. *Amer. Econom. J. Applied Econom.* 2(3):228–255.

Bianchi SM, Sayer LC, Milkie MA, Robinson JP (2012) Housework: Who did, does or will do it, and how much does it matter? *Soc. Forces* 91(1):55–63.

Bidwell MJ (2009) Do peripheral workers do peripheral work? Comparing the use of highly skilled contractors and regular employees. *Indust. Labor Relations Rev.* 62(2):200–225.

Bidwell MJ (2010) Problems deciding: How the make or buy decision leads to transaction misalignment. *Organ. Sci.* 21(2):362–379.

Bidwell MJ, Briscoe FS (2009) Who contracts? Determinants of the decision to work as an independent contractor among information technology workers. *Acad. Management J.* 52(6):1148–1168.

Bidwell MJ, Mollick E (2015) Shifts and ladders: Comparing the role of internal and external mobility in executive careers. *Organ. Sci.* 26(6):1629–1645.

BIS (2014) *The Fourth Work-Life Balance Employer Survey, 2013* (BIS, London).

Briscoe F (2006) Temporal flexibility and careers: The role of large-scale organizations for physicians. *Indust. Labor Relations Rev.* 60(1):88–104.

Briscoe F (2007) From iron cage to iron shield? How bureaucracy enables temporal flexibility for professional service workers. *Organ. Sci.* 18(2):297–314.

Briscoe FS, Wardell M, Sawyer S (2011) Membership has its privileges? Contracting and access to jobs that accommodate work-life needs. *Indust. Labor Relations Rev.* 64(2):258–282.

Bureau of Labor Statistics (2001) Occupational classification system manual. Accessed August 28, 2016, <https://www.bls.gov/ocsm/commmain.htm>.

Bureau of Labor Statistics (2010) 2010 Standard Occupational Classification Definitions. 1–46. Accessed August 28, 2016, https://www.bls.gov/soc/soc_2010_definitions.pdf.

Cappelli P, Keller JR (2013) Classifying work in the new economy. *Acad. Management Rev.* 38(4):575–596.

Cycyota CS, Harrison DA (2006) What (not) to expect when surveying executives: A meta-analysis of top manager response rates and techniques over time. *Organ. Res. Methods* 9:133–160.

Cyert RM, March JG (1963) *A Behavioral Theory of the Firm*, 2nd ed. (Blackwell, Malden, MA).

Dalton M (1959) *Men Who Manage: Fusions of Feeling and Theory in Administration* (John Wiley & Sons, New York).

Davis-Blake A, Broschak JP (2009) Outsourcing and the changing nature of work. *Annual Rev. Sociol.* 35(1):321–340.

Davis-Blake A, Broschak JP, George E (2003) Happy together? How using nonstandard workers affects exit, voice, and loyalty among standard employees. *Acad. Management J.* 46(4):475–485.

Elfenbein DW, Hamilton BH, Zenger TR (2010) The small firm effect and the entrepreneurial spawning of scientists and engineers. *Management Sci.* 56(4):659–681.

- Evans JA, Kunda G, Barley SR (2004) Beach time, bridge time, and billable hours: The temporal structure of technical contracting. *Admin. Sci. Quart.* 49(1):1–38.
- Farber HS, Hall R, Pencavel J (1993) The incidence and costs of job loss: 1982–91. *Brookings Papers Econom. Activity Microeconomics* (1):73–132.
- Froot KA (1989) Consistent covariance-matrix estimation with cross-sectional dependence and heteroskedasticity in financial data. *J. Financial Quant. Anal.* 24(3):333–355.
- Greenhaus JH, Parasuraman S, Wormley WM (1990) Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Acad. Management J.* 33(1):64–86.
- Groves RM, Peytcheva E (2008) The impact of nonresponse rates on nonresponse bias. *Public Opinion Quart.* 72(2):167–189.
- Guest D (2004) Flexible employment contracts, the psychological contract and employment outcomes: An analysis and review of the evidence. *Internat. J. Management Rev.* 5/6(1):1–19.
- Hill LA (1992) *Becoming a Manager: Mastery of a New Identity* (Harvard Business School Press, Boston).
- Hollister MN (2004) Does firm size matter anymore? The new economy and firm size wage effects. *Amer. Sociol. Rev.* 69(5):659–676.
- Holbrook A, Krosnick JA, Pfent A (2007) The causes and consequences of response rates in surveys by the news media and government contractor survey research firms. JM Lepkowski, C Tucker, JM Brick, eds. *Advances in Telephone Survey Methodology* (John Wiley & Sons, Hoboken, NJ), 499–528.
- Houseman SN, Kalleberg AL, Erickcek GA (2003) The role of temporary agency employment in tight labor markets. *Indust. Labor Relations Rev.* 57(1):105–127.
- Huy Q (2001) In praise of middle managers. *Harvard Bus. Rev.* 79(8):72–79.
- Jacobs JA, Gerson K (2001) Overworked individuals or overworked families? Explaining trends in work, leisure, and family time. *Work Occupations* 28(1):40–63.
- Kanter RM (1977) *Men and Women of the Corporation* (Basic Books, New York).
- Katz LF, Krueger AB (2016) *The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015*. NBER Working Paper No. 22667, National Bureau of Economic Research, Cambridge, MA.
- Kopelman RE, Greenhaus JH, Connolly TF (1983) A model of work, family and interrole conflict: A construct validation study. *Organ. Behav. Human Performance* 32(2):198–215.
- Kunda G, Barley SR, Evans J (2002) Why do contractors contract? The experience of highly skilled technical professionals in a contingent labor market. *Indust. Labor Relations Rev.* 55(2):234–261.
- Lautsch BA (2002) Uncovering and explaining variance in the features and outcomes of contingent work. *Indust. Labor Relations Rev.* 56(1):23–43.
- Lichtenstein N (2002) *State of the Union* (Princeton University Press, Princeton, NJ).
- Logan JA (1996) Opportunity and choice in socially structured labor markets. *Amer. J. Sociol.* 102(1):114–160.
- Marler J, Barringer MW, Milkovich G (2002) Boundaryless and traditional contingent employees: Worlds apart. *J. Organ. Behav.* 23(4):425–453.
- Masten SE (1988) A legal basis for the firm. *J. Law Econom. Organ.* 4(1): 181–198.
- Masters JK, Miles G (2002) Predicting the use of external labor arrangements: A test of the transaction costs perspective. *Acad. Management J.* 45(2):431–442.
- Mayer KJ, Nickerson JA (2005) Antecedents and performance implications of contracting for knowledge workers: Evidence from information technology services. *Organ. Sci.* 16(3):225–242.
- Meiksins P, Whalley P (2002) *Putting Work in Its Place: A Quiet Revolution* (ILR Press, Ithaca, NY).
- Miller J, Miller M (2012) The rise of the supertemp. *Harvard Bus. Rev.* (May):50–62.
- Milliken FJ, Dunn-Jensen LJ (2005) The changing time demands of managerial and professional work: Implications for managing the work-life boundary. Kossek EE, Lambert SJ, eds. *Work and Life Integration: Organizational, Cultural, and Individual Perspectives* (Lawrence Erlbaum, Mahwah, NJ).
- Millward LJ, Hopkins LJ (1998) Psychological contracts, organizational and job commitment. *J. Appl. Soc. Psychol.* 28(16):1530–1556.
- Mintzberg H (1973) *The Nature of Managerial Work* (Harper & Row, New York).
- Mintzberg H (2009) *Managing* (Berrett-Koehler, San Francisco).
- O'Mahony S, Bechky BA (2006) Stretchwork: Managing the career progression paradox in external labor markets. *Acad. Management J.* 49(5):918–941.
- Osnowitz D (2010) *Freelancing Expertise: Contract Professionals in the New Economy* (Cornell University Press, Ithaca, NY).
- Osterman P (1987) Choice of employment systems in internal labor markets. *Indust. Relations* 26(1):46–67.
- Osterman P (2008) *The Truth About Middle Managers: Who They Are, Who They Work, Why They Matter* (Harvard Business Press, Boston).
- Overman S (2011) The rise of the hired gun G-suite. Accessed August 28, 2016, <http://fortune.com/2011/04/15/the-rise-of-the-hired-gun-c-suite/>.
- Parks JM, Kidder DL, Gallagher DG (1998) Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *J. Organ. Behav.* 19:697–730.
- Pearce JL (1993) Toward an organizational behavior of contract laborers: Their psychological involvement and effects on employee co-workers. *Acad. Management J.* 36(5):1082–1096.
- Peterson NG, Mumford MD, Jeanneret IR, Fleishman EA, Levin KY, Campion MA, Mayfield MS, Morgeson FI, Lancaster AR, Silver MB (2001) Understanding work using the Occupational Information Network (O*NET): Implications for practice and research. *Personnel Psych.* 54(July):451–492.
- Pfeffer J (1992) *Managing with Power: Politics and Influence in Organizations* (Harvard Business Press, Boston).
- Pfeffer J, Baron JN (1988) Taking the workers back out—recent trends in the structuring of employment. *Res. Organ. Behav.* 10:257–303.
- Rosen S (1986) The theory of equalizing differences. Ashenfelter O, Layard R, eds. *Handbook of Labor Economics* (Elsevier Science, Amsterdam).
- Rosenfeld RA (1992) Job mobility and career processes. *Annual Rev. Sociol.* 18:39–61.
- Rosshem J (2015) Executives for hire. Accessed January 2, 2016, <http://career-advice.monster.com/job-search-company-industry-research/executives-for-hire/article.aspx>.
- Rousseau DM (1995) *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements* (Sage Publications, Thousand Oaks, CA).
- Roy AD (1951) Some thoughts on the distribution of earnings. *Oxford Econom. Papers* 3(2):135–146.
- Schein EH (2004) *Organizational Culture and Leadership*, 3rd ed. (Jossey Bass, San Francisco).
- Smith V (2001) Teamwork vs. tempwork: Managers and the dualism of workplace restructuring. Cornfield D, Campbell K, McCammon H, eds. *Working in Restructured Workplaces: Challenges and New Directions for the Sociology of Work* (Sage, Thousand Oaks, CA).
- Spilerman S (1977) Careers, labor market structure, and socioeconomic achievement. *Amer. J. Sociol.* 83(3):551–593.
- Stewart R (1976) *Contrasts in Management: A Study of Different Types of Managers' Jobs, Their Demands and Choices* (McGraw Hill, Maidenhead, UK).
- Van Dyne L, Ang S (1998) Organizational citizenship behavior of contingent workers in Singapore. *Acad. Management J.* 41(6):692–703.

- Weisshaar K (2018) From opt out to blocked out: The challenges for labor market re-entry after family-related employment lapses. *Amer. Sociol. Rev.* 83(1):34–60.
- Whyte WH (1956) *The Organization Man* (Simon and Schuster, New York).

Tracy Anderson is a PhD candidate in the management department at the Wharton School, University of Pennsylvania. Her research focuses on how careers are shaped by features of contemporary work, such as contracting and collaboration, with

a particular interest in the careers of managerial and knowledge workers.

Matthew Bidwell is an associate professor in the management department at the Wharton School. He received his PhD in management from the MIT Sloan School. His research examines how organizations and markets interact to shape employment, with a particular emphasis on how firms balance internal and external labor markets, patterns of worker mobility, contracting, and outsourcing.