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Leader Beliefs and CSR for Employees: The Case of Telework

Abstract

Purpose
- This study aims to investigate the role of top leaders’ beliefs in the importance of work-family balance as a key determinant in explaining the adoption of social practices oriented toward internal stakeholders, focusing on home telework as one of these practices.

Design/methodology/approach
- A sample of 2,388 executive officers reported the senior leaders’ belief favoring work-family balance by completing a new scale developed for this purpose asking how much key decision-makers (1) were convinced of the value to employees of supportive family-friendly HR practices, (2) modeled how to balance work and family life, and (3) felt a personal commitment to implement family-friendly practices. They also reported the firm’s provision of telework and organizational characteristics such as industry, multinational status and firm size.

Findings
- Regression analyses revealed that the firm’s provision of telework is more pervasive when its top leaders believe in the importance of work-family balance, even after controlling for firm context (industry, geographical dispersion, and size). More importantly, we also find that managerial beliefs augment the positive effect of instrumental factors on the provision of home telework.

Originality/value
- This study contributes to the leadership and CSR literature by suggesting that top leaders play a catalyst role in contexts where telework is instrumentally valued.

Keywords
Leader beliefs, leadership motives, managerial cognition, corporate social responsibility, home telework, Spain
“Corporate Social Responsibility-Employees: We understand that attracting and retaining the best possible people is paramount, so we have created a workplace that makes BOQ a company people want to work for and an environment and culture where they can succeed. This includes the Bank’s Home-Based Work Policy which allows for the flexibility to work from home.”


“More than 40 suicides have been reported since the start of 2008 among people who have worked for France Télécom..... The case has captured the attention of the French media, the public and the government because many of the suicides and more than a dozen failed suicide attempts have been attributed to work-related problems. In response, France Télécom has halted some practices identified as being particularly disruptive, like involuntary transfers, while encouraging more supportive practices, including working from home.”


Introduction

The examples above provoke the question of who should bear responsibility for the wellbeing of employees facing work-life issues. During the last few decades, our thinking about this question has undergone a subtle but important shift. It is now widely recognized that it is difficult for employees to fulfill their family and work responsibilities unless organizations begin to recognize and provide support for employee work-life issues (Pitt-Catsouphes & Googins, 2005). This evolution in our thinking represents a significant shift from viewing work-life issues as private concerns to a stronger recognition that they are critical corporate leadership issues (Googins, 1991). This has also been evidenced in the recent interest in the Telework Week (3-7th March 2014), a global initiative that drives awareness of the “win-win” outcomes that flexible work options such as telecommuting,
have for both companies and their employees. “Last year, more than 71,000 people pledged. That saved more than $5.6 million on commuting costs, gained nearly 252,000 hours back into employees’ days, removed three and a half tons of pollutants from the air, and prevented 6.4 million miles of driving” (MapleNewtownPatch News, March 4th, 2013).

This shift requires an expansion of the framing of the business case for work-life balance to also include normative leadership considerations for employees’ wellbeing. In a growing field broadly known as corporate social responsibility (CSR), the traditional assumption that profit maximization is the firm’s sole goal and the shareholder the sole relevant actor has been questioned in favor of a broader view which suggests that the firm’s success should be defined by the extent to which it satisfies the needs of multiple constituents (Donaldson, 2001; Donaldson and Preston, 1995; Freeman, 1984). Empirical research on CSR, however, has focused almost exclusively on a firm’s responses to ‘external’ stakeholders’ demands. For instance, several CSR studies analyze the impact of external pressures on a variety of environment-related firm behaviors (e.g., Etzion, 2007). This research rarely considers organizational responses to ‘internal’ stakeholders (employees), and when it does, it usually aggregates these responses with several other broad categories (Hillman and Keim, 2001), treating all constituencies as essentially a homogeneous block. Although employees have often been treated as a valued ‘resource’ or as ‘human capital’ (Niederman, Sumner, and Maertz, 2007; Shaw, 2011), they have not been studied as important stakeholders in their own right. This is surprising given that, as noted by McWilliams and Siegel (2001), employees are most affected by the business every day, are responsible for running it, and hence have the most stakes in it. Also, a recent study by Blair-Loy, Wharton, & Goodstein (2011) show the importance of employees over shareholder value in mission statements of firms recognized for their work-life initiatives.
Thus, for a firm to be truly committed to social responsibility, its top leaders must respond to employees’ changing needs (Shellenbarger, 1992). As Cohen (2010) recently noted, it is necessary to develop “CSR for HR” in order to enhance responsible business practices.

A ‘CSR’ perspective on HR raises questions about the leader beliefs that ultimately drive these policies for internal stakeholders. Why do firms engage in socially responsible actions toward employees? In a recent paper examining the adoption of family friendly policies, Bloom, Kretshmer, and Van Reenen (2011) argued that these policies represent a non-market strategy driven to satisfy employee needs rather than achieve financial outcomes. They do not test this explanation but suggest that it is a reasonable inference given that, after controlling for other management practices, family friendly policies do not have a tangible effect on firm performance. They note that ‘Our results support the conclusion that family friendly policies are neither a value creating bundle of activities nor a lever for existing resources-they do not affect performance directly or indirectly’ (2011:344). We revisit the question of why some firms take an internal CSR stance in the form of family friendly practices, and conclude that normative beliefs by senior leaders in addition to their economic instrumentality jointly explain the provision of such practices. A study by Pastor and Mayo (2008) supports this conclusion as they found that managerial beliefs are key determinants of leaders transformational versus transactional behavioral displays.

While other practices have been examined in the literature (e.g., provision of child care, fitness program, Wang & Verma, 2012) we focus on one particular family-friendly initiative that has received limited empirical attention (Mayo, Pastor, Gomez-Mejia & Cruz, 2009), namely the firm’s provision of home-based telework because it requires significant supervisory involvement and commitment in its implementation and, as noted later, it poses
substantial risks to management. In a generic way, telework refers to an alternative work arrangement in which employees perform job-related tasks from a distant location using electronic media to interact with others inside and outside the organization (i.e. Gajendran & Harrison, 2007). Following Peters & den Dulk (2003) we focus on support for home-based telework as a work flexibility arrangement under which an employee performs the duties and responsibilities associated with their position, and other authorized activities, from his or her home. Although empirical evidence regarding this is inconclusive, telecommuting from home may differ from doing so from a telecenter or a satellite office (Allen, Renn, & Griffeth, 2003). Thus, we focus on the extent to which the firm devotes substantive efforts and financial resources to allow employees to perform their job related duties remotely from home through the use of information technology.

We add to existing literature in several ways. First, we position our work in a relatively unexplored area of management research and practice – that of linking leadership motives to CSR oriented toward employees. We take a holistic stakeholder engagement approach that shows how managerial mindset can impact the pervasiveness of telework in an organization beyond its compatibility with an organization’s instrumental factors. Second, we contribute to the CSR field by focusing our attention on the provision of social practices oriented to internal stakeholders, which have often been ignored or treated tangentially. In this way, we account for the fact that CSR is a multi-dimensional construct and companies treat diverse social issues differently in practice (Bansal & Gao, 2008). Moreover, we contribute to stakeholder management theory by suggesting that instrumental and normative managerial drivers of social practices (telework in our case) are not mutually exclusive categories but rather jointly explain some variance in the provision of such practices. Third, we respond to the seemingly puzzling question of why, despite the
purported benefits of telework and the huge advancements in technology that makes this
possible at a very low cost, it is still offered sparingly and in a highly selective fashion.
Finally, we integrate telework research into broader organizational studies and management
theories. In doing so, we also contribute to the telework literature, which has failed to
develop theory-based explanations of why firms do or do not offer telework to their
employees (Bailey & Kurland, 2002). And more generally, we address the call for more
emphasis on the social dynamics in technology management and development (Munir &
Jones, 2004).

Telework as a CSR practice for employees

As we note in this section, it has long been argued that having the option to work from
home is highly desirable to most employees. Hence a firm’s active support for this practice
demonstrates caring for employees’ welfare. For instance, the Kinder, Lydenberg Domini
and Co (KLD) database—perhaps the most popular dataset used in the field—considers
telework as a positive CSR practice since it promotes workplace and lifestyle flexibility,
offers better work conditions for the disabled, and serves environmental goals. A meta-
analysis of 46 studies going back to the 1960s conducted by Gajendran and Harrison (2007)
showed that the ability to work from home has benefits for employees beyond lowering
work-family conflict, such as higher perceived job autonomy, responsibility, and greater
satisfaction with the work itself. Ratings of companies as ‘best places to work’ often
mention telecommuting as one of the key criteria for inclusion at the top of the list (see, for
instance, the annual ranking of companies by Fortune Inc.). A 2012 survey of working
parents reported by Salary.Com reveals that nine in ten parents place a greater value on the
flexibility to work from home as needed than receiving higher pay (Fell, 2013). And a
recent study with college students shows that being “family friendly” increased job seekers´ intentions to pursue employment with a firm (Wayne & Casper, 2012).

Unlike many other employee benefits that are statutory in most industrialized countries (such as social security, overtime pay, various types of insurance, maternity leave, vacations, and the like), telework is not legally mandated in any nation around the globe (Gomez-Mejia, Balkin, and Cardy, 2012). Thus, it is a discretionary choice made by organizational leaders against the backdrop of the highly variable constraints organizations face in relation to work-family programs (Michel, Pichler, & Newness, 2014). So, while telework may be attractive to the firm in terms of positive media attention, recruitment and retention of employees, lower real estate expenses, access to a wider labor pool and such (Martinez-Sanchez et al., 2008), its use remains rather restricted. In fact, fewer than 10 percent of firms in Western Europe and the USA have formally adopted telework (Mayo, Pastor, Gomez-Mejia, and Cruz, 2009; Peters, Oldenkamp, and Bleijenberg, 2008). In 2001, Raghuram, London, and Larsen lamented (p. 739) that ‘growth in telework has been fairly slow, demonstrating lack of comfort with this work mode.’ Similar conclusions were reached by Gareis (2002) and Bailey and Kurland (2002). Even as recently as 2010, Peters and Heusinkveld concluded that ‘there is consensus that the adoption of telework policies in organizations falls short of the high expectations’ (p. 108).

One reason for the limited support of telecommuting is that it represents a major departure from traditional work arrangements and thus it poses many real or perceived risks to potential adopters: among others, reduced client face time, higher coordination costs, managers’ and employees’ discomfort with the ambiguity that this work mode may entail, mismatch in schedules between teleworkers and supervisors or colleagues in the office, dilution of the hierarchical structure of an organization, interpersonal conflicts,
opportunistic employee behaviors, information asymmetries and lack of supervisory skills to monitor and elicit performance from telecommuters (Lautsch, Kossek, and Eaton, 2009; Raghuram et al., 2001). In short, while there may be instrumental reasons for supporting telework (e.g., facilitate the attraction and retention of employees), the benefits are hard to quantify, and some of its drawbacks are intangible and difficult to anticipate. Thus, given the potential trade-offs between benefits and costs of telework (Cooper and Kurland, 2002; Golden, Veiga & Simsek, 2006)—as happens in other social initiatives (Margolis and Walsh, 2003)—it is hard to argue that most firms adopt it purely to remain competitive in the labor market, and this in turn suggests that mixed factors are at play in explaining the provision of telecommuting. This raises the question: why are some firms more willing to take this risk by offering telework as a valuable option to internal stakeholders? Next, we argue that telecommuting as a CSR practice is offered to employees not only when certain conditions make it more advantageous to the firm, but also when the dominant logic of the top management team accords a high priority to work-family balance.

**Hypotheses**

McWilliams and Siegel (2001) define CSR as ‘actions that appear to further some social good, beyond the interest of the firm and that which is required by law’ (p. 117). Others have noted that firms may engage in CSR when senior leaders believe that it is both the right way to treat stakeholders (that is, managers believe in the importance of ‘demonstrating some responsiveness to the needs and interests of others…an orientation that is a defining characteristic of moral behavior’; Mayer et al., 2012: 153) and economically advantageous for the firm (that is, it has high instrumentality; see Harrison, Bosse, and Phillips, 2009). Donaldson and Preston (1995: 67) remind us that while there
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may be a connection between stakeholder approaches and commonly desired objectives (such as cost savings), ‘[these] cannot be fully justified by instrumental considerations.’

Accordingly, we suggest that there are two broad dimensions to consider when a firm decides to support socially responsible practices for internal stakeholders, such as telework. ‘Instrumentality’ refers to those conditions that are more likely to make particular practices more beneficial to the firm. Even the strongest advocates of ‘doing well by doing good’ have recognized that ‘win-win’ outcomes are not always possible and might depend on particular conditions (Hillman and Keim, 2001).

The second dimension is the extent to which senior leaders’ personal beliefs (also referred to in the literature as ‘dominant logics’ [Kossek, Dass, and DeMarr, 1994]) interpret a given practice as worthy in its own right because it enhances employees’ welfare. Existing CSR literature has long argued about how individual values, beliefs, and attitudes of the decision maker play a pivotal role in CSR (Hay and Gray, 1974; Hemingway, 2005; Mitchell, Agle, and Wood, 1997), although empirical evidence supporting this view is almost non-existent (Waldman and Siegel, 2008). Consistent with recent arguments by Bloom et al. (2011), a core idea of this stream of literature is that some managers may simply value practices that promote their employees’ well-being apart from any instrumental benefits derived by the firm. In addition, some leaders may perceive telework as a virtual mode of work in which, in spite of low face-to-face interactions, psychological proximity is possible among employees to achieve collaboration (Wilson, Boyer O’Leary, Metiu, and Jett, 2008).

*Instrumental determinants of telework provision*
Leader Beliefs and Home Teleworking

Instrumental thinking suggests that socially responsible investments in employees build a resource that results in a sustained competitive advantage (Siegel, 2009). We therefore argue that the extent of employer support of telework depends partly on the presence of certain conditions that make it potentially more advantageous to the firm.

**(A) Industry favorability**

Although advances in technology have made telework a practical alternative for a wide range of jobs (Overbey, 2013), social practices for internal stakeholders such as telework should be more prevalent in knowledge-oriented sectors where instrumental benefits are more palpable. This would be the case in the finance, health, and education industries which employ a larger percentage of knowledge workers with higher educational levels, who engage in more cognitive tasks, spend more time on written documentation, and expect greater work flexibility under looser supervision (see Goodstein, 1994). Not only does the nature of their predominant ‘white collar’ work fit with the use of information technology (Milliken, Martins, and Morgan, 1998) but they tend to employ a higher proportion of women in professional positions who benefit most from ‘work-life’ programs. **Women typically bear the responsibility of household chores and childcare (Savery & Luks, 2000), and as a result are likely to show a higher interest in telework.** Hence, telework should be more advantageous to the firm (and thus more likely to be supported) in these industries, where it may serve as an important inducement to attract and retain scarce talent.

Conversely, there are some industries in which an employee’s physical presence is essential and work activities cannot be performed remotely. For instance, in the manufacturing, construction, retail, and hospitality industries, most employees must be
physically present in their conventional workplace; also, a large proportion of workers are low-skilled and easily replaceable, so that firms in these industries have little incentive to use telecommuting to facilitate employee recruitment and retention. Thus, we hypothesize that

*Hypothesis 1:* Firms operating in higher knowledge-oriented settings (finance, health and education sectors) are more likely to provide telework than those in lower knowledge-oriented settings (manufacturing, construction, retail and hospitality sectors).

**(B) Multinational Status**

Studies have suggested that multinational firms can secure their legitimacy and corporate image by supporting CSR activities. Even when irresponsible actions are committed far from the headquarters, interest groups and nongovernmental organizations can expose firms globally by stimulating consumer awareness and pressuring governments to discipline poor social performers. That is, the legitimacy of subsidiaries abroad influences the legitimacy of the whole organization (Kostova and Zaheer, 1999). Multinationals can also use CSR strategies to heighten entry barriers to competitors (McWilliams, Van Fleet, and Cory, 2002). Dowell, Hart, and Yeung (2000) showed that international firms adopting a single stringent global environmental standard have much higher market values than firms defaulting to less stringent standards. Similarly, multinational status can also influence the demand for telework. Globalization is greatly expanding interconnectedness among units at all levels, and technology is enabling much of this coordination. The traditional multinational firm with primarily stand-alone units in separate countries is quickly becoming a thing of the past. International coordination now involves purchasing, logistics,
inventory control, and clerical work (for instance, customer service for Citibank is handled from overseas) (Griffin and Pustay, 2010). Differences in time zones allow employees to coordinate their work without being simultaneously present in the office.

In addition to the legitimacy benefits noted above, telework provides two important related advantages to multinationals in managing work flows across borders. First, multinational firms often need effort integration and synergies among a geographically dispersed workforce. Since the way in which work is distributed among employees and the presence of ‘communication system problems’ (Buckley and Strange, 2011; Zaidman and Brock, 2009;) affect the type of technology adopted (Scott, 2003), globalization should encourage more investments in enabling technology. The changing structure of competition has compelled many globalized or multinational firms to seek new ways to manage their dispersed business units (Jarvenpaa and Ives, 1993). Kogut (1985) has described ‘information arbitrage’ as one of the four opportunities that might be exploited by the multinational corporation. He argues that success in developing information systems tied to the firm’s global strategy may well reduce costs related to the management and control of human resources. Second, telework may help give the multinational a positive local image serving as an example of sophisticated HR practices that foster employee welfare. Multinationals may decide to support “CSR for employees” such as telework in order to build positive relations with the host country’s community and develop a reputation as an ethical employer that treats employees well and does not take undue advantage of the workforce. Such a positive image can offset the ‘liability of foreignness’ (Ferraro, 2010) and help the organization become a supplier, investor, or employer of choice (Lobel and Faught, 1996). It may also help the multinational preempt any legislative action or close monitoring on the part of the host country government. Therefore,
Hypothesis 2: Multinational firms are more likely to provide telecommuting than domestic firms.

(C) Firm size

We propose that telecommuting may be more advantageous at both ends of the firm size spectrum, that is, in micro and large firms (the operational definitions of the size categories are discussed in detail in the methods section). At one end of the scale, micro-firms might be more interested in telework for several reasons. First, they have informal structures, less inertia, and weaker or nonexistent bureaucratic corporate hierarchies, all of which make them amenable to greater experimentation and adopting new ways of working. Second, telework can enable direct savings in operational space requirements and therefore in real estate expenditure. Third, many micro-businesses may be home-based firms where the self-employed teleworker utilizes his or her residence as the primary place of work. A survey of a representative sample of decision-makers in Europe showed that telework offered major financial advantages to nascent micro-companies strapped for cash and that telecommuting was not uncommon among these firms (Korte and Wynne, 1994). Working from home allows micro-business owners and freelancers not only to save on separate real estate costs and business expenses but also to better manage the interface between their work and personal lives (Udayasankar, 2008).

As firms begin to grow, managers may be more wary of telework because they often feel a need to bring order to chaos (Pratch and Levinson, 2002), and work-at-home arrangements do not fit this general objective. Huws and colleagues (1990), studying a representative sample of decision-makers in organizations considering telework adoption in Europe, found that more than 70 percent of managers in these type of enterprises were
unwilling to adopt telework because they were trying to infuse more formal structures into the firm. Moreover, managers are often concerned that telecommuting may hurt job performance, hinder availability to others and increase the workloads of office-based employees (Gajendran, Harrison, & Delaney-Klinger, in press).

In the case of large established firms, telework represents an attractive option for a variety of reasons. First, large firms are more likely to seek institutional acceptance in order to secure access to vital resources; and there is a growing normative expectation that organizations should help employees balance work-family issues (Kamerman and Kahn, 1987). Large organizations receive more attention from regulators, the media, and the public and are, therefore, expected to meet higher standards than smaller organizations (Berrone et al., 2010; Goodstein, 1994; Ingram and Simons, 1995; Powell, 1991). In a number of empirical studies, researchers have found a consistently positive relationship between organizational size and CSR commitment (Grant, Jones and Bergesen, 2002; Stanwick and Stanwick, 1998; Udayasankar, 2008; Gallo and Christensen, 2011). In the specific case of telework, large companies usually have fully staffed HR departments to support its implementation and tend to enjoy more slack resources to fund the most up-to-date technological platforms (such as equipment, software, and dedicated videoconferencing rooms) and the expertise needed to run them smoothly. Thus,

*Hypothesis 3*: There is a U-shaped relationship between firm size and telework provision, such that micro- and large-sized firms will provide more telecommuting than small- and medium-sized firms.

*Normative Leadership Determinants: Positive managerial beliefs*

Although the CSR literature acknowledges that corporate leaders are actively involved in
promoting CSR, most empirical studies have ignored the role of top executives in the
support of CSR initiatives (Siegel, 2009). A socially responsible initiative can be motivated
not only by rational calculation (instrumental thinking) but also by top leaders’ beliefs
about situations, events, or particular domains (Meindl, Stubbart, and Porac, 1994; Prahalad
and Bettis, 1986; Weick, 1979) that are crucial for making strategic choices (Cho and
Hambrick, 2006; Daft and Weick, 1984). From a normative perspective, leaders are viewed
as decision makers who make decisions based on moral principles or norms (Vroom, 2003;
Vroom, 2000). For CSR, a defining feature is top managers’ conviction that socially
responsible practices are good in them apart from any efficiency or economic
considerations. For instance, a voluntary strategy that goes beyond compliance with
environmental regulations is motivated mainly by managers’ favorable attitudes toward
environmental preservation (Bansal, 2003; Cordano and Frieze, 2000; Sharma, 2000).
Along this line, Waldman, Siegel, and Javidan (2006) found that the ‘intellectual
stimulation’ aspect of transformational leadership was positively related to the firm’s
propensity to engage in socially responsible environmental actions. There is also evidence
that the extent of adoption of employer-sponsored childcare was related to the strength of
the HR manager’s belief that executives favored childcare initiatives (Kossek et al., 1994).

Similarly, we expect that senior managers’ strong expressions favoring family-
friendly initiatives will greatly spur provision of telework. Milliken and colleagues (1998)
showed that when executives interpreted work-family balance as relevant and a priority that
deserved managerial attention, the prevalence of family-friendly policies was high.
Likewise, Kossek, Barber, and Winters (1999) found that the likelihood of adopting a
family-friendly practice was higher when managers perceived it favorably. As we noted
earlier, telework has many purported benefits to the firm, employees, and society, but it
may also involve substantial costs and unexpected risks for the firm such as loss of supervisory control, employee abuses, poor monitoring, and difficulty in coordination. The fact that the evidence is unsupportive of a direct relationship between these policies and firm performance (Bloom et al., 2011) strongly suggests that normative factors are at play in their adoption and hence managerial beliefs may tip the balance in their favor.

Hypothesis 4a: Firms whose top managers believe in work-family balance provide more telecommuting.

It also seems reasonable that managerial beliefs favoring work-family balance should interact with the instrumental factors discussed in Hypotheses 1–3. According to Wang and Verma (2012) “the availability of work life balance policies sends a signal to employees that the organization values their contributions and emphasizes their personal well-being rather than only profits and revenues” (p.410). When telework is viewed as a socially responsible action pertaining to employees, leader mindset that is based on the moral standard of doing the right thing for employees is an easy conduit for telework provision under favorable contextual conditions. We expect that stronger managerial beliefs in favor of work-life balance augment the perceived instrumental effect of advantageous conditions for the provision of telework. Thus,

Hypothesis 4b: Managerial beliefs in favor of work-family balance moderate the association of instrumental factors (industry, multinational status, size) and provision of telecommuting, such that this relationship is stronger when managers hold highly positive beliefs.
Research Design

Sample and procedures

The data used for this study were gathered by the regional authorities of Spain with the support of the European Union as part of a project whose goal was to evaluate the extent to which companies offer telework to help employees balance work and family life and avoid long commuting between home and the workplace. The survey was developed and administered by a government certified consulting company via telephone interview. The population was composed of all firms in the central region (248,449 organizations). Approximately 1 percent of these firms, or 2,400 firms, were randomly chosen to participate in the telephone survey, stratified by industry and firm size. From the chosen companies, 2,388 usable responses were obtained, for a response rate of 99.5 percent. This extremely high response rate may be attributed to the official sponsorship of the survey. Participating companies ranged from organizations with fewer than 5 employees (n = 734 firms which we designate as micro) to those with more than 200 employees (n = 192 firms which we designate as large), and belonged to a wide array of industries including manufacturing (27.1%), construction (12.9%), retail and hospitality (31.3%), finance (6.7%), health and education (22.7%).

The survey targeted executives working at decision-making levels and in strategically oriented positions: chief executive officers (68.2%), general managers (20.2%), firm owners (9.6%), and others (2% of the respondents did not provide this information). They were assured that their responses would remain confidential and would be used only for aggregate statistical analyses.
We use two major indicators of a firm’s provision of telework. The first is the proportion of employees who are allowed to work from home. The greater the employee coverage of telework, the more widespread the potential benefits should be among internal stakeholders; higher coverage also serves as a visible demonstration of substantive organizational commitment to telework. The second is the investment that the firm makes in information technology (IT) resources to enable employees to work from home. The telework literature emphasizes investments in equipment and software and continuous IT support as essential elements for smoother operations of remote work arrangements (Olson and Primps, 1984; Shin et al., 2000; Robert and Börjesson, 2006). We created a two-item composite scale to measure these two aspects of telework provision: (1) the proportion of organizational members who are permitted to telework from home and (2) the firm’s investments in technologies and IT support to enable employees to work from home. The two items were rated on a four-point Likert scale. Use of a Likert scale allowed us to measure the extent of telework provision as a continuously rather than a discretely varying phenomenon.

The validity of the telework provision scale was supported in a variety of ways. Table 1 reports the results of the exploratory factor analysis. First, a factor analysis with varimax rotation of all the Likert-type items used in the study shows that both of these telework provision items loaded highly on a single factor (see column 3 of Table 1), indicating that they form a distinct construct. Second, the coefficient alpha for this scale was 0.79, indicating high internal consistency. Third, we ran a separate independent survey of 44 executives attending a seminar at a leading European business school and 78 percent agreed that these items adequately measured the telework provision construct. Lastly, we held in-
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depth phone interviews lasting approximately one hour with 10 human resource
managers (50% women) across a variety of industries and firm sizes, whose companies
were selected as candidates for the 2012 nation-wide workplace flexibility award sponsored
by the national government. There was unanimous agreement that the proportion of
employees allowed to work from home and related IT investments to make this possible
represent the best indicators of telework provision. In short, both executives and the HR
managers used as an independent panel of experts reached a general consensus about the
content validity of the scale, corroborating the results of the factor analysis in the entire
sample.

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Insert Table 1 about here
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Measures of independent variables

Industry favorability. We created a dummy variable that captured the knowledge
orientation: (1) those with a higher knowledge orientation, namely financial services, health
care and education; and (0) those with a lower knowledge orientation, namely
manufacturing, construction, retail, and hospitality.

Multinational status. We created a dummy variable to indicate whether or not the
company was a multinational. The variable had a value of 0 if the firm’s operations were
based solely in Spain and 1 otherwise.

Firm size. The categorization of firms by size varies among countries and even
regions within countries. In the case of the present study, we utilized the official national
classification for firm size: (1) companies with 5 or fewer employees are micro- or nano-
firms (30.7%); (2) companies with between 6 and 19 employees are small-low firms (32%);
(3) companies with between 20 and 49 employees are small-high firms (16.6%); (4) companies with between 50 and 99 employees are medium-low firms (8.4%); (5) companies with between 100 and 199 employees are medium-high firms (4.1%), and (6) firms with more than 200 employees are large firms (8.1%).

Positive managerial beliefs favoring work-family balance. We found no scale in the academic literature measuring the extent to which top managers’ beliefs favored work-family balance; hence a new scale had to be developed for this purpose. To keep the interview within time constraints, the scale had three items asking how much key decision-makers (1) were convinced of the value to employees of supportive family-friendly HR practices, (2) modeled how to balance work and family life, and (3) felt a personal commitment to implement family-friendly practices.

We confirmed the validity of the scale in several convergent ways. First, when these items were factor-analyzed together with the rest of the Likert-type items used in the study (with a varimax orthogonal rotation), all three items loaded highly on a single factor, indicating that they are part of a distinct construct (see Factor 2 in Table 1). Second, the Cronbach alpha for the three items reached 0.81, indicating high internal reliability. Third, there was high agreement among our independent panel of experts (the 44 executives and 10 HR managers mentioned earlier) that these three items tapped positive managerial beliefs favoring work family balance, hence supporting the content validity of the scale.

Measures of control variables

Respondent’s gender. We controlled for the respondent’s gender with a dummy variable that assumed the value 0 if the respondent was male and 1 if the respondent was female. We took this variable into consideration because previous research has suggested
that women managers are particularly sensitive to work-family issues (Milliken et al., 1998).

*Family-friendly culture.* The success of telecommuting arrangements often depends on a supportive family friendly culture (Baruch and Nicholson, 1997; Ruppel and Harrington, 1995) and thus we created a composite scale to control for this effect. The items of this scale were constructed from the relevant literature (e.g., Thompson, Beauvais, and Lyness 1999; Offstein and Morwick, 2010), tapping the following elements: (1) the company’s culture supports and values the integration of employees’ work and family life; (2) the company’s culture encourages employees to go home after a normal schedule of work; (3) the company’s culture encourages supervisors to take into account employees’ personal and family concerns; (4) the company’s culture encourages employees’ family members to visit work premises and interact with workmates; and (5) the company’s culture supports a work environment where employees perform their duties independently and autonomously. When these items were factor-analyzed together with the rest of the Likert-type items used in the study (with a varimax orthogonal rotation), they all loaded on a single factor, indicating that they are part of a distinct construct (see Factor 1 in Table 1). The Cronbach’s alpha achieved a permissible value of 0.60 (Nunnally, 1978).

*Firm age.* We also controlled for firm age because the literature suggests that young companies trying to build a strong and stable workforce can offer the option to work from home (or other distant locations) as a bargaining tool when trying to convince prospective employees to join or current employees to stay (Mamaghani, 2006; Mello, 2007). This variable, as classified by the government, took a value of 1 for companies that were less than 5 years old (9.5%); 2 for companies that ranged from 5 to 10 years old (16.1%); 3 for companies that were 10 to 20 years old (28.4%); 4 for those 20 to 30 years old (22.8%); and
for those over 30 years old (23.2%).

**Measurement model**

Self-selection is not an issue in this study, as the response rate was almost 100 percent. However, the fact that all data came from a single respondent for each company means that common method variance may threaten validity. This should not be a serious concern here because this was a government-sponsored study and most measures used to test the hypotheses (including the dependent variable) are objective and easily verifiable (proportion of employees allowed to telework, industry, number of employees, whether the firm is multinational or domestic, firm age, and respondent’s gender). We did have two attitudinal predictors that may be subject to generalized affect and social desirability bias (i.e., family-friendly culture, used as a control variable, and managerial beliefs regarding work-family balance, used to test Hypotheses 4a and 4b). We conducted standard analyses to uncover their presence and we did not find any evidence of major biases that could affect the conclusions of this study (these results are available from the authors upon request).

First, in order to check for common method variance (CMV), we followed the recommendations of Podsakoff *et al.* (2003) and this analysis indicated that our results were not inflated because of the existence of CMV. Second, one way to uncover social desirability bias in a survey of this nature is to check the distribution of scores (Cruz, Gomez-Mejia, and Becerra, 2010). Very high scores and low variance would suggest a strong generalized bias to ‘say the right things,’ whether or not the ratings correspond with reality. For the group of ‘family-friendly’ culture items and the ‘positive managerial beliefs’ items the mean score was at 67.2 percent of the maximum and the SD was 0.57. This offers comforting evidence that social desirability bias is not a fatal flaw in this study.
Results

Descriptive statistics

Table 2 presents the correlation matrix and descriptive statistics for all the variables in the study. In general, these zero-order correlations are consistent with our initial expectations that instrumental drivers and managerial beliefs are significantly correlated with telework provision.

Insert Table 2 about here

Tests of hypotheses

Table 3 presents the results of regression equations. Following the guidelines of Aiken and West (1991), we centered all independent variables to zero before squaring terms used to test curvilinear effects and the telecommuting provision variable was standardized for this purpose. We then calculated variance inflation factors (VIF) to test for multicollinearity among independent variables and found them all to be below the cutoff of 10 (Cohen et al., 2003), suggesting that multicollinearity was not a serious issue.

Insert Table 3 about here

(A) Instrumental drivers of telework

Hypothesis 1 states that firms in knowledge-oriented industry settings (e.g., finance, health, and education industries) are more likely to provide telecommuting. Model 2 shows that this is indeed the case ($\beta = 0.10, p < 0.001$). We also found support for Hypothesis 2’s
prediction that multinational firms would tend to provide telecommuting to a greater extent than domestic firms ($\beta = 0.09, p < 0.001$).

The last ‘instrumental’ variable related to the characteristics of the firm is size. Hypothesis 3 predicts that there is a quadratic U-shaped relationship between company size and the provision of telework. The results show that the main ($\beta = -0.19, p < 0.01$) and quadratic ($\beta = 0.20, p < 0.01$) effects of firm size on telecommuting were significant (see Model 2). In an ad hoc analysis, this concave association explains 3 to 4 percent of the variance in the extent of support for telecommuting beyond that explained by the monotonic association ($p < 0.03$ of $R^2$ change). Following the guidelines of Cohen and colleagues (2003), we graphed the association and found that telework provision reaches its lowest point in small and medium-sized firms and its highest point in micro- and large firms (see Figure 1). This suggests that very small and very large firms offer their employees more telework, as predicted by Hypothesis 3. To summarize, the results of the regression analysis indicate that instrumental factors significantly predict firm’s provision of telework ($F$ of $R^2$ change = 15.704, $p < 0.001$).

(B) Leader belief in work-family importance as a driver of telework: Positive managerial beliefs

Hypothesis 4a predicts that firms whose top leaders believe in the importance of work-family balance for their employees will be more supportive of telework independently of its instrumental value. We find that positive managerial beliefs about
work-family balance are associated with greater telecommuting provision after partialling out control and instrumental variables (β = 0.04, p < 0.05; see Model 3).

Hypothesis 4b, which predicts that managerial beliefs moderate the effect of instrumental factors on firm’s provision of telecommuting, is supported for industry favorability (β = 0.04, p < 0.05, see Model 4), for multinational status (β = 0.04, p < 0.05, see Model 5), and for the curvilinear relationship with firm size (β = 0.17, p < 0.05, see Model 6). We find that the interaction terms of managerial beliefs with each instrumental driver are significantly associated with the provision of telecommuting. To check that the interactions go in the expected direction, we followed the procedures suggested by Aiken and West (1991) to calculate the slopes of the regressions. Figure 2a shows that positive managerial beliefs do not play a significant role in unfavorable industry settings. In contrast, the positive effects of managerial beliefs supportive of work-family balance on telecommuting provision are higher in favorable industry settings. Also as expected, Figure 2b shows that firms that have an international presence are more likely to provide telecommuting when top managers strongly believe in work-family balance.

Finally, Figure 3 shows that the curvilinear relationship between size and telework provision is moderated by positive managerial beliefs such that this positive effect is higher for micro and very-small firms when senior managers strongly believe in work-family balance. However, this effect vanishes for medium and large firms. These results support
Leader Beliefs and Home Teleworking

Hypothesis 4b suggesting a catalyst role of top leaders in contexts where telework is instrumentally valued.

----------------------------------------------
Insert Figure 3 about here
----------------------------------------------

Discussion and Conclusion

This study has shown that top leaders’ beliefs in the importance of facilitating work-family balance for employees is a critical determinant of CSR practices for internal stakeholders such as provision of telework. The role of leadership motives promoting telework for the wellbeing of employees goes beyond its instrumental value in a favorable context (knowledge-oriented industry, multinational status, and firm size). Furthermore, the positive effects of managerial beliefs supportive of work-family balance on telecommuting provision are higher in knowledge-oriented industry settings, in firms that have an international presence and for micro/very small firms. A summary of the hypotheses is included in Table 4.

Our theoretical model offers an integrated view of leadership motives and key instrumental factors explaining socially responsible actions that past literature, for the most part, has treated in an isolated manner (for a notable exception see McWilliams and Siegel, 2001) and without empirical validation. Our theoretical model contributes to the leadership and CSR literature in several important ways. First, academics have typically identified CSR as a macro-level activity that has macro-level consequences (Orlitzky, Schmidt, and Rynes, 2003) and have paid scant attention to enabling managerial cognitive processes.
Furthermore, much of the organizational development literature on CSR has focused on external stakeholders such as regulators and consumers; there is little discussion of discretionary workplace practices engaging internal stakeholders. Our paper provides a change in focus by linking identifiable internal stakeholders (employees) with a specific CSR policy directed toward internal stakeholders (telework) that has potential value to both the employee and the organization. In this way, we offer a more micro, “employee” perspective on organizational development that sharply contrasts with broad views of CSR that consider aggregated social actions without a clear target audience.

Second, our paper can be interpreted in light of the ongoing debate about instrumental vs. leadership determinants for CSR. Many authors have argued that firms adopt social agendas because they are economically beneficial to the firm (McWilliams and Siegel, 2001), while others have suggested that firms adopt social practices because its top leaders believe in its moral value, that is, ‘because it is the right thing to do’ (Donaldson and Preston, 1995; Harrison et al., 2009). These two starkly different positions have treated instrumental and leadership drivers as alternatives. Our work—in particular, our finding concerning the importance of managerial beliefs (Hypotheses 4a-b)—offers the possibility that instrumental and leadership drivers may be complements. In this sense, our results support the notion that firms can act both ‘altruistically and strategically’ when engaging in CSR (Hillman and Keim, 2001), at least for internal stakeholders.

Third, our empirical results shed light on unanswered questions in the literature. For instance, since each company operates within a particular context and CSR is a multidimensional construct (Carroll, 1979), it is reasonable to assume that different dimensions of CSR will have different weights depending on the sector in which the firm operates. Yet the role of industry is often neglected or simply treated as a control. We show
that one specific CSR practice for employees (telework) is less likely to receive support in sectors where the nature of work and the level of workers’ education constrain its value for the firm. Also, we provide empirical evidence for Udayasankar’s (2008) theoretical argument that very small and very large firms are equally motivated to participate in CSR for employees, while medium-sized firms are the least motivated. Similarly, in accordance with previous work, our results suggest that multinational companies can find strategic value in supporting responsible human resource practices.

Lastly, our study adds to the embryonic literature that studies the intersection between leadership and CSR by considering telework as a social initiative. Although employers perceive telework as a mutual flexibility for both employer and employees, they are ambivalent about its implementation and management (Taskin & Devos, 2005). Many of these reservations stem from additional technology costs, social isolation of employees limiting a shared collective interest, and less control over employees (Marchese, Bassham, & Ryan, 2002; Sherman et al., 1998). Our study contributes to an ethical leadership perspective on this debate by showing that telework, a CSR practice oriented toward employees, is adopted not only due to employers’ desire of cost rationalization (Baruch, 2000) but also because of the virtues and ethics of those in top leadership positions (Marchese et al., 2002). In this way, we invite scholars to examine other practices that have social value for internal stakeholders (such as flexible work hours and employee assistance programs). It is possible that firms may bundle these practices and they may be part of a constellation of ‘best management practices’ (as per Bloom et al., 2011).

For practitioners, perhaps the most important message is that, while contextual and organizational features are important in the choice of CSR practices for employees, the conviction of senior leaders is absolutely essential. In other words, if top leaders do not
believe that it is the right thing to do, this will act as a major barrier for CSR support. Alternatively, if top managers believe that a particular CSR initiative for employees is important in its own right, then the firm is more likely to implement it, apart from any instrumental value that might be derived from it. Thus, this is a vital aspect that should be taken into account when designing and launching CSR programs within firms.

Content analyses of follow-up qualitative interviews to a random sample of 10 human resource managers mentioned earlier across sectors and size support our conclusions. Several HR managers emphasized the importance of managers’ attention and responsiveness to work-family issues via a company-wide climate survey. For example, the HR manager of a medium size company in the distribution sector states, “top management is involved in the decision-making and adoption of work-life balance policies. This initiative originated with the first climate survey which indicated the need for a plan on flexible work arrangements.” Other HR managers emphasize the importance of a results-oriented culture for encouraging the implementation of flexible work arrangements such as teleworking. For instance, the HR manager of a large company in the food sector shows an example of how managers’ accountability is based on employees’ work-family balance. He reports, “Managers are evaluated by their subordinates and an effective manager for the company is one who promotes flexibility and helps subordinates achieve a balance between work and personal life.” Similarly the HR manager of a large insurance company states, “the company trusts employees’ responsibility and results-oriented management.” Finally, one of the managers interviewed illustrates the importance of role modeling. He mentions, “the general director lives in Paris and he teleworks fulltime. He only comes to Spain one week per month. The two maxims of the company are trust and responsibility. Under these premises, the general director assumes that each employee is independent to manage his/her
work. The employees, on the other hand, respond with complete commitment [to the company].”

One limitation of our study is that we relied on a single respondent although factual information, such as a company’s sector, multinational status, or size, is relatively impervious to these biases (Feldman and Lynch, 1988), and our analyses suggest that these biases are not significant problems in our data. Furthermore, the positive managerial beliefs items did not ask executives to give their opinion about the telework programs they might have introduced and/or they managed but rather about more fundamental issues concerning the link between work and family life. Another caveat is that this study is based on a large sample of firms from a single European country. National culture may influence the acceptance of telework (Raghuram et al., 2001) and thus it would be desirable to replicate this study in other national contexts. Lastly, future studies should design multilevel and comparative models that consider both formal organizational CSR policies introduced at the top and informal managerial support at lower levels in the hierarchy.

Concluding Comments

The volume of research on corporate social responsibility has been growing rapidly during the past two decades, but most of this work is unrelated to the role of leadership in the adoption and implementation of social practices for employees. A parallel literature on organizational development continues to be largely driven by an instrumental contingency paradigm in which the ultimate goal is to design HR programs that match the firm’s idiosyncratic needs, structural features, and environment and thus contribute to a sustainable competitive advantage. If we conceive CSR for internal stakeholders as not
driven solely by a utilitarian logic, then this requires a different paradigm; one that we believe should include leadership motives.
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References


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### Table 1. Exploratory Factor Analysis Results

<table>
<thead>
<tr>
<th>Survey items</th>
<th>Family-Friendly Culture</th>
<th>Positive Managerial Beliefs</th>
<th>Telecommuting Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>The company’s culture supports and values the integration of employees' work and family life</td>
<td><strong>0.614</strong></td>
<td>0.001</td>
<td>0.009</td>
</tr>
<tr>
<td>The company’s culture encourages employees to go home after a normal schedule of work</td>
<td><strong>0.649</strong></td>
<td>0.201</td>
<td>-0.019</td>
</tr>
<tr>
<td>The company’s culture encourages supervisors to take into account employees' personal and family concerns</td>
<td><strong>0.476</strong></td>
<td>0.012</td>
<td>0.081</td>
</tr>
<tr>
<td>The company’s culture encourages employees' family members to visit work premises and interact with workmates</td>
<td><strong>0.704</strong></td>
<td>0.111</td>
<td>0.027</td>
</tr>
<tr>
<td>The company’s culture supports a work environment where employees perform their duties independently and autonomously</td>
<td><strong>0.552</strong></td>
<td>0.031</td>
<td>0.195</td>
</tr>
<tr>
<td>Key decision-makers were convinced of the value to employees of supporting family-friendly HR practices</td>
<td>0.129</td>
<td><strong>0.801</strong></td>
<td>0.123</td>
</tr>
<tr>
<td>Key decision-makers displayed good role-modeling behaviors on how to balance work and family life and thus provided an example to other people in the organization</td>
<td>0.002</td>
<td><strong>0.811</strong></td>
<td>0.002</td>
</tr>
<tr>
<td>Key decision-makers felt a personal commitment to implementing family-friendly practices designed to meet employee needs</td>
<td>0.143</td>
<td><strong>0.802</strong></td>
<td>0.024</td>
</tr>
<tr>
<td>Proportion of organizational members who are permitted to telework from home</td>
<td>0.009</td>
<td>0.001</td>
<td><strong>0.970</strong></td>
</tr>
<tr>
<td>Employer’s provision of technologies that help employees work from home</td>
<td>0.042</td>
<td>-0.011</td>
<td><strong>0.719</strong></td>
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<tr>
<td>Cronbach’s Alpha Coefficient</td>
<td>0.60</td>
<td>0.81</td>
<td>0.79</td>
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</table>
Table 2. Means, Standard Deviations, and Correlations Coefficients of the Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Manager gender</td>
<td>0.48</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Firm age</td>
<td>3.34</td>
<td>1.25</td>
<td>-0.05*</td>
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<td></td>
<td></td>
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<tr>
<td>3. Industry favorability</td>
<td>0.70</td>
<td>0.46</td>
<td>0.07**</td>
<td>-0.10**</td>
<td></td>
<td></td>
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<tr>
<td>4. Multinational status</td>
<td>0.07</td>
<td>0.26</td>
<td>0.05*</td>
<td>0.02</td>
<td>0.11**</td>
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<td>5. Firm size</td>
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<td>1.50</td>
<td>0.07**</td>
<td>0.30**</td>
<td>0.03</td>
<td>0.26**</td>
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<tr>
<td>6. Family-friendly culture</td>
<td>2.19</td>
<td>0.54</td>
<td>0.00</td>
<td>-0.13**</td>
<td>0.01</td>
<td>-0.04</td>
<td>-0.20**</td>
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<tr>
<td>7. Positive managerial beliefs</td>
<td>2.41</td>
<td>0.59</td>
<td>-0.06**</td>
<td>-0.12**</td>
<td>0.02</td>
<td>-0.07**</td>
<td>-0.23***</td>
<td>0.44***</td>
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<tr>
<td>8. Telecommuting provision</td>
<td>1.13</td>
<td>0.53</td>
<td>0.00</td>
<td>-0.08**</td>
<td>0.13***</td>
<td>0.10***</td>
<td>0.00</td>
<td>0.12***</td>
<td>0.09***</td>
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N = 2,388
*p < 0.05; **p < 0.01; ***p < 0.001
Table 3. Results of Regression Tests for Instrumental and Leadership Determinants of Telework Provision

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<td>Manager gender</td>
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<td>Family-friendly culture</td>
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<td>0.11***</td>
<td>0.09***</td>
<td>0.09***</td>
<td>0.09***</td>
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<td>Firm age</td>
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<td>-0.07**</td>
<td>-0.05**</td>
<td>-0.05*</td>
<td>-0.05*</td>
<td>-0.05*</td>
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<tr>
<td>Industry favorability</td>
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<td>Multinational status</td>
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<td>0.09***</td>
<td>0.09***</td>
<td>0.09***</td>
<td>0.09***</td>
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<tr>
<td>Firm size</td>
<td>-0.19**</td>
<td>-0.18*</td>
<td>-0.18*</td>
<td>-0.19*</td>
<td>-0.20*</td>
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<tr>
<td>Firm size squared</td>
<td></td>
<td>0.20**</td>
<td>0.20**</td>
<td>0.20**</td>
<td>0.23***</td>
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<tr>
<td>Leadership Determinant</td>
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<tr>
<td>Positive managerial beliefs</td>
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<td></td>
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<td>0.04*</td>
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<td>Interactions effects</td>
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<tr>
<td>Positive managerial beliefs * knowledge industry</td>
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<td></td>
<td>0.04*</td>
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<td></td>
<td></td>
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<tr>
<td>Positive managerial beliefs * multinational status</td>
<td></td>
<td></td>
<td>0.04*</td>
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<td></td>
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<tr>
<td>Positive managerial beliefs * firm size</td>
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<td>-0.14</td>
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<td>Positive managerial beliefs * firm size squared</td>
<td></td>
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<td></td>
<td>0.17*</td>
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<tr>
<td>Adjusted $R^2$</td>
<td>0.02</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
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<tr>
<td>$F \Delta R^2$</td>
<td>13.945***</td>
<td>2.974†</td>
<td>3.713*</td>
<td>3.855*</td>
<td>1.993†</td>
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$N = 2,388$

† <0.10; * p < 0.05; ** p < 0.01; *** p < 0.001
<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Provision of telework will be more likely in Knowledge-oriented firms</td>
<td>Strong Support</td>
</tr>
<tr>
<td>H2: Provision of telework will be more likely in multinational firms</td>
<td>Strong Support</td>
</tr>
<tr>
<td>H3: Provision of telework will be more likely in very-small and very large firms and lower in medium/large firms (U-shape)</td>
<td>Strong Support</td>
</tr>
<tr>
<td>H4a: Provision of telework will be more likely in firms with leaders holding positive beliefs about work-family balance</td>
<td>Moderate Support</td>
</tr>
<tr>
<td>H4b-industry favorability: Knowledge-oriented companies will be more likely to provide telework if they are led by top managers with positive managerial beliefs.</td>
<td>Strong Support</td>
</tr>
<tr>
<td>H4b-multinational status: Multinational companies will be more likely to provide telework if they are led by top managers with positive managerial beliefs.</td>
<td>Strong Support</td>
</tr>
<tr>
<td>H4b-size: Micro and large-sized companies will be more likely to provide telework if they are led by top managers with positive managerial beliefs.</td>
<td>Moderate Support</td>
</tr>
<tr>
<td>(Micro companies)</td>
<td></td>
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</table>
Figure 1. Conceptual Model
Figure 2. Firm size and telework provision
Figure 3a. Effects of the interaction between positive managerial beliefs and firm’s industry knowledge intensity on telework provision
Figure 3b. Effects of the interaction between positive managerial beliefs and firm’s multinational status on telework provision
Figure 4. Effects of the interaction between positive managerial beliefs and firm’s size on telework provision