FLEXTIME AND PROFITABILITY

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KEYWORDS: flextime; profitability; strategy
Abstract

Despite the well-documented benefits of flexible work schedules (flext ime), generalizeable assessments of how flext ime influences organizational profitability have proven elusive. Using a unique dataset representative of organizations in Canada, we examine the effect of flext ime in combination with organizational strategies to predict profitability. Using fixed effects and controlling for prior profitability, we find that flext ime increases profitability when implemented within a strategy centered on employees but decreases profitability when implemented within a strategy focused on cost reduction.
FLEXTIME AND PROFITABILITY

Recently the passing of a demographic milestone in the United States—women comprising fully half of the workforce—has renewed calls for updating the structure of work to meet the needs of the 21st century family (Shriver 2009). The availability of flexible work schedules (hereafter flextime) is one tool that many see as critical to addressing the challenges families confront in managing the conflicting responsibilities of work and family life. Indeed, Bond, Galinsky, Kim, and Brownfield (2005) found that flextime has been the most widely adopted work-family practice among medium and large private-sector employers.

As organizations increasingly adopt flextime, it is critical to evaluate its costs and benefits. Whereas the benefit of flextime for employees is well documented, the impact for the organizational bottom line remains much less well understood (Baltes, Brigs, Huff, Wright, and Neuman 1999; Kelly, Kossek, Hammer, Durham, Bray, Chermack, Murphy and Kaskuba 2008). Indeed, a recent report by the Council of Economic Advisors (2010) concluded: “A factor seriously hindering our deeper understanding of the benefits and costs of flexibility is a lack of data” (p. 25).

In this paper, we focus on providing generalizable assessments of how flextime influences organizational profitability. We do this in two important ways. First, a critical limitation to our understanding of the effect of flextime on the organization’s bottom line emanates from the absence of representative data from organizations across industries, which introduces the potential of a serious selection bias. To understand how flextime impacts organizations on average, it is critical to observe the entire population of
organizations—not just those organizations that volunteer information consistent with flextime being effective for profitability in particular contexts. Secondly, we evaluate the effect of flextime on profitability as a function of the organization’s strategy. While it is recognized that costs and benefits of adopting flextime differ across firms and industries (Council of Economic Advisors 2010), we examine flextime’s alignment with the organization’s strategy as an important contextual variable for predicting when flextime will lead to greater organizational profitability.

**FLEXTIME**

Broadly defined, flextime is the ability to schedule flexible starting and quitting times, sometimes with a core-hours requirement (Eaton, 2003). There has been a plethora of research detailing the relationship between work-family initiatives (i.e. flextime) on employee outcomes such as organizational commitment, turnover intentions and tardiness (see Kelly et al. 2008 for a review). The prior body of literature has documented clear benefits of flextime for employees in terms of job satisfaction, absenteeism, and productivity (for a meta-analytic review, see Baltes et al. 1999). Amidst the high variability observed in the literature for the effects of flextime on employees, Baltes et al. (1999) have been able to identify some moderating variables that partially explain this variability, such as employee type where flextime tends to have its largest effect on general employees but has no reliable effect on professionals and managers.

Understanding the link between a practice such as flextime that alleviates the work-family conflict and organizational outcomes is much more difficult due to the sparse existing literature. From a theoretical perspective, Kelly et al. (2008) hypothesized that
work-family initiatives such as flextime has an impact on the employees’ perceptions of the work environment which leads to improved employee outcomes and in the aggregate leads to improved organizational outcomes. Empirically, most studies examine the relationship between work-family initiatives and firm productivity, with a primary focus on using cross-sectional data. One rare exception is a longitudinal analysis of flextime on productivity by Shepard, Clifton, and Kruse (1996) within the pharmaceutical industry that found the implementation of flextime increased productivity. Although most studies recognize financial measures to be the best indicators of an organization’s performance, few studies have been able to evaluate this outcome empirically (Ichniowski, Kochan, Levine, Olson, and Strauss 1996). In terms of firms’ financial performance, the empirical literature mainly focuses on the positive relationship between announcements of work-family initiatives and stock prices (Arthur 2003; Arthur and Cook 2004). Overall, the few studies that examine this relationship, find a positive correlation between work-family initiatives and firm outcomes.

With the paucity of research detailing the relationship between firm outcomes and work-family initiatives such as flextime, the mechanism whereby this relationship occurs also remains unclear. Kelly et al. (2008) theorized that flextime can have an impact on organizational outcomes through two processes: firm revenues and firm costs. Flextime can increase firm revenues through attracting higher quality candidates and increasing the marginal productivity of existing employees (Konrad and Mangel 2000; Drago and Golden 2006). Flextime can also decrease costs through the reduction of turnover (reducing the costs of training and recruitment) and absenteeism (increased productivity). Given the difficulty of identifying and separating these two processes and the paucity of
organizational level data, the empirical literature is limited in exploring the relationship between flextime and organizational outcomes. Indeed, in the review completed by Kelly et al. (2008, p. 333), they call for “more objective, non-self report data such as supervisor ratings, sales volume, profit-sales growth, shareholder value, profit and loss and measures of market performance over time.” In utilizing our unique representative dataset, we are able to address this gap in the literature by examining the relationship between flextime and the profit and loss measures as organizational outcomes over time.

The major concern in evaluating the impact of flextime on the organization’s bottom line stems from the often overlooked problem of self-selection (e.g., Boselie, Dietz, and Boon 2005). When participation is voluntary, it is highly probable that organizations whose profitability has increased subsequent to the introduction of flextime will be more likely to participate in a research study than organizations whose profitability has declined subsequent to the introduction of flextime. The evidence on the positive effects of flextime may be overstated because firms that first implement flextime are the firms that most likely reap the greatest rewards of flextime (Council of Economic Advisors 2010). Additionally, without longitudinal data it is difficult to rule out the alternative that organizations with higher profitability may be more likely to choose to implement flextime (Bowen and Wiersema 2005). Finally, the issue of how these research findings will generalize is of upmost importance. Often studies focus on a single industry or have low response rates raising concerns that we have yet to assess the effect of flextime for organizations on average or for the typical organization. Thus, by not using a representative sample of organizations both the response bias of the samples as well as the typicality of context constitutes major limitations of prior research to assessing the effects of flextime.
An important issue related to generalizability is the question of whether the implementation of flextime has systematically different effects within different organizational contexts. Despite all the indicated benefits of flextime for employees, it is also possible that employees can abuse this practice if not properly motivated and satisfied with their work. Flextime is ideal for employees who can be trusted, motivated to do their jobs well, and highly committed to the goals of the organization. In this context, flextime will be poised to have its greatest positive impact on organizational profitability. Strategic human resource management research has differentiated human resource systems according to the employee-oriented philosophy held by management. An employer philosophy aimed at employee well-being is fundamentally different from one aimed at employee efficiency (Osterman 1994). This vein of research predicts that, in order to be most effective, a human resource practice such as flextime must be consistent with an overall strategy aimed at an employee’s well-being (e.g., Delery and Doty 1996). Although an extensive literature in strategic human resource management has theorized the importance of fit or alignment between human resource practices and the strategy chosen, prior empirical work has failed to document reliable positive effects (e.g., Arthur 1994; Delery and Doty 1996; Huselid 1995; Roehling et al. 2005). This is not necessarily surprising as studies within this literature have not had longitudinal data available to control for the firm specific characteristics of the organization.

Based upon the often theorized benefits of human resource practice alignment with organizational strategy (e.g., Powell 1992; Roehling et al. 2005), we examine strategy as a potential moderating variable in the context of flextime’s affect on organizational profitability. Given the literature’s identification of flextime’s benefits on the employees
occurring through positive employee responses (e.g., higher job satisfaction, decreased absenteeism, increased productivity), it is logical to assume that an organizational strategy that bolsters and supports these individual reactions will offer fit and alignment that will allow the organization to realize the potential benefits of flextime in terms of profitability. Alternatively, organizational strategies that do not support these positive employee reactions can potentially overwhelm or undermine these reactions which will result in misalignment that can negatively impact profitability. The contribution of this paper is to consider whether or not the benefits of flextime for the organization’s bottom line can be evaluated in isolation or whether the benefits of flextime are subject to the constraints surrounding the context of the organizational strategy chosen by the organization. We make a distinction in firm strategy by following the strategic human resource management literature and divide the strategies into quality enhancement strategy and cost reduction strategy (Arthur 1992, 1994).

Amidst the recent economic turbulence, a pervasive organizational strategy has focused on cost reduction as a primary goal. For example, a cross-industry survey of international executives found that in response to the recent economic downturn, 61% stated “cutting and managing costs” as one of the top strategic goals (Deloitte 2009). When the strategic focus is on competing on the basis of low costs, employees are seen as replaceable and not as a competitive advantage and the associated human resource strategy emphasizes reducing the costs per employee (Schuler and Jackson 1987). Youndt, Snell, Dean, and Lepak (1996) examined performance in the context of human resource management practices where emphasis on human capital investment was compared to manufacturing strategies that focused on different attributes, such as cost. In terms of the
cost reduction strategy, Youndt et al. focused on low labor, material, and unit costs as a strategy consistent with other strategies examined in the literature (e.g., Leong, Snyder and Ward 1990; Marucheck, Pannesi, and Anderson 1990). For instance, Hambrick and Schecter (1983, p. 234) define a cost reduction strategy as one that “typically involves cutbacks in administrative, R&D, marketing and other seemingly discretionary expenses”. For the purposes of our study of flextime, we operationalize a cost reduction strategy as the extent to which reducing labor and other related costs are the focus of the organization’s strategy.

Importantly, flextime is likely to be misaligned with a cost reduction strategy. Specifically, cost reduction as a primary goal is unlikely to support and may even undermine the benefits flextime can have on employees (e.g., job satisfaction). Firms that pursue a cost reduction strategy focus on reducing the costs to the organization while flextime is a benefit that is usually only realized to the extent that it has a positive impact on the employee. It is difficult for a firm that is reducing its costs which may lead to negative outcomes such as a lack of employee trust and turnover to expect the positive aspects associated with flextime to override these negative consequences. If flextime is provided to an employee who feels negative emotions from a cost-reduction strategy, then this is not likely to lead to more productive behavior such as decreased absenteeism on the part of the employee. As a result, a strategy focused on cost reduction is likely to be misaligned with flextime; and we predict that flextime would have the most negative impact on organizational profitability when introduced within an organizational strategy that primarily focused on cost reduction.

We also sought to identify meaningful conditions at the level of the organization’s
strategy under which flextime would most benefit organizational profitability under the resource-based view of the firm. While strategies that put cost reduction as their primary goal are poised to undermine flextime’s positive effects on profitability, a quality enhancement strategy may be likely to fit with flextime. When a firm adopts a quality enhancement strategy, employees are treated as an asset required to produce high-quality goods or services with an employer focus on motivating employees in order to generate a competitive advantage (Schuler and Jackson 1987). Pfeffer (1994) maintained that differentiation by investment and focus on employees is particularly effective in the modern economy. We define a quality strategy in which employees are viewed as an asset as an employee-centered strategy. Indeed, an employee-centered strategy is a well studied strategy related to profitability and is likely to be in alignment with the practice of flextime. Schuster (1986) defined employee-centered management as a “strategy for achieving high levels of employee motivation, commitment and performance through management practices (such as participation and involvement that emphasize attention to employee needs and goals” (p. 160). Indeed, Schuster (1998) found that a quality enhancement strategy where the employee is a key component was a strong cross-sectional predictor of financial performance. For the purpose of this study, we operationalize an employee-centered strategy as the extent to which labor-management cooperation, employees’ skills, and employee participation are the focus of the organization’s overall strategy. Since firms that pursue an employee-centered strategy have employees that are more likely to be willing to give back to their employers (Eisenberger, Fasolo and Daivs-Lamastro 1990), providing these employees with flextime is likely to facilitate an increase in their productivity through mechanisms such as a greater productive window of work or
decreased absenteeism. As a quality enhancement strategy focused on employees offers greater organizational alignment with flextime, we predict that flextime would have the most positive impact on organizational profitability when introduced within a context where the strategy was more employee-centered.

Fortunately, the availability of panel data from a nationally representative survey of Canadian organizations with government mandated participation permits us the unique opportunity to better resolve whether or not flextime increases organizational profitability for the typical organization and whether this varies as a function of different strategies employed by the firm.

METHOD

Sample and Data Collection

The relationship between organizational profitability, organizational strategies and flextime is examined using a Canadian dataset that precisely measures organizational outcomes such as revenue and expenses for a wide sample of workplaces. This large-scale survey is representative of the Canadian workplace population, allowing for conclusions that are strong in external validity. The Workplace and Employee Survey (WES) is collected by Statistics Canada at the workplace (establishment level) in person for the initial year of the survey. In subsequent years, establishment-level data was collected through a telephone interview using a computer assisted interviewing method in order to reduce the errors around data collection. For about 20% of the sampled workplaces in WES (mainly large organizations), multiple persons were interviewed as part of the process. The employer questions were sent to the person most knowledgeable about the company in the specific location. This was usually the owner or CEO for small businesses and multiple
persons such as the various department managers at larger firms. The target population for
the employer component is all business locations in Canada with paid employees in the
month of March except for employers in specific industries (e.g., as agriculture, mining,
fishing, religious organizations and public administrations) and located in the territories.
The sample of employers is drawn from the Business Register which is a list of all
businesses operating in Canada.

The first cycle of the WES began with a sample selected in 1999. The companies
selected into the survey are followed over time for the life of the survey (a period of seven
years ending in 2006). The inaugural WES survey collected data from 6,322 out of the
9,144 sampled employers. The employers with no data were determined to be out-of-scope
because they were either not in business, seasonally inactive, holding companies or the
companies were owner-operators with no paid help. This initial sample (in 1999) was
supplemented at two-year intervals in order to account for the birth of businesses into the
Business Register since the last survey occasion.

WES takes extreme care in minimizing the sampling errors around the collection of
data. Sampling errors occur because the data is only collected from a sample of the
population and not from the entire population. Statistics Canada provides survey weights¹
based on the sampling methodology to apply to each observation in order to ensure that the
conclusions drawn from the data are accurate and not biased. As a result, these weights are

¹ The WES employer sample is selected independently from 252 different strata. Strata are
composed of unique industry, region and employer size groups. Weights are then generated using the inverse
of the probability of selection from each stratum. Adjustments were then made for non-response and for units
that jump across strata during the length of the survey. According to Statistics Canada, the weights are
needed to provide an unbiased estimate.
applied throughout the analysis in order to ensure the quality and robustness of the estimates.

There are many advantages in using WES for the analysis of our hypotheses. First, WES allows the analysis to be the first to provide a nationally-representative view across Canada relating flextime and organizational business strategy with the organizational outcome of profitability. Second, WES allows for an exploration of organizational outcome measures that are very specific and detailed such as revenue, expenses and profitability. This allows for the analysis of actual outcomes by the organization. Finally, WES also provides a longitudinal component to the analysis. Using the longitudinal nature of WES, we are able to link changes in the use of flextime with changes in organizational profitability.

**Measures**

_Flextime._ The main independent variable is whether organizations have chosen to adopt flextime (i.e., “flexible work schedules”) during the years of the survey. The employer is asked the following question: “Has your workplace experienced the adoption of flexible working hours between April 1, YYYY and March 31, YYYY?” The adoption of flextime was coded 1 and the absence of flextime implementation was coded 0. Once the organization implemented flextime, it was considered to offer flextime in all subsequent years of the survey (coded 1). Only workplaces that have adopted flextime during this time frame would answer yes to this question. Workplaces continuing with flextime would answer no to this question. We are hence unable to determine from the survey whether workplaces continued using flextime, but we assume that once firms adopt flextime, they continue offering this practice.
Cost reduction strategy. A cost reduction strategy was accessed through the employer questionnaire which contains a broad range of information. As a result, different sections of the questionnaire were sent to the respondent most knowledgeable about the aspect of the business (not revealed due to confidentiality requirements of the government sponsored survey). One of these categories was the general business strategy section which was sent to the appropriate person in the company. Specifically for the cost reduction strategy, the measure was based upon the organization’s ratings of the importance of the workplace general business strategy for the items “Reducing labor costs” and “Reducing other operating costs” on a 1 (not important) to 5 (crucial) scale. These items also exhibited acceptable reliability (α = .81). The composite mean responses were centered to the sample mean to ease the interpretation of the coefficients.

Employee-centered strategy. Similar to the cost-reduction strategy, a quality enhancement strategy focused on the employee was accessed at the organizational level to generate the measure of the employee-focused strategy. Specifically, each organization was asked to rate the importance of the workplace general business strategy for the items “Enhancing labour-management cooperation”, “Increasing employees’ skills”, and “Increasing employee involvement / participation” on a 1 (not important) to 5 (crucial) scale. Responses to these three items exhibited acceptable reliability (α = .84). The composite mean responses were centered to the sample mean to ease the interpretation of the coefficients.

Organizational profitability. Our central outcome is the profit generated by the organization. As a measure of the before-tax profit of the organization, we subtract the local expenditures from the revenue of the organization. We then took the log of the
before-tax profits (negative profits were assigned a logged value of -1) in order to reduce the outlier effect and to convert the resulting regression coefficients into percentage effect on profitability. In the longitudinal analysis examining profits in the second period as the outcome variable, we control for profits in the previous period, since it is a time varying factor and not accounted for in the fixed effects analysis. The resulting estimates indicate the effect of flextime on profits after controlling for the profits earned by the firm in previous period.

Control variables. Different organizations adopt flextime during different years. To ensure that the macro-economic situation is not driving the regression results, we have controlled for the year in which the profit was earned by the firm. All other time-invariant characteristics of the firm are controlled in the fixed-effects regression.

ANALYSES AND RESULTS

Descriptive statistics for the WES

Table 1 displays the descriptive statistics for the first (1999) and last (2006) wave of the WES.

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Insert Table 1 about here

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While the percent distribution is similar across most of the characteristics, they are not identical because additional firms were added to the sample due to attrition of firms from the initial sample. The summary statistics also indicate that profitability was higher in the first year. The comparative statistics also indicate that the average firm size also increased.
One point of interest is that in the first year of the survey, 16% of firms adopted flexible hours. While this percentage seems high, it is likely that firms that adopted flextime prior to the initial survey year are included in this percentage. This is evident as over the next seven years of the survey, the total adoption rate of flextime only increases to 35%.

In our analysis of the organizational outcome of profitability, we first descriptively analyzed the differences in profits between organizations that chose to offer flextime and those who did not in the first year (1999) of the longitudinal survey. The organizations in this survey were representative of all business locations in Canada that had paid employees. As a result, the distribution across firm size and industry was similar to the workplace distribution in Canada. Approximately 16% of firms implemented flextime for the first time in the organization in 1999. On average, organizations that offered flextime for the first time as an organizational change made more logged profits in 1999 ($M = 10.14, SD = 4.75$) than firms that did not offer flextime ($M = 9.22, SD = 5.25$), $t(5460) = 4.73, p < .01$. Organizations that implemented flextime were just as likely to match this practice with a cost reduction strategy ($M = 2.98, SD = 1.05$) as an employee-centered strategy ($M = 3.02, SD = .99$), $t(1646) = .77, ns$. Similarly, organizations not implementing flextime did not differ in the extent to which they pursed a cost reduction strategy ($M = 2.32, SD = 1.34$) versus an employee-centered strategy ($M = 2.31, SD = 1.37$), $t(9274) = .31, ns$. These descriptive statistics highlight that flextime plays an important role in the profits of organizations. Specifically, firms with flextime earned higher profits than firms who had not implemented flextime. Additionally, the organization’s decision to implement flextime appears to be independent of the type of organizational strategy pursued by the firm.
Regression analysis for the initial wave of WES

We first examine the impact of implementing flextime using the initial wave of WES. In the initial analysis, we test the main effects of flextime and the two different organizational strategies on the log of profits for the organization. We then test the interaction effects between flextime offered by the organization and the two different strategies pursued by each organization.

The results from the initial model indicate that organizations implementing the option of flextime for its employees earned higher profits, $b = .809$, $s.e. = .196$, $t(5456) = 4.12$, $p < .01$. Firms that pursued a cost reduction strategy had lower profits, $b = -0.209$ $s.e. = .069$, $t(5456) = -3.02$, $p < .01$. However, consistent with prior research, firms that pursued an employee-centered strategy earned higher profits, $b = .414$, $s.e. = .068$, $t(5456) = 6.12$, $p < .01$. The coefficients of the interaction term for both the cost reduction strategy [$b = -.210$, $s.e. = .194$, $t(5456) = -1.09$, $ns$] and the employee-centered strategy [$b = -.090$, $s.e. = .203$, $t(5456) = -0.44$, $ns$] were not statistically significant. This suggests that there is no moderating effect from implementing flextime with either organizational strategy. One possible explanation for the absence of significant interaction terms is that this initial analysis only utilized cross-sectional data to examine a specific earning period. While the results from this initial model are consistent with the few existing studies relating flextime to organizational outcomes, we are only observing correlational estimates that fail to capture the firm-specific heterogeneity that exists across organizations. It is precisely organizational specific variability that may overshadow fit/misfit relationships.
Fixed effects analysis across all waves

To test whether flextime and the degree of the strategy emphasized by the organization net of time-invariant firm differences influenced the amount of profits earned, we utilized the panel data structure to hold constant unobserved characteristics of individual organizations by employing a fixed-effects regression analysis. By controlling for the time-invariant within-organization differences, we are able to focus on examining the existence of a fit between the choice of a business strategy and flextime. Importantly, the prior estimates of this fit—as with many other studies in prior literature—may be confounded by potential selection effects. Moreover, the fit/misfit of flextime with organizational business strategy may be overshadowed by organizational specific variability. Using fixed effects estimation enables us to hold constant unobservable selection effects and hold constant the specific organizational effects so that we are able to observe subtle variations that constitute flextime’s better or worse fit with organizational strategies. Importantly, fixed effects allow us to control for static organizational characteristics (e.g., industry). Moreover, the longitudinal data allows us to further evaluate the impact of implementing flextime on an additional future time period where profits in the prior period can be held constant providing an even more sensitive test of the long term consequences on organizational profitability. Finally, due to the nature of the survey question on flextime, some of the survey respondents may already have a flextime program but may have implemented this program prior to the start of the survey. If respondents interpreted the question correctly, these respondents would be included in a group that has not implemented flextime. Using fixed effects, we are able to mitigate this concern as the resulting estimation is identified by
those who adopt flextime (as opposed to companies with a time-invariant flextime policy).

The specification of our fixed effects model is as follows:

\[
\text{LOG} \pi_{it} = \beta_1 \text{Flex}_i + \beta_2 \text{Cost}_it + \beta_3 \text{HR}_it + \beta_4 \text{Cost}_it \times \text{Flex}_i + \beta_5 \text{HR}_it \times \text{Flex}_i + \alpha_1 D_i + \alpha_2 Y_t + \epsilon_{it}
\]

Where: 

\( i = \) individual firm \( i \)

\( t = \) year

\( D = \) fixed effect dummy for each firm

\( Y = \) fixed effect dummy for each year

The results of the analyses predicting profits of the organization in the first (left column) and second period (right column) are presented in Table 2. It is important to note that under a fixed effects analysis, profit in the first year is negatively related to profits in the second year. While this result may seem counterintuitive, it is driven by the fixed effects analysis. When a cross-sectional regression is employed, then profits in the first year is positively associated with profits in the second year. This indicates that the fixed effect of each firm captures the positive correlation in profits across years, resulting in a negative coefficient after controlling for fixed effects.

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Insert Table 2 about here

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Results show that organizations implementing flextime earned less profits in the first period \([b = -.827, s.e. = .122, t(33516) = -6.76, p < .01]\), with a negligible effect on profits in the second period \([b = .039, s.e. = .132, t(26829) = .30, ns]\) after controlling for the degree of
each strategy chosen by the organizations. Organizations that pursued a cost reduction strategy earned lower profits in both the first period \[b = -0.153, \text{s.e.} = 0.035, t(33516) = -4.40, p < .01\] and second period \[b = -0.105, \text{s.e.} = 0.038, t(26829) = -2.78, p < .01\]. However, consistent with previous research, organizations that pursued an employee-centered strategy earned higher profits in both the first period \[b = 0.164, \text{s.e.} = 0.036, t(33516) = 4.57, p < .01\] and second period \[b = 0.082, \text{s.e.} = 0.040, t(26829) = 2.11, p < .05\].

Importantly, after controlling for the differences within organizations, the interaction between flextime and the two different organizational strategies becomes significant. Specifically, organizations that implement flextime in the context of a strategy that was more focused on cost reduction earned a lower level of profits in both the first \[b = -0.302, \text{s.e.} = 0.066, t(33516) = -4.58, p < .01\] and second year \[b = -0.235, \text{s.e.} = 0.071, t(26829) = -3.30, p < .01\]. This result suggests that flextime is detrimental for the bottom line when it is misaligned with their organizational strategy.

Conversely, organizations that implement flextime in the context of an organizational strategy that was more employee-focused earned significantly higher profits in both the first \[b = 0.189, \text{s.e.} = 0.067, t(33516) = 2.81, p < .01\] and second period \[b = 0.194, \text{s.e.} = 0.072, t(26829) = 2.71, p < .01\]. This result suggests that flextime is more effective for increasing the bottom line when it is aligned with its organizational strategy.

Collectively, these findings support a contingency perspective for flextime’s benefits on the organizational outcome of profitability.

We then attempt to examine the mechanism whereby firms that follow this alignment with their organizational strategy increase their profits. The results of the analysis are found in Table 3.
We first use a fixed effects regression and examine the impact the organizational strategy of the firm and flextime on the log of the gross operating revenue of the firm. We then also employ a fixed effects regression to examine the impact of the organizational strategy and flextime on the total payroll expenditures of the firm. The results indicate that flextime increases the overall revenue to the firm when combined with an employee-centered strategy. These positive results provide some evidence that flextime aligned with an employee-centered strategy helps to increase the productivity of employees and/or raises the reputation of the firm (through an increase in stock prices) which translates to an increase in revenue for the firm. Conversely, flextime combined with a cost-reduction strategy has a negative impact on the revenue of the firm, perhaps due to the shirking effects that are possible with flextime in the context of a misaligned strategy. When payroll expenditures are examined, the results indicate that when employed with an employee-centered strategy, flextime is more costly to the firm due to the high costs associated with this specific practice and the overall organizational strategy pursued by the firm. Conversely, flextime combined with a cost reduction strategy is not associated with any change in payroll expenditures, perhaps due to counterbalancing forces of flextime and a cost reduction goal. Taken together these results indicate that flextime combined with an employee-centered strategy results in higher costs but also higher revenues for the firm, with revenues outweighing costs leading to higher firm profits.
DISCUSSION AND CONCLUSION

Summary of Findings

Using a unique longitudinal dataset that is representative of Canadian organizations, we found that the implementation of flextime does appear to have positive effects on the bottom line for organizations on average. Evidence supportive of ensuring the alignment of flextime with the appropriate organizational strategy, however, was revealed only when we used the panel structure of the data to hold constant individual organizational characteristics through fixed effects. Specifically, the implementation of flextime had a negative effect when combined with a strategy that put cost reduction as the primary goal, but had a positive effect on profitability when aligned with an employee-centered strategy. Thus, the results of the present study suggest that the implementation of flextime is more fruitfully thought of from the organization’s perspective as a strategic choice that must take into account the organization’s broader strategy.

In attempting to further explore the processes whereby organizational strategy is an important context for the use of flextime, we explored this impact by examining both payroll costs and revenue. We find that flextime with an employee-centered strategy both increases costs and increases revenue (revenue increases more than costs). These results provide evidence that while flextime is costly to implement, when it is combined with a strategy that invests in the workforce it has positive impacts on productivity such as a reduction in absenteeism and turnover and from the institutional perspective increases the attractiveness of companies leading to increased revenues.
Given the prior literature’s failure to empirically support the often theorized benefits of alignment between human resource practices and the strategy of the firm (Roehling et al. 2005), the analyses of the present study speak to the fact that these subtle interactions may potentially be overshadowed by organizational specific variability. Much like the findings in the prior literature, our own cross-sectional analysis of the first wave of data was unable to detect evidence for alignment or fit. It may be that evidence for fit will be more reliability detected when organizational specific variability can be adequately accounted for either with sufficient covariates or using a similarly powerful fixed effects analytical strategy.

**Limitations and Future Research**

The present results provide evidence that the context of an organization’s strategy is important and reliable results can be found when longitudinal data high in external validity are available. While this was a unique advantage of the dataset we analyzed, there are important limitations of these data that are important to highlight in the context of future research.

Our primary goal was to examine flextime’s impact on organizational profitability. Although we replicated the positive consequences of flextime documented in the prior literature, our analysis is the first to identify specific organizational contexts in which flextime had negative consequences for profitability. Given the current evidence for flextime’s benefits on the organization’s bottom line being contingent on the organization’s strategy, future research needs to more precisely understand the form of alignment this constitutes. The strategy of the firm may proxy for other human resource practices offered by an organization. For instance the benefits of alignment we have identified may reflect an
organization’s adherence to an employee-centered strategy may on average translate into offering human resource practices that are more coherent with flextime. Additionally, a cost reduction strategy may reflect the absence of human practices that are synergistic with flextime or a set of practices that are incoherent with flextime. In this regard, our perspective may reflect bundling (MacDuffie 1995) or a configurational mode (Delery and Doty 1996). While our results clearly demonstrate that the benefits of flextime for the organizational bottom line should not be evaluated in isolation of an organization’s strategy, future research needs to more fully understand the nature of this context and its relationship to these other perspectives.

Relatedly, future research needs to provide a better understanding of the precise processes and mechanisms through which flextime impacts organizational profitability. The present study was able provide a robust assessment of the generalizability of flextime’s impact on profitability and identify the critical moderating variables of organizational strategy. In addition, we were able to explore the processes (payroll costs or revenue) through which flextime and the strategic context of the firm had an impact on profitability. Despite these contributions, the data did not allow the identification of the precise mechanisms through which flextime impacted profitability. In this regard, our approach is similar to Datta, Guthrie, and Wright (2005) who found that the contextual conditions of industry was an important moderator of the link between human resource practices and productivity. However, precisely identifying the mediating mechanisms through which human resource management more generally impacts profitability continues to constitute a “black box” (e.g., Purcell, Hutchinson, Kinnie, Rayton, and Swart 2003). Now that we have been able to identify in a representative sample contexts in which flextime increases
profitability (including payroll costs and revenue) and the contexts in which flextime decreases profitability, future research will be better positioned to focus on the underlying precise mechanism of variation in profitability.

Understanding these mechanisms is essential to understanding whether or not flextime is desirable for society. Most prior work has demonstrated clear benefits of flextime for employees and failed to identify any conditions under which there may be significant costs to the organization. We have focused on providing a robust assessment of the benefits of flextime for the organization’s bottom line while also explicitly testing organizational level factors. In evaluating the full costs and benefits, however, the impact on employees, their family, communities, well-being, health, as well as profitability must be taken into consideration for a complete evaluation of the costs and benefits a societal level. Even focusing just on the individual employee, the consequences of the implementation of flextime is not necessarily without tradeoffs. For example, Golden (2001) has found that while flextime is spreading as a practice in the workplace, it is also often associated with important tradeoffs, such as, increased number of working hours and working at undesirable times (e.g., evening shifts). To the extent that flextime comes with these types of tradeoffs, they too must be taken into consideration in a full evaluation of the costs and benefits.

Additionally, while the present study provided a unique opportunity to evaluate the implementation of flextime in a representative sample, future research will need to evaluate whether these results generalize to organizational contexts outside of Canada. Importantly, countries vary in terms of dimensions that may be critical to the success or failure of flextime (e.g., universal health care, workers rights, and entitlements). Future
research needs to evaluate whether the success and failure of flextime generalizes to other countries and economies.

Finally, the data analyzed in the present paper did not capture the current economic turbulence experienced around the globe, where organizations have responded in large numbers by shifting towards cost reduction strategies. Based on the findings of the present study, we would expect that the introduction of flextime within this economic climate where many more organizations have been focusing on cost reduction as their primary goal might further hurt the organization’s bottom line. Given the economy-wide shift to this cost reduction strategy, however, the patterns we observed may not easily generalize. Future research needs to consider not just individual organizational shifts in strategy but also economy-wide shifts to better understand how these function. The strategy level is precisely the area where organizations attempt to respond to dynamic economic conditions. The present paper highlights the interactive role of organizational practices and strategy for understanding profitability.
REFERENCES


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Eisenberger, Robert, Peter Fasolo and Valerie Davis-LaMastro. 1990. “Perceived organizational support and employee diligence, commitment and innovation.” 


Golden, Lonnie. 2001. “Flexible work schedules: What are we trading off to get them.” 


<table>
<thead>
<tr>
<th>Firm Characteristics</th>
<th>1999</th>
<th>2006</th>
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<tbody>
<tr>
<td>Sample size</td>
<td>5462</td>
<td>5504</td>
</tr>
<tr>
<td>Number of Employees (Units)</td>
<td>12.4</td>
<td>16.2</td>
</tr>
<tr>
<td>Profit ($)</td>
<td>783,207</td>
<td>695,414</td>
</tr>
<tr>
<td>Cost Reduction Strategy</td>
<td>2.419</td>
<td>2.403</td>
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<tr>
<td>Employee-Centered Strategy</td>
<td>2.420</td>
<td>2.361</td>
</tr>
<tr>
<td>Adoption of Flexible Hours</td>
<td>16%</td>
<td>35%</td>
</tr>
<tr>
<td>Industry (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry, mining, oil, gas</td>
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<td>.013</td>
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## Table 2

### Predicting Profits Using Fixed Effects Across All Waves in WES

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<th>Predictors</th>
<th>Log of Profits in Period 1</th>
<th>Log of Profits in Period 2</th>
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<tbody>
<tr>
<td>Flextime (FLEX)</td>
<td>-.827 (.122)***</td>
<td>-.045 (.134)</td>
</tr>
<tr>
<td>Cost reduction strategy (CR)</td>
<td>-.153 (.035)***</td>
<td>-.090 (.038)***</td>
</tr>
<tr>
<td>Employee-centered Strategy (EC)</td>
<td>.164 (.036)***</td>
<td>.087 (.039)**</td>
</tr>
<tr>
<td>CR x FLEX</td>
<td>-.301 (.066)***</td>
<td>-.259 (.072)***</td>
</tr>
<tr>
<td>EC x FLEX</td>
<td>.185 (.067)***</td>
<td>.193 (.072)***</td>
</tr>
<tr>
<td>Total Number of Employees</td>
<td>.010 (.002)***</td>
<td>.000 (.002)</td>
</tr>
<tr>
<td>Log of Profits in Year 1</td>
<td></td>
<td>-.153 (.006)***</td>
</tr>
<tr>
<td>N</td>
<td>41,902</td>
<td>34,113</td>
</tr>
<tr>
<td>R-squared</td>
<td>.47</td>
<td>.48</td>
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Table 3
Predicting Revenue and Salary Expenditures

<table>
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<th>Predictors</th>
<th>Log of Revenue</th>
<th>Log of Total Payroll Expenditures</th>
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<td>Flextime (FLEX)</td>
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<td>.020 (.011)</td>
</tr>
<tr>
<td>Cost reduction strategy (CR)</td>
<td>.001 (.003)</td>
<td>-.000 (.003)</td>
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<tr>
<td>Employee-centered Strategy (EC)</td>
<td>.023 (.004)***</td>
<td>.017 (.003)***</td>
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<tr>
<td>CR x FLEX</td>
<td>-.025 (.006)***</td>
<td>.001 (.006)</td>
</tr>
<tr>
<td>EC x FLEX</td>
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<td>.013 (.006)**</td>
</tr>
<tr>
<td>N</td>
<td>41,902</td>
<td>41,902</td>
</tr>
<tr>
<td>R-squared</td>
<td>.94</td>
<td>.94</td>
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