Family-Friendly Benefits and Subsequent Employee Turnover and Profitability

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By Annalisa I. Mastri*

While women earn approximately half of law and medical degrees and about a third of MBAs at elite business schools, a sizable gender gap remains in the workplace. Women make up only about 15% of tenured medical faculty or partners at large law firms and less than 3% of Fortune 500 CEOs. Why have women's gains in educational attainment failed to translate into advances in the workplace?

One common explanation for the under-representation of women at the upper echelons of professional work is that combining high-powered careers with family is exceedingly difficult, causing women to drop out of the labor force or remain concentrated at the lower levels of professional work. Thus, in recent years many companies have adopted family-friendly benefits to ease the difficulty of combining work and family. However, a study of whether these benefits actually have their intended effect has not yet been undertaken.

In this study, we examine the effect of family-friendly benefits on the presence and retention of female employees. We also examined how these benefits affect profitability; while they may help increase the representation of women in the professions, the likelihood of firms instituting such policies depends heavily on how it affects their bottom line.

We investigate these issues using a new data set and an empirical approach relying on firm-level variation in benefit adoption. The analysis indicates that firms that are thinking of providing family-friendly benefits should probably do so; marginal firms that decide to provide

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these family-friendly benefits would see an increase in the retention of female employees and a parallel reduction in employee turnover without a decrease in profits.

I. Family-friendly Benefits

A. Family-friendly Benefits and Employee Turnover

The literature on provision of traditional benefits, such as health insurance and pensions, suggests that a) firm provision of traditional benefits induces greater attachment to the firm (whether as a result of increased commitment on the part of employees or "job-lock"), resulting in reduced turnover (see, e.g., Olivia S. Mitchell 1982 and Steven G. Allen, Robert L. Clark and Ann A. McDermed 1993. See Jonathan Gruber and Brigitte C. Madrian 2002 for an extensive review of this literature); and b) firms provide benefits to attract and keep those employees who are more likely to stay with the firm for a long time (see Allen et al. 1993 and Paul Oyer 2008). Compared to traditional benefits, however, it is not clear ex ante that family-friendly benefits they should have a similar effect on turnover; there is little formal bonding to the firm, or "job-lock", induced by family-friendly benefits, and it isn't clear that provision of such benefits results in positive selection into the firm.

We suggest that family-friendly benefits may reduce employee turnover in particular by stemming the turnover of female employees. Keeping in mind that females perform the majority of child-rearing and household duties, provision of benefits such as emergency childcare might reduce job separations to deal with persistent failures in child care arrangements or frequently sick children. Family-friendly benefits may reduce turnover by sending employees a signal that the firm cares about them, which increases company loyalty. They may also help retain the best females who value such benefits.

Psychological research using survey data supports these hypotheses. Lack of workplace flexibility has been linked to depression in women (Bradley K. Googins 1991). Others have found that mothers reporting difficulty making child-care arrangements had higher rates of depression (Catherine E. Ross and John D. Mirowsky 1988). Terri A. Scandura and Melenie Lankau (1997) showed that women who perceived that their company offered a flexible work environment—even if it did not actually do so—reported higher levels of organizational commitment and job satisfaction than women who did not. In a similar vein, Samuel Aryee, Vivienne Luk and Raymond Stone (1998) found that work schedule flexibility is negatively correlated with the intent to leave the organization. And, in addition to psychological and health benefits, family-friendly benefits may offer time savings and convenience.

B. Family-friendly Benefits and Profitability

The relationship between family-friendly benefits and firm profitability is unclear. Benefits might hurt profitability. They can be costly to administer and support, leading to higher operating expenses and lower profits for the firms that adopt them. For example, in 1999 the price of reserving a single slot for back-up child care at a child care center was as high as $23,000 in major metropolitan areas (Nancy Woodward 1999). Furthermore, to the extent that people with lower workplace commitment seek out firms offering such benefits, the provision of them may result in adverse selection into the firm on the part of employees.

Alternatively, such policies might improve profitability. Family-friendly benefits could help attract and retain the best employees who know they want to have children. As noted above, family-friendly benefits may reduce turnover rates among female employees in particular, ultimately saving the firm money. Turnover leaves a firm with large, unrecoverable recruitment and training expenditures for the person who leaves and costs for searching for, recruiting, and training a replacement.[1] In addition, potential clients may value the diversity that comes with more women at a firm, leading to more clients and greater profitability for firms with such benefits. Other possible benefits of reduced turnover include continuity of client service and better departmental morale, both of which may increase profitability.

II. Methodology

We investigate the relationship between family-friendly benefits, female employee turnover, and firm profitability in the context of U.S. law firms. While comprehensive benefits data is not available in most industries, we were able to collect detailed longitudinal data on the presence of specific benefits at approximately 1,200 law firms over ten years (1995-2004).

The data employed for the study come from two sources: data on firm characteristics and specific benefits offered come from the *National Directory of Legal Employers* (NDLE) published annually by the National Association for Law Placement. Each law firm that recruits on a law school campus is required to fill out a data sheet containing information on location, number, gender, and race of associates and partners, types of law practiced, and fringe benefits, among other items. Data on firm profitability are from the AmLaw200, a list of the 200 most profitable law firms in America published yearly by *The American Lawyer* magazine. Profitability is reported by firm partners (or former partners) and is thoroughly investigated and confirmed from multiple sources by investigative journalists.

We consider four distinct employer-provided family-friendly benefits that have been adopted at a relatively high rate over the last two decades:

1. Employee assistance programs (EAP): Provide counseling, legal and financial advice on a confidential basis for employees and their families. Since women began entering the workforce

[1] Conversations with the human resources director at a large law firm suggest the search and recruiting costs alone are in the tens of thousands of dollars per associate.

in greater numbers in the 1970s, EAPs have expanded to include what are typically referred to as "Work-Life Balance" services.

2. Child Care Flexible Spending Accounts (CCFSA): Allow employees to set aside up to $5000 in pre-tax earnings to pay for services that allow parents to work, such as day care, in-home care, nursery school and summer day camps.

3. Paternity leave: Provides job security for new fathers who take time off work following the birth of a child. This may be either paid, unpaid, or a combination of the two. It is typically fairly short in duration. Although theoretically paternity leave should decrease the turnover of *male* associates, the scant uptake of this benefit (according to HR personnel in a large law firm in the sample) indicates it may be more effective for the signal it provides that a firm is "family-friendly" and thus may reasonably be expected to decrease the turnover of female associates.

4. Emergency child care: Typically involves contracting for "slots" at local child care centers to be used when a child is too sick to attend school or regular child care arrangements fall through. Less common is firm provision of emergency child care in an on-site facility.

We focus on three dependent variables: percentage of female associates, annual associate turnover rate, and firm profitability. The percentage of female associates is used as an indicator of attraction and retention of female employees since it is not possible to compute gender-specific annual turnover rates; the annual associate turnover rate is not reported by firms, but can be calculated by comparing the number of associates in each year with the number of associates in the following year, factoring in the number of associates who were hired (which is reported, but not by gender). Profits per partner are collected directly from the *AmLaw 200.*

This study investigates outcomes—percentage of female associates, annual associate turnover, and profits per partner—as a function of specific benefits offered. [2] To do so, we use the longitudinal nature of the data to estimate models with firm fixed effects. Although we typically think the ideal way to identify whether the benefits are effective is to randomly assign similar firms to provide a benefit or not and then following the outcomes over time, this is impractical, as well as of doubtful usefulness (see footnote 3) to the present study. Instead, we use data that are already available and try to mimic the ideal design to the extent possible. As in any study of treatment effects under non-random assignment, there would be selection problems inherent in cross-sectional analyses. For instance, firms with some unobserved characteristic, such as a commitment to equity and social responsibility, may be more likely to both provide family-friendly benefits and have lower turnover; the lower turnover finding would be spurious in this case.

However, using longitudinal data we can consistently estimate the coefficients of interest even in the presence of time-invariant unobserved heterogeneity that is correlated with other explanatory variables by including a firm fixed effect. The firm fixed effect controls for time-invariant, unobserved firm characteristics that may have an effect on the outcomes of interest and benefits provision, thereby mitigating potential omitted variables bias. In doing so, the coefficients are identified by variation in policy adoption within a firm over time, rather than across firms or employees; firms effectively serve as their own controls.[3]

[2] Models with percentage female associates and turnover as the outcome variables use a one year lag of benefit provision as the independent variable of interest. Profits are examined contemporaneously with the provision of the benefit.

[3] Adding a firm fixed does not control for the fact that all firms may have similar outcome trends over time; it could be the case that, while a firm that provides a benefit is more profitable after benefit provision, *so is a firm that did not provide the benefit* over the same time period. To control for this possibility, we also estimate models including time trends, essentially a difference-in-differences model. This specification allows us to compare the change over time in the firms that began providing a family-friendly benefit over the sample period to the change over time in those firms that did not provide the benefit and arguably represents a stronger test of effectiveness, as it differences

Specifications employing firm fixed effects identify the treatment-on-the-treated effect (TT), i.e., the expected outcome of the benefits on those firms that chose to provide it. They do not give an average treatment effect, or the effect we would expect if we randomly assigned benefits to firms and compared the outcomes between treated and untreated groups. The TT is the important treatment effect in this context, since provision of benefits is completely voluntary on the part of firms; our goal is to find out how the outcome of the marginal firm would change as a result of the policy, not the random firm. This is because some firms, such as those with a very rigid managerial culture, may never realistically gain anything from providing family-friendly benefits and should not be considered part of the potential treatment group.

III. Results

Table 1 reports the results of fixed effects analyses conducted on each of the dependent variables of interest (each cell represents a separate regression).[4] Controls for primary practice area and firm size are suppressed for the sake of brevity, but only a few firms change these designations over time and their inclusion did not alter the results. The errors reported are robust to arbitrary heteroskedasticity and autocorrelation. Results including errors corrected for an AR(1) process and Newey-West standard errors were not substantively different.

The results suggest that family-friendly benefits are positively related to the proportion of associates who are female (Table 1, Column 1). Emergency child care, child care flexible spending accounts, and EAPs are all significantly associated with increases in the percentage of female associates in firms after the adoption of these policies. Adoption of an emergency

out changes that may have been expected to occur over time even in the absence of a family-friendly benefit. The major drawback to this approach is that, due to a low adoption rate of the benefits examined, the time trends are identified predominantly off firms that never offered the benefit, and there may be reasons to expect that firms that never offered a given benefit are not a good comparison group for firms that ever offered a benefit. Results of these analyses are available from the author upon request.

[4] Specifications including all benefits at once suffer from collinearity in benefits provision, which reduces the statistical significance of all coefficients. F-tests conducted after specifications including all benefits at once reject the hypothesis that all coefficients are zero.

childcare program is associated with a 1.8 percentage point increase in the percentage of female associates while a child care FSA or EAP is associated with a 1.5 percentage point increase. These may seem small, but to put them in context, we can evaluate them at the constant value, which gives the average percentage of female associates in firm-years where the benefit was not offered. The constant in each regression was approximately 41 percent; thus these correspond to increases of 4.3, 3.5, and 3.6 percent, respectively. Paternity leave, perhaps unsurprisingly, does not show a significant relationship with the percentage of female associates.

TABLE 1--Regression Results

	(1) *Percentage of female associates*	(2) *Associate turnover rate*	(3) *Profits per partner*
EAP	0.0148**	-0.0520***	249.5725***
	(0.0063)	(0.0092)	(38.8775)
CCFSA	0.0146*	-0.0652***	264.3332***
	(0.0079)	(0.0086)	(48.7240)
Paternity	0.0152	-0.0286*	450.3366***
	(0.0117)	(0.0157)	(82.7346)
Emergency child care	0.0178***	-0.0233*	220.5153***
	(0.0066)	(0.0133)	(71.4191)
Observations	9093	6594	2062
Number of firms	1765	1598	249

Notes: Each cell corresponds to a separate regression. The dependent variable is listed at the top of each column. Regressions include firm fixed effects. Number of observations and firms differ across specifications due to difficulty matching firms over time (necessary to compute turnover rate) and limited profitability data. Robust standard errors in parentheses.

* Denotes significance at 0.10 level.

** Denotes significance at 0.05 level.

*** Denotes significance at 0.01 level.

Family-friendly benefits are also linked to reduced associate turnover (Table 1, Column 2). The coefficient on Employee Assistance Programs suggests a 5.2 percentage point average reduction in associate turnover after its introduction. Evaluated at the constant value, which is 21 percent, this corresponds to a 22 percent reduction. Child care flexible spending accounts are associated with a 6.5 percentage point, or 27 percent, reduction in turnover. The coefficient on paternity leave suggests a 13 percent reduction after provision of paternity leave benefits while the coefficient on emergency child care suggests a reduction of roughly ten percent in the average associate turnover rate upon provision of emergency child care.

In supplementary analyses (available from the author on request) we examined the relationship between turnover and the percentage of female associates by predicting the turnover in year *t* as a function of the percentage of female associates and benefits offered in year *t-1*. The results of this correlational analysis indicate a negative relationship between turnover and the percentage of female associates in the previous year, and inclusion of the percentage of female associates reduces the magnitude and significance of the benefit coefficients. These results are consistent with the hypothesis that firms with family-friendly benefits are better able to attract and retain female associates, and that this is at least partly responsible for the turnover reductions associated with provision of these benefits.

We also cast doubt on the possibility that firms which offer family-friendly benefits may also be likely to pay higher salaries, and the higher salary, and not the benefits, is responsible for the observed negative relationship between benefit provision and turnover. The estimation strategy identifies coefficients from the change in benefits provision over time. Consequently, for the salary explanation to hold it would have to be the case that firms enact salary increases at the same time as provision of benefits. There is no evidence in the data that firms adopt benefits in concert with salary increases.[5] In addition, there is no reason to expect salary changes to change the gender composition of the firm in favor of females.

Results also indicate that profits greatly increased in firms after adoption of all family-friendly benefits considered (Column 3). The coefficients represent the average change in profits, in thousands, after provision of each of the family-friendly benefits. In supplementary analyses (available from the author on request) we included turnover in the profitability models. Consistent with the mediational hypothesis that benefits reduce turnover, which increases profitability, we find a very strong negative relationship between turnover and profitability, and the magnitudes and significance of the benefit coefficients are reduced.

Profits clearly trend strongly over the sample period in all firms, and it is not claimed that provision of family-friendly benefits is responsible for all of this growth in profits, even if it does significantly reduce turnover. However, even if it were the case that only very profitable firms offered these benefits in the first place, this simple analysis suggests that provision of benefits does not act as a drain on profits or drive firms in our sample that adopted them out of business.

IV. Conclusion

Taken together, the results indicate the value to firms of providing family-friendly benefits. We found a significant positive relationship between the percentage of female associates and provision of family-friendly benefits (except paternity leave, perhaps not unexpectedly). Subsequent analyses showed that Employee Assistance Programs, child care flexible spending accounts, and emergency child care are associated with significant reductions in turnover at the associate level. This, combined with the mediational analysis of percentage of female associates on turnover, suggests that at least some of the reduction in turnover is

[5] We estimated fixed effects logit models predicting the probability of benefit provision in year *t* as a function of the difference in salary from year *t-1* to year *t*. The estimates suggest that a higher salary spike is associated with a lower probability of benefit provision.

attributable to the fact that female employees value these benefits, especially emergency childcare, and therefore persist longer with the firm. Moreover, these results, taken in tandem with the correlational profitability analyses, provide evidence against a sentiment beginning to be expressed in some circles that firms offering family-friendly benefits can expect to see *increased* turnover of female employees and profitability losses.[6] The results of this study are directly translatable to other large firms with similar organizational structures and a similar workforce composition, such as consulting and accounting firms.

Overall, these findings have important implications for firms and policy makers as well as individuals. Family-friendly policies can obviously help individuals, for instance by helping reduce stress and more efficiently perform at work. While many have debated the value of family-friendly benefits for the firm, this study provides at least some preliminary evidence of their utility. Not only can they help firms reduce turnover, but also retain female employees. Further, they do so without any detriment to profitability, *even when firms completely finance the cost of benefits provision themselves*. Public provision of family-friendly benefits could further reduce the burden to individual firms and have more far-reaching results. In particular, these findings suggest that family-friendly policies can help combat the underrepresentation of women in the workplace, as well as helping individual firms.

[6] For example, conservative career expert and columnist Dr. Marty Nemko says on his website: "But let's say that you, the CEO, did what feminist activists advocate: install a family-friendly workplace that prioritizes work-life balance, and hired many women who had worked only 40 hours a week and taken years off to raise children. You might hire lots of people [like women]. If so, your company would likely go out of business."

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