Are Some Firms Better for Women's Careers?

By Garima Sharma, Shreya Tandon, Lisa Ho, Pulak Ghosh and Stephanie Hao ⓡ*

A large body of research establishes the importance of firms for wage-setting, demonstrating that the same worker earns markedly different wages depending on her employer (reviewed in Card 2022, Kline 2024). A natural corollary of this insight is that firms could influence other outcomes for workers beyond just wages—in particular, their careers. Firm environments may be especially pivotal for women's careers given how many women withdraw from the labor market to balance work and home responsibilities, potentially because workplaces are poorly designed for women's needs. This paper explores whether some firms better advance women's careers than others. Our setting is India.

Studying how firms influence careers poses two key challenges. First, highly talented women may disproportionately select into better firms, leading us to misattribute career advancements driven by worker ability to the firm. Second, good work environments are difficult to observe.

We employ a novel approach to mitigate selection concerns using "first recruitment events," where a firm recruits from a university for the first time. Comparing women recruited during these events to equally qualified peers from earlier cohorts of the same university and degree program then controls for worker ability, since university admissions in India rely on exam scores. Both groups of women entered college equally qualified and received identical educations. We identify good firms using a 300-question survey of amenities conducted by two diversity- and inclusion-focused organizations in India. We track career trajectories using new data on the universe of LinkedIn profiles from India.

Our findings show that women's careers indeed progress better at firms deemed desirable based on the benefits they offer. First, on participation, women who start careers at good firms by chance (during the very first year it recruits from their university) are more likely to remain in the workforce and with their first employer three to five years later. Second, on measures of job quality, these women are more likely to advance to managerial positions and hold abstract rather than routine or manual roles. Finally, top-ranked firms for women also better promote men's careers, albeit with slightly smaller effects.

I. Data

Top Firms for Women Ranking.— We identify top firms for women via a ranking created by two diversity, equity, and inclusion solutions firms called Avtar and the Seramount group. Since 2013, the two organizations have produced an annual ranking of the top firms for women in India by inviting firms with over 500 employees to complete an extensive 300-question survey. The survey investigates firms' provision of female-friendly amenities including parental support, flexible work arrangements, policies against sexual harassment, and women's representation in the workforce and leadership. In 2024, 361 firms participated in the ranking—nearly 8% of all firms in the eligible size category in social security records. Of them, 110 were classified as the "Best Firms" for women in India. Top firms inhabited a wide range of industries including automotives, chemical products, e-commerce, hospitality, healthcare, IT, consulting, manufacturing, media, pharmaceutical, real estate, retail, telecommunication, science and engineering, and

* ⓡ Authors are in random order. Sharma: Northwestern University, garima.sharma@northwestern.edu. Tandon: Harvard University, shreyatandon@g.harvard.edu. Ho: Yale University, lisa.y.ho@yale.edu. Ghosh: IIM Bangalore, pulak.ghosh@iimb.ac.in. Hao: Revelio Labs, stephanie@reveliolabs.com. We gratefully acknowledge funding from Northwestern University.

utilities. Importantly, firms participated in the ranking confidentially and were evaluated on their application data alone (Avtar and Seramount Group 2024).

We use the 2024 Avtar classification of top-ranked female-friendly firms in India, focusing on data from the IT, finance, professional services, and consulting industries. These industries comprise nearly half the top firms. Altogether 52 firms employing over 500,000 workers are classified as top-ranked. Reflecting the appeal of top-ranked firms for women, inclusion in the ranking strongly correlates with a firm's revealed preference value for women calculated using the PageRank method (Sorkin 2018). Firms' self-selection into the ranking likely underestimates the true number of top firms for women in India, leading us to underestimate these firms' effects on women's careers.

LinkedIn Profiles.— To track workers' educational qualifications and career trajectories, we use the universe of LinkedIn profiles from India obtained from Revelio Labs. The data cover the period between 2012 and 2023 and report a worker's university, degree, field, and year of graduation, for example "Bachelor's of Science in Electrical Engineering" from IIT Bombay. For each job position held by a worker, the data report her employer, duration of employment, job title, O*NET occupation code, and six-digit NAICS industry code.

II. Empirical Approach

Selection poses the main challenge to studying the impact of firms on careers. If highly talented women disproportionately select into the top-ranked firms for women, career advancements stemming from worker ability may be falsely attributed to firms.

We mitigate selection concerns by identifying women who begin their post-college careers (i.e., first job after earning a Bachelor's degree) at a top-ranked firm in the first year that it recruited from their university. These "first-recruitment events" represent chance recruitments because women graduating in the affected year had the opportunity to apply for positions at the top-ranked firm, but not women graduating from the same university program in prior years. Since undergraduate admissions in India are primarily determined by exam scores on entrance exams or high-school leaving exams, women in the same university-degree program are similarly selected at matriculation and receive identical educations.[1] Campus recruitment is a common hiring method for undergraduate students in India, with colleges often hosting placement cells to facilitate the process. To confirm that first recruitment events reflect a firm's decision to begin recruiting rather than an entrepreneurial student's application to a top-ranked firm, we demonstrate robustness to restricting the analysis to events with multiple hires.

An event study then compares the career evolution of women hired by top-ranked female-friendly firms during first-recruitment events to similarly qualified peers graduating in the prior two cohorts of the same program. Effectively, this strategy compares worker A, who graduated into a top-ranked firm from Amity University with a BS in Electrical Engineering, to worker B, graduating the year before the firm began recruiting from Amity University. LinkedIn data identify first recruitment events as the first year when a university graduate reports starting their first job at a female-friendly firm.

The sample includes 367,001 women graduating between 2011 and 2018, of whom 26,669 join top-ranked female-friendly firms (treated) and 340,332 form the comparison group. We also study outcomes for men: 1.17 million graduates with 51,665 treated and 1,122,604 in the comparison group. The regression is:

[1]For example, at Delhi University, among India's largest government run universities with 71,000 undergraduates, admissions were based on high school exam scores until 2024, and have since relied on a standardized entrance exam. Similarly, over 2,100 of 3,500 engineering colleges use the Joint Engineering Entrance (JEE) Exam to admit students. In 2021, 940,000 aspirants took the JEE Exam, representing over a quarter of the 3.6 million students pursuing four-year engineering degrees the same year (All India Survey of Higher Education 2021).

(1)
$$Y_{iuft} = \sum_{t=1}^{8} \beta_t Top_i * 1_{year=t} + \theta_{ufty} + \epsilon_{iuft}$$

For individual i earning a Bachelor's degree from university u in field f, Y denotes the outcome of interest t years after graduation. Top is a dummy variable equal to 1 for individuals hired by top-ranked female-friendly firms in a first recruitment event and equal to 0 for individuals graduating from u in the two prior years. θ_{ufty} denote university- field- years since graduation fixed effects, calculated separately for each year y in which u experiences a first recruitment event. β_t denote the coefficients of interest, with β_0 omitted. Standard errors are clustered by university-event.

We track four career outcomes for eight years following graduation: (1) labor market participation, measured as reporting a position on LinkedIn, (2) remaining at one's first employer, (3) promotion into a managerial or senior position, and (4) job complexity, measured through the abstract, manual, or routine nature of work defined as in Adda, Dustmann & Stevens (2017).

III. Results

Figure 1 compares the career outcomes of women who begin their post-college careers at a top-ranked firm for women by chance, in the first year it recruits from their university, to peers graduating from the same university and degree program in the two prior years. Panel A examines women's likelihood of remaining in the labor force and at their first employer. Women working at firms that ease their transitions into motherhood—e.g. through generous maternity leave policies or flexible work schedules—should be more likely to remain in the workforce, and more likely to remain at the firm itself if it is more desirable (Krueger and Summers 1988). Our findings align with both hypotheses. Three years upon entering the labor market, women with first positions at female-friendly firms are 5pp more likely to remain in the labor force, representing a 6.25% improvement over the comparison group. They are 2pp more likely to stay at their first female-friendly employer, denoting a 3.70% increase.

Panel B reports effects on two richer measures of job quality: promotion into managerial positions and job complexity[2]. We find positive effects on both outcomes. Women entering firms deemed female-friendly are more likely to be promoted into managerial positions. By year three, they are 2pp more likely to become managers, which grows to 3pp five years after graduation. These effects represent 27.83% and 12.28% improvements over the comparison group respectively.

[Figure 1 Here]

Finally, firms that expect to retain workers for longer may employ them in complex roles that, on the one hand, enable workers to develop skills that facilitate higher wage growth, but, at the same time, atrophy faster during career interruptions. We follow Adda, Dustmann, and Stevens (2017) to classify occupations into abstract roles (involving analytical skills and adaptability), routine jobs (stable, repetitive processes), and manual roles (involving non-routine physical activity). Examples of abstract roles include bank clerks and medical assistants, routine jobs include shop assistants, and manual jobs include nurses and flight stewards. In the original study, abstract roles are found to offer higher wage growth but pose higher risks of skill loss during career interruptions.

We find that treated women are 2.9pp more likely to hold abstract rather than routine or manual positions three years after entering the labor market. This denotes a 3% improvement over the comparison group. Notably, the gains in women's promotions and abstract roles extend far beyond their tenure at the first employer. This persistence also mitigates concerns that the observed positive effect simply reflects top-ranked firms classifying job titles

[2]A worker is defined as being promoted into a managerial or senior role if her job title changes relative to the previous year and one of the following words appears in the new title: manager, senior, principal, lead, managing, director, head, chief, or supervisor, or the word junior disappears.

differently from others.

Figure 2 extends the analysis to eight years following graduation. To ensure our ability to track outcomes for eight years, we restrict the sample to women graduating between 2011 and 2015. Although the effect of female-friendly firms on participation attenuates over time, it remains persistent. Treated women are 3pp more likely to stay in the workforce five to seven years after entry. While these women are no more likely to remain at their first firm by year five, they continue achieving career success. By year eight, treated women are 2pp more likely to be managers and 2pp more likely to occupy abstract positions.

[Figure 2 Here]

One potential concern is that the positive effects may reflect women's entry into large firms, while counterparts from prior years select into self-employment or smaller firms. However, results remain robust to restricting the comparison group to women entering large firms with over 100 workers on LinkedIn (the 97th percentile of the firm size distribution in 2016, Figure A3).

The findings so far raise a natural follow up question: do firm better at advancing women's careers also benefit men? Table 1 employs the first recruitment strategy to compare the career outcomes of men entering female-friendly firms versus not. The appendix reports corresponding figures. Firms which launch better careers for women also do so for men. Men starting at top-ranked firms experience promotions and abstract roles at similar rates as women. However, unlike women, they are more likely to exit their first employer over all time horizons.

[Table 1 here spanning both columns]

IV. Conclusion

This paper shows that firms identified as desirable for women based on their workplace policies meaningfully advance women's careers. Women who enter these firms experience both better immediate outcomes and sustained career growth, even compared to similarly qualified peers graduating from the same university and degree program, before the good firm began recruiting from their university.

Although both men and women benefit from starting careers at top-ranked firms, the margin of workforce participation is especially important for women given remarkably low rates of female labor force participation in India. While largely driven by low labor market entry, women also leave the workforce at high rates upon marriage and childbearing. For instance, approximately one-third of women in South Asia who previously worked for pay left the labor market after marriage (Bussolo et al 2024). The success of these top-ranked female-friendly firms, which offer more generous benefits like parental support and flexible work arrangements, in retaining and promoting women shows that it is possible to design jobs that enable women to continue working after marriage and childbirth even in settings with conservative gender norms.

The findings of this paper raise several interesting questions: First, what drives top-ranked firms' positive impact on women's careers (managerial practices, amenities for working mothers, or institutional culture)? Second, do workers optimally allocate across firms, or do frictions like limited information or mobility constraints create mismatches that shape career outcomes?

REFERENCES

Adda, J., Dustmann, C. and Stevens, K., 2017. The Career Costs of Children. Journal of Political Economy, 125(2), pp.293-337.

Ministry of Education, Government of India, 2021. All India Survey on Higher Education.

Avtar and Seramount Group, 2024. The 2024 Avtar and Seramount Best Companies for Women in India.

Bussolo, M., Rexer, J., and Triyana, M. Education, Social Norms, and the Marriage Penalty: Evidence from South Asia. Policy Research Working Paper. World Bank Group.

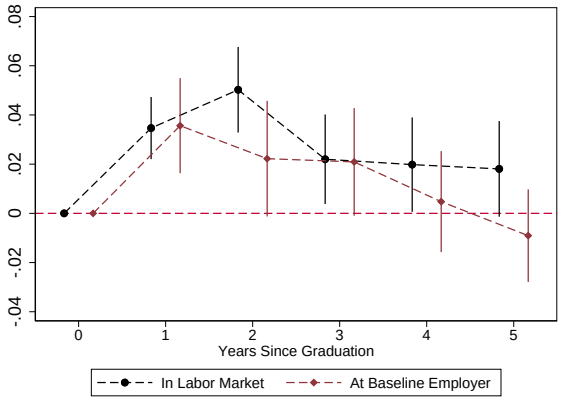
Card, D., 2022. Who Set Your Wage?. American Economic Review, 112(4), pp.1075-1090.

Kline, P. (2024). Firm wage effects. Handbook of Labor Economics, 5, 115-181.

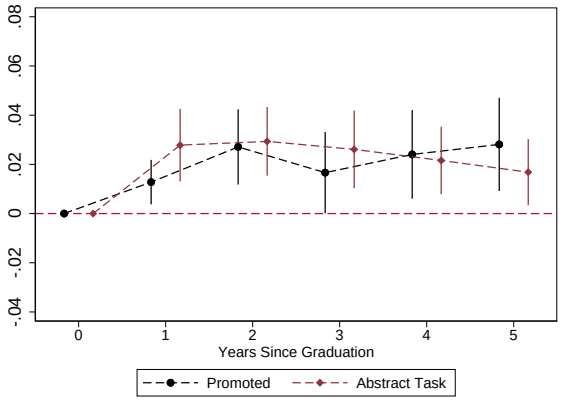
Krueger, A.B. and Summers, L.H., 1988. Efficiency Wages and the Inter-industry Wage Structure. Econometrica: Journal of the Econometric Society, pp.259-293.

Sorkin, I., 2018. Ranking Firms Using Revealed Preference. The Quarterly Journal of Economics, 133(3), pp.1331-1393.

Figure 1. : Effect on Career Outcomes for Women (5 Years)



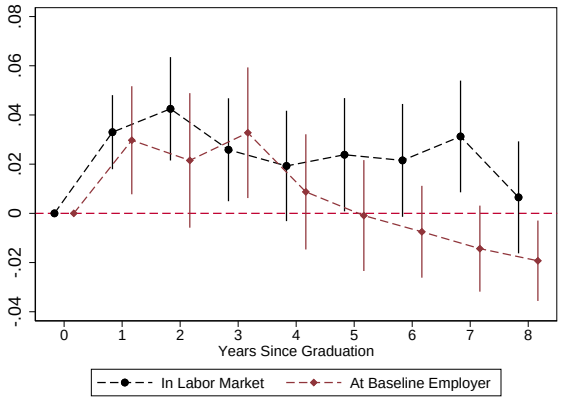
(a) Panel A: Retention



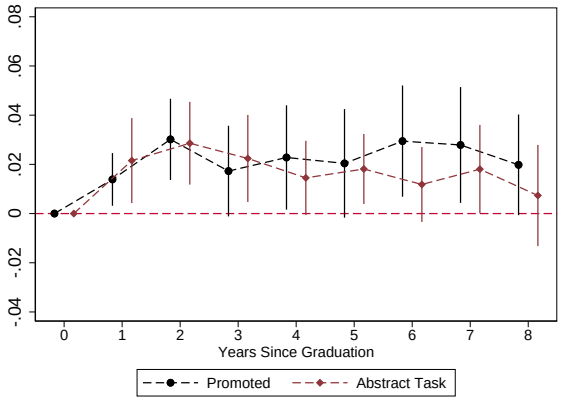
(b) Panel B: Job Quality

Note: Figures depict β_t coefficients and 95% confidence intervals from a regression comparing the career outcomes of women who begin post-college careers at a female-friendly firm by chance, to peers graduating from the same university and degree program in the two prior years up to 5 years after graduation. The sample includes all first recruitment events between 2011 and 2018. Standard errors are clustered at the university level.

Figure 2. : Effect on Career Outcomes for Women (8 Years)



(a) Panel A: Retention



(b) Panel B: Job Quality

Note: Figures depict β_t coefficients and 95% confidence intervals from a regression comparing the career outcomes of women who begin post-college careers at a female-friendly firm by chance, to peers graduating from the same university and degree program in the two prior years up to 8 years after graduation. The sample includes all first recruitment events between 2011 and 2018. Standard errors are clustered at the university level.

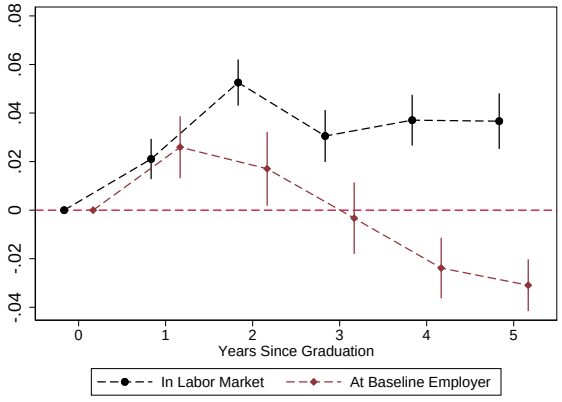
Table 1—: 5 Year Career Effects

Panel A: Men					
	Report job on LinkedIn (1)	At Baseline Emp. (2)	Promoted (3)	No. promotions (4)	Abstract (5)
t + 5	0.026***	-0.031***	0.032***	0.143***	0.030***
	(0.003)	(0.005)	(0.006)	(0.015)	(0.005)
Observations	259306	259306	259306	259306	140750
Control Mean	0.908	0.174	0.256	1.013	0.907
Panel B: Women					
	Report job on LinkedIn (1)	At Baseline Emp. (2)	Promoted (3)	No. promotions (4)	Abstract (5)
t + 5	0.016**	-0.009	0.028***	0.128***	0.017**
	(0.007)	(0.010)	(0.010)	(0.023)	(0.007)
Observations	70158	70158	70158	70158	34320
Control Mean	0.789	0.205	0.227	0.894	0.931

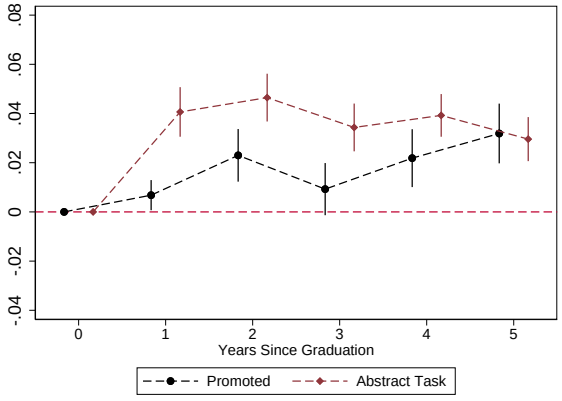
Note: The table reports average differences in career outcomes 5 years after graduation for individuals whose first job was at a top-ranked firm for women and were hired during a first-recruitment event compared to individuals graduating from the same university and field of study in the two years prior. In labor market is measured at three years to ensure sufficient opportunity to update profiles; although effect sizes are similar at five years. Standard errors are clustered at the university level.

Supplemental Appendix

Figure 1. : Effect on Career Outcomes for Men (5 Years)



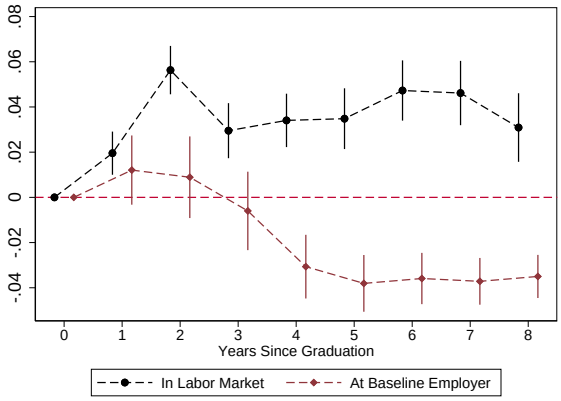
(a) Panel A: Retention



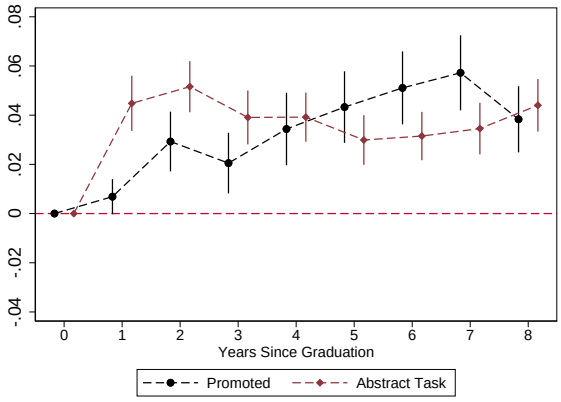
(b) Panel B: Job Quality

Note: Figures depict β_t coefficients and 95% confidence intervals from a regression comparing the career outcomes of men who begin post-college careers at a female-friendly firm by chance, to peers graduating from the same university and degree program in the two prior years up to 5 years after graduation. The sample includes all first recruitment events between 2011 and 2018. Standard errors are clustered at the university level.

Figure 2. : Effect on Career Outcomes for Men (8 Years)



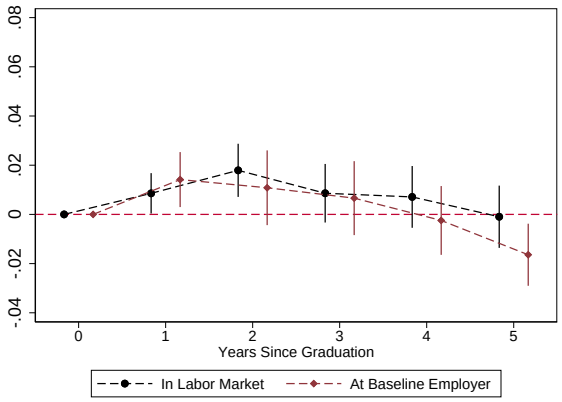
(a) Panel A: Retention



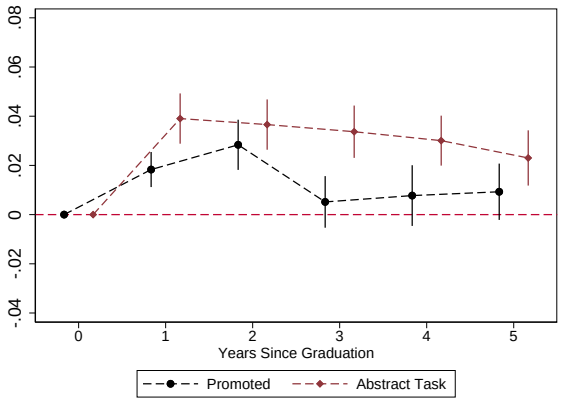
(b) Panel B: Job Quality

Note: Figures depict β_t coefficients and 95% confidence intervals from a regression comparing the career outcomes of men who begin post-college careers at a female-friendly firm by chance, to peers graduating from the same university and degree program in the two prior years up to 8 years after graduation. The sample includes all first recruitment events between 2011 and 2018. Standard errors are clustered at the university level.

Figure 3. : Effect on Career Outcomes for Women at Firms with 100+ Workers (5 Years)



(a) Panel A: Retention



(b) Panel B: Job Quality

Note: Figures depict β_t coefficients and 95% confidence intervals from a regression comparing the career outcomes of women who begin post-college careers at a female-friendly firm by chance, to peers graduating from the same university and degree program in the two prior years up to 5 years after graduation. The sample includes all first recruitment events between 2011 and 2018. The sample is further restricted to women hired by firms that have at least 100 employees represented in the LinkedIn data. Standard errors are clustered at the university level.