

# Brief Review of the literature on the relationship between teleworking and worker productivity

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1. Bloom et al. (2015) report the results of a WFH experiment at CTrip, a 16,000- employee, NASDAQ-listed Chinese travel agency. Call center employees who volunteered to WFH were randomly assigned to work from home or in the office for 9 months. Home working led to a 13% performance increase, of which about 9% was from working more minutes per shift (fewer breaks and sick-days) and 4% from more calls per minute (attributed to a quieter working environment). Home workers also reported improved work satisfaction and experienced less turnover, but their promotion rate conditional on performance fell. Due to the success of the experiment, CTrip rolled-out the option to WFH to the whole firm and allowed the experimental employees to re-select between the home or office. Interestingly, over half of them switched, which led to the gains from WFH almost doubling to 22%.
2. Choudhury et al. (2020) study the effects of work from anywhere (WFA) on productivity at the United States Patent and Trademark Office (USPTO) and exploit a natural experiment in which the implementation of WFA was driven by negotiations between managers and the patent examiners' union, leading to exogeneity in the timing of individual examiners' transition from a work-from-home to a work-from-anywhere program. This transition resulted in a 4.4 percent increase in output without affecting the incidence of rework.
3. Dutcher (2012) study the effects of telework using an experimental approach. Creative and dull individual tasks were used to mimic two extreme work climates. Results of this study indicate that the telecommuting environmental effects may have positive implications on productivity of creative tasks but negative implications on productivity of dull tasks.
4. Monteiro et al. (2019) study longitudinal data from Portugal over the period 2011 - 2016. On average, the authors find a statistically significant and negative effect of enabling remote work on overall productivity. However, the authors also find substantial heterogeneity in the results. The authors find negative effects for firms do not undertake R&D but positive

effects for firms that do. Negative effects are also more likely for small firms that do not export and employ a workforce with below-average skill level.

5. Kazekami (2020) study the labor productivity of teleworkers in Japan. First, this study finds that appropriate telework hours increase labor productivity, but when telework hours are too long, telework decreases labor productivity. Second, telework increases life satisfaction, and life satisfaction improves labor productivity. However, telework increases the stress of balancing work and domestic chores, contrary to Japanese governmental expectations, and the stress decreases life satisfaction. The stress, fortunately, does not directly reduce labor productivity. Although telework increases happiness and work satisfaction, these factors do not influence labor productivity. Third, this study clarifies that telework is more efficient for improving labor productivity if workers commute more than 1 h or commute by trains or buses that are usually very crowded during rush hours in Japan. Finally, the effect of telework for workers who have a greater number of potential trivial duties is insignificantly larger.
6. Onder (2016) proposed and tested a theoretical model of telecommuting's impact on these outcomes using lagged self-report and supervisor-rated performance data from 2,682 full-time managerial and administrative employees in an organization where telecommuting was broadly offered as a flexible work policy. Results indicated that telecommuting had a positive impact on affective commitment and intent to stay through perceptions of work-life balance support. Perceptions of autonomy and job performance, however, were unaffected. Results suggest that work-life balance support is an important mediator of telecommuting's impact on commitment-related outcomes, and that where telecommuting is perceived as a form of work-life balance support, performance may be unaffected. Results of this study extend the literature on telecommuting's mechanisms of action and from an organizational perspective, suggest that the "value added" of work-life balance supportive telecommuting arrangements is more likely to come in the form of enhanced commitment versus performance.

## References

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