

Workforce Composition and Remote Work Productivity

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1 Introduction

Productivity regressions with composition share levels as controls. Tests whether remote productivity effects persist after controlling for workforce composition levels.

2 Role Composition Effects

Table 1: Role Composition Effects on Remote Work Productivity

	Dep Var: Total Productivity (Contributions Q100)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: OLS								
Remote \times Post	-1.23** (0.50)	-0.69 (0.49)	-0.77 (0.48)	-0.68 (0.49)	-0.70 (0.49)	-0.06 (0.51)	-0.62 (0.48)	0.06 (0.57)
Remote \times Post \times Startup	6.21*** (1.27)	6.83*** (1.36)	6.38*** (1.27)	5.91*** (1.39)	5.93*** (1.30)	5.42*** (1.56)	5.83*** (1.27)	7.70*** (1.95)
Panel B: IV								
Remote \times Post	-9.26** (4.01)	-7.91* (4.30)	-4.99 (3.09)	-8.38** (4.10)	-8.69** (4.22)	-6.18 (9.26)	-6.38* (3.41)	-8.19 (15.06)
Remote \times Post \times Startup	12.45** (5.39)	16.25*** (5.99)	11.95** (5.26)	15.41*** (5.76)	14.36** (5.73)	10.83 (10.61)	11.84** (4.81)	8.18 (15.73)
N	224,708	160,847	169,172	155,993	165,632	148,180	167,300	122,407
KP rk Wald F	123.4	105.8	210.5	115.8	113.6	19.3	177.0	9.3
Admin control	-	✓	-	-	-	-	-	-
Engineer control	-	-	✓	-	-	-	-	-
Finance control	-	-	-	✓	-	-	-	-
Marketing control	-	-	-	-	✓	-	-	-
Operations control	-	-	-	-	-	✓	-	-
Sales control	-	-	-	-	-	-	✓	-
Scientist control	-	-	-	-	-	-	-	✓

Notes: The dependent variable is user productivity measured as total contributions (GitHub commits, pull requests, issues, and code reviews), winsorized at the 100th percentile. All specifications include worker-firm and time fixed effects. Composition controls are role-specific share interactions (COVID \times role share \times startup). Standard errors clustered by user in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

3 Seniority Composition Effects

Table 2: Seniority Composition Effects on Remote Work Productivity

	Dep Var: Total Productivity (Contributions Q100)				
	(1)	(2)	(3)	(4)	(5)
Panel A: OLS					
Remote \times Post	-1.23** (0.50)	-0.72 (0.49)	-0.76 (0.48)	-0.69 (0.49)	-0.64 (0.48)
Remote \times Post \times Startup	6.21*** (1.27)	6.30*** (1.30)	6.46*** (1.27)	6.46*** (1.27)	6.08*** (1.30)
Panel B: IV					
Remote \times Post	-9.26** (4.01)	-10.59** (4.88)	-7.01* (4.00)	-8.83 (5.75)	-9.52*** (3.17)
Remote \times Post \times Startup	12.45** (5.39)	18.47*** (6.87)	14.67*** (5.64)	14.59** (6.64)	13.78*** (5.08)
N	224,708	165,392	169,466	166,528	165,062
KP rk Wald F	123.4	86.5	118.3	60.3	210.5
Level 1 control	-	✓	-	-	-
Level 2 control	-	-	✓	-	-
Level 3 control	-	-	-	✓	-
Level 4 control	-	-	-	-	✓

Notes: The dependent variable is user productivity measured as total contributions (GitHub commits, pull requests, issues, and code reviews), winsorized at the 100th percentile. All specifications include worker-firm and time fixed effects. Composition controls are seniority-specific share interactions (COVID \times seniority share \times startup). Standard errors clustered by user in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.