# 1 Figures

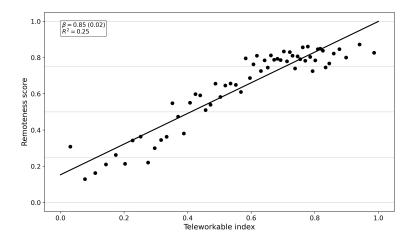


Figure 1: Remote v. Teleworkabe Scores

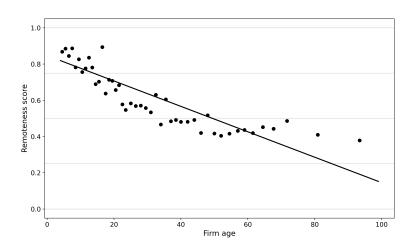


Figure 2: Remote v. Firm Age



### 2 Table of Means

Table 1: Table of Means

	Startup	Incumbent	All Firms		
Panel A: Firm-level					
	0.20	0.06	0.09		
Growth	(0.31)	(0.16)	(0.22)		
-	0.26	0.21	$0.22^{'}$		
Leave	(0.31)	(0.28)	(0.29)		
T .	$0.35^{'}$	$0.17^{'}$	$0.22^{'}$		
Join	(0.32)	(0.18)	(0.24)		
T 1 1 1 C (0.1)	$0.67^{'}$	$0.54^{'}$	$\stackrel{ ext{ }}{0.57}^{'}$		
Teleworkable Score (0–1)	(0.18)	(0.25)	(0.24)		
D (0.1)	$0.85^{'}$	$0.57^{'}$	$0.64^{'}$		
Remote Score (0–1)	(0.30)	(0.41)	(0.40)		
F 1 (G 1)	271	2740	2126		
Employees (Count)	(1432)	(9555)	(8380)		
<b>A</b>	7	43	34		
Age	(2)	(34)	(33)		
D (0/ C)	49	37	40		
Rent (\$/sq ft)	(21)	(19)	(20)		
G + 1:+ G	1419	949	1066		
Centrality Score	(1830)	(1309)	(1470)		
$G : \mathcal{A} \to \mathcal{A}$	$3.62^{'}$	$3.86^{'}$	3.80		
Seniority Levels (Count)	(0.77)	(0.50)	(0.59)		
Number of firms	878	2630	3508		
Observations	10450	31530	41980		
Panel B: User-level					
	363.55	193.43	225.69		
Total Contributions	(796.33)	(641.42)	(676.83)		
	319.21	138.68	172.91		
Restricted Contributions	(727.47)	(356.21)	(456.26)		
Number of firms	727	1530	2257		
Number of users	8635	33351	38411		
Observations	48756	208390	257146		
	10,00		20,110		

Notes: Panel A uses firm—half—year observations. Panel B relies on worker—half—year observations. "Number of firms" counts distinct firm IDs that ever appear in each category over the full sample window, so Startup and Incumbent counts need not sum to the "All" column. Growth, Leave, and Join rates are fractions between 0 and 1. Teleworkable and Remote scores are index values between 0 and 1. The sample period spans 2016 H2–2022 H1 at the firm level and 2017 H1–2022 H1 at the user level.

# 3 User Productivity – Pre-COVID Panel

#### 3.1 OLS

Table 2: User Productivity – OLS

				0 10		
	(1)	(2)	(3)	(4)	(5)	(6)
	Total (pct. rk.)	Total (pct. rk.)	Total (pct. rk.)	Restr. (pct. rk.)	Total (wins.)	Restr. (wins.)
$Remote \times \mathbb{1}(Post)$	-0.27 (0.44)	-1.04** (0.49)	-1.34*** (0.50)	-1.57*** (0.52)	-20.72*** (4.70)	-17.61*** (3.93)
$Remote \times \mathbb{1}(Post) \times Startup$		5.12*** (1.25)	6.36*** (1.29)	7.58*** (1.28)	60.95*** (14.38)	56.81*** (12.83)
Time FE	✓	✓	✓	✓	✓	<b>√</b>
Firm FE	✓	✓				
User FE	✓	✓				
$Firm \times User FE$			✓	✓	✓	✓
Pre-COVID mean	49.91	49.91	49.91	48.43	185.29	137.87
N	$229{,}710$	$245,\!105$	$239,\!315$	$239,\!315$	$239,\!315$	239,315

#### 3.2 Instrumental Variables

Table 3: User Productivity – IV

(1)	(2)	(3)	(4)	(5)	(6)
Total (pct. rk.)	Total (pct. rk.)	Total (pct. rk.)	Restr. (pct. rk.)	Total (wins.)	Restr. (wins.)
-1.90 (2.73)	-5.94 (3.96)	-9.15** (4.11)	-6.85 (4.28)	-123.00*** (34.63)	-106.21*** (28.75)
	8.70 (5.46)	12.28** (5.50)	10.80* (5.53)	125.97** (56.11)	109.12** (49.64)
<b>√</b>	✓	✓	✓	✓	<b>√</b>
$\checkmark$	$\checkmark$				
✓	$\checkmark$				
		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
49.91	49.91	49.91	48.43	185.29	137.87
229,710	245,105	239,315	239,315	239,315	239,315
538.04	137.92	118.65	118.65	118.65	118.65
	Total (pct. rk.)  -1.90 (2.73)	Total (pct. rk.)  -1.90	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

### 3.3 First Stage

Table 4: First-Stage Estimates – User Productivity (precovid)

		V (1 )
	$\mathrm{Remote} \times \mathbb{1}(\mathrm{Post})$	$\mathrm{Remote} \times \mathbb{1}(\mathrm{Post}) \times \mathrm{Startup}$
Tolomorlychia v 1 (Dogt)	0.23***	-0.00*
Teleworkable $\times 1$ (Post)	(0.01)	(0.00)
Toloworkable × 1(Post) × Startun	0.16***	0.39***
Teleworkable $\times 1$ (Post) $\times$ Startup	(0.02)	(0.02)
1 (Post) v Stantun	0.09***	0.60***
$1(Post) \times Startup$	(0.02)	(0.01)
Time FE	$\checkmark$	$\checkmark$
Firm FE	$\checkmark$	$\checkmark$
User FE	$\checkmark$	$\checkmark$
Partial F	323.23	187.25
N	245,105	245,105



# ${\bf 4}\quad {\bf User\ Mechanisms-Covid\ Bifurcation\ (Continuous)-Pre-COVID\ Panel}$

Table 5:	User M	lechanisms –	Lean	(Precovid)	) – Part 1
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			Г	otal Contr	rib. (pct. 1	·k)		
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		$\checkmark$			$\checkmark$	$\checkmark$		$\checkmark$
нні			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
Remote $\times 1$ (Post)	-1.23**	-0.95*	-1.22**	-1.19**	-0.95*	-0.90*	-1.19**	-0.91*
, ,	(0.50)	(0.51)	(0.50)	(0.50)	(0.51)	(0.52)	(0.50)	(0.52)
Remote $\times 1(Post) \times Startup$	6.21***	4.03***	6.39***	6.15***	4.21***	3.96***	6.40***	4.21***
	(1.27)	(1.26)	(1.28)	(1.28)	(1.27)	(1.26)	(1.30)	(1.29)
N	224,708	218,112	224,596	224,708	218,032	218,112	224,596	218,032
Panel B: IV								
Remote $\times 1$ (Post)	-9.26**	-9.23*	-9.72**	-9.28**	-9.97**	-9.24*	-9.82**	-10.13**
, ,	(4.01)	(4.87)	(3.93)	(4.12)	(4.86)	(5.03)	(4.08)	(5.14)
Remote $\times 1(Post) \times Startup$	12.45**	11.76*	14.94***	12.30**	14.35**	11.68*	15.48***	14.97**
	(5.39)	(6.15)	(5.62)	(5.52)	(6.49)	(6.31)	(5.94)	(6.91)
N	224,708	218,112	224,596	224,708	218,032	218,112	224,596	218,032
KP rk Wald F	123.43	81.62	130.14	117.48	82.68	76.72	121.02	74.32

# ${\bf 5}\quad {\bf User\ Mechanisms-Covid\ Bifurcation\ (Binned)-Pre-COVID\ Panel}$

Table 6:	User Mechanisms	– Lean	(Precovid)	– Part 1	L
					_

	Table	o: User Me	chamsins – i	Lean (Precovi	a) – Part	L		
				Total Con	trib. (pct.	rk)		
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		✓			<b>√</b>	<b>√</b>		<b>√</b>
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
$Remote \times \mathbb{1}(Post)$	-1.23**	-1.11*	-1.54**	2.65	-1.21*	4.16	2.14	3.96
	(0.50)	(0.63)	(0.63)	(5.85)	(0.71)	(5.80)	(5.90)	(5.86)
$\operatorname{Remote} \times \mathbb{1}(\operatorname{Post}) \times \operatorname{Startup}$	6.21***	4.08***	6.07***	6.09***	4.06***	3.90***	5.95***	3.88***
	(1.27)	(1.27)	(1.29)	(1.28)	(1.28)	(1.27)	(1.29)	(1.28)
N	224,708	218,112	224,596	224,708	218,032	218,112	224,596	218,032
Panel B: IV								
$Remote \times \mathbb{1}(Post)$	-9.26**	-990.04	-188.00**	-21799.94	-677.88	7540.44	5749.41	19936.89
	(4.01)	(3169.06)	(95.53)	(13665.66)	(982.93)	(13396.79)	(11264.50)	(149586.97)
Remote $\times 1$ (Post) $\times$ Startup	12.45**	-182.31	-14.51	-310.11	80.55	177.08	122.50	-67.96
	(5.39)	(642.58)	(16.54)	(255.37)	(85.79)	(266.43)	(200.54)	(1452.16)
N	224,708	203,754	209,684	209,788	203,676	203,754	209,684	203,676
KP rk Wald F	123.43	0.03	2.18	0.96	0.17	0.09	0.07	0.00

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# ${\bf 6}\quad {\bf User\ Mechanisms-Remote\ Bifurcation\ (Continuous)-Pre-COVID\ Panel}$

Table 7: User Mechanisms (P.	recovid) – Part 1
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				Total Contr	rib. (pct. rk	)		
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		<b>√</b>			✓	<b>√</b>		✓
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
$Remote \times \mathbb{1}(Post)$	-1.03**	-1.94*	-0.57	4.11	-1.48	4.59	5.55	6.04
	(0.48)	(1.13)	(0.60)	(5.86)	(1.18)	(5.86)	(5.95)	(5.94)
Remote $\times 1(Post) \times Startup$	5.25***	2.91**	5.64***	5.10***	3.35***	2.71**	5.47***	3.12**
	(1.24)	(1.24)	(1.29)	(1.24)	(1.28)	(1.24)	(1.29)	(1.28)
N	229,710	222,851	229,620	229,710	222,798	222,851	229,620	222,798
Panel B: IV								
$Remote \times \mathbb{1}(Post)$	-4.57	-2775.24	-98.17	88633.78	2183.05	39.59	5246.00	1651.21
	(3.39)	(11069.18)	(198.56)	(356887.66)	(9557.95)	(4560.50)	(17096.43)	(1963.50)
Remote $\times 1(Post) \times Startup$	9.78*	259.56	-27.25	2571.92	-254.15	196.96	239.35	18.19
	(5.44)	(1034.96)	(77.53)	(10384.31)	(1451.85)	(446.61)	(527.34)	(505.58)
N	229,710	208,057	214,249	214,330	208,006	208,057	214,249	208,006
KP rk Wald F	180.13	0.02	0.08	0.02	0.01	0.04	0.04	0.02

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# $7\quad User\ Mechanisms-Remote\ Bifurcation\ (Binned)-Pre-COVID\ Panel$

Table 6. User Mechanishis Hitecovici — Lait	Table 8:	User Mechanisms	s (Precovid)	) – Part 1
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				Total Con	trib. (pct.	rk)		
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		✓			✓	<b>√</b>		$\checkmark$
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
$Remote \times \mathbb{1}(Post)$	-1.23**	-1.11*	-1.54**	2.65	-1.21*	4.16	2.14	3.96
	(0.50)	(0.63)	(0.63)	(5.85)	(0.71)	(5.80)	(5.90)	(5.86)
Remote $\times 1(Post) \times Startup$	6.21***	4.08***	6.07***	6.09***	4.06***	3.90***	5.95***	3.88***
	(1.27)	(1.27)	(1.29)	(1.28)	(1.28)	(1.27)	(1.29)	(1.28)
N	224,708	218,112	224,596	224,708	218,032	218,112	224,596	218,032
Panel B: IV								
$Remote \times \mathbb{1}(Post)$	-9.26**	-990.04	-188.00**	-21799.94	-677.88	7540.44	5749.41	19936.89
	(4.01)	(3169.06)	(95.53)	(13665.66)	(982.93)	(13396.79)	(11264.50)	(149586.97)
Remote $\times 1(Post) \times Startup$	12.45**	-182.31	-14.51	-310.11	80.55	177.08	122.50	-67.96
	(5.39)	(642.58)	(16.54)	(255.37)	(85.79)	(266.43)	(200.54)	(1452.16)
N	224,708	203,754	209,684	209,788	203,676	203,754	209,684	203,676
KP rk Wald F	123.43	0.03	2.18	0.96	0.17	0.09	0.07	0.00

# 8 Firm Scaling

### 8.1 OLS

Table 9: Firm Scaling — OLS

	(1)	(2)	(3)	(4)
	Growth (wins.)	Growth (wins.)	Join (wins.)	Leave (wins.)
Remote $\times$ 1(Post)	0.01** (0.01)	0.00 (0.00)	0.01** (0.00)	0.02*** (0.00)
Remote $\times 1(Post) \times Startup$		0.07*** (0.02)	0.05* (0.03)	-0.01 (0.01)
Time FE Firm FE	√ √	<b>√</b> ✓	<b>√</b> ✓	√ √
Pre-COVID mean N	0.11 41,742	0.11 $41,742$	0.25 $41,742$	0.14 41,742

### 8.2 Instrumental Variables

Table 10: Firm Scaling — IV

	(1)	(2)	(3)	(4)
	Growth (wins.)	Growth (wins.)	Join (wins.)	Leave (wins.)
Remote $\times$ 1(Post)	0.02 (0.01)	-0.00 (0.01)	0.03*** (0.01)	0.04*** (0.00)
$\mathrm{Remote} \times \mathbb{1}(\mathrm{Post}) \times \mathrm{Startup}$		0.22** (0.09)	0.23** (0.10)	$0.06 \\ (0.05)$
Time FE	✓	✓	✓	✓
Firm FE	✓	✓	✓	✓
Pre-COVID mean	0.11	0.11	0.25	0.14
N	41,742	41,742	41,742	41,742
KP rk Wald F	982.73	18.30	18.30	18.30

### 8.3 First Stage

Table 11: First-Stage Estimates – Firm Scaling

	$\mathrm{Remote} \times \mathbb{1}(\mathrm{Post})$	$\operatorname{Remote} \times \mathbb{1}(\operatorname{Post}) \times \operatorname{Startup}$
Teleworkable $\times 1$ (Post)	0.772***	-0.000
Teleworkable × I(1 obt)	(0.024)	(0.000)
Teleworkable $\times 1(Post) \times Startup$	-0.349***	0.423***
Teleworkable × II(Tost) × Startup	(0.074)	(0.070)
$\mathbb{1}(\text{Post}) \times \text{Startup}$	0.446***	0.497***
r(rost) × Startup	(0.065)	(0.063)
Time FE	$\checkmark$	$\checkmark$
Firm FE	$\checkmark$	$\checkmark$
Partial F	525.42	18.34
N	41,742	41,742

### 8.4 Remote $\rightarrow$ Teleworkable: First Stage

Table 12: First-Stage Estimate: Remote  $\rightarrow$  Teleworkable

	Remote
Teleworkable	0.795*** (0.021)
$R^2$	0.290
IN	3,486

### $\bf 8.5 \quad Firm \ Mechanisms - Covid \ Bifurcation \ (Continuous)$

Table 13: Firm Mechanisms – Lean (Part 1)

				Grow	th Rate			
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		<b>√</b>			<b>√</b>	<b>√</b>		✓
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
Remote $\times 1$ (Post)	0.003	0.005	0.004	0.001	0.005	0.002	0.003	0.004
` ,	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
$Remote \times \mathbb{1}(Post) \times Startup$	0.068***	0.064**	0.076***	0.069***	0.071***	0.063***	0.075***	0.071***
	(0.024)	(0.025)	(0.023)	(0.023)	(0.025)	(0.025)	(0.023)	(0.025)
N	41,742	38,580	41,725	41,742	38,563	38,580	41,725	38,563
Panel B: IV								
Remote $\times 1$ (Post)	-0.002	0.007	0.003	-0.005	0.010	0.004	0.001	0.008
	(0.009)	(0.009)	(0.008)	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)
Remote $\times \mathbb{1}(\text{Post}) \times \text{Startup}$	0.221**	0.192**	0.180**	0.177**	0.144	0.139	0.173**	0.135
	(0.089)	(0.094)	(0.083)	(0.082)	(0.089)	(0.088)	(0.083)	(0.089)
N	41,742	38,580	41,725	41,742	38,563	38,580	41,725	38,563
KPrk Wald F	18.30	16.52	18.33	18.09	16.53	16.29	18.15	16.34

### 8.6 Firm Mechanisms – Covid Bifurcation (Binned)

Table 14: Firm Mechanisms – Lean (Part 1)

				Growth	n Rate			
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		<b>√</b>			<b>√</b>	<b>√</b>		✓
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
Remote $\times 1$ (Post)	0.003	0.003	0.004	0.001	0.004	0.001	0.000	0.000
` ,	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
$Remote \times \mathbb{1}(Post) \times Startup$	0.070***	0.067***	0.066***	0.070***	0.061**	0.066***	0.070***	0.065***
	(0.024)	(0.025)	(0.024)	(0.023)	(0.025)	(0.025)	(0.023)	(0.025)
N	41,980	38,794	41,946	41,980	38,760	38,794	41,946	38,760
Panel B: IV								
Remote $\times 1$ (Post)	0.006	0.013	0.008	0.003	0.015	0.009	0.002	0.008
	(0.009)	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)
Remote $\times 1(Post) \times Startup$	0.209**	0.207*	0.188*	0.121	0.182	0.105	0.130	0.113
. , -	(0.102)	(0.113)	(0.102)	(0.094)	(0.115)	(0.105)	(0.095)	(0.107)
N	41,980	38,794	41,946	41,980	38,760	38,794	41,946	38,760
KP rk Wald F	16.53	14.39	15.27	16.46	13.05	14.37	15.67	13.57

### 8.7 Firm Mechanisms – Remote Bifurcation (Continuous)

Table 15: Firm Mechanisms (Part 1)

				Grow	th Rate			
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		✓			<b>√</b>	<b>√</b>		✓
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
Remote $\times 1(Post)$	0.003	0.008	-0.020***	0.033	-0.017	0.031	-0.027	-0.025
, ,	(0.005)	(0.011)	(0.007)	(0.021)	(0.013)	(0.025)	(0.025)	(0.029)
Remote $\times 1(Post) \times Startup$	0.068***	0.067***	0.060**	0.064***	0.059**	0.065***	0.062***	0.062**
	(0.024)	(0.026)	(0.023)	(0.023)	(0.025)	(0.025)	(0.023)	(0.025)
N	41,742	38,580	41,725	41,742	38,563	38,580	41,725	38,563
Panel B: IV								
$Remote \times 1 (Post)$	-0.002	-0.074**	-0.034	-0.043	-0.111***	-0.130*	-0.131**	-0.241***
	(0.009)	(0.036)	(0.023)	(0.062)	(0.039)	(0.074)	(0.064)	(0.080)
$\operatorname{Remote} \times \mathbb{1}(\operatorname{Post}) \times \operatorname{Startup}$	0.221**	0.184**	0.154*	0.201**	0.114	0.170**	0.154*	0.118
	(0.089)	(0.090)	(0.086)	(0.083)	(0.089)	(0.084)	(0.085)	(0.087)
N	41,742	38,580	41,725	41,742	38,563	38,580	41,725	38,563
KPrk Wald F	18.30	14.43	4.59	11.16	10.13	10.76	4.49	8.28

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### $8.8 \quad Firm \ Mechanisms - Remote \ Bifurcation \ (Binned)$

Table 16: Firm Mechanisms (Part 1)

	Growth Rate							
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rent		<b>√</b>			<b>√</b>	<b>√</b>		<b>√</b>
ННІ			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Seniority				$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Panel A: OLS								
Remote $\times 1(Post)$	0.003	-0.001	-0.016**	0.036*	-0.021***	0.026	0.013	0.002
,	(0.005)	(0.006)	(0.007)	(0.021)	(0.008)	(0.023)	(0.023)	(0.025)
Remote $\times 1$ (Post) $\times$ Startup	0.070***	0.066***	0.063***	0.065***	0.059**	0.063***	0.065***	0.062**
	(0.024)	(0.025)	(0.024)	(0.023)	(0.025)	(0.024)	(0.023)	(0.024)
N	41,980	38,794	41,946	41,980	38,760	38,794	41,946	38,760
Panel B: IV								
Remote $\times 1(Post)$	0.006	-0.006	-0.031**	-0.003	-0.040**	-0.022	-0.053	-0.066
` ,	(0.009)	(0.012)	(0.014)	(0.067)	(0.017)	(0.074)	(0.069)	(0.076)
Remote $\times 1$ (Post) $\times$ Startup	0.209**	0.210*	0.193*	$0.157^{*}$	$0.195^{*}$	0.157	0.166*	0.167
· , , -	(0.102)	(0.112)	(0.102)	(0.094)	(0.113)	(0.103)	(0.095)	(0.104)
N	41,980	38,794	41,946	41,980	38,760	38,794	41,946	38,760
KP rk Wald F	16.53	10.43	10.85	11.09	7.86	7.97	8.24	6.49