
Remotely Productive: The Efficacy of Remote Work for Executives

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Motivation

- **Remote work** in corporate management
 - A growing trend in governance
 - Catalyzed by the global pandemic

Frequency of Remote CEOs by Year



- Pandemic → **wide adoption** of remote work **for mgmt** (Barrero et al. 2023)
 - Most common remote arrangement in U.S. workforce: working from the office for **3 days a week** and working remotely on the other days

This paper:

How effective is remote management during normal business times?

Diverging Views on Remote Management

- Efficiency gains: allow boards to attain high-profile CEOs
 - CEOs spend **72%** of their time in **meetings** and **11%** on **electronic communication** (Porter & Nohria 2018) → this can be done more efficiently offsite
 - Org. design literature → numerous benefits of hands-off mgt style (Yang 2015)

→ “I am a strong advocate of an MBA management style, that is, *managing by absence*”

- Yvon Chouinard
Founder & CEO of Patagonia



- Agency Frictions: short-termism, leisure consumption, information loss

Jack Dorsey's planned move to Africa divides Twitter investors

Feb 28, 2020: Paul Singer starts a campaign to fire Twitter CEO Dorsey after he declared plans to **work remotely from Africa**.

Mar 7, 2020: Dorsey **Cancels plans to work remotely** and says this announcement was a 'mistake.' Activists get board seats.

TWITTER (TWTR)
35.82 +2.62 [+7.89%] MKT CLOSED

38
36
34
32
30

9A 11A 1P 3p 11A 1p 3p

2/28/20 3/2/20

2-DAY

35.82

ELLIOTT MANAGEMENT LOOKS TO OUST TWITTER CEO JACK DORSEY

What would a Strong Principal Do?

Bloomberg

Musk's First Email to Twitter Staff Ends Remote Work

November 10, 2022

- Prior remote arrangements **discontinued**
- Executives **required to be in the office** for at least 40 hours a week



*“Those who believe coming to the office is outdated can **pretend to work somewhere else.**”*

Pandemic as Experimentation

August 2023: An early supporter of remote work, Zoom CEO Eric Yuan requests his personnel to return to the office:

zoom



“We cannot have a great conversation.

We cannot debate when we are remote...”

Sept 2022: Meta CEO Mark Zuckerberg, who initially voiced plans to run Meta remotely 6 months a year & led its firm-wide adoption, halts the policy after “**an internal analysis of performance data**”:


Meta



“It is still easier to build trust in person and those relationships help us work more effectively”

Preview of Main Results

▪ Economic importance

- 17.6% of public firms have had a long-distance CEO in 2000-2019 → 946 arrangements
- These CEOs manage firms in every major industry across 47 states
- Such arrangements are truly remote: ave. distance from CEO home to HQ = 979 miles

▪ Performance: efficiency vs. frictions

- The same firm under the same CEO earns a lower ROA and has a lower Tobin's Q when its CEO is in a remote working arrangement
- The underperformance expands with distance to HQ and time difference
- Long-distance CEOs are more likely to be terminated, and firm value goes up by 2.5% on the announcement day of their departures

▪ Economic channels

- Short-termism → lower R&D & long-term investment, tilt to assets with shorter useful life
- Leisure → purchases of boats & beach homes and consumption of perquisites
- Information frictions → investment less sensitive to opportunities

Remote arrangements shift CEOs' incentives and productivity

Identifying Remote CEO Arrangements

■ CEO contracts



“Executive shall not be required to relocate his principal residence from the Los Angeles, California metropolitan area to Englewood, Colorado during the Term”



“In connection with the Executive’s commute from his New York residence, the Company will reimburse Executive for the cost of weekly trips from NY to San Diego”

■ Proxy statements



“Because Mr. Bidzos was located in California and the Company’s headquarters are in Virginia, the Company also provided Mr. Bidzos with a corporate-leased apartment and automobile while he was in Virginia.”



“The Company also pays the cost for Mr. Mitchell to travel to our headquarters in Minneapolis from his office in San Diego”

■ CEO’s primary residence: address of voter registration & spouse

■ Start & end dates of remote arrangements

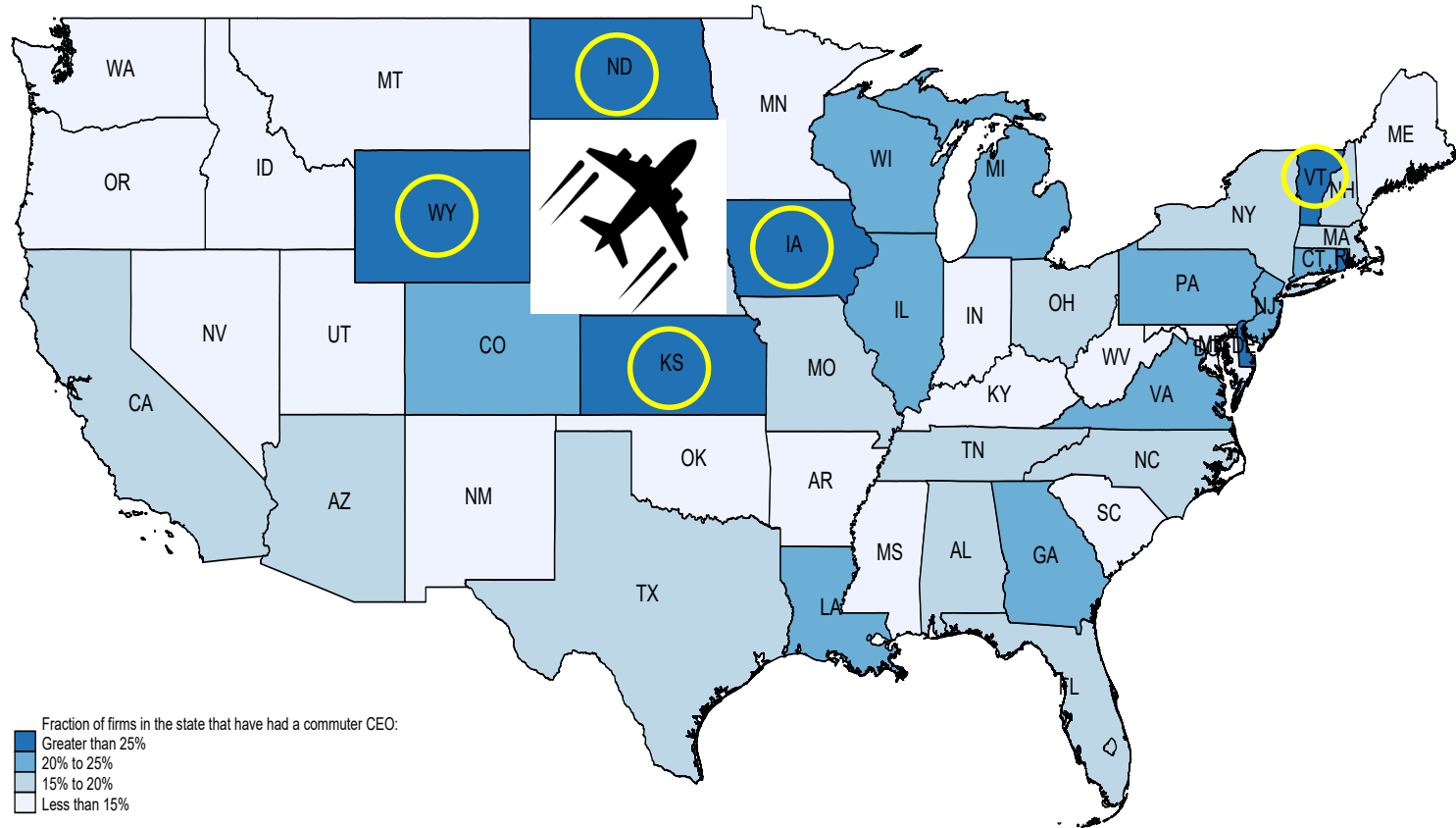
- Amendments to employment agreements → effective dates
- Disclosure of relocation expenses in proxy statements → end of remote arrangement

1. Descriptive Evidence

Which Firms Opt for Remote CEOs?

Variable	Local CEOs	Long-distance CEOs	Difference	t-statistic	
Trailing performance					Similar trailing and forward-looking performance
Annual ROA	0.021	0.019	-0.002	0.568	
Annual realized stock return	0.051	0.050	-0.001	0.485	
Tobin's Q	1.918	1.900	-0.018	0.932	
Forward-looking performance					
Expected one-year stock return	0.026	0.020	-0.006	0.764	
Expected EPS growth	-0.006	-0.015	-0.009	0.309	
Average analyst recommendation (0-4)	2.576	2.601	0.025	0.652	
Insiders' sell-buy imbalance	0.427	0.360	-0.067	1.180	
Corporate governance					
Fraction of independent directors	0.734	0.762	0.028	2.770	
Chairman-CEO duality	0.525	0.470	-0.054	1.395	
Local CEO pool					Smaller local talent pool
State CEO pool	901.784	826.109	-75.675	5.448	
100-mile radius CEO pool	726.062	612.947	-113.115	5.763	
Trailing firm attributes					
CapEx/Assets	0.052	0.055	0.002	0.341	
Leverage	0.238	0.217	-0.021	1.179	
Cash/Assets	0.138	0.140	0.002	0.270	
R&D/Assets	0.050	0.045	-0.005	1.136	
Size (Natural logarithm of book assets)	7.630	7.679	0.049	0.570	

HQ States of Long-Distance CEOs



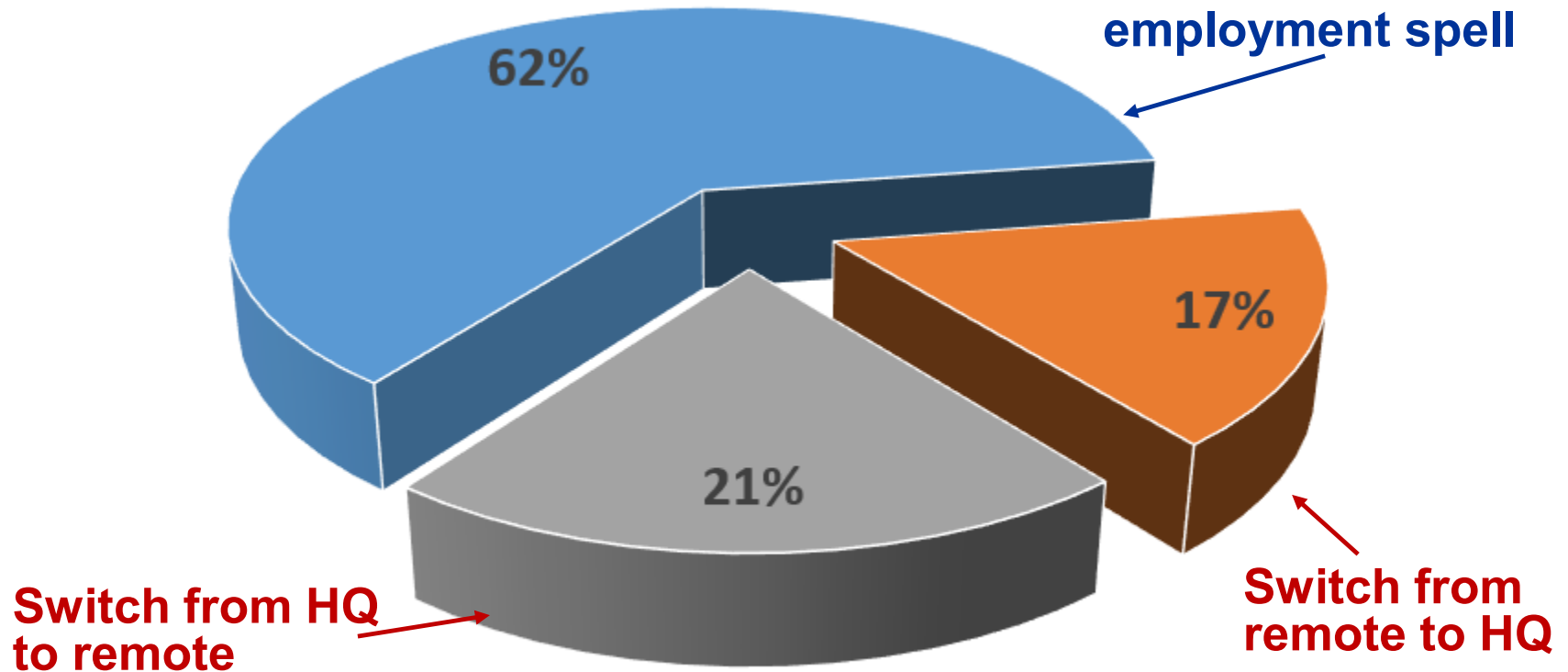
1. States with the **highest fraction** of long-distance CEOs in their firms (**dark**) are **landlocked**, **rural**, and **cold**
2. Top 5 states by the frequency of long-distance CEO arrangements: **Wyoming, Kansas, North Dakota, Iowa, and Vermont**

Do Firms Get Better Talent?

Variable	Long-distance CEOs	Local CEOs	Difference	t-statistic	
Demographics					
Age, years	56.16	55.94	0.22	1.53	
Male indicator	0.96	0.97	-0.01	1.30	
Born out-of-state indicator	0.77	0.68	0.09	12.75***	Extended reach
Education					
Ivy League indicator	0.24	0.19	0.05	4.75***	
Graduate degree indicator	0.67	0.64	0.03	1.42	
MBA indicator	0.44	0.42	0.02	1.08	
College admission rate	0.68	0.54	-0.14	8.41***	Better pedigree and prior CEO experience
College ave. SAT percentile rank, 0-100	71.50	84.06	12.56	9.12***	
Experience and Professional Networks					
Prior CEO experience indicator	0.45	0.33	0.12	10.66***	
Mutli-industry experience indicator	0.28	0.21	0.07	5.06***	
External board seats	1.87	1.36	0.51	2.29**	
Professional network centrality	163.42	118.79	44.63	18.46***	
Employee approval rate in prior CEO positions	0.69	0.66	0.03	1.46	
Relationship with the Firm at Appointment					
External hire indicator	0.50	0.36	0.14	15.90***	
Tenure with the firm, years	5.73	7.58	-1.85	8.28***	
Chairman-CEO indicator	0.46	0.48	-0.02	1.27	

Timing of Remote CEO Contracts

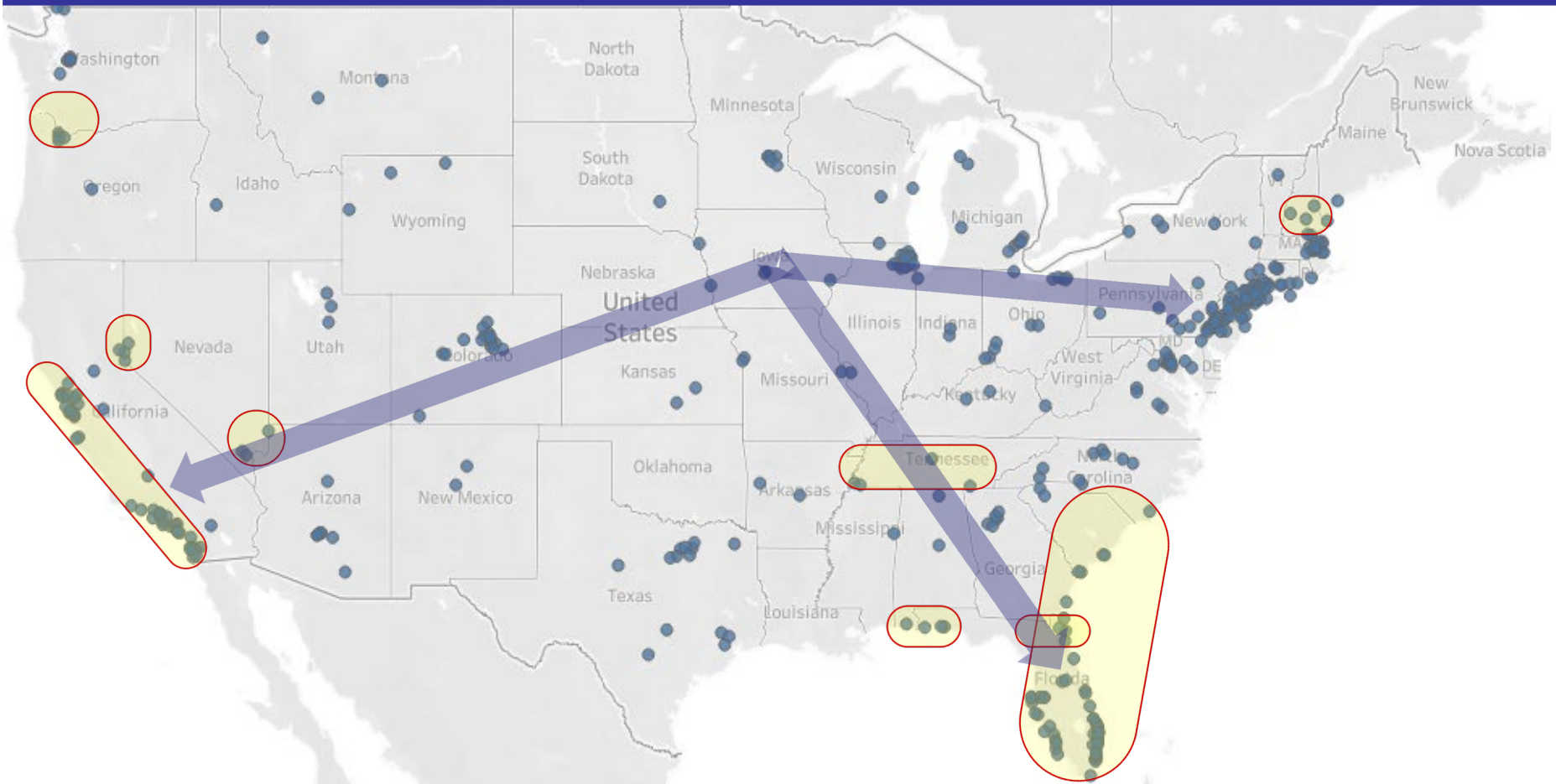
Remote for entire CEO employment spell



■ Remote for the entire contract ■ Start remote & switch to HQ ■ Start at HQ & switch to remote

1. 62% of remote contracts are for the CEO's entire tenure at the firm
2. One third of CEOs switch between onsite & remote contracts within the same firm
3. Main results robust for each of the three groups

Primary Residences of Long-Distance CEOs



1. **15%** of long-distance CEOs live on the **beach** (within 0.25 miles of the coastline)
2. Relative to HQ, CEOs' primary residences shift to **warmer** and **milder climates**
3. Gravitate towards states with **lower taxes** on income and capital gains

2. Performance & Valuation

Operating Performance: Regression Evidence

Dependent variable	Return on Assets (ROA)				
Column	(1)	(2)	(3)	(4)	(5)
Long-distance CEO	-0.010*** [3.174]	-0.014*** [3.385]	-0.010*** [3.316]	-0.010*** [3.561]	-0.010** [2.278]
Firm fixed effects	Yes	No	Yes	Yes	No
CEO fixed effects	No	Yes	Yes	Yes	No
Year fixed effects	No	No	No	Yes	Yes
Firm x CEO fixed effects	No	No	No	No	Yes
N_obs	36,930	36,930	36,930	36,930	36,930
R ²	0.438	0.570	0.564	0.579	0.601

Firm's ROA declines by 1 percentage point when its CEO starts working remotely

Robust to controlling for firm & CEO heterogeneity and the matching of CEOs to firms

Time-Series Dynamics of ROA

Dependent variable	Return on Assets (ROA)			
Column	(1)	(2)	(3)	(4)
Long-distance year -3 or earlier	-0.002 [0.393]	0.005 [0.573]	0.007 [0.726]	0.007 [0.875]
Long-distance year -2	-0.008 [1.573]	0.001 [0.159]	0.003 [0.342]	0.003 [0.413]
Long-distance year -1	-0.007 [0.946]	-0.007 [0.831]	-0.005 [0.572]	-0.005 [0.689]
Long-distance year +1	-0.016*** [3.635]	-0.011* [1.792]	-0.011* [1.698]	-0.010* [1.950]
Long-distance year +2	-0.014*** [3.366]	-0.011** [2.228]	-0.012** [2.318]	-0.012*** [2.794]
Long-distance year +3 or later	-0.007* [1.866]	-0.007 [1.431]	-0.007 [1.609]	-0.007* [1.939]
Firm fixed effects	Yes	No	Yes	No
CEO fixed effects	No	Yes	Yes	No
Firm x CEO fixed effects	No	No	No	Yes
N_obs	4,235	4,235	4,235	4,235
R ²	0.550	0.612	0.679	0.688

No significant pre-trends in performance before the start of a remote arrangement

The decline in performance is rapid and persistent

Holds within firm, within CEO, and within CEO-firm pair

Firm Valuation

Dependent variable	Tobin's Q				
Column	(1)	(2)	(3)	(4)	(5)
Long-distance CEO	-0.164*** [3.582]	-0.156** [2.577]	-0.131*** [3.360]	-0.096** [2.549]	-0.096** [2.028]
Firm fixed effects	Yes	No	Yes	Yes	No
CEO fixed effects	No	Yes	Yes	Yes	No
Year fixed effects	No	No	No	Yes	Yes
Firm x CEO fixed effects	No	No	No	No	Yes
N_obs	36,930	36,930	36,930	36,930	36,930
R ²	0.641	0.738	0.746	0.764	0.773

Firm's Q declines by 0.096 after its CEO switches to a remote arrangement

Equivalent to 4.9% of the mean or 6% of the standard deviation in Q

Summary

- Performance **decline is steeper** when:
 - Remote **arrangement is more onerous** → longer commute & time difference
 - **CEO is more important** for the firm → CEO is chairman of the board
- High bar for an omitted variable:
 - Robust to **matching of CEOs & firms** (CEO*Firm F.E.)
→ can't be a persistent firm or CEO attribute
 - **No pre-trend** or reversal → should produce a decline in performance precisely after the CEO's switch to a remote working arrangement
 - Should vary in **intensity** with the **CEO's importance and commuting costs**

3. Instrumental Variable

Instrumental Variable

- Instrument for the CEO's decision to work remotely:

Uprooting the spouse = 1 if moving CEO's home to HQ would force the spouse to **leave her home state**, disrupting her network, community, and access to family

- Economic intuition:



*“Beginning this summer, I will be splitting my time between Seattle and L.A., where **my wife grew up**” ... Spencer Rascoff, CEO of Zillow Group*



*“Snowden [CEO of Penn National Gaming] has had Boston connections since his Harvard days — **his wife is from there**, with him commuting weekly to Penn..”*

- Statistical relevance:

A CEO is **39.6% more likely to work remotely** if moving to the HQ would uproot his spouse (t -stat. = **4.77**; F-stat. = **23.1**)

- Exclusion restriction:

Private costs of the CEO's spouse are plausibly unrelated to firm outcomes

Instrumented Decision to Work Remotely

First stage		Dep. Variable: <i>Long-Distance CEO</i> [t-statistics in brackets]			
<i>Uprooting the spouse</i>	0.210*** [5.80]	0.208*** [5.84]	0.396 *** [4.71]	0.396*** [4.77]	
Second stage		Dep. Variable: <i>Return on Assets</i> [t-statistics in brackets]			
<i>Long-Distance CEO</i>	-0.012*** [2.73]	-0.015** [2.94]	-0.014*** [3.63]	-0.016*** [3.62]	
Year FE	No	Yes	No	Yes	
Firm FE	Yes	Yes	No	No	
CEO FE	No	No	Yes	Yes	
First-Stage F-Stat.	37.45	37.93	22.55	23.10	
No. of obs.	29,465	29,465	29,465	29,465	

1st stage: *uprooting the spouse* is a strong predictor of remote work

2nd stage: working remotely leads to a decline in ROA of 120–160 bps, comparable to the estimate of 100 bps in the OLS specification

4. Economic Channels

- i. Short-termism
- ii. Loss of information
- iii. Absenteeism and leisure

Employee Reviews

Dependent variable	Employee approval rate				
Column	(1)	(2)	(3)	(4)	(5)
Long-distance CEO	-0.085*** [4.327]	-0.086*** [4.292]	-0.063** [2.079]	-0.059** [2.045]	-0.061** [2.052]
Review by manager				0.011* [1.883]	
Long-distance CEO x Review by manager				-0.017* [1.859]	
Review from HQ state					0.009* [1.718]
Long-distance CEO x Review from HQ state					-0.014* [1.706]
Industry x Year fixed effects	No	Yes	Yes	Yes	Yes
Firm x CEO spell fixed effects	No	No	Yes	Yes	Yes
N_obs	12,255	12,255	12,255	22,396	21,262
R ²	0.004	0.126	0.539	0.439	0.467

A CEO's switch to remote status is followed by a **6% decline in the approval rate** by insiders, especially for more informed insiders: managers and HQ personnel

Insights from Insider Reviews

- Analyze 1.47 million **reviews of remote CEOs** by firm insiders
- Remote CEOs have a **5.4% lower approval rate** from firm insiders, especially from more informed insiders (managers and those at HQ)
- The reviews identify three common issues with remote CEOs:
 - 1. Short-term focus**
 - *“Short-sighted, prioritizing short-term goals, lacks a long-term vision”*
 - 2. Loss of information**
 - *“out of touch, disconnected, confused, detached from the workforce, lost”*
 - 3. Absenteeism and leisure**
 - *“not around most of the time, invisible, generally absent”*
 - *“It’s disheartening to know layoffs are pending and see the executives taking their helicopters back and forth to their homes”*

Evidence on the Channels

- **Short-termism** ✓
 - Remote CEO arrangements → decline in R&D & capital investment
 - Investment in PP&E shifts towards assets with shorter useful life
 - Investment becomes less responsive to long-term investment opportunities
- **Loss of information** ✓
 - Decline in ROA stronger for external CEOs who are less informed
 - Decline in ROA attenuated for geographically dispersed firms
- **Leisure** ✓
 - Decline in ROA stronger when a remote CEO:
owns a leisure boat, resides in beach home, or lives next to a top golf course

The underperformance of remote CEOs → a combination of several non-mutually exclusive channels: short-termism, information loss, and leisure

5. Learning

Do **boards update their priors** about remote CEO arrangements and take corrective actions if these CEOs underperform?

Summary of Evidence

- Boards appear to **learn and adjust** their recruiting policies after a first-hand experience with a long-distance CEO:
 - Boards are more likely to **terminate** remote CEOs, and such terminations yield **2-3%** positive announcement returns
 - Boards that have had a remote CEO arrangement are **less likely to hire another** remote CEO in the future
 - After employing a remote CEO, some firms adjust CEO employment contracts to **require relocation** to the firm's HQ
 - *“Executive **shall be required to relocate** to the Atlanta area within 30 days after the commencement of this contract.”*
 - *“It is expected that the Executive will perform his duties from our Minneapolis headquarters and **establish his principal residence** in the state of Minnesota.”*

Conclusion

- CEOs' remote working arrangements are associated with weaker performance and lower valuation
- Such arrangements don't last, and investors cheer their terminations

Evidence on the [efficacy of remote work for executives](#)