Corporate Culture and Future Directions

Fellow of the Ro Canada Research Cha University of British Colu

Online Public Lecture Series on Corporate Governance Organized by ICG, Indiana University, and ECGI, April 6, 2023

Kai Li

- Fellow of the Royal Society of Canada
- Canada Research Chair in Corporate Governance
- University of British Columbia, ABFER, CAFR, CSFN, ECGI

Corporate culture from the field

"I came to see, in my time at IBM, that culture isn't just one aspect of the game, **it is the game**. In the end, an organization is nothing more than the collective capacity of its people to create value...."

"Culture is not the most important thing in the world. **It's the only thing**. It is the thing that drives the business."

"Culture has to come from the tone and the actions of its leaders, and the feeling that people get from working with those leaders. Culture is the collective actions of the company, and the choices that leaders make help their employees understand the company and its tone."

—Louis V. Gerstner, JR., Former CEO, IBM

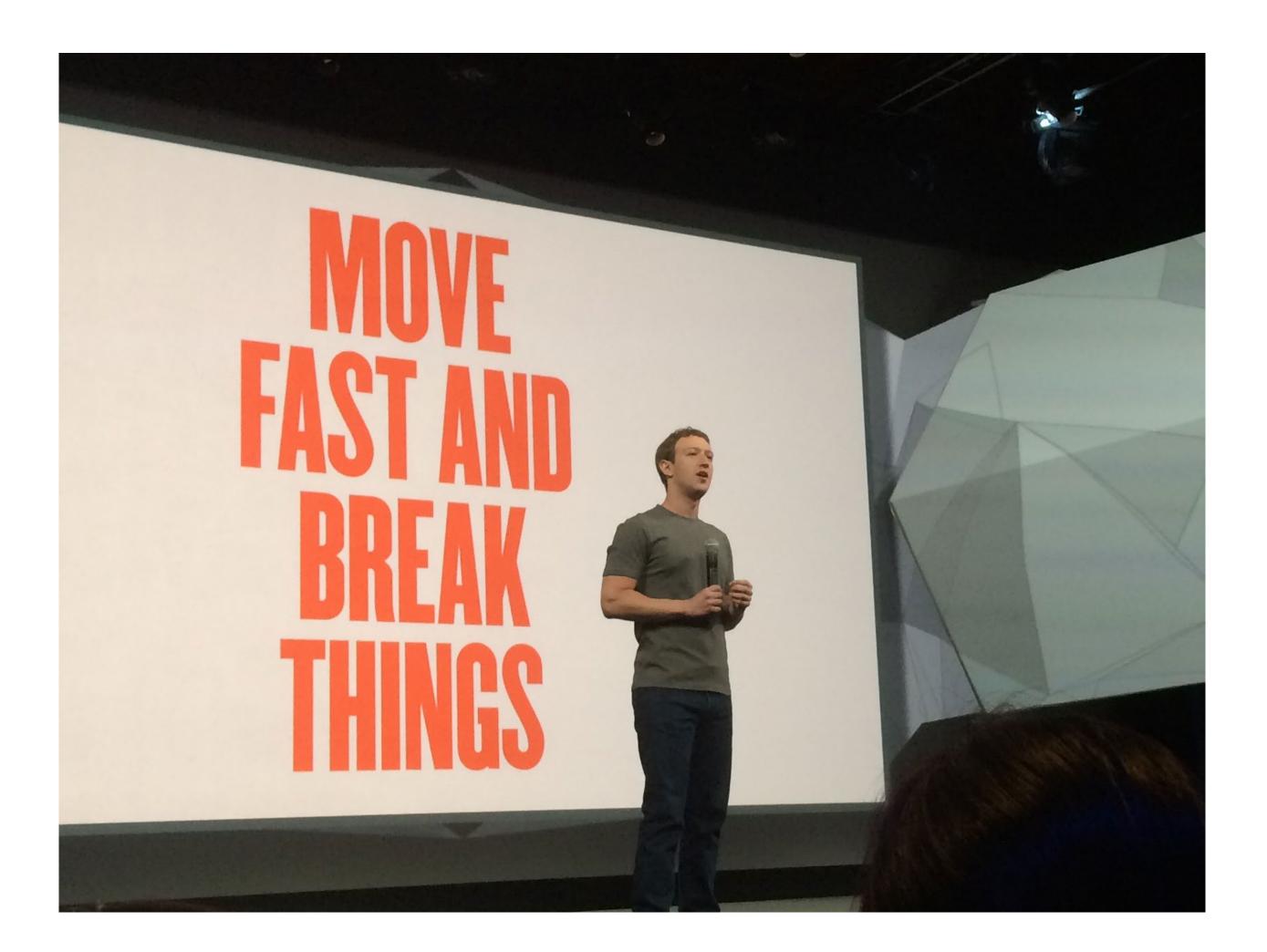
—Jim Sinegal, Co-founder & Former CEO, Costco

—Jensen Huang, Co-founder & CEO, NVIDIA



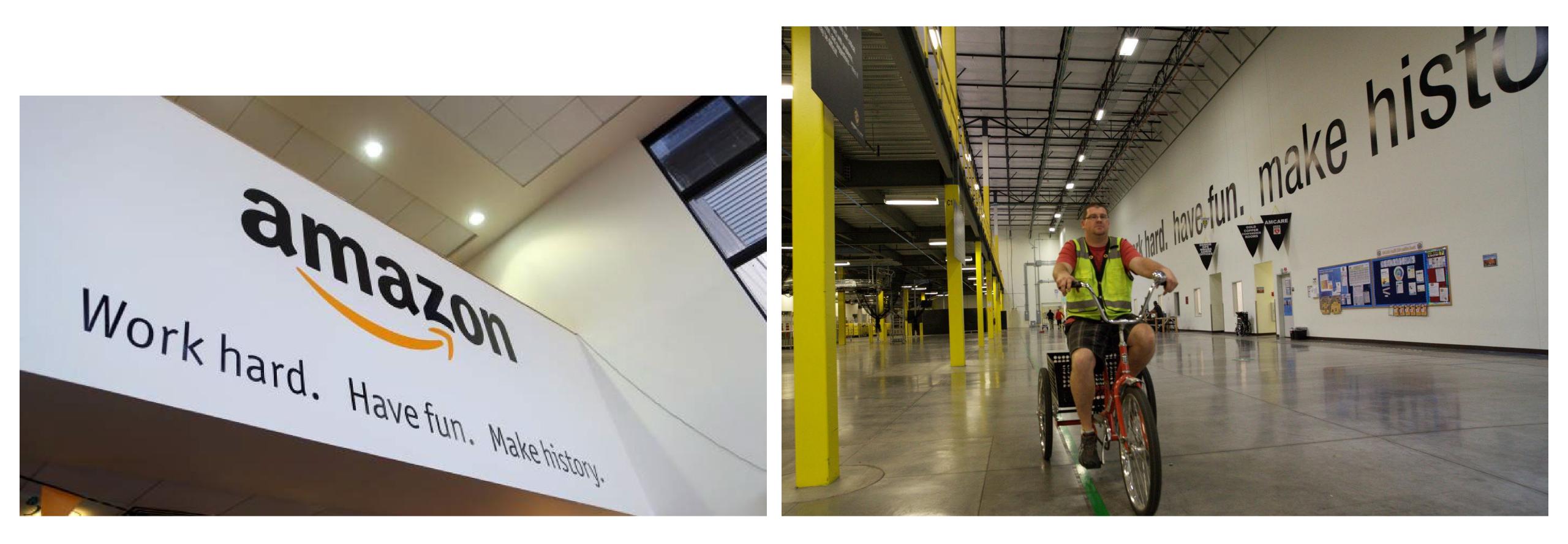


Corporate culture in workplace





Corporate culture in workplace





Corporate culture in brand logo



keep reinventing







What is corporate culture?

• From management scholars:

Corporate culture is "a system of **shared values and norms** that define appropriate attitudes and behaviors for organizational members." (O'Reilly and Chatman, 1996)

• From economists:

Corporate culture is "a set of principles and values that should inform the behavior of all the firms' employees." (Guiso, Sapienza, and Zingales, 2015)







What is corporate culture?

Review and Directions for Future Research," in: G. Hilary and D. McLean (eds.), Handbook of Financial Decision Making, Elgar Publishing, available on SSRN

Corporate culture is an informal institution (cf. governance and compensation) typified by patterns of behavior and reinforced by people, systems, and events.

Corporate culture brings unity to employees' perspectives through the their firm.



From financial economists – Grennan and Li (2023), "Corporate Culture: A

expectations they have for how they need to behave to fit in and succeed in



What is corporate culture?

by past research as well as guide future research are:

 \checkmark Corporate culture is dynamic rather than static (cf. societal culture).

- People, systems, and events are catalysts for cultural change (e.g., M&As, CEO turnover).
- \checkmark It is possible to unpack the many elements of culture.
 - Corporate mottos like "Move Fast and Break Things" at Facebook.
 - Cultural values and day-to-day norms.
 - ✓ Differences between espoused and practiced/perceived values.



- The key components of our definition of corporate culture that are supported



Corporate culture: reinforced by people, systems, and events

- Three elements influence culture:
 - People (e.g., leaders, new employees, and investors)
 - Formal systems (e.g., compensation structure)
 - Events (e.g., going public, mergers, and #MeToo movement)
- People, systems, and events are helpful for identifying the "shocks" that may perpetuate within-firm changes in culture over time.
 - Internal: turnover in key positions, adopting new technologies, or reaching a new point in a firm's lifecycle.
 - External: outside stakeholders, facing new regulation, or social or geopolitical unrest.





Does corporate culture matter?

- properly regulated ex ante (O'Reilly 1989; Kreps 1990)
- Corporate culture "brings unity to employees' perspectives through the ٠ their firm." – corporate culture defines "*a way of doing things*" within an organization (Grennan and Li, 2023)

challenge to measure it.



Corporate culture matters because employees will face choices that cannot be

expectations they have for how they need to behave to fit in and succeed in

Despite its importance, the finance, accounting, and management literature has limited large sample evidence on the role of corporate culture because of the





Measuring corporate culture

consistent and reliable manner.

- There have been five approaches to measure corporate culture: Surveys and interviews.
 - Time-invariant proxies (e.g., executives' cultural heritage).
 - Time-varying proxies (e.g., corporate frauds).
 - **Experiments**. Guggenmos (2020)
 - Computational linguistic models.



• The notion of culture is somewhat nebulous, making it hard to measure in a



Measuring corporate culture: surveys and interviews

 Prior research asks employees and executives what the underlying values and norms are through surveys and interviews.

- Guiso, Sapienza, and Zingales (2015) use proprietary data based on surveys of employees
 - The data is based on surveys of rank-and-file employees developed by the Great Place to Work Institute.
 - Surveys include two questions that measure employees' perception of top management as trustworthy and ethical.
 - Cultural value of integrity as perceived by employees is positively correlated with higher Tobin's Q and return on sales.





Measuring corporate culture: surveys and interviews

- related questions.
- What is corporate culture?
 - another."
- What mechanisms underlie the creation and effectiveness of corporate culture?
 - \bullet
- What aspects of business performance does corporate culture affect?
 - Executives strongly believe that an effective corporate culture enhances firm value.
 - 91% of executives consider corporate culture to be "important" or "very important" at their firm
 - 54% of executives would walk away from an M&A target that is culturally misaligned •
 - Executives link culture to a wide range of actions and decisions: •
 - Ethical choices (compliance, short-termism)
 - Innovation (creativity, risk taking)
 - Value creation (productivity, investment)

Graham, Grennan, Harvey, and Rajgopal (2022) ask corporate executives a number of culture-

"a belief system," "a coordination mechanism," "an invisible hand," "how employees interact with one

Formal institutions such as governance and compensation can either reinforce or work against culture.



Measuring corporate culture: executives' cultural heritage

- The national culture values mostly come from Hofstede (1980, 1991, 2001)
 - term orientation

- Prior research infers firms' or executives' country of origin through
 - Guedhami, Li, and Lu, 2021)
 - Executives' last name (e.g., Liu, 2016; Pan, Siegel, and Wang, 2017, 2020)
 - Executives' family tree (e.g., Nguyen, Hagendorff, and Eshraghi, 2018)

Societal culture enters business decision-making via the backgrounds of corporate executives.

Power distance; Individualism vs. collectivism; Uncertainty avoidance; Masculinity vs. femininity; Long-

Headquarters location (e.g., Li, Griffin, Yue, and Zhao, 2011, 2013; Griffin, Guedhami, Kwok, Li, and Shao, 2017; Griffin,





Measuring corporate culture: executives' cultural heritage

Table 3 **Baseline results at the firm level**

A. CEO UAI and acquisition

	(1)	(2)	(2) (3)	
		Acqu	isition	
CEO UAI	-0.157***	-0.146***	-0.191***	-0.154***
	(0.015)	(0.013)	(0.047)	(0.020)
CEO age	-0.001^{***}	-0.001^{***}	-0.002^{***}	-0.001
-	(0.000)	(0.000)	(0.001)	(0.000)
Missing age	-0.085^{***}	-0.076^{***}	-0.109^{***}	-0.040
	(0.022)	(0.020)	(0.036)	(0.028)
CEO education	0.003	0.006	-0.019^{**}	0.016**
	(0.006)	(0.004)	(0.008)	(0.007)
Missing edu.	-0.008	0.000	-0.046	0.037**
	(0.012)	(0.009)	(0.030)	(0.014)
Female	-0.034^{***}	-0.028^{**}	-0.002	-0.022
	(0.013)	(0.011)	(0.033)	(0.014)
log(MB)	0.026***	0.025***	0.023***	0.029***
	(0.005)	(0.003)	(0.006)	(0.004)
ROA	0.000	0.000	0.000	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
log(sales)	0.021***	0.026***	0.025***	-0.013^{**}
	(0.003)	(0.003)	(0.004)	(0.005)
Year FE	X	Х	Х	х
Ind, state FEs		X	Х	
Firm FE				Х
Obs.	71,109	71,109	9,881	71,109
Adj. R^2	.041	.057	.076	.192

- Pan, Siegel, and Wang (2020) show that CEOs with a more uncertainty-avoidant cultural heritage are less likely to engage in acquisitions.
- Use a CEO's last name to infer her cultural heritage
 - Use nationality information of passengers with the same last name arriving in the port of New York between 1820 and 1957 from *Ancestry.com*
- The uncertainty avoidance index (UAI) of a CEO with last name *l* is

$$CEO UAI_l = \sum w_{lj} UAI_j$$

where w_{lj} represents the frequency for last name l with respect to country *j*.







Measuring corporate culture: executives' cultural heritage

Table 2

Explaining firm-level E/S performance.

	Hofstede		WVS	
	(1a)	(1b)	(2a)	(2b)
	Within-country	Cross-country	Within-country	Cross-country
Firm Characteristics				
Size	0.109***	0.112***	0.110***	0.113***
	[0.001]	[0.005]	[0.001]	[0.006]
Sales growth	-0.061***	-0.077***	-0.061***	-0.071***
-	[0.005]	[0.024]	[0.005]	[0.024]
Leverage	-0.079***	-0.038	-0.081^{***}	0.035
	[0.008]	[0.069]	[0.008]	[0.072]
R&D	0.092***	-1.542***	0.091***	-1.136**
	[0.032]	[0.501]	[0.032]	[0.508]
U.S. cross-list	0.023***	0.194***	0.023***	0.209***
	[0.004]	[0.033]	[0.004]	[0.035]
Country Characteristics				
Individualism (Hofstede)		0.438***		
		[0.081]		
Individualism (WVS)				0.624***
				[0.096]
Log(GDP per capita)		0.007		-0.029**
		[0.013]		[0.014]
Legal origin: common law		-0.095**		-0.073*
		[0.039]		[0.039]
Revised anti-director index		0.049***		0.057***
		[0.015]		[0.016]
Years of schooling		-0.023**		-0.008
-		[0.011]		[0.010]
Public sector employment		-0.000		-0.001
1 7		[0.001]		[0.001]
Government effectives		0.033**		0.031**
		[0.014]		[0.014]
Control of corruption		-0.047***		-0.048***
1		[0.011]		[0.011]
Industry FEs		Yes		Yes
Year FEs		Yes		Yes
No. of observations		33,021		32,264
No. of countries		43		38
		10		

- country *** 71*** 6**
- *** 5] 9**

- Griffin, Guedhami, Li, and Lu (2021) find that individualism is positively associated with firm-level E/S performance.
- Use two proxies for individualism
 - Hofstede's individualism score
 - Survey data from the World Values Survey (WVS) and European Values Study (EVS)
- Based on WVS, an individual is considered to be individualistic if he/she:
 - (1) thinks that independence is an important child quality
 - (2) regards imagination as an important child quality
 - (3) does not think that obedience is an important child quality
 - (4) does not live with his/her parents
 - (5) thinks that divorce is justifiable
 - (6) is of the opinion that private ownership of business should increase.









Measuring corporate culture: other proxies

- Executives' religiosity
 - a proxy for its risk culture.
- Corporate fraud history
 - corruption norms in these firms' home countries to capture a culture of corruption.
 - proxy for weak culture.
 - for weak integrity culture.
- Gender

 - of corporate innovation.

• Hilary and Hui (2009) use the population share of religious adherents in a firm's headquarters county as

DeBacker, Heim, and Tran (2015) use the IRS audits of foreign-owned corporations in the U.S. and

Pacelli (2019) uses violations observed in securities market activities unrelated to equity research as a

• Altamuro, Gray, and Zhang (2021) use the predicted probability of internal control weakness as a proxy

 Tate and Yang (2015) find a more female-friendly corporate culture when having women in leadership. Faccio, Marchica, and Mura (2016) compare the performance of firms run by female and male CEOs. Griffin, Li, and Xu (2021) study the value-creation proposition regarding female directors through the lens





Measuring corporate culture: computational linguistic models

- One of the fastest-growing methods of measuring culture is to applying advanced computational linguistic models to big data.
- Three approaches so far:

✤Bag-of-words

- and Thakor, 2006; Au, Dong, and Tremblay, 2021.
- Topic modelling Latent Dirichlet Analysis (LDA)
 - e.g., Yoo, 2020; Adams, Akyol, and Grosjean, 2021.
- Machine learning
 - Zou, 2023)
 - WordNet (e.g., Grennan, 2022)

• e.g., Guiso, Sapienza, and Zingales, 2015; Audi, Loughran, and McDonald, 2016; Cameron, DeGraff, Quinn,

• Word embedding model (e.g., Li, Mai, Shen, and Yan, 2021; Li, Liu, Mai, and Zhang, 2021; Pacelli, Shi, and





Measuring corporate culture: bag-of-words

- Integrity + Ethics + Accountability + Trust + Honesty + Responsibility + Fairness + Do the right thing+ Transparency + Ownership.
- *Teamwork*+Collaboration/Cooperation.
- Innovation + Creativity + Excellence + Improvement +Passion + Pride + Leadership + Growth + Performance + Efficiency + Results.
- Respect + Diversity + Inclusion + Development + Talent + Employees + Dignity + Empowerment.
- Quality + Customer + Meet needs + Commitment + Make a difference + Dedication + Value + Exceed expectations.
- Safety + Health + Work/Life balance + Flexibility.
- **Community** + Environment + Caring + Citizenship.
- *Communication*+Openness.
- Hard work + Reward + Fun + Energy.

Guiso, Sapienza, and Zingales (2015) count the advertised values listed on a company's website for S&P 500 firms as of June 2011.

 85% of S&P 500 companies have at least a section called "corporate culture."

They classify value words into nine categories.

Fail to find a significant correlation between the frequency of value words and short- and long-term performance.







Measuring corporate culture: topic modeling (LDA)

- LDA assumes that a document is generated from latent distributions over a collection of words, depending on the topics it delivers.
- Yoo (2020) applies LDA to CEOs' letters in annual reports.
 - Find that firms with more similar cultures are more likely to merge.
 - The cultural similarity of two merged firms is positively related to acquirer announcement period return.
- Adams, Akyol, and Grosjean (2021) construct a measure of "gender culture" by applying LDA to mandatory reports by Australian firms.
 - Equality of training opportunities is positively associated with female representation in leadership and firm performance.





Measuring corporate culture using machine learning

cultural values.

>Earnings calls involve mostly CEOs and sometimes other top executives speaking to analysts, often reveal the set of values that are important to a **COMPANY.** (Graham, Grennan, Harvey, and Rajgopal 2023)

 \triangleright Our starting point is the five most often-mentioned values by S&P 500 firms: innovation, integrity, quality, respect, and teamwork. (Guiso, Sapienza, and Zingales, 2015)

 Li, Mai, Shen, and Yan (2021) employ a machine learning technique—the word embedding model—and earnings call transcripts to measure corporate





The word embedding model (aka word2vec)

- Sapienza, and Zingales (2015).
 - Responsibility + Fairness + Do the right Transparency + Ownership.
 - *Teamwork*+Collaboration/Cooperation.
 - Efficiency + Results.
 - Employees + Dignity + Empowerment.

> Our goal is to construct a culture dictionary by associating new words and phrases with the seed words defining each cultural value as provided in Guiso,

> • Integrity + Ethics + Accountability + Trust + Honesty +thing+ • Innovation + Creativity + Excellence + Improvement +

Passion + Pride + Leadership + Growth + Performance +

• Respect + Diversity + Inclusion + Development + Talent +• *Quality* + Customer + Meet needs + Commitment + Make a

difference + Dedication + Value + Exceed expectations.



The word embedding model (aka word2vec)

- The word embedding model is based on a simple, time-tested concept in linguistics: Words tend to co-occur with neighboring words with similar meanings (Harris 1954)
- features in all neighboring words (less than five words apart).

Innovation and a candidate word as part of the culture dictionary.

• The algorithm learns from the entire collection of earnings call transcripts and transforms any word (or phrase) of interest as a vector of 300 most important

 Such vector representation allows us to compute the association between a pair of words using cosine similarity, e.g., between a seed word defining



Thirty most representative word/phrase list for each value

Innovation	Integrity	Quality	Respect	Teamwork
Creativity	Accountability	Dedicated	Talented	Collaborate
Innovative	Ethic	Quality	Talent	Cooperation
Innovate	Integrity	Dedication	Empower	Collaboration
Innovation	Responsibility	Customer_service	Team_member	Collaborative
Creative	Transparency	Customer	Employee	Cooperative
Excellence	Accountable	Dedicate	Team	Partnership
Passion	Governance	Service_level	Leadership	Cooperate
World-class	Ethical	Mission	Leadership_team	Collaborative
Technology	Transparent	Service_delivery	Culture	Partner
Operational_excellence	Trust	Customer_satisfaction	Teammate	Co-operation
Passionate	Responsible	Service	Organization	Coordination
Product_innovation	Oversight	Reliability	Entrepreneurial	Engage
Capability	Independence	Commitment	Skill	Jointly
Customer_experience	Objectivity	Customer_need	Executive	Coordinate
Thought_leadership	Moral	Customer_support	Empowerment	Teamwork
Expertise	Trustworthy	High-quality	Management_team	Business_part
Agility	Fairness	Ensure	Best_brightest	Alliance
Efficient	Hold_accountable	Customer_relationship	Professionalism	Team_up
Technology_innovation	Corporate_governance	Quality_service	Staff	Technology_p
Competency	Autonomy	Product_quality	Highly_skilled	Joint
Know-how	Core_value	Quality_product	Skill_set	Cooperatively
Cutting-edge	Assure	Capable	Technologist	Relationship
Agile	Stakeholder	Service_quality	Competent	Collaborator
Creatively	Fiduciary_responsibility	End_user	Entrepreneur	Interaction
Customer-centric	Continuity	Quality_level	Experienced	Working_relat
Enable	Credibility	Customer_expectation	Energize	Co-operate
Value_proposition	Honesty	Service_capability	Entrepreneurial_spirit	Technology_p
Reinvent	Privacy	Client	High-caliber	Association
Focus	Fiduciary_duty	Customer_requirement	Manager	Dialogue
Innovation_capability	Rigor	Sla	Leadership_skill	Dialog





Scoring cultural values

- section.
- averages of annual values.

 \geq 62,664 firm-year observations for 7,500 firms over the period 2001–2018 (data updated to 2021, available here).

• At the firm-year level, we measure corporate cultural values by counting the frequency of dictionary words underlying each cultural value in the Questions and Answers (QA) section of the call normalized by the length of the Q&A

Our firm-year measures of cultural values are based on three-year moving



Summary statistics

Variable	Obs.	Mean	10th Percentile	Median	90th Percentile	SD
Innovation	62,664	1.737	0.692	1.488	3.141	1.029
Integrity	62,664	0.584	0.198	0.504	1.077	0.381
Quality	62,664	1.323	0.499	1.155	2.384	0.777
Respect	62,664	1.005	0.306	0.793	1.983	0.754
Teamwork	62,664	0.864	0.286	0.688	1.689	0.635

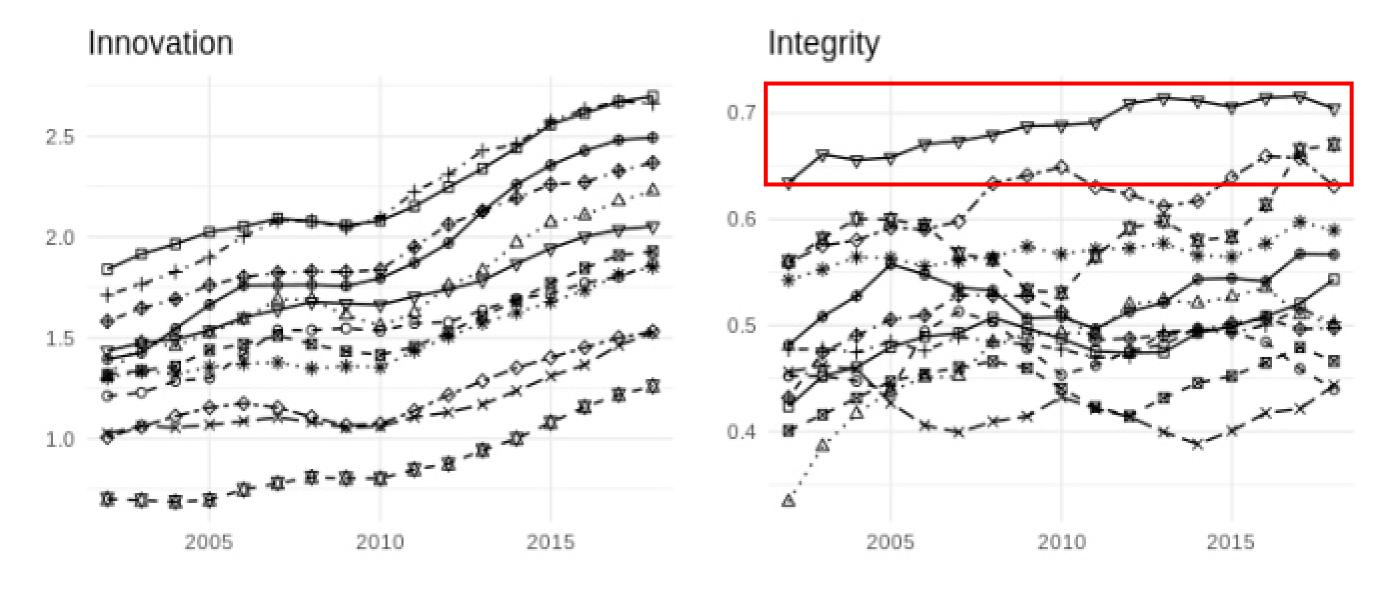
- the least frequently mentioned cultural value.
- the lowest, at 0.109.

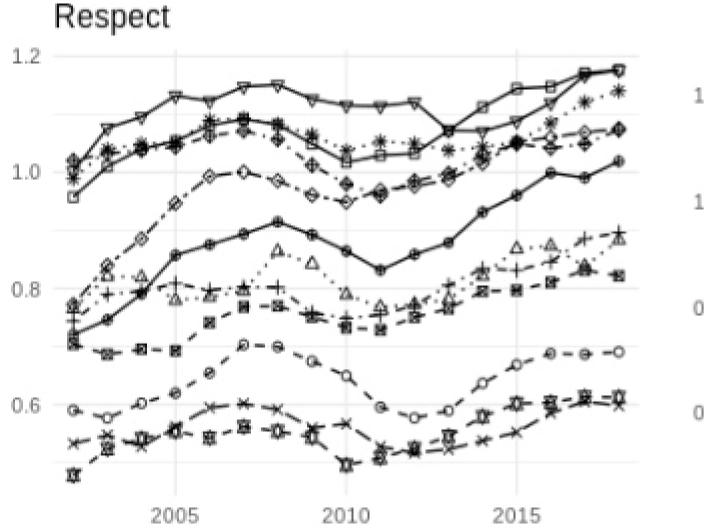
Innovation is the most frequently mentioned cultural value, whereas Integrity is

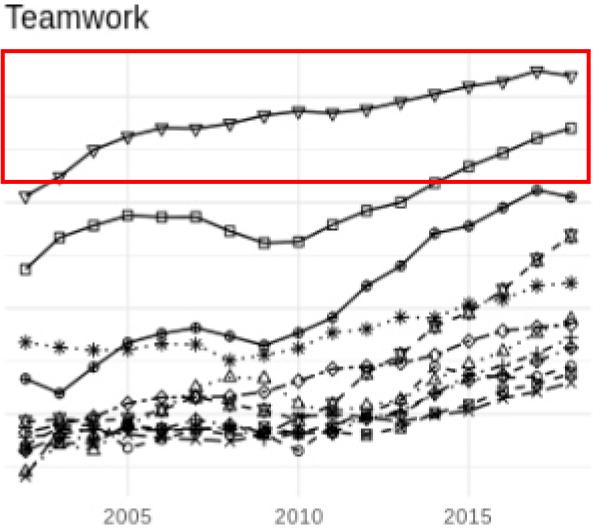
 Among the five cultural values, the correlation between *innovation* and *quality* is the highest, at 0.490, and the correlation between *innovation* and *integrity* is

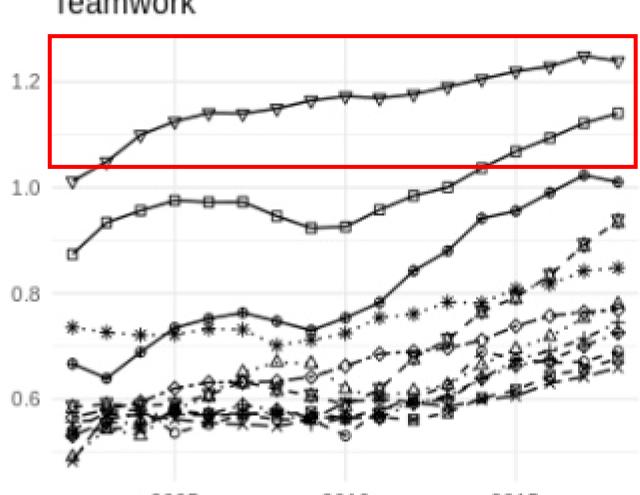


Corporate culture across industries and over time

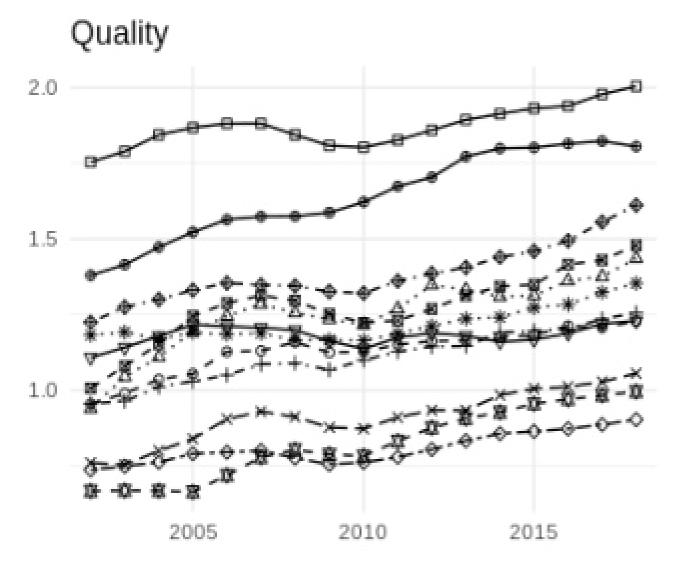








2005



Industry

- Business Equipment
- Chemicals and Allied - - 0-
- Consumer Durables · · · · <u>A</u> · · ·
- Consumer NonDurables
- Energy
- Finance
- Healthcare
- -B- Manufacturing
- ····*··· Others
- Shops
- Telecommunication
- Utilities -亞-



Validating our measures

- 2015).
- It is thus important to validate our measures using some well-established

□ the correlation between *innovation* and other markers of corporate R&D - # patents, R&D spending, MSCI R&D strength. - An innovative culture is broader than the usual measures of corporate innovation – R&D expenses and patenting.

• the correlation between *quality* and product quality and safety from MSCI and top brand from Brand Finance rankings.

• There is a general concern that commonly advertised values do not capture how values are perceived and upheld by employees (Guiso, Sapienza, and Zingales,

markers for best practices in the corporate world. For example, we examine



Corporate culture and M&As

- are less likely to be acquirers.
- \succ Firms closer in cultural values are more likely to do a deal together cultural congruency.
- premerger cultural values acculturation.



Using a sample of close to 8,000 deals over the period 2003–2018, we show:

> Firms scoring high on the cultural values of *innovation* and *respect* are more likely to be acquirers, whereas firms scoring high on the cultural values of *integrity* and *quality*

> Post-merger, acquirers' cultural values are positively associated with their target firms'





What makes firm resilient?

- Li, Liu, Mai, and Zhang (2021) examine how firms with a strong corporate culture fare amid the COVID-19 outbreak.
- They hypothesize two potential channels:
 - The human capital channel whereby a strong culture empowers employees to make consistent decisions and exert greater effort based on long-term perspectives, resulting in higher productivity.
 - The technology channel whereby a strong culture instills long-term orientation and makes firms more likely to adopt digital technology and/or introduce new products/services.





Corporate culture, COVID-19 exposure, and stock returns

	Monthly return						
	(1)	(2)	(3)	(4)			
Overall exposure	-0.098***	-0.105***	-0.092***	-0.098***			
Overall exposure × Strong culture	(0.015) 0.109***	(0.015) 0.109***	(0.014) 0.084***	(0.015) 0.085***			
	(0.017)	(0.018)	(0.016)	(0.017)			
Firm characteristics	No	No	Yes	Yes			
Four-factor loadings	No	Yes	No	Yes			
Firm FE	Yes	Yes	Yes	Yes			
Month FE	Yes	Yes	Yes	Yes			
N	35,505	35,505	35,505	35,505			
Adj. <i>R</i> ²	0.407	0.415	0.423	0.429			

• firms without when their exposure to COVID-19 is increased by one-standarddeviation.

In terms of economic significance, firms with a strong culture are associated with only a monthly return drop of 0.1 percentage points compared to 1.1 percentage points for





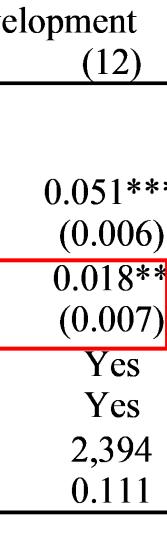
31

Corporate culture and firm response in the crisis period

	Community engagement Cost outting			A C	Digital transformation			New product devel				
	Community engagement				Cost cutting Digi					new product dever		Ļ
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Strong culture	0.394***	0.417***		-0.068	-0.003		1.800***	1.834***		0.548**	0.609***	-
	(0.148)	(0.147)		(0.104)	(0.098)		(0.326)	(0.325)		(0.213)	(0.209)	
Overall exposure		0.021***	0.017***		0.059***	0.059***		0.031***	0.018**		0.056***	
		(0.004)	(0.004)		(0.003)	(0.003)		(0.008)	(0.008)		(0.006)	
Overall exposure × Strong culture			0.017***			0.002			0.056***			•
			(0.005)			(0.004)			(0.011)			
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	•
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
N	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	2,394	
Adj. R^2	0.039	0.046	0.047	0.052	0.161	0.161	0.111	0.116	0.111	0.081	0.112	
												1

develop new products than their peers without a strong culture.

• Firms with a strong culture are more likely to support their community, no more likely to engage in cost cutting, more likely to embrace digital transformation, and more likely to







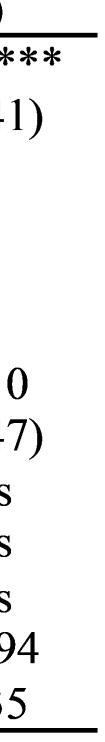
Corporate culture, COVID-19 exposure, and performance and real outcomes

	Sal	es per emplo	yee		Layoff	
	(1)	(2)	(3)	(4)	(5)	(6)
Overall exposure	0.028	0.062	0.013	0.207***	0.216***	0.206**
	(0.130)	(0.129)	(0.133)	(0.040)	(0.040)	(0.041
Overall exposure × Strong culture	0.382***			0.009		
	(0.117)			(0.050)		
Overall exposure × Strong people culture		<mark>0.465***</mark>		•	<mark>-0.110**</mark>	
		<mark>(0.129)</mark>			<mark>(0.055)</mark>	
Overall exposure × Strong technology culture			<mark>0.354***</mark>			0.010
			<mark>(0.102)</mark>			(0.047
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
N	14,594	14,594	14,594	14,594	14,594	14,594
Adj. <i>R</i> ²	0.058	0.058	0.058	0.035	0.036	0.035

layoff employees.

• We show that firms with a strong people/technology culture are associated with high employee productivity; and firms with a strong people culture are no more likely to







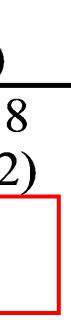
Corporate culture, COVID-19 exposure, and performance and real outcomes

	ROA				ROS			
	(7)	(8)	(9)	(10)	(11)	(12)		
Overall exposure	-0.007*	-0.007*	-0.007*	-0.015	-0.008	-0.018		
	(0.004)	(0.004)	(0.004)	(0.031)	(0.031)	(0.032)		
Overall exposure × Strong culture	0.008**			0.059**				
	(0.004)			(0.027)				
Overall exposure × Strong people culture		0.011**			0.041			
		<mark>(0.005)</mark>			(0.038)			
Overall exposure × Strong technology culture			0.005			<mark>0.057*</mark>		
			(0.004)			<mark>(0.025</mark>		
Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes		
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes		
\dot{N}	14,594	14,594	14,594	14,594	14,594	14,594		
Adj. R^2	0.063	0.063	0.063	0.048	0.048	0.048		

operating performance.

• We show that firms with a strong people/technology culture are associated with better













Looking ahead

- Corporate culture is expected to be shaped by as well as play a role in:
 - Leadership.
 - Formal governance systems and corporate events.
 - Technology.
 - Industry dynamics.
 - . . .



Looking ahead: leadership

- Enrich our understanding of the mechanisms underlying the leader-culture relation and their relative importance.
- Understand the timing and reasons behind corporate leaders' investments in culture.
 - Why do some leaders underinvest in culture?

✓ Examine the quality of the match between leaders and culture, and how that match relates to business outcomes.





Looking ahead: formal governance systems and corporate events

- There are many major events worthy of study.
 - Going public might contribute to changes in culture (e.g., Guiso et al., 2015)
 - Shareholder activism might not be conducive to fostering a strong culture (Popadak, 2016)
 - Postmerger acquirers' cultural values are positively associated with premerger target firms' cultural values (Li et al., 2021)
 - Going private transactions.
 - Restructuring and recapitalization events.

 \checkmark Research examining how these events contribute to cultural change, value creation, and the extent to which the existing culture influences selection into these events will be informative.





Looking ahead: technology

- Recent advances in technology have a number of implications for culture.
 - The way management and employees interact.
 - Whether and how flexible work arrangements affect cultural values and norms and their transmission when interpersonal socializing and interactions are absent.
 - Whether leaders need to change existing aspirational values and introduce new values.
- Researchers may investigate the cultural complexities associated with these advances in technology.
 - Does work-from-home enable a more inclusive culture, or does it create a two-tiered culture?
 - Do remote leaders weaken culture?
 - What role does technology play in setting employees' expectations for how they need to behave to fit in and succeed in a firm?







Looking ahead: industry dynamics

- Li et al. (2021) find that over time, most industries put more emphasis on technology and innovation and score higher in innovation.
 - The healthcare industry stands out by scoring the highest in respect and teamwork.
 - The business equipment industry holds the highest scores in innovation and quality.
- Empirical research exploring the complex relation between competition, culture, and firm performance will be valuable.
 - Industry competition can be disciplinary so that only firms with a strong culture can compete.
 Industry competition puts pressure on firms not to invest in long-term intangibles such as
 - Industry competition puts pressure on fir culture.



Looking ahead: more directions

- Corporate culture is expected to play a role in:
 - Earnings management.
 - Voluntary disclosure.
 - Stock market crash risk.
 - Investor relations.
 - Supply chain management.
 - Disruptive innovation.
 - Workplace safety.
 - Environmental and social performance.
 - . . .



Thank you!