FRANCO FIORDELISI, ORNELLA RICCI,
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THE VALUE
OF CULTURAL
CLASHES IN M&A

ROMA TRE
UNIVERSITÀ DEGLI STUDI

Dipartimento di Economia Aziendale

QUADERNI
DEL DIPARTIMENTO DI ECONOMIA AZIENDALE ROMA TRE
WORKING PAPER SERIES
DEPARTMENT OF BUSINESS STUDIES ROMA TRE – "BS RM3"

COLLANA DIRETTA DA ORNELLA RICCI

FRANCO FIORDELISI, ORNELLA RICCI,
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CORPORATE CULTURE AND MERGER SUCCESS
Franco Fiordelisi, Ornella Ricci, Franco Saverio Stentella Lopes

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Corporate Culture and Merger Success

Franco Fiordelisi[✝], Ornella Ricci[*], Franco Saverio Stentella Lopes[*]

ABSTRACT

We show that corporate culture influences both the probability to act as an acquirer and the merger outcome. Based on the Competing Values Framework, we disentangle companies culturally oriented inside their organization from companies oriented outside their organization. We find that an internally oriented corporate culture significantly decreases the participation to merger deals, but it has a positive impact on post-merger operating performance. We also show that paid family leave programs at state level exogenously shift the corporate culture of affected companies inside their organization. We use this shock to corporate culture to validate all our results.

KEYWORDS: corporate culture; competing values framework; mergers; operating performance.

JEL CLASSIFICATION: G34

[✝] Essex Business School and University of Roma Tre.
Wivenhoe Park, Colchester, CO4 3SQ, UK; +44 (0) 1206 872 260; franco.fiordelisi@essex,ac,uk.

[*] University of Roma Tre.
Via S. D'Amico 77, 00145 Rome, Italy; +39 0657 335 708; ornella.ricci@uniroma3.it.

[*] University of Roma Tre.
Via S. D'Amico 77, 00145 Rome, Italy; francescosaverio.stentellalopes@uniroma3.it.

I.   Introduction

It is widely believed that corporate culture[1] is important to the success of an acquisition (Larsson, Brousseau, Driver, Sweet, 2004; Kusstatscher and Cooper, 2005). However, anecdotal evidence suggests that the majority of mergers are concluded without a specific strategy to integrate the culture of merging companies (Bouwman, 2013). Why do firms merge without a plan for cultural integration? One explanation is that mergers and acquisitions are generally conducted with a focus on the external of the organization: Acquirer companies are often in search of gaining market shares or achieving operational efficiencies lowering production costs (Sheen, 2014). The acquirer's focus generally shifts on the internal side of the organization when the deal is completed and it emerges the need to harmonize and to integrate multiple payroll systems, sales compensation models and, more generally, different corporate cultures. In this paper, we examine whether companies culturally oriented inside their organization tend to be more careful in selecting target companies and obtain better results with their deals.

The merger between HP and Compaq shows how the importance of considering the relation between corporate culture and M&A. When the merger was initially disclosed in 2001, it was announced as a great opportunity to build a strong customer base and, especially, achieve large cost savings. Compaq's stockholders received the merger announcement with excitement. The company had a strong market-oriented culture and a business strategy based on low-margin high-volume products: Thus, a merger aiming to achieve cost savings was fully in line with Compaq's values and strategy. HP was the opposite case. Over the years the company had built a culture oriented inside the organization, based on employees' commitment, satisfaction and loyalty. Immediately after the announcement of the deal, the merger was strongly opposed by the hires of HP funders, arguably the stockholders with the deepest knowledge on HP's culture. The rationale for the opposition was based on the violation of HP's values. In a statement David Packard, son of a co-founder of the company said: "*For over fifty years, one of HP's fundamental corporate objectives has been to provide long-term employment for its people*" and that "*Bill (Hewlett) and Dave (Packard, HP's co-founders) never developed a premeditated business strategy that treated HP employees as expendable*". The merger ultimately took place: although it was not a total disaster, the expected synergies did not fully materialize (Bouwman, 2013).

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[1] The cultural conflict between two merging companies may lead to lower commitment and co-operation (Buono, Bowditch, Lewis, 1985), greater turnover among acquired executives (Lubatkin, Schweiger, Weber, 1999) and decline in shareholder value of the buying firm (Chatterjee, Lubatkin, Schweiger, Weber, 1992).

This example illustrates a number of important features of the relation between corporate culture and M&A that we study in our paper. First, companies oriented inside their organizations are more aware of potential cultural clashes in the post-merger integration period and may be more careful in selecting the target company. We conjecture that these companies announce a lower number of mergers when compared to companies oriented outside their organizations. We also argue that this stricter selection process improves the performance of the deal as captured by the post-deal operating performance.

The empirical test of our conjectures is difficult since the measurement of corporate culture using large sample of companies is not easy. In order to disentangle companies oriented outside the organizations from other companies, we leverage the Competing Value Framework (CVF) developed by Quinn and Rohrbaugh (1983) and Cameron, De Graff, Quinn and Thakor (2006). The premise of the CVF is that culture varies according to two dimensions: 1) externally vs. internally oriented cultures, and 2) flexible over stable cultures. Combining these two dimensions, there are four basic competing values, preferences or priorities within every company: adhocracy (external and flexible culture), market (external and stable culture), hierarchy (internal and stable culture), and clan (internal and flexible culture). This framework perfectly fits modern corporations nowadays, as managers regularly confront issues such as how to be innovative, how to stay competitive, how to organize and deploy resources, and how to collectively change and grow as a company. Based on the CVF, we compile a new dataset on corporate culture measures for the population of Compustat firms using text analysis. Specifically, we examine the item 7 of 10ks, the Management's Discussion and Analysis (MD&As). The premise of text analysis is that the words and language used in a company's MD&A reveal some information on the organizational culture it has developed over time. The text analysis approach has been employed by a growing number of finance and accounting papers to examine the tone and sentiment of corporate documents, newspaper articles, press releases, and investor message boards (see, for example, Antweiler and Frank, 2004; Tetlock, 2007; Li, 2008; Tetlock, Saar-Tsechansky, and Mackassy, 2008; Loughran and McDonald, 2011, and 2014; and Jegadeesh and Wu, 2013; Hoberg and Phillips, 2016 and 2018). We first identify a set of keywords and their synonyms for each of the cultural dimensions. We then compute the frequency with which these different sets of words occur in MD&As to measure cultural dimensions. In the final step, we match our corporate culture measures with accounting information from Compustat and a sample of mergers announced between 1995 and 2015 from SDC.

The construction of a large dataset of corporate culture measures (all US listed companies) and M&A deals (deals involving US listed companies between 1995 and 2015) enables us to empirical answer our main research questions: are companies culturally oriented inside their organization more careful in selecting target companies? and do these companies obtain better results with their deals? We show that companies oriented inside the organization are less likely to acquire other companies but obtain better results from their deals as captured by post-merger operating performance. Specifically, we find that one standard deviation shift in our cultural orientation variable from external to internal decreases the number of acquisitions announced by a company in a year by 5.7% of the average number of acquisitions announced by companies in our sample. This decrease in the number of acquisitions is also reflected in the post-merger operating performance of the acquiring companies which increases by 1.4%. This is a very large improvement in performance and represents 12% of the interquartile range of the difference in operating performance three years after the merger completion in our sample.

To face identification issues, in the first part of the paper we use different sets of fixed effects to control for time-varying characteristics of the states and industries in which the companies in our sample operate. We also use auditor fixed effects to control for persistent characteristics of auditors involved in the completion of accounting documents. While fixed effects improve the reliability of our estimates, we cannot rule out the possibility that unobserved factors at company level, unrelated to corporate culture, might drive our estimates. To rule out this possibility, we identify a shock to corporate culture arising from a policy intervention arguably unrelated with the strategy and the characteristics of the companies in our sample. Specifically, we argue that the introduction of paid family leave programs at state level shifts the culture of affected companies toward the internal dimensions of the CVF. This conjecture is based on the evidence surrounding paid family leave programs and it is also reflected in our data. We then replicate our results relying solely on this shock to corporate values. When we use our cultural orientation measures as dependent variables, we show that the introduction of paid family leave programs shifts the culture of affected companies toward the internal dimensions of the CVF by 4.08% approximately 9% of the interquartile range of our cultural variables. This shift in corporate culture is also reflected in companies' characteristics linked to an internal culture like lower R&D expenditure and firm value as captured by Tobin Q. We show that this exogenous shift to corporate culture decreases the number of mergers announced by affected companies and improves the post-merger operating

performance of those deals.

Our paper differs from past papers and thus contributes to the literature in a number of ways. First, to the best of our knowledge, our paper presents for the first-time large sample evidence in the finance literature showing that a corporate culture oriented inside the organization can affect the participation and improve the performance of M&A deals. Second, our paper is one of the first to use text analysis to construct measures of corporate culture based on MD&As for the population of Compustat firms, providing further insights into a growing field of research that values the role of corporate culture. Third, our paper is the first paper that leverages the activation of paid family leave programs at state level as a shock to corporate culture. This is important as it allows us to rule out the possibility that the links between corporate culture, merger participation and merger outcomes are driven by unobservable persistent characteristics of the companies in our sample. This is very important because corporate culture is notoriously very persistent (see Cronqvist, Low, and Nilsson, 2009) and the only way researchers have to disentangle corporate culture from other persistent features of listed companies is relying on a specific cultural shock and observe its effect on the company operations.

Our paper is inspired by and closely related to Ahern *et al.* (2015), who are the first to pinpoint the importance of national culture in cross-border M&As. Using three key dimensions of national culture (trust, hierarchy, and individualism) from the World Value Survey, Ahern *et al.* (2015) find that the volume of cross-border mergers is lower when countries are more culturally distant, and that a greater cultural distance in trust and individualism leads to lower combined announcement returns. Different from their study, we examine the role of corporate culture in domestic deals in the US, which is one of the largest M&A markets in the world.

The rest of this paper is organized as follows. Section II reports a detailed analysis of our empirical approach to measure corporate culture and proposes a preliminarily validation of our estimates. In section III, we develop our research hypotheses. Our econometric framework is dealt with in section IV. Section V discusses the empirical results and robustness checks and section VI concludes.

II. Measuring corporate culture

Corporate culture is an inherently difficult-to-measure concept. In this section, we illustrate our empirical approach to measure corporate culture: we report past papers (section II.1), we define culture in a sufficiently narrow way focusing on the Competing Value Framework (section II.2), we describe the text analysis

methodology used to capture corporate culture and the features of the resulting corporate culture variables (sections II.3 and II.4). Finally, we show that paid family leave programs at state level exogenously shift the culture of affected companies inside their organizations (sections II.5).

II.1   Past literature

A growing literature in finance examines the importance of national culture in a wide range of financial and investment outcomes (see Ahern *et al.*, 2015 for a review; Bryan, Nash, and Patel, 2015 on CEO pay design and Griffin, Guedhami, Kwok, Li, Shao, 2018 on corporate governance practices). The literature has almost completely overlooked the role of corporate culture in firm policies and performance (until recently, see discussion below), perhaps because the notion of corporate culture is somewhat nebulous, and it raises numerous measurement issues in empirical research (see Zingales, 2015). Nonetheless, a number of recent papers have made headway to explore the relation between corporate culture and firm policies using novel proxies for corporate culture.

Cronqvist, *et al.* (2009) find that a broad range of spinoffs' financing and investment policies appear to be more similar to the policies of their parents than to those of similar-sized industry peers, even in cases when the spinoffs are run by outsider CEOs. They measure corporate culture with firm fixed effects and indices on employee relations and diversity from the KLD Research & Analytic arguing that these findings are consistent with a culture-based explanation. Using the high annual rankings of the *Best Companies to Work for in America* by the Great Place to Work Institute to proxy for firms with a strong corporate culture, Bargeron, Smith, and Lehn (2012) find that firms with strong cultures make significantly smaller acquisitions than other firms, and acquirer announcement period returns are negative for deals made by strong culture firms. Using corporate executives' personal traits, such as reckless behavior or frugality, as a proxy for corporate culture of the firm that they manage, Davidson, Dey, and Smith (2015) find that firms whose CEOs and CFOs have a legal record are more likely to commit fraud, and firms with extravagant CEOs are associated with a loose control environment characterized by more frauds and unintentional material reporting errors. Using ties to multinationals as a proxy for the corporate culture of transparency, Braguinsky and Mityakov (2015) find that private Russian firms with closer ties to multinationals are associated with improved transparency of wage reporting and fewer accounting fraud. Using a novel proprietary data set based on surveys of the employees of more than 1,000 US firms developed by the Great Place to Work Institute, and employees' perception of top management

as trustworthy and ethical as a proxy for corporate culture, Guiso, Sapienza and Zingales (2015) find that corporate culture is strongly associated with firm value. Recently, two papers (Tremblay, 2016; Li, Mai, Shen, and Yan, 2018) examine the relation between corporate culture and M&A. Similarly to Fiordelisi and Ricci (2014), those papers also directly measure corporate culture using text analysis. Our paper differs from these studies as they mainly focus on cultural differences between the target and the acquirers, while we study how the probability of a merger and the merger outcome is related with the cultural focus of the acquirer.

II.2 The Competing Values Framework (CVF)

Culture is a broad concept and represents the implicit and explicit contracts that govern behavior within the organization (Bénabou and Tirole, 2002, 2006, and 2011; Tabellini, 2008). A first necessary step for our analysis is to define culture in a sufficiently narrow way within this framework so that it is possible to identify the link between culture and merger outcomes.

To measure corporate culture, we rely on the Competing Values Framework (CVF) developed by Quinn and Rohrbaugh (1983) and Cameron *et al.* (2006), and widely used in the organizational behavior literature (see, for example, Ostroff, Kinicki, and Tamkins, 2003; Hartnell, Ou, and Kinicki, 2011, and Schneider, Ehrhart, and Macey, 2013). Among the various frameworks on organizational culture developed in the management literature (e.g. Hofstede, 1991; O'Reilly, Chatman, and Caldwell, 1991; Denison, 1990; Deal and Kennedy, 1982; Cooke, 1987), the CVF has various pros. First and foremost, this framework fits very well modern corporations nowadays, as managers regularly confront issues such as how to be innovative, how to stay competitive, how to organize and deploy resources, and how to collectively change and grow as a company. These four values compete in a very real sense for a company's limited resources (as funding, time, and people). How managers respond to the tension created between these competing values will shape a company's culture, practices, products, and ultimately, how it innovates and grows. Second, the CVF identifies the underlying organizational dimensions that exist in most human and organizational activities. Third, the CVF is intuitive and aligns with the four biological determined drives in the brain (the need to bond, to learn, to acquire, and to defend: Lawrence and Nohria, 2002). Panels A and B of Table 1 summarize key attributes of the CVF's four cultural dimensions (Cameron *et al.*, 2006).

There are two *externally* oriented cultural dimensions. The first dimension is the *adhocracy* culture (also called the "create" culture in the CVF). This cultural dimension focuses on creating future opportunities in the marketplace through

innovation of a firm's products and services. Firms with the adhocracy culture encourage entrepreneurship, vision, and constant change, e.g., allowing for freedom of thought and action among employees so that rule breaking and reaching beyond barriers are common characteristics of this corporate culture. They aim to develop new technologies, innovative product-line extensions, radical new process breakthroughs, and innovations in distribution and logistics that redefine entire industries.

The second externally oriented dimension is the *market* culture (also called the "compete" culture in the CVF). This cultural dimension focuses on a firm's external effectiveness by pursuing enhanced competitiveness and emphasizing organizational effectiveness, fast response, and customer focus. Firms with market culture attach the highest priority to customers and shareholders and judge success based on indicators such as market value, revenues and meeting budgetary targets.

There are two *internally* oriented cultural dimensions. The first dimension is the *hierarchy* culture (also called the "control" culture in the CVF). This cultural dimension focuses on a firm's control mechanisms to create value through internal improvements in efficiency and implementation of better processes (e.g., by the extensive use of processes, systems, and technology) and quality enhancements (such as statistical process control and other quality control processes). Firms with hierarchy culture make extensive use of standardized procedures and emphasize rule reinforcement and uniformity.

The second internally-oriented dimension is the *clan* culture (also called the "collaborate" culture in the CVF). This cultural dimension focuses on employees and on various attempts to develop human competencies and strengthen organizational culture by building consensus inside the organization. The logic behind such focuses is that human affiliation produces positive affective employee attitudes directed toward the organization. Firms with clan culture develop cooperative processes and attain cohesion through consensus and broad employee involvement (e.g., clarifying and reinforcing organizational values, norms, and expectations, developing employees and cross-functional work groups, implementing programs to enhance employee retention, and fostering teamwork and decentralized decision making). These firms succeed because they hire, develop, and retain their human resource base. Table 1 summarizes the attributes of the four types of corporate culture.

Table 1
Introduction to the Competing Values Framework

This table provides an introduction to the Competing Values Framework originated in Quinn and Rohrbaugh (1983) and further developed in Cameron et al. (2006), the theoretical framework for the corporate cultural dimensions employed in this paper. Panel A presents the Competing Values Framework (CVF). Panel B reports the bag of words used in text analysis to capture each cultural dimension. The bag of words is obtained in two steps. First, we consider the synonyms suggested by Cameron *et al.* (2006) to identify each cultural dimension. Second, we further search additional synonyms of the words obtained in the first step in the Harvard IV-4 Psychosocial Dictionary. All words with the identified prefixes are part of the bag of words to measure corporate cultural dimensions. In this way, we are able to include as many words as possible with close meaning without reporting all of them. The bag of words is a updated version of the one reported in the panel C of the figure 1 of Fiordelisi and Ricci (2014): specifically, we eliminated words that may have an uncertain attribution to cultural values (as risk* predict*, budget*, charg*, deliver*, direct*, driv*, excellen*, invest*, mov*, scan*, succes* , conflict*, cultur*, expectat*, monit*, norm*,tension*) and added words that we think are reflective of a specific culture (as develop*, imagin*, inventive* research*, budget*, charg*, deliver*, direct*, driv*, excellen*, invest*, mov*, scan*, succes*, conflict*, cultur*, expectat*, monit*, norm*,tension, as commun*,contribut*, responsib*, willingness*).

Panel A – The Competing Values Framework

Flexibility and discretion

Clan **Thrust** Collaborate **Means** Cohesion, participation, communication, empowerment **Ends** Morale, people development, commitment	**Adhocracy** **Thrust** Create **Means** Adaptability, creativity, agility **Ends** Innovation and cutting-edge output
Hierarchy **Thrust** Control **Means** Capable processes, consistency, process control, measurement **Ends** Efficiency, timeliness, smooth functioning	**Market** **Thrust** Compete **Means** Customer focus, productivity, enhancing competitiveness **Ends** Market share, profitability, goal achievement

Internal focus and integration (left) — **External focus and differentiation** (right)

Stability and control

Source: Hartnell *et al.* (2011, p. 679), Figure 1, which is adapted from Figure 3.1 in Cameron *et al.* (2006)

Panel B – Bag of words (semantic fields) to measure corporate cultural dimensions

Cultural dimensions	Synonyms
Adhocracy	adapt*,begin*,chang*,creat*,develop*,discontin*,dream*,elabor*,entrepre*,envis*,experim*,fantas*, freedom*,future*,idea*,imagin*,init*,innovate*,intellect*,inventive*,learn*,new*,origin*,pioneer*,ra dic*,research*,start*,thought*,trend*,unafra*,ventur*,vision*
Market	achiev*,acquir*,acquis*,aggress*,analyst*,attack*,challeng*,client*,compet*,customer*,expand*,fast* ,goal*,growth*,hard*,market*,outsource*,perform*,position*,pressur*,profit*,rapid*,reputat*,result *,revenue*,satisfy*,share*,signal*,speed*,strong*,superior*,target*,value*,win*
Hierarchy	Administrat*,analys*,boss*,bureaucr*,caution*,certain*,chief*,conservat*,control*,cost*,detail*,disc ipline*,document*,efficien*,enhance*,fail*,inform*,logic*,measur*,method*,outcom*,predictab*,pr ocedur*,process*,productiv*,regular*,rule*,solv*,standard*,system*,uniform*
Clan	Capab*,cohes*,collab*,collectiv*,commit*,commun*,competen*,consens*,contribut*,cooperat*,co ordin*,decentr*,dialogue*,employ*,empower*,engag*,facilitator*,help*,hir*,human*,interper*,invol ve*,life*,longlast*,longterm*,loyal*,mentor*,mutual*,parent*,partic*,partner*,people*,responsib*,re tain*,reten*,skill*,social*,team*,teamwork*,train*,willingness*,workgroup*

Panel A of Table 1 yields important insights into the CVF. First, while aspects of all four cultural dimensions are usually present in any organization, one or two dimensions typically dominate. Second, some pairs of cultural dimensions share a common focus, while some other pairs have tensions or "competing values" between them. For example, adhocracy and market share an external focus, while market and hierarchy share a stability focus. Adhocracy tends to clash with hierarchy, and market tends to clash with clan. Such clashes exist because these cultural dimensions emphasize different forms of value creation.

II.3 Our text analysis approach

In order to measure CVF's four cultural dimensions (i.e., adhocracy, market, hierarchy, and clan), we use text analysis to capture, in a systematic and in as much as is achievable objective manner, the characteristics specific to a text (Stone, Dunphy, Smith, Ogilvie, 1966). Our content analysis is motivated by the notion that words and expressions used by members of an organization (labeled "vocabulary") represent the outcome of an organizational culture that has developed over time (Levinson, 2003).

The exact bag of words used for measuring each cultural dimension is adapted from Fiordelisi and Ricci (2014) and is provided in Panel 2 of Table 1. Starting from the words reported in the belief, value, artifact, and effectiveness criteria in Fiordelisi and Ricci (2014), we identify synonyms for each cultural dimension within the Harvard-IV-4 Psycho-Social Dictionary. We then drop words that occur in more than one bag of words for each cultural dimension in order to identify only unique words that capture a particular cultural dimension. For example, words like "begin, change, and envision" are taken as representing "ad-

hocracy" and a relatively high frequency of their use in corporate documents suggests that the firm has an adhocracy-oriented culture. Words like "achieve and expand" are taken as representing "market," words like "caution, conservation, and efficiency" are taken as representing "hierarchy," and words like "capability, collective, and cooperation" are taken as representing "clan." Loughran and Mc-Donald (2011) note that the Harvard-IV-4 Psycho-Social Dictionary is a commonly used source of word classification, in part because its composition is beyond the control of the researcher and the possible impact of researcher subjectivity is significantly reduced.

Following Loughran and McDonald (2011), we first download from the Edgar website <www.sec.gov> the 10-K reports and 10-K405 related to the period 1994-2015 (due to data availability, as Edgar only started to cover the above documents since 1994). We focus on the item 7 of the documents, the Managerial Discussion and Analysis (MD&A), and we include only one filing per firm in each calendar year. Finally, we use a bag of words method that requires us to parse the MD&As into vectors of words and word counts. The raw score for each cultural dimension is the frequency of its synonyms (as listed in Panel B of Table 1) normalized by the total number of words in the MD&A.

To identify the cultural orientation for each firm-year, we construct two variables: external-internal and flexibility-stability. We first rescale the raw scores to range between 0 and 1 based on the industry-year distribution. Specifically, for each raw score, we calculate the maximum and the minimum in each year in each industry (three - digit SIC code). We then rescale each variable as:

$$scaled\ culture_{ij,t} = \frac{raw\ score_{ij,t} - \min_{jt}(raw\ score_{ij,t})}{\max_{jt}(raw\ score_{ij,t}) - \min_{jt}(raw\ score_{ij,t})} \tag{1}$$

where raw score is the raw count of the words in the bag of words of each cultural dimension (market, hierarchy, adhocracy, and clan) and $\min_{jt}(raw\ score_{ijt})$ is the minimum raw score in the year and in the industry where the company operates. We then construct four variables: Internal (scaled score of clan plus scaled score of hierarchy), External (scaled score of market plus scaled score of adhocracy), Flexibility (scaled score of clan plus scaled score of adhocracy), Stability (scaled score of market plus scaled score of hierarchy). Finally, the variables capturing the cultural orientation of each firm in each year in our sample is given by:

$$External - Internal_{it} = \frac{External_{it} - Internal_{it}}{External_{it} + Internal_{it}} \quad \text{for } External_{it} + Internal_{it} \neq 0 \tag{2}$$

$$Flexibility - Stability_{it} = \frac{Flexbility_{it} - Stability_{it}}{Flexbility_{it} + Stability_{it}} \text{ for } Flexbility_{it} + Stability_{it} \neq 0 \tag{3}$$

These measures range between -1 and 1 and capture the cultural orientation of companies at firm-year level. In our tests, we use these measures to examine how corporate culture influences merger participation and how it affects the outcome of a merger deal.

II.4 Features of our culture measures

We estimate cultural scores for each company in our sample by the means of text analysis. One possible difficulty with our approach is that listed companies may tend to write official documents to "cater" for investors' expectations and, consequently, most official documents exhibit significant similarity. This will bias against our being able to detect any differences in culture in the cross-section. Nonetheless, in panel A of Table 2 we document that there is significant cross-section heterogeneity among companies along the four Cameron *et al.* (2006) corporate culture dimensions as captured by the standard deviations of our raw corporate culture estimates. Specifically, the coefficient of variation is greater than 50% for clan and adhocracy cultures and it is around 33% for market and hierarchy cultures.

Table 2
Corporate culture dimension estimates

Panel A reports the descriptive statics for the four cultural dimensions by Cameron et al. (2006) investigated in our study. This table shows the raw count of words resulting from the analysis of the MD&As before they are scaled using Equation (1). We drop from the sample all MD&As with less than 250 words. All values are expressed in percentage. Panel B shows the persistency of our corporate culture measures. Specifically, column (1) shows the portion of variance explained by firm fixed effects for each cultural dimension. Column (2) reports the F-test for joint significance of all firm fixed effects in a regression model including only firm fixed effects and a constant. Panel C illustrates the correlations between our cultural orientation variables calculated using equations (2) and (3) and some important characteristics of the companies in our sample. Superscripts *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Panel A – Raw Scores descriptive statistics

Collaborate/Clan (COL)	Mean	0.4859
	Standard Deviation	0.2564
	Min	0.0000
	Max	1.4706
Compete/Market (COM)	Mean	2.7104
	Standard Deviation	0.8715
	Min	0.8798
	Max	5.1769
Control/Hierarchy (CON)	Mean	2.0249
	Standard Deviation	0.6664
	Min	0.6576
	Max	4.1498
Create/Adhocracy (CRE)	Mean	1.4242
	Standard Deviation	0.7817
	Min	0.2625
	Max	4.1860

Panel B – Persistency of our scaled corporate culture measures

	Portion of variance explained by Firm Fixed effects	Joint significance (F-test) of Firm Fixed effects
Clan	0.4883	5.8475
Adhocracy	0.7104	13.4577
Hierarchy	0.4782	5.6533
Market	0.5320	6.7726

Panel C – Correlations between cultural orientations and firm characteristics

	(1)	(2)	(3)	(4)
	ROA	Leverage	R&D	Tobin Q
External-Internal	-0.074***	-0.110***	0.144***	0.087***
Flexibility-Stability	-0.020***	0.001	0.103***	0.027***

In panel B of Table 2, we show that one drawback of our measures is that they are very persistent over time. In order to gain additional insight into the persistency of our measures of corporate culture, we estimate the portion of variance explained by firm fixed effects for each cultural dimension and use the relative F-test for the relevance of firm fixed effects in each dimension. The results reported in panel C of Table 2 clearly show that our measures are very persistent and firm fixed effects explain a large portion of the variation of our corporate culture scores. While the persistency of corporate culture is in line with the existing literature (Cronqvist *et al.*, 2009), it creates identification issues as it hinders the possibility to augment our regression models with firm fixed effects. In panel C of Table 2, we present the pairwise correlations between our cultural orientation variables and some important characteristics of the companies in our sample. As shown in the first row of panel C our cultural orientation variable *external-internal* is strongly correlated with R&D expenditure. The correlation is 14% and it is statistically significant at 1% (p<0.01). As expected, the variable *external-internal* also shows a positive and statistically significant correlation with the market value of the companies in our sample as captured by Tobin Q. This evidence is in line with the theoretical prediction of the Competing Values Framework. The two characterizing corporate values of an externally oriented company are adhocracy and market suggesting a focus toward innovation and market value. The correlations between the cultural orientation *flexibility-stability*, R&D expenditure and market value of companies in our sample are largely less

pronounced. Notably, another important characteristic of the cultural orientation *flexibility-stability* is that the correlation with the leverage of companies in our sample is significantly less pronounced. Specifically, while there is a negative and significant correlation between our variable *external-internal* and leverage, in our sample this correlation is not statistically significant for the cultural orientation variable *flexibility-stability*.

II.5 The effect of Paid family leave programs on corporate culture

To isolate a shift in the cultural orientation of companies in our sample, we exploit the activation of paid family leave programs in California (2004), New Jersey (2009) and Rhode Island (2014). The pivotal experiment about paid family leave was conducted in California. The literature on the effect of this program suggests that it had a strong impact on the behavior of young parents in California. Das and Polachek (2015) show that paid family leave programs affected the participation of young women to the labor market. Specifically, using a difference in difference estimator, they show that the labor force participation rate, the unemployment rate and the duration of unemployment among young women increased in California compared to men. Bedard and Rossin-Slater (2016) analyzed the entire universe of applications for paid family leave in California. They show that the program took off in 2005 and from that year there were more than 100,000 applications per year with little effect of large economic shocks such as the great recession in 2008. They find that an increase in the share of employees taking leave is associated with a decrease in the per worker quarterly wage bill of employers. This result is also in line with Appelbaum and Milkman (2011) showing that the large majority of companies temporarily assign the work of employees on leave to other members of their existing staff and do not replace employees on leave. From a corporate culture perspective this is very important because, if employees are not replaced, they must be temporarily covered by other workers and a higher number of family leaves should translate into higher collaboration within the organization. Furthermore, managers may also exercise a greater control on the internal processes to ensure a smooth and cost-effective continuation of the company's operations when one or more employees are on parental leave. These changes will then shift the culture of affected companies toward the internal dimensions of the CVF collaboration and control.

We formally test the hypothesis that paid family leave programs exogenously shifted the cultural orientation of affected companies toward the inside of the organization in panel A of Table 3 where we use our cultural scores as dependent

variables and we test the impact of paid family leave programs on the corporate culture of listed firms in our sample. Specifically, we consider as affected, companies headquartered in California, New Jersey and Rhode Island. These states introduced paid family leave programs respectively in 2004, 2009 and 2014. These programs are generally launched in the second half of the year and as outlined in Bedard and Rossin-Slater (2016) they do not fully take off in the first six months. Therefore, our treatment periods begin in the year after the introduction, more specifically in 2005 in California, in 2010 in New Jersey, and in 2015 in Rhode Island. We exclude from the analysis the year of the program activation in the affected states.

Table 3
The effect of paid family leave programs on corporate culture

In panel A we show the effect of the approval of paid family leave programs on corporate culture. The dependent variables are the cultural orientation of companies in our sample as defined in equation (2) and (3). The variable Cultural Shock is an indicator variable, which takes the value of one in states that have an active paid family leave program. More specifically, the variable shock is equal to one in California from 2005, New Jersey from 2010 and Rhode Island in 2015. The variable Shock minus 1 takes the value of one in the year before the activation of paid family leave in each state. Observations from treated states in the year of the activation of paid family leave programs are excluded from the analysis. In panel B we show the effect of paid family leave on some companies features related to an externally-oriented corporate culture. Definitions of the variables are provided in Appendix 1. All specifications include Industry (3-digit SIC codes) times year fixed effects, firm and auditors fixed effects. All variables are winsorized at 1% level. Robust standard errors (clustered at state level) are reported in parentheses.

Panel A – The effect of the approval of paid family leave on corporate culture

	(1) External- Internal	(2) External- Internal	(3) Flexibility- Stability	(4) Flexibility- Stability
Cultural Shock	-0.0397**	-0.0408**	0.0159	0.0163
	(0.0175)	(0.0181)	(0.0138)	(0.0141)
Shock minus 1		-0.00719		0.00243
		(0.0120)		(0.0116)
Company FEs	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes
Industry×Year FEs	Yes	Yes	Yes	Yes
Observations	34,145	34,145	34,145	34,145

Panel B – The effect of the approval of paid family leave on company characteristics correlated with the external dimensions of the CVF

	(1)	(2)	(3)	(4)
	R&D	R&D	Tobin Q	Tobin Q
Cultural Shock	-0.0171**	-0.0173**	-0.276***	-0.288***
	(0.00720)	(0.00675)	(0.0886)	(0.0928)
Shock minus 1		-0.00114		-0.0670
		(0.00639)		(0.0651)
Company FEs	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes
Industry×Year FEs	Yes	Yes	Yes	Yes
Observations	19,974	19,974	28,019	28,019

In panel A of Table 3, we show the effect of the activation of paid family leave programs on the cultural orientation of affected companies: As shown in columns (1) and (2), the variable cultural shock, which captures the activation of paid family leave programs, has a negative and statistically significant effect on our variable external-internal. The column (2) also shows that the control sample is an appropriate counterfactual for our analysis: the variable minus 1 (a variable taking the value of 1 in the affected states the year before the activation of paid family leave programs) is not statistically significant suggesting that corporate culture differences between affected companies and companies in the control sample followed a parallel trend before the activation of paid family leave programs. Results in the columns (3) and (4) show that paid family leave programs did not have any effect in shifting the orientation of companies toward flexibility or stability. These results further validate our corporate culture measures and identify a specific clean cultural shock that is not connected to firm business strategies or endogenous choices. In panel B of Table 3, we also show that the activation of paid family leave had an effect on the companies in our sample which is in line with a cultural shift. Specifically, we find that the cultural shock had a negative impact on R&D expenditure and on the market valuation of affected companies, this effect further reinforces the evidence reported in the panel A of Table 3 and suggests that the activation of paid family leave programs at state level shifted the culture of affected companies toward the internal dimensions of the CVF. Notably, as shown in columns (2) and (4) of panel B of Table 3, differences in market values and R&D expenditure between affected

companies and the control sample was stable in the year before the activation. Therefore, in the following sections we first estimate our coefficients using our cultural scores resulting from text analysis of MD&As, we then use the exogenous shock to corporate culture to validate our main findings.

III. Hypotheses development

In their seminal paper, Moeller, Schlingemann, and Stulz (2005) show that a large portion of deals announced by listed companies in the US between 1998 and 2001 destroyed shareholder value. Many papers have then tried to explain the value destruction phenomenon (Malmendier and Tate, 2008; Dong, Hirshleifer, Richardson and Teoh, 2006; Kempf, Manconi and Spalt, 2017); the belief that corporate culture may be, at least in part responsible for the lackluster performance of many deals is wide shared among academics (Larsson, Brousseau, Driver, Sweet, 2004; Kusstatscher and Cooper, 2005) and practitioners in the M&A industry. In spite of this common belief the majority of mergers are concluded without a specific plan to integrate the cultures and the values of merging companies (Bouwman, 2013). This evidence is not surprising, if we consider that many deals are announced by companies with a cultural orientation outside the organization, often solely concerned with cost savings, market shares, profitability or product synergies. We argue that corporate culture influences the focus of the acquiring companies in the acquisition. Companies culturally oriented outside the organization may prioritize marketable objectives and may overlook the effect that contrasting corporate values and cultures may have on the post-merger integration process. Contrarily, companies oriented inside their organization are more aware of their cultural values and will put the emphasis not only on product synergies and marketable outcomes but also on the integration of the values of target company inside the acquirer culture. Our first hypothesis is that companies oriented inside their organization select the target company more carefully, are less likely to acquire other companies and conclude a lower number of mergers.

Hypothesis 1 (H_1): Corporate culture influences the probability and the frequency a company participates to the merger market as an acquirer.

While the effect that an internally oriented culture may have on the probability of being an acquirer and on the number of acquisitions announced is straight-forward, the effect of corporate culture on the post-merger operating performance is more ambiguous. Companies with an externally oriented culture tend to focus on market variables and may conclude a deal with the sole aim of achieving cost-savings or improving scale economies. This alone may have a positive impact

on the post-merger operating performance. However, achieving the promised synergies in the post-merger integration process may not be a simple task. Maksimovic, Phillips, and Prabhala (2011) and Sheen (2014) show that after the completion of a merger, the companies involved in the deal go through complex reorganizations of their assets. The post-merger management is a difficult process. The integration of cultures and values of merging companies is pivotal in assuring the materialization of the expected synergies. Companies with an externally oriented culture may put too much emphasis on market-related objectives and may overlook their internal features assuming that the integration of values and cultures will automatically happen over time. Conversely, companies with an internally oriented culture will be less focused on market-related aims, and more aware of their internal values and cultures. If this awareness is critical for the success of the post-merger integration process, an internally oriented corporate culture may also have an effect on the post-merger operating performance. Thus, our second research hypothesis is:

Hypothesis 2 (H_2): An internally oriented corporate culture affects the outcome of a merger, as captured by post-merger profitability.

IV. Empirical approach

IV.1 Data

We use two main sources of data. First, we collect the universe of COMPUSTAT/CRSP non-financial companies (we exclude companies with SIC codes from 6000 to 6999) for which we were able to estimate our cultural scores and a sample of merger deals. Second, we collect mergers data from Thomson Financials SDC according to the following criteria: first, we collected all US deals announced from January 1, 1995 to December 31, 2015; second, we keep all deals coded as a merger, an acquisition of assets, or acquisition of majority interest. We also require the acquirer to be a US public firm listed on the AMEX, NYSE or NASDAQ. Third, we retain an acquisition if the acquirer owns less than 50% of the shares of the target firm before the acquisition, 100% of the shares of the target firm after the deal. Next, we keep only deals with a value greater than $1 million (1990 $) and the ratio of the book value of transaction over the book value of the acquirer's total assets (i.e. relative size) must beat least 1%. In final, we merge our sample of M&A deals with the intersection of Compustat/CRSP and our dataset on corporate culture dimensions. These steps result in a sample of 4,970 acquirers.

Descriptive statistics for the entire sample of companies with non-missing cultural orientation variables are reported in Table 4 in panel A. Panel B shows descriptive statistics of the characteristics of the deals in our sample and of the post-merger operating performance.

Table 4
Summary statistics

This table presents summary statistics. The sample period is 1995 to 2015. Panel A reports descriptive statistics of the entire Compustat sample of non-financial companies for which we have a non-missing corporate culture variable. Panel B reports descriptive statistics of the sample used for the estimations on post-merger operating performance. Definitions of the variables are provided in Appendix 1.

Panel A – Compustat Universe with non-missing culture

	Mean	Median	SD	Minimum	Maximum
	(1)	(2)	(3)	(4)	(5)
Acquirers	0.1374	0.0000	0.3443	0.0000	1.0000
Number of Acquisitions	0.1862	0.0000	0.5877	0.0000	30.0000
Number of private target acquired	0.1015	0.0000	0.4346	0.0000	28.0000
External-Internal	0.0193	0.0326	0.3941	-1.0000	1.0000
Flexibility-Stability	-0.0539	-0.0541	0.3725	-1.0000	1.0000
Total assets	5.4529	5.3209	1.9004	1.0828	10.5745
ROA	-0.0812	0.0231	0.3308	-1.9540	0.2730
Leverage	0.5000	0.4801	0.2819	0.0464	1.5745
R&D	0.1093	0.0494	0.1659	0.0000	0.9521
Tobin Q	2.0810	1.4478	1.8518	0.5405	11.7858

Panel B – Deal characteristics and post-merger operating performance

	Mean	Median	SD	Minimum	Maximum
	(1)	(2)	(3)	(4)	(5)
All cash	0.2977	0.0000	0.4573	0.0000	1.0000
All stock	0.1727	0.0000	0.3781	0.0000	1.0000
Same industry	0.6244	1.0000	0.4843	0.0000	1.0000
Private	0.5301	1.0000	0.4992	0.0000	1.0000
Relative size	0.3342	0.1087	1.3014	0.0100	61.8508
ROA2y	-0.0500	-0.0190	0.2880	-2.1116	2.1545
ROA3y	-0.0444	-0.0212	0.2750	-2.2270	2.0029

Table 4 shows that on average companies in our sample are involved in 0.18 mergers per yar as acquirers. The average number of acquisitions with a private target is about 0.10. Both the average and the median of our cultural variable External-Internal are positive suggesting that the majority of companies in our sample are culturally oriented outside their organizations. The average and median of our cultural variable Flexibility-Stability is instead negative indicating an average orientation toward the values of the CVF underpinning a flexible culture.

IV.2 Econometric approach

Our analysis develops into two steps. In the first step, we examine deal origination by estimating the effect of corporate culture on probability of becoming an acquirer and on the number of announced deals. In this test we use the entire universe of Compustat/CRSP companies for which we have non-missing culture:

$$Y_{i,j,s,au,t} = \alpha + \beta_1 External - Internal_{ij,s,au,t-1} + \beta_2 Flexibility - Stability_{ij,s,au,t-1}$$
$$+ I_{j,t} + s_{s,t} + a_{au} + e_{i,j,s,au,t}$$

$$(4)$$

The dependent variable, $Y_{i,j,s,au,t}$ is equal to one if firm *i* operating in industry j, headquartered in state s and audited by auditor au is an acquirer in year t, and zero otherwise or is equal to the number of mergers announced by company i in year t. The variables are External-Internal and Flexibility-Stability are discussed in Section II.3. and are calculated using equations (2) and (3). We estimate equation (4) with and without firm characteristics (the log of total assets, ROA and leverage) to appreciate the effect of endogenous controls on the estimation of the coefficients of our cultural orientation variables. All variables used in the paper are described in the Appendix A. In all our estimates, we use different sets

of fixed effects to control for time-varying unobservable characteristics at Industry $(I_{j,t})$ and State level $(s_{s,t})$. Since our cultural variables may also be affected by unobservable characteristics of the company auditors, we also augment our regression models with auditor fixed effects (a_{au}). These fixed effects improve the reliability of our estimates, but do not help to exclude the possibility that unobserved characteristics at company level affect our estimates. To rule out this possibility, we rely on the activation of paid family leave programs and estimate the following equation.

$$Y_{i,j,s,au,t} = \alpha + \beta_1 Cultural\ Shock_{s,t} + I_{j,t} + f_i + a_{au} + e_{i,j,s,au,t} \qquad (5)$$

Where the variable Cultural shock captures the presence of an active family leave program in the state where the company operates. Following the indication of Gormley and Matsa (2016), we avoid the use of endogenous control variables that may affect the link of interest and control for firm characteristics using fixed effects at firm, industry-year and auditor level. We also test the identification assumption implicit in equation (5), the parallel trend assumption, using our variable cultural shock minus 1. This variable takes the value of 1 in California in 2003, in New Jersey in 2008 and in Rhode Island in 2013 and tests the stability of the difference between companies in the treated sample and companies in the control sample in the year before the activation of paid family leave.

In the second step, we examine the effect of culture orientation on the post-merger operating performance:

$$ROA\ (k)_{ij,s,au,t} = \alpha + + \beta_1 External - Internal_{ij,s,au,t-1}$$
$$+ \beta_2 Flexibility - Stability_{ij,s,au,t-1} + Firm\ Characteristic_{i,t-1}$$
$$+ Deal\ Characteristic_{i,t} + I_{j,t} + s_s + a_{au} + e_{ij,t} \qquad (6)$$

where $ROA\ (k)$ is the difference between the performance of the acquiring company one year before the announcement and k (equals to 2 or 3) years following the merger completion. We present all our estimates with different sets of fixed effects to rule out the possibility that our results may be driven by shocks at industry or state level. These fixed effects improve the reliability of our estimates, but do not help to exclude the possibility that transitory shocks at company level affect our estimates. We also estimate equation (6) replacing our cultural variable with the exogenous shift in corporate culture generated by the activation of paid family leave programs to rule out any concern of omitted variable and reverse causality in our analysis.

V.   Results

V.1   Which firms are the acquirer firms?

Table 5 presents coefficient estimates from Equation (4). In column (1), we report results when we regress an indicator variable identifying each acquirer or a variable containing the number of acquisitions in which a company is involved as an acquirer on the external-internal and flexibility-stability cultural orientation variables. In column (2), we add some endogenous time-varying control variables at company level to appreciate the effect of those controls on our estimates. We find that firms oriented toward the internal dimensions of the CVF are less likely to become acquirers. Our results also indicate that a cultural orientation toward flexibility has a negative effect on the probability of being involved as an acquirer in a merger deal. This result support our first research hypothesis (H_1). Endogenous control variables display a moderate impact on the size of our coefficients but improves the precision of our estimates.

Table 5
Which firms are the acquirers?

Panel A reports coefficient estimates from models (4) and (5). Singletons are excluded from regression models which are estimated using the methodology presented in Correia (2016) to accommodate for multiple fixed effects. Definitions of the variables are provided in Appendix 1. All control variables are winsorized at 1% level and lagged by one year. In Panel B, the variable Cultural Shock is an indicator variable taking the value of 1 if a company is headquartered in a State with an active paid family leave program. Specifically, the variable cultural shock is one for companies in California from 2005, companies in New Jersey from 2010 and in Rhode Island in 2015. The variable Cultural Shock minus 1 takes the value of one in the year before the approval of paid family leave in each state. Observations from treated states in the year of the activation of paid family leave programs are excluded from the analysis. In Panel C, we report a placebo test: the variable Cultural Shock placebo takes the value of one in states that share a border with a state that has an active paid family leave program. Companies from California, New Jersey or Rohde Island are excluded from the analysis in panel C. Fixed effects are specified below each column. Robust standard errors clustered at industry level in panel A and at state level in panel B and C are reported in parentheses. Superscripts *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Dependent variable =	(1) Acquirer	(2) Acquirer	(3) Number of Acquisitions	(4) Number of Acquisitions
External-Internal	0.0119*	0.0169***	0.0269***	0.0355***
	(0.00634)	(0.00587)	(0.00880)	(0.00831)
Flexibility-Stability	-0.0291***	-0.0282***	-0.0644***	-0.0638***
	(0.00790)	(0.00744)	(0.0148)	(0.0143)
Log(Total assets)		0.0259***		0.0421***
		(0.00320)		(0.00541)
ROA		0.0278***		0.0171*
		(0.00634)		(0.00954)
Leverage		-0.0734***		-0.104***
		(0.0173)		(0.0259)
Industry×Year FEs	Yes	Yes	Yes	Yes
State×Year FEs	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes
Observations	30,865	30,708	30,865	30,708

Panel B – Cultural shock

	(1) Acquirer	(2) Acquirer	(3) Number of Acquisitions	(4) Number of Acquisitions	(5) Number of private target acquired	(6) Number of private target acquired
Cultural shock	-0.0327***	-0.0331***	-0.0389***	-0.0394***	-0.0313***	-0.0307***
	(0.00813)	(0.00787)	(0.0115)	(0.0111)	(0.00925)	(0.00927)
Cultural Shock minus 1		-0.00290		-0.00370		0.00384
		(0.0142)		(0.0177)		(0.00813)
Industry×Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	34,145	34,145	34,145	34,145	34,145	34,145

Panel C – Placebo test

	(1)	(2)	(3)	(4)	(5)
	Acquirer	Number of Acquisitions	Number of private target acquired	External-Internal	Flexibility-Stability
Cultural shock	-0.00128	0.00765	0.0192	-0.0126	0.00528
	(0.0145)	(0.0179)	(0.0142)	(0.0288)	(0.0177)
Industry×Year FEs	Yes	Yes	Yes	Yes	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes	Yes
Observations	26,600	26,600	26,600	26,600	26,600

In columns (3) and (4), we follow the approach of Gormley and Matsa (2016) and investigate the effect of our cultural variables on the number of acquisitions announced by the companies in our sample. The estimates are consistent with results reported in the first two columns of panel A of Table 5: a cultural shift toward the internal dimensions of the CVF has a negative effect the number of mergers announced by a company in a year. Specifically, a one standard deviation negative shift in our variable External-Internal decreases the number of acquisitions announced by companies in our sample by 5.7% of the average number of acquisitions announced by companies in our sample. In the last two columns we investigate how corporate culture affects the number of acquisitions where the target is a private company. This result also suggests that companies more oriented inside their organization tend to be more careful in selecting the target companies in their merger deals and avoid acquiring private companies on which public information is scarcer. Our findings (not directly related to corporate culture) are that larger firms, and firms with better operating performance and lower leverage are more likely to be acquirers: these results are consistent with prior work in M&As (see, for example, Moeller *et al.*, 2004; Gaspar *et al.*, 2005; and Bena and Li, 2014).

In all models reported in the panel A of Table 5 and above discussed, we use different sets of fixed effects to rule out the possibility that our results are driven by transitory shocks at industry, state level or auditor level. Unfortunately, we cannot use firm fixed effects in our regression models given the high persistency of our measures of corporate culture. To overcome this issue, in panel B of Table 5, we then take advantage of the exogenous shift in the cultural orientation of companies in our sample generated by the activation of paid family leave programs in California, New Jersey and Rhode Island and we augment our regression models

with firm fixed effects. As shown in panel A of Table 3, the activation of paid family leave programs significantly shifted the cultural orientation of affected companies toward the internal dimensions of the CVF. The results reported in panel B of Table 5 show that paid family leave programs significantly decrease the probability of being involved in a merger deal as an acquirer. In line with results reported in panel A of Table 5, our results in the panel B show how a shift in the cultural orientation toward the internal dimensions of the CVF decreases the probability of being involved in a merger as an acquirer, the number of mergers announced by companies in our sample and the number of acquisitions where the target company is private. Specifically, the shift toward the internal dimensions of the CVF generated by the activation of paid family leave programs at state level decreases the number of mergers announced by affected companies by 3.89%, using the average number of mergers announced by companies in our sample as a benchmark, this represents a very large decrease of approximately 21%.

In panel C of Table 5, we also present a placebo test where we exclude from the sample the states that actually implemented paid family leave programs: California, New Jersey and Rhode Island and we identify as treated, states that share a border with the above states in the years after the activation of paid family leave programs. More specifically, we use as treated states Oregon, Nevada and Arizona from 2005. New York, Delaware and Pennsylvania from 2010. We also characterize as treated Connecticut and Massachusetts in 2015. As shown in panel C of Table 5 none of the estimated coefficients is statistically significant suggesting that the effect estimated in panel B are in fact caused by the approval of paid family leave programs. In the next section we then investigate the effect of corporate culture on the post-merger operating performance.

V.2   Corporate culture and deal performance

To investigate whether companies with an internal corporate culture create more value with their merger deals, we examine the post-merger operating performance of the acquirers (measured by the difference between the acquirer operating performance one year before the deal announcement and two or three years after the deal completion).

Table 6
Long-run Performance

Panel A presents coefficients estimates from OLS and fixed effect models where the dependent variable is the post-merger operating performance of the acquirers. Specifically, ROA2y stands for the difference between the return on assets of the acquiring company one year before the deal announcement and two years after the deal completion. ROA3y stands for the difference in the return on assets of the acquiring company one year before the deal announcement and three years after the deal completion. Singletons are excluded from fixed effects models which are estimated according to Correia (2016) to accommodate for multiple sets of fixed effects. Fixed effects vary across models and are specified below each column. Definitions of the variables are provided in Appendix 1. All control variables are winsorized at 1% level and taken one year before the deal announcement. In panel B we show the effect of the activation of paid family leave programs on post-deal operating performance. Specifically, the variable Cultural Shock is an indicator variable taking the value of 1 if the company is headquartered in a State with an active paid family leave program in the completion year. Standard errors reported in parentheses are clustered at industry level in panel A and at state level in panel B. Superscripts *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

Panel A – Post merger accounting performance

Dependent variable =	(1) ROA2y	(2) ROA3y	(3) ROA2y	(4) ROA3y
External-Internal	-0.0167	-0.0363***	-0.0150	-0.0376**
	(0.0101)	(0.0114)	(0.0200)	(0.0172)
Flexibility-Stability	-0.00518	-0.00193	-0.00835	-0.0146
	(0.0134)	(0.0127)	(0.0220)	(0.0163)
Log(Total assets)			-0.00817	-0.00121
			(0.00500)	(0.00493)
Leverage			0.275***	0.229***
			(0.0447)	(0.0284)
All Cash			0.0164	0.00139
			(0.0132)	(0.0144)
All Stock			0.0489	0.0227
			(0.0298)	(0.0204)
Same industry			-0.0106	-0.00725
			(0.0188)	(0.0183)
Private Target			-0.0114	-0.00906
			(0.0123)	(0.00829)
Relative Size			-0.0247***	0.00223
			(0.00737)	(0.00299)
Industry FEs	Yes	Yes	No	No
State FEs	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	No	No
Industry ×Year FEs	No	No	Yes	Yes
Observations	3,490	3,485	2,957	2,955

Panel B – Post merger accounting performance: cultural shock

	(1) ROA2y	(2) ROA3y	(3) ROA2y	(4) ROA3y
Cultural Shock	0.0698***	0.0266*	0.0494**	-0.00175
	(0.0187)	(0.0138)	(0.0219)	(0.0190)
Industry FEs	Yes	Yes	No	No
State FEs	Yes	Yes	Yes	Yes
Auditors FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	No	No
Industry ×Year FEs	No	No	Yes	Yes
Observations	3,490	3,485	2,969	2,967

As shown in Table 6, we find that cultural orientation toward the internal dimensions of the CVF increases the post-merger operating performance of the acquiring company. The increase is consistent across our fixed effects models and shows that the difference between the performance of the acquiring company one year before the announcement and three years after the deal completion increases substantially when the acquiring company has a culture oriented toward the internal dimensions of the CVF. Specifically, results reported in column (2) suggest that a one standard deviation shift of our cultural orientation variables toward the internal dimensions of the CVF is associated with an increase of the post-merger operating performance of 1.4%, this increase is economically very large and represents approximately 12% of the interquartile range of our post-deal operating performance measures.

In panel B of Table 6, we estimate the effect of a cultural shift on the peruse an exogenous shift in corporate culture to identify the effect of corporate culture on deal performance. Consistently with results in panel A, the shift of cultural orientation of listed companies toward internal CVF dimensions has a positive effect on deal performance. All in all, our evidence suggests that companies with an internally oriented culture tend to carefully plan and execute their merger: these companies participate less to the merger market and obtain better results from their acquisitions.

VI. Conclusions

Anecdotal evidence suggests that many deals are concluded without a plan to integrate the culture and the values of merging companies. This evidence is in apparent contrast with the common belief that corporate culture is a pivotal driver for the success of post-merger restructuring process. One possible explanation is that mergers are generally concluded with the main intent of achieving product synergies (Hoberg and Phillips, 2010) and aggressive price reduction achievable through scale economies and cost savings (Sheen, 2014). Put it differently, the focus of acquirer companies pursuing a merger is often on the outside of the organization. In this paper, we examine whether companies culturally oriented outside their organization announce an excessive number of deals which are often less successful than the deals announced by their peers culturally oriented inside their organization.

By using a large sample of mergers announced between 1995 and 2015, we find evidence confirming our conjectures. We leverage the Competing values framework to disentangle companies internally oriented from companies

culturally oriented outside their organizations by the means of content analysis. We examine the item 7 of the 10Ks of all listed companies in US. We show that companies culturally oriented inside their organizations are less likely to become acquirers than companies with an externally oriented culture. They announce a lower number of mergers and are less likely to acquire private companies. This evidence suggests that internally oriented companies are more careful in selecting their target companies. We also show that this stricter selection process has a positive effect on the merger outcome. Specifically, our results indicate that such culture is positively connected to the profitability of the acquiring companies in the years immediately after the deal completion. We show that those results are not driven by transitory shocks at State or industry level. We also leverage an exogenous shock to corporate culture, the activation of paid family leave at state level, to validate our results. We show that paid family leave programs at state level shift the culture of affected companies toward the internal dimensions of the Competing value Framework. We then confirmed all our main results replacing our cultural orientation variables with this exogenous cultural shock.

We believe that our paper provides a useful first step in exploring in some depth the relationship between corporate culture mergers participation and outcomes, an often discussed but little-researched topic. Our results have important policy information: we provide empirical evidence based on large sample that corporate culture is critical for both the selection of the target company and the merger outcomes in the medium run. Our results suggest that companies with an externally oriented corporate culture may conclude an excessive number of mergers that may subsequently result in a lackluster operating performance. Hence, shifting the corporate culture of listed companies inside their organizations has positive implication for the merger market. We also, outline a policy tool that may be used to facilitate this shift of corporate values. We show that paid family leave programs shift the cultural values of affected companies toward more collaboration and control. All in all, our results show how corporate culture affects the merger activities of listed companies and how policymakers may facilitate a shift of corporate values which may have positive implications for the merger market.

References

Appelbaum E., Milkman R., 2011. Paid Family leaves pay off in California. *Harvard Business Review,* January 19, 2011. *Retrieved* from <https://hbr.org/2011/01/paid-family-leave-pays-off-in/>.

Ahern, K.R., Daminelli, D., Fracassi, C., 2015. Lost in translation? The effect of cultural values on mergers around the world, *Journal of Financial Economics* 117, 165-189.

Antweiler, W., Frank, M.Z., 2004. Is all that talk just noise? The information content of Internet stock message boards, *Journal of Finance* 59, 1259-1293.

Bargeron, L., Smith, J., Lehn, K., 2012. Corporate culture and M&A activity, University of Pittsburgh working paper.

Bedard, K., and Rossin-Slater, M. (2016). The economic and social impacts of paid family leave in California: Report for the california employment development department. California Employment Development Department Policy Report

Bena, J., Li, K., 2014. Corporate innovations and mergers and acquisitions, *Journal of Finance* 69, 1923-1960.

Bénabou R., Tirole, J., 2002. Self-Confidence and Personal Motivation. *Quarterly Journal of Economics,* 117, 871-915

Bénabou R., Tirole, J., 2006. Belief in a Just World and Redistributive Politics. *Quarterly Journal of Economics*, 121, 699-746.

Bénabou R., Tirole, J., 2011. Identity, Morals and Taboos: Beliefs as Assets. *Quarterly Journal of Economics*, 126 805-855.

Bouwman, C.H.S., 2013. The role of corporate culture in mergers & acquisitions, in: Perrault, E. (ed.), *Mergers and Acquisitions: Practices, Performance and Perspectives*, NOVA Science Publishers.

Braguinsky, B., Mityakov, S., 2015. Foreign corporations and the culture of transparency: Evidence from Russian administrative data, *Journal of Financial Economics* 117, 139-164.

Bryan, S., R. Nash, and A. Patel, 2015. The effect of cultural distance on contracting decisions: The case of executive compensation. *Journal of Corporate Finance*, 33:180-195

Buono, A.F., Bowditch, J.L., Lewis, J.W., 1985, When cultures collide: the anatomy of a merge. *Human Relations*, 38, 477-500.

Cameron, K.S., De Graff, J., Quinn, R.E., Thakor, A., 2006. *Competing Values Leadership: Creating Value in Organisations*, Cheltenham, UK: Edward Elgar.

Chatterjee, S., Lubatkin, M., Schweiger, D., Weber, Y. 1992. Cultural differences

and shareholder value in related mergers: linking equity and human capital. *Strategic Management Journal*, 13, 319-334.

Cooke, R.A., 1987. The Organizational Culture Inventory. Plymouth, MI: Human Synergistics, Inc, U.S.

Correia, S. (2016). REGHDFE: Stata module to perform linear or instrumental-variable regression absorbing any number of high-dimensional fixed effects.

Cronqvist, H., Low, A., and Nilsson, M., 2009. Persistence in firm policies, firm origin, and corporate culture: Evidence from corporate spin offs, University of Miami working paper.

Das, T. and Polachek, S.W. (2015), Unanticipated effects of California's paid family leave program. *Contemporary Econ Policy,* 33: 619-635.

Davidson, R., Dey, A., Smith, A., 2015. Executives' "off-the-job" behavior, corporate culture, and financial reporting risk, *Journal of Financial Economics* 117, 5-28.

Deal, T., Kennedy, A., 1982. Corporate cultures: The rites and rituals of corporate life. Reading, MA: Addison-Wesley.

Denison, D., 1990. Corporate culture and organizational effectiveness. New York: John Wiley.

Dong, M., Hirshleifer, D., Richardson, S., and Teoh, S.H. 2006. Does Investor Misvaluation Drive the Takeover Market? *The Journal of Finance*, 61, 725-762

Fiordelisi, F., Ricci, O., 2014. Corporate culture and CEO turnover, *Journal of Corporate Finance,* 28, 66-82.

Gaspar, J.-M., Massa, M., Matos, P., 2005. Shareholder investment horizons and the market for corporate control. *Journal of Financial Economics,* 76, 135-165.

Gormley, T. A., and Matsa, D. A. (2016). Playing it safe? Managerial preferences, risk, and agency conflicts. Journal of financial economics, 122(3), 431-455.

Griffin, D., Guedhami, O., Kwok, C., Li, K. and Shao, L., 2018. National Culture and the Value Implication of Corporate Governance. *Journal of Law, Finance, and Accounting* 3, 333-372.

Guiso L., Sapienza, P., Zingales, L., 2015. The value of corporate culture, *Journal of Financial Economics,* 117, 60-76.

Hartnell, C.A., Ou, A.Y., Kinicki, A., 2011. Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions, *Journal of Applied Psychology* 96, 677-694.

Hoberg, G., and Phillips, G. (2010). Product market synergies and competition

in mergers and acquisitions: A text-based analysis. *The Review of Financial Studies*, 23, 3773-3811.

Hoberg, G., and Phillips, G. (2016). Text-based network industries and endogenous product differentiation. *Journal of Political Economy*, 124, 1423-1465.

Hoberg, G.and Phillips, G. (2018). Conglomerate industry choice and product language. *Management Science*, 64, 3469-3970

Hofstede, G., 1991. Cultures and organizations. New York, McGraw-Hill.

Jegadeesh, N., Wu, D., 2013. Word power: A new approach for content analysis, *Journal of Financial Economics* 110, 712-729.

Kempf, E., Manconi, A. and Spalt O.; Distracted Shareholders and Corporate Actions, *The Review of Financial Studies*, 30,1660-1695.

Kusstatscher, V., Cooper, C.L., 2005. Managing Emotions in Mergers and Acquisitions. Edward Elgar Publishing, Cheltenham, U.K..

Lawrence, P. R., andNohria, N. (2002). Driven: How human nature shapes our choices (Vol. 2). San Francisco: Jossey-Bass.

Larsson R., Brousseau K.R., Driver, M.J., Sweet, P.L., 2004. The Secrets of Merger and Acquisition Success: A Co-Competence and Motivational Approach to Synergy Realization. In Pablo A.L., Mansour, J., (eds), Mergers and Acquisitions. Creating Integrative Knowledge, Blackwell Publishing Ltd, Oxford, U.K., 3-17.

Levinson, S., 2003. Language and mind: Let's get the issues straight! in: Gentner, D., Goldin-Meadow, S. (eds), *Language in Mind*, Cambridge, MA: MIT Press, 25-45.

Li, F., 2008, Annual report readability, current earnings, and earnings persistence, *Journal of Accounting and Economics,* 45, 221-247.

Li, K., Mai, F., Shen, R., and Yan, X. (2018). Corporate culture and merger success: Evidence from machine learning. working paper.

Loughran, T., McDonald, B., 2011. When is a liability not a liability? Text analysis, dictionaries, and 10-KSs, *Journal of Finance,* 66, 35-65.

Loughran, T., McDonald, B., 2014. Measuring readability in financial disclosures. *Journal of Finance,* 69, 1643-1671.

Lubatkin, M., Schweiger, D., Weber, Y., 1999. Top management turnover in related M&As: an additional test of the theory of relative standing. *Journal of Management*, 25, 55-73.

Malmendier, U., and Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction. Journal of financial Economics, 89, 20-43.

Maksimovic, V., Phillips, G., and Prabhala, N. R. (2011). Post-merger restructuring

and the boundaries of the firm. *Journal of Financial Economics*, 102, 317-343.

Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2004. Firm size and the gains from acquisitions, *Journal of Financial Economics,* 73, 201-228.

Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2005. Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *Journal of Finance,* 60, 757-782.

O'Reilly. C., Chatman, J., Caldwell, D., 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. Academy of Management Journal, 34, 487-516.

Ostroff, C., Kinicki, A.J., Tamkins, M.M., 2003. Organizational culture and climate, *Handbook of Psychology,* Part III, Wiley, published online 15 April 2003

Quinn, R.E., Rohrbaugh, J., 1983. A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis, *Management Science,* 29, 363-377.

Schneider, B., Ehrhart, M.G., Macey, W.H., 2013. Organizational climate and culture, *Annual Review of Psychology,* 64, 361-388

Sheen, A. (2014), The Real Product Market Impact of Mergers. The Journal of Finance, 69: 2651-2688.

Stone, P.J., Dunphy, D.C., Smith, M.S., Ogilvie, D.M., 1966. *The General Inquirer: A Computer Approach to Content Analysis*, Cambridge, MA: MIT Press.

Tabellini, G., 2008. The Scope of Cooperation: Values and Incentives. *The Quarterly Journal of Economics*, 123, 905-950.

Tetlock, P.C., 2007. Giving content to investor sentiment: The role of media in the stock market, *Journal of Finance* 62, 1139-1168.

Tetlock, P.C., Saar-Tsechansky, M., Mackassy, S., 2008. More than words: Quantifying language to measure firms' fundamentals, *Journal of Finance* 63, 1437-1467.

Tremblay, A. (2016). Cultural differences, synergies and mergers and acquisitions. Synergies and Mergers and Acquisitions (December 22, 2016).

Zingales, Z., 2015. The "cultural revolution" in finance, *Journal of Financial Economics* 117, 1-4.

Appendix 1
Variables Definition

All variables are measured at the fiscal year end prior to the bid announcement unless noted otherwise. All continuous variables are winsorized at the 1st and 99th percentiles.

Acquisitions counts and frequency	
Acquirer	An indicator variable equal to one if a company is involved in a merger as an acquirer in a year and zero otherwise.
No. of Acquisitions	The total number of acquisitions that meet our selection criteria announced by the company in a year.
No. of Private target acquired	The total number of acquisitions that meet our selection criteria announced by the company in a year and where the target is a private company.

Corporate culture and cultural orientation	
Adhocracy	The number of times a firm uses the words contained in the bag of words for *Adhocracy* in its MD&A as a percentage of the total number of words in its MD&A and scaled on the industry-year distribution to range between 0 and 1. This measure for corporate cultural dimension is obtained through text analysis.
Market	The number of times a firm uses the words contained in the bag of words for *Market* in its MD&A as a percentage of the total number of words in its MD&A and scaled on the industry-year distribution to range between 0 and 1. This measure for corporate cultural dimension is obtained through text analysis.
Hierarchy	The number of times a firm uses the words contained in the bag of words for *Hierarchy* in its MD&A as a percentage of the total number of words in its MD&A and scaled on the industry-year distribution to range between 0 and 1. This measure for corporate cultural dimension is obtained through text analysis.
Clan	The number of times a firm uses the words contained in the bag of words for *Clan* in MD&A as a percentage of the total number of words in its MD&A and scaled on the industry-year distribution to range between 0 and 1. This measure for corporate cultural dimension is obtained through text analysis.
Internal	The variable *Hierarchy* plus the variable *Clan*.
External	The variable *Adhocracy* plus the variable *Market*.
Flexibility	The variable *Adhocracy* plus the variable *Clan*.
Stability	The variable *Hierarchy* plus the variable *Market*.
External-Internal	The ratio of our variables Internal minus External on Internal plus External.
Flexibility-Stability	The ratio of our variables Flexibility minus Stability on Flexibility plus Stability.

Paid family lave shock

Cultural Shock	This variable is equal to one for companies headquartered in states with an active program for paid family leave. Specifically, this variable is one for companies located in California from 2005, in New Jersey from 2010 and in Rhode Island from 2015.
Cultural Shock minus 1	This variable is equal to one in states that will activate a paid family leave program in the year before the activation of the program. Specifically, this variable is one for companies located in California in 2003, in New Jersey from 2008 and in Rhode Island from 2013.

Firm characteristics

Total assets	The book value of total assets.
ROA	The return on assets as the ratio of net income to total assets.
Leverage	The ratio of total liabilities to total assets.
R&D	R&D expenditure on total assets
Tobin Q	The market value of equity plus total liabilities divided by book value of total assets.

Deal Characteristics

All stock	An indicator variable taking the value of one if the transaction value is paid entirely in stock, and zero otherwise.
All cash	An indicator variable taking the value of one if the transaction value is paid entirely in cash, and zero otherwise.
Same industry	An indicator variable taking the value of one if an acquirer is in the same industry as its target firm (industry measured at the two-digit SIC level), and zero otherwise.
Private Target	An indicator variable taking the value of 1 if the target company of acquisition is private
Relative size	The ratio of transaction value to book value of acquirer's total assets.
ROA 2, 3y	The difference between the Acquirer's return on assets two or three years after the deal completion and one year before the announcement.

Appendix 2
Geographical distribution of companies in our sample

This table reports the geographical distributions of company-year observations in our sample.

State	Observations	State	Observations
AK	9	MT	36
AL	217	NC	651
AR	157	ND	20
AZ	515	NE	131
CA	6,243	NH	167
CO	1,061	NJ	1,750
CT	837	NM	22
DC	64	NV	355
DE	157	NY	2,935
FL	1,573	OH	992
GA	1,036	OK	329
HI	62	OR	382
IA	152	PA	1,527
ID	108	PR	18
IL	1,374	RI	108
IN	491	SC	164
KS	215	SD	53
KY	220	TN	488
LA	213	TX	3,913
MA	1,976	UT	344
MD	590	VA	845
ME	51	VT	69
MI	634	WA	650
MN	1,032	WI	507
MO	600	WV	33
MS	64	WY	28
		Total	36,168

This paper empirically shows that corporate culture influences both the probability of being involved in a merger and the outcome of the deal itself. We use text analysis to measure corporate culture for all US listed companies relying on the Competing Values Framework. We disentangle companies culturally oriented inside their organization from companies oriented outside their organization. We also distinguish companies focused on fostering stability rather than flexibility. We then study the impact of corporate culture on merger participation and outcome: we show that an externally-oriented corporate culture significantly increases the participation to merger deals, but has a negative impact on the merger outcome as captured by the profitability of the acquiring company the years after the deal completion. We validate our measures and all our results using a natural experiment resulting from the approval of paid family leave in some States in our sample period. Our results suggest that externally-oriented companies underestimate the possibility of culture clashes after a merger deals and are more likely to conclude value destroying deals.

FRANCO FIORDELISI
è professore ordinario (part-time) di Economia degli Intermediari Finanziari a Roma Tre e presso la Essex Business School.
ORNELLA RICCI
è professore ordinario di Economia degli Intermediari Finanziari a Roma Tre.
FRANCESCO SAVERIO STENTELLA LOPES
è professore associato di Economia degli Intermediari Finanziari presso l'Università degli studi Roma Tre.

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