PhD Title:

"Us and Them: The impact of CEO ancestry on US Mergers & Acquisitions"

Author: Karan Vishwanath

Supervisors: Dr. Xeni Dassiou, Prof. Saqib Jafarey

Qualification: PhD Economics

Institution: City, University of London,

Department: Economics

Submitted September, 2024

Declaration:

I, Karan Vishwanath confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract:

This PhD thesis investigates whether shared ancestry and cultural heritage between Chief Executive Officers (CEOs) of bidding and target firms influences corporate merger and acquisition (M&A) outcomes. The overarching research question is: Does similarity in the ancestral origins of bidder and target CEOs impact M&A processes and performance? The empirical setting is US public company mergers. CEO ancestry is operationalized using surname analysis of data on historical passenger arrivals to the port of New York. The thesis examines effects of CEO ancestries on aspects of M&As such as acquisition premiums, shareholder returns, post-merger performance, and executive compensation. Results reveal that deals undertaken by CEOs of the same ancestry exhibit lower premiums, wealth destruction for acquiring shareholders, and declines in post-merger performance. Additional analysis shows CEOs are rewarded despite decreasing profitability after same-ancestry deals, and further tests reveal CEO pay components become less sensitive to performance. This demonstrates how shared ancestry between bidder and target CEOs may lead to rent extraction. Overall, the dissertation provides novel empirical evidence that executive ancestral origins significantly influence domestic US mergers. The results have theoretical and practical implications regarding the role of cultural identity in the upper echelons. This thesis contributes to literature examining CEO ancestry as an impactful factor for M&A, establishes cultural heritage as a driver of agency costs, and critiques prevailing cross-cultural measures. It underscores how the past continues to echo in the ways contemporary executives evaluate strategic opportunities based on cultural affinity and homophily.

CONTENTS

INTRODUCTION

This research investigates whether and how the ancestral origins and cultural heritage of Chief Executive Officers (CEOs) impact corporate mergers and acquisitions (M&A). Cultural identity and heritage have long been shown to influence human behaviour and decision-making (Cavalli-Szforza and Feldman, 1981). Yet in the context of corporate governance, strategy, and finance the role of executive ancestry and cultural background is an understudied area of research. Specifically, this thesis examines if similarity or differences in CEO ancestral identity influence M&A outcomes, including bid premiums, shareholder returns, and post-merger performance. The overarching research question is: Does the ancestral heritage of bidder and target CEOs have meaningful impacts on M&A outcomes and shareholder wealth?

The empirical setting of US public company mergers from the last 30 years provides an ideal background to study domestic cultural interactions given the melting pot nature of American society. Combining perspectives from upper echelons theory, cross-cultural organizational behaviour, and corporate finance, the analysis explores the concept of ancestral identity between CEOs to identify impacts on M&A outcomes that are robust to known, previously studied determinants. Results reveal that deals between CEOs who share ancestry see lower premiums and ambiguous effects on announcement returns, suggesting target shareholders are worse off. Examination of the long-term performance of the merged firm finds same-ancestry deals lead to relatively worse returns for acquiring shareholders, pointing to suboptimal negotiating and weaker monitoring of managerial self-interest. Further examination of post-merger performance and executive pay incentives indicates CEO ancestry amplifies agency problems, information asymmetries, and flawed strategic decision-making in M&A.

This research makes several contributions. First, it introduces CEO ancestry and cultural heritage as a novel factor shaping M&A outcomes. Second, it provides empirical evidence that executive background influences corporate strategy and performance domestically. Finally, it offers a critique of prevailing national culture measures like Hofstede's indices when studying cultural interactions in melting pot societies, while presenting an argument for the importance of the interaction between CEOs and the role their cultural identities play in the M&A process. This research also adopts a relatively new approach to identifying CEO ancestries using surnames and cross-references to historical passenger records of migrants arriving at the port of New York, provided by Ancestry.com. Overall, the analysis enhances understanding of how the ancestral origins of CEOs to echo in their decision-making and highlights the importance of the human elements of corporate managers. The findings also have practical implications for executive hiring, compensation, and corporate governance.

CHAPTER 1: THE SHORT-TERM IMPACT OF CEO ANCESTRY ON DOMESTIC US M&A

1. Introduction

This research investigates the impact of differences in cultural heritage between the Chief Executive Officer (CEO) of bidding and target firms on domestic United States (US) mergers and acquisitions (M&A). CEOs play a crucial role in the M&A process, often negotiating on behalf of shareholders. The interaction between bidder and target CEOs is relatively under explored due to difficulty in accurately assessing what happens in the 'black box' of private negotiations in M&A. There is a growing and increasingly credible body of literature that argues for CEO cultural heritage, as well as other less tangible characteristics, as an important indicator of how CEOs make corporate decisions. Cultural heritage, or ancestry, is treated as a source of persistent variations in CEOs' values and beliefs that inform their corporate decision making. Ancestry can be seen as early life inherent characteristics that are inculcated by CEOs through their upbringing and social interactions.

Robalino and Robson (2013) provide a theoretical basis for cultural transmission in individuals, arguing that preferences are partly innate and shaped by genetics, and partly plastic and a result of cultural forces. Key elements of this are the definition of culture as socially transmitted information that has lasting effects on an individual's behaviour (Cavalli-Szforza and Feldman, 1981), and that culture is the non-genetic transfer of skill, thought, and feeling from person to person (Boyd and Richerson, 1988). Robalino and Robson (2013) extend this to suggest that despite genetics being a key determinant of values and preferences, cultural transmission can evolve on a faster scale, better reflect rational choices of the individuals transmitting, overcome limits to genetic transmission, and contain additional societal information such as from elders or previous generations. Effectively, information passed down from elders and decisions made through time on what behaviours to enforce or imitate are what make ancestral cultural heritage influential on values and beliefs (Bisin and Verdier, 2001).

Empirical evidence is presented on the transmission of social norms amongst US immigrants (Fernandez and Fogli, 2006, 2009). Using past values of female labour force participation and fertility rates in the parent's country of origin to proxy for culturally inherited attitudes towards work and fertility, Fernandez and Fogli (2006) show that cultural heritage is correlated with fertility outcomes in the US, after controlling for possible overlapping impacts of personal experience. Furthermore, Fernandez and Fogli (2009) show that for a sample of second-generation immigrants in the US, a significant portion of variation in fertility and women's participation in the work force over time is explained by differences in beliefs and preferences on the 'appropriate' role of women in society, i.e., cultural differences as opposed

economic and institutional variation. More recently, Giavazzi, Petkov and Schiantarelli (2019) examine the difference between horizontal and vertical transmission. Where horizontal transmission is cultural information learned from the world outside of the family and the circumstances the individual grows up in, vertical transmission relates to preference shaping inculcated from parents and ancestors (Boyd and Richerson, 1988). Giavazzi et al. (2019) examine multiple generations of immigrants to the US and show that though some convergence to US norms occurs in higher order generations, there is generally still persistence in attitudes informed by the first generation's vertically transmitted national culture.

A recent body of literature investigates the impact cultural heritage has on corporate outcomes. Du et al. (2017) document evidence of the effect of individual ethnicity, used as a proxy for culture, on information asymmetry in financial markets and give credibility to the idea that culture is an important aspect of human capital. Brochet, Miller, Naranjo, and Yu, (2018) find that the ethnic background of managers affects how they communicate with investors, and how the market responds to disclosure events. Specifically, Brochet et al. (2018) find that the effect of ethnic heritage is present in spontaneous communications such as investor Q&A sessions and persists for executives whose later work experiences expose them to different ethnic cultures. Nguyen, Hagendorff, and Eshraghi, (2018) show that a CEO's cultural heritage plays a significant role in how US banks perform under competitive pressure, with firms led by CEOs who are second or third generation immigrants being associated with 6.2% higher profitability on average when responding to industry shocks. Importantly they suggest that the ancestral country of origin causes persistent values in the individual that has some manifestation in corporate outcomes (Nguyen et al., 2018). Evidence that a CEO's cultural origin has a statistically and economically significant effect on CEO incentives and pay-for-performance sensitivities also exists, with CEOs from countries with higher GDP per capita, lower corruption and high concentration of Protestants shown to exhibit weaker monetary incentives (Liu, 2013). Moreover, Liu (2013) shows that the effect of cultural origin is found to overshadow other factors such as gender, education, military experience, year of birth, or possession of an MBA degree. This further gives credence to the idea that ancestry is an important factor in corporate decisions, and that it is worthwhile to investigate the ways in which it has an impact on M&A.

Combining elements and methods from these areas, the main research question is: Does the interaction between CEO ancestries have meaningful impacts on M&A? The main results of this chapter suggest that M&A premiums are lowest when CEOs share the same ancestry, and that premiums increase when a deal takes place between CEOs of differing ancestry. Rather than the differences in cultural values, it appears that similarity in ancestral culture drives this

effect. Moreover, there is indication that this effect is robust to the possibility of prior interactions between CEOs. Ancestral cultural distance is not found to have effect on announcement-period cumulative abnormal returns. Specifically, same-ancestry deals are found to exhibit premiums that 7% lower than different-ancestry deals. Intuitively this indicates a loss for target shareholders and a potential gain for bidder shareholders arising from the ancestries of involved CEOs. Deals undertaken by CEOs of shared ancestry exhibit lower premiums on average as compared to deals between CEOs of different ancestry, and thus suggests relative opportunity cost for target shareholders. One implication is that ancestral similarity is detrimental to target shareholder wealth, with an ambiguous effect on acquiror shareholder wealth in the short run. Subsequent analysis conducted in this chapter do not clearly identify positive gains for bidders in announcement returns. Additionally, the fact that sophisticated investors do not appear to react to ancestral differences in CEOs enforces the idea that the observed effect on premiums arises from unobservable interactions between CEOs. These effects are found to be robust to indicators of pre-existing relationships, and generation gaps between CEOs. These results add to our understanding of the impact of ancestry at a top executive level, by introducing observable effects that occur between both CEOs in M&A. This result is additive to studies that find the importance of a CEOs ancestry with regard to their own firm (Pan, Siegel & Wang, 2014). While this chapter establishes the presence of an effect on shareholder wealth in the short term, chapters 2 and 3 investigate longer term effects, and the channels through which this value destruction occurs.

The remainder of this chapter is organised as follows. Section 2 discusses the relevant literature and recent developments in this field. Section 3 discusses expected results. Section 4 describes the methodology, data, empirical strategy, and provides univariate results as a first step. Section 5 establishes the main result of estimating the effect of CEO ancestry on M&A bid premiums and cumulative abnormal returns around announcement. Section 6 provides additional analysis of ancestry effects on shareholder value, CEO collusion, and if it is indication of persistent vertical cultural transmission. Section 7 concludes and suggests next steps for continuing this research.

2. Literature Review

2.1 CEO Characteristics' impact on corporate outcomes

The Upper Echelons Theory (Hambrick and Mason, 1984) suggests that the experiences, values, and cognitive styles of managers affect their decision making and consequently corporate decisions and outcomes. Empirical evidence for this exists in the form of significant manager fixed effects on corporate investment behaviour, financing policy, organizational strategy, and performance (Bertrand and Schoar, 2003). Similarly, significant management fixed effects on firms' voluntary accounting disclosures and corporate tax avoidance are

documented by Bamber, Jiang, and Wang (2010) and Dyreng, Hanlon, and Maydew (2010) respectively. Barker and Mueller (2002) empirically demonstrate that CEO characteristics such as age, personal wealth, career history and tenure can explain research and development (R&D) spending variations across firms. Importantly, recent literature has focused on uncovering the impact of CEO personal characteristics on firm outcomes in a more explicit manner.

Davidson et. al (2015) examine how executives' personal lifestyle relate to financial reporting risk. It is found that CEOs and CFOs with a legal record are more likely to commit financial fraud, and that CEOs who are less frugal, measured by ownership of luxury goods, tend to run firms with weaker governance and higher propensity of other insiders to commit fraud and material reporting errors. Sunder, Sunder, and Zhang (2017) present evidence that CEOs who recreationally fly airplanes and possess pilot's licenses tend to be associated with significantly better innovation activities and outcomes in their firms. Arguing that Pilot CEOs exhibit a tendency to be more creative and open to new ideas and taking risks, it informs their corporate decision making and leads to more patents and associated citations, as well as greater R&D spending and innovation success (Sunder et. al, 2017). Furthermore, CEO political ideologies are shown to impact M&A decisions (Elnahas and Kim, 2017). Elnahas and Kim (2017) empirically show that Republican CEOs that have politically conservative views are generally less likely to engage in M&A and are more likely to pay with cash and target public firms from the same industry, avoiding acquisitions with high information asymmetry and stipulated cash pay outs to target CEOs.

A growing literature also looks at how inherited or imprinted attributes manifest in corporate outcomes. Imprinting is defined by Marquis and Tilcsik (2013, p199) as "a process whereby, during a brief period of susceptibility, a focal entity develops characteristics that reflect prominent features of the environment, and these characteristics continue to persist despite significant environmental changes in subsequent periods". Benmelech and Frydman (2015) find that firms run by CEOs who have served in the military invest less, spend less on R&D, and run less leveraged firms compared to non-military peers. Moreover, they also find that military CEOs tend to perform better during periods of industry distress and are 70% less likely to commit fraud, suggesting past military experience inculcates leadership potential that ultimately effects corporate outcomes (Benmelech and Frydman, 2015). Further evidence is presented for the notion of past experience manifesting in corporate decision making in Bernile, Bhagwat and Rau's (2017) examination of the relation between a CEO's early-life exposure to life threatening natural disasters and their firm's subsequent corporate financial and investment policies. They find a consistent pattern across firm decisions and outcomes that CEOs are typically heavily involved in such as capital structure, acquisition activity, and

return volatility, finding that early-life exposure to moderate intensity disasters leads to higher leverage ratios, higher risk taking, and more profligate M&A as compared to CEOs with exposure to low or high intensity disasters (Bernile et. al, 2017). Long et. al (2020) find in a sample of Chinese companies from 2000 to 2015 that CEOs who lived through the Great Chinese Famine (between 1959 to 1961) early in their life tend to run firms that exhibit lower stock price crash than CEOs who did not, and this is more pronounced in firms whose CEOs have greater decision-making powers.

2.2 The importance of CEO characteristics in M&A negotiations

M&A is another corporate decision that is susceptible to influence by CEO characteristics, and there is a growing literature that looks at the interactions between bidder and target CEOs in M&A and how they play a determinant role. The negotiation stage in M&A is where information is shared and compromises are made between the acquiring and target firm to achieve mutually agreeable terms that lead to deal completion (Parola and Ellis, 2014). The processes that take place during negotiations are critical in determining the success or failure of a deal (Cartwright & Schoenberg, 2006; Greenwood, Hinings, & Brown, 1994; Jemison & Sitkin, 1986; Marks & Mirvis, 2001; Neal, 1998; Pablo, Sitkin, & Jemison, 1996; Parola and Ellis, 2014; Zollo & Singh, 2004).

Pruitt's (1981) negotiation theory characterises several steps in the negotiation process; first verbalising contradictory demands, followed by concession making and searching for new alternatives, and finally agreement when all necessary concessions have been made. Applied to M&A, this encapsulates the deal making process ranging from initial bids and offers, to determining time pressures, deal limitations, termination fees and unscheduled award payments, all the way to board endorsement, regulatory approval, and shareholder consent when the deal is completed. Influencing the evolution of the negotiation process are the phenomenon of competitive and cooperative behaviour (Pruitt, 1981), which have a multitude of manifestations such as extreme offers, poison pills, information exchange or cost-cutting concessions. The role of both bidder and target CEO is crucial as they are appointed to represent their respective shareholders' best interests (Jensen and Meckling, 1976; Fama and Jensen, 1983). It is also documented that managers of target firms are rarely passive during M&A, with CEOs playing a central role in the process (Graham, Harvey, and Puri, 2015). Roll (1986) introduces more formally the idea that individual CEO decision making might have an influence on the decision to engage in merger activity with the hubris hypothesis, arguing that CEOs never undertake enough M&A to learn from mistakes, and thus often make wasteful acquisitions by erroneously assuming their estimated valuations of target firms are accurate. Moreover, Balmaceda (2009) posits that the greater a CEO's ability to influence board

decisions, the more likely it is that they will incorporate their own interests into merger negotiations alongside maximising the efficiency gains from merging.

There is evidence that CEO characteristics, preferences, and opportunism factor into the negotiation process. Aktas, Bodt, Bollaert, and Roll (2012) show that both bidder and target CEOs are equally important protagonists in negotiations by investigating the effect of CEO narcissism in the M&A process and the influence their psychology has. Arguing that narcissism differs from hubris and overconfidence by more closely representing inherent psychological traits such as a need to reinforce self-image or a lack of empathy, they show that narcissistic target CEOs tend to elicit higher bid premiums and less favourable market reactions, while narcissistic bidder CEOs are associated with a higher probability of initiating a takeover and a shorter private takeover process length (Aktas et. al, 2012). Additionally, target CEOs can sometimes negotiate for large cash payments through special bonuses or golden parachutes as a requirement for the deal to go through (Hartzell et. al, 2004; Sorkin, 2002). Fich, Cai, and Tran (2011) find that a non-trivial proportion of acquisition targets between 1999 to 2007 grant unscheduled stock options to their CEOs as compensation for their foregone benefits from the merger. As suggested by these findings, the presence of negotiated special pay outs lead to lower premia received by target shareholders, and a drop in deal value (Hartzell et. al, 2004, Fich et. al, 2011). Thus, CEO characteristics also represent potential for agency costs to manifest and for decisions to be made that conflict with maximising value for shareholders. However, Heitzman (2011) contests this implication, finding no meaningful relation between negotiation grants to target CEOs and observed premiums but reaffirms that relative CEO bargaining power still factors into the negotiation process.

External to golden parachutes and unscheduled options grants being used as negotiation tactics, target CEOs can often stipulate that the sale of their firm is contingent on ex post side payments (Broughman, 2017). Management can bundle a side payment or post-merger employment with an acquisition that is desirable for target shareholders, making them approve a payment to the target CEO that they might not have otherwise approved ex ante, had it been tied to firm performance. More importantly, Broughman (2017) points out that the CEO is typically the primary party negotiating the deal on behalf of the target, and even in cases where they are not, lack of cooperation from managers may lead to a considerable loss in value that the bidder shareholders hope to gain from the deal. Effectively, due to the CEOs crucial role in M&A negotiations, and the extent of their ability to import self-interest and bargaining power, there is a risk for rent extraction to occur where CEOs can enrich themselves at the shareholders' expense.

Further evidence linking CEO attributes and prior experience to the negotiation process is presented by Bernile and Kang (2017), who show that a target CEO's experience with M&A

leads to higher premiums for shareholders. Importantly, their analysis stems from the idea that learning from past experience leads to superior economic outcomes (e.g., Robert, 1988; Hax and Majluf, 1982; Henderson, 1968; Arrow, 1971). Bernile and Kang (2017) find offer premiums to be higher when a target CEO has past exposure to takeovers during their career in senior management in a sample of 932 US listed M&A between 2000 to 2014. The specific circumstances, forces, and incentives between CEOs in negotiations even have an impact in friendly mergers with premerger negotiations, resulting in greater shared control between board and management, as well as a more equal sharing of merger gains between both firms (Wulf, 2004).

One aspect that is relatively underexplored with regards to CEO characteristics is culture and cultural heritage. In the vein of inherited values or past experiences informing later corporate decisions, manager and executive cultural heritage is a growing literature that has scope for continued application to M&A. Many prior studies generally focus on cross border M&A and cultural difference is identified at a country level, where each firm is headquartered.

2.3 CEO Cultural distance

A recent development in the literature on CEO characteristics is the specific cultural heritage of CEOs themselves. Studies typically measure cultural heritage at a personal level with methods employing surname analysis, or ancestry data. The idea is that cultural and ancestral heritage is a proxy or indicator for inherent values and beliefs held by CEOs and top management. As a background, it is noted by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998,1999,2000), Stulz and Williamson (2003), Doidge, Karolyi, and Stulz (2007), and Griffin, Lai, Yue, and Zhao (2009), that national culture involves dimensions such as language, religion, legal heritage or ethnicity. The term ethnicity broadly refers to a societal group whose members are connected to each other by common heritage such as common ancestry, language, culture, and often religion (Zagefka, 2009).

Fu and Zhang (2019) investigate the relation between CFO cultural background and stock price crash risk in the UK market, finding evidence that CFOs from backgrounds with uncertainty avoidance as an emphasised trait have a negative association with their firms' stock price crash risk and that this effect is stronger when they have a greater ability to influence firm decisions. Uncertainty avoidance is one of Hofstede's six cultural dimensions and as prior research suggests, is most salient in corporate decisions (Kwok and Tadesse, 2006; Kanagaretnam et al., 2014; Nguyen and Truong, 2013; Pan et al., 2016). Hofstede, Hofstede and Minkov (2010) suggest that individuals with strong uncertainty avoidance seek to control the future and maintain strict codes of belief and behaviour, and thus apply these beliefs to their corporate decision making. This effect also exists in CEO responses to competitive pressure and translates to tangible corporate outcomes. Nguyen, Hagendorff and

Eshraghi (2018) use variation in cultural heritages across US CEOs, proxied by immigrant generation status derived from ancestry data, to show that second or third generation immigrant CEOs are associated with higher profitability than average in response to shocks to industry competition. They attribute this effect to cultural values that prevail in a CEOs ancestral country of origin.

CEO ethnicity, used as a proxy for common inherited beliefs and values, is also shown to have an impact on corporate outcomes. Changes in CEO compensation are found to be larger when CEOs are replaced by someone from a different ethnicity, and that a CEOs sensitivity to being terminated due to poor performance is impacted by their ethnicity (Ellahie et. al, 2017). Furthermore, empirical studies on several countries suggest that ethnicity can shape organisational management and commercial exchanges. Efferin and Hopper (2007) find ethnicity to be a key factor in shaping management control processes in Indonesian firms; Davie (2005) suggests that culturally pre-existing patterns and ideas of Chiefly power based on ethnicity impact the use of accounting reports in Fiji; and Biggs, Raturi, and Srivastava (2002) find that belonging to specific ethnic groups impacts the availability and access to informal sources of finance such as supplier credit in Kenya. These findings suggest the existence of information and contract enforcement mechanisms that work within ethnic groups but not across them (Biggs et. al, 2002). Moreover Fisman, Paravisni and Vig (2017) find strong evidence of preferential in-group treatment of individuals belonging to the same religion or caste in Indian state banks with regards to grants of new loans, and surmise that being culturally proximate facilitates a higher level of transactions between parties.

This gives credibility to the idea of a cultural proximity effect that occurs at the executive management level, suggesting shared codes, language, religion, ethnicity etc. can affect corporate decision making. When applied to firms traded in the US, but headquartered in regions sharing Chinese culture, Du et. al (2017) find that US analysts of Chinese ethnic origin issue more accurate forecasts on Chinese firms than non-Chinese analysts, a result that is found to be stronger on firms with less transparent information environments. Their finding extends the evidence of the critical role cultural and ethnic proximity plays in corporations exists in the audit pricing and accounting literature. Johl, Subramaniam, and Zain (2012) find in a sample of publicly listed Malaysian firms that CEOs of the Bumiputra ethnicity incur higher audit fees, suggesting the existence of an ethnicity effect. More recently in a sample of hand collected data from China, Du (2019) finds that when auditors share a common surname with CEOs of companies they audit, there is higher occurrence of financial misstatement. Furthermore, it is found that sharing both surname and hometown further increases the likelihood of financial misstatement, and this is even more pronounced when the shared surname is uncommon (Du, 2019). This suggests that shared ancestry between CEOs and

auditors may indicate collusion or an implicit bias and gives credibility to the notion that similar phenomenon exist in negotiations between bidder and target CEOs due to imprinting.

2.4 CEO Culture and M&A

In cross border M&A, studies that look at cultural distance generally consider cultural distance at the country level in transactions, suggesting the firm's location alone accounts for the cultural interactions at play, and that there is an effect on transactions and premiums depending on which countries are involved on either side of the transaction (Lim, Makhija, and Shenkar, 2016). Studying a sample of 1690 cross border M&A between 1990 to 2009 involving 45 countries as counterparties to the US, Lim et. al (2016) find that cultural distance is negatively associated with a US bidder's pricing of foreign targets, suggesting cultural difference tend to make the negotiation and post-deal integration process more difficult, and reduce expected synergy gains.

Based on Zagefka's (2009) characterisation of the concept of ethnicity in a social psychological context, membership to a societal group based on ancestry, culture, or religion represents a more unspoken link that affects cognitive biases of managers during negotiations. Reductively, it is at minimum equivalent to having social ties between bidder and target CEOs. Ishii and Xuan (2014) show that social ties between acquirers and targets have a negative effect on abnormal returns for the bidder and the combined entity upon announcement, and lead to poorer decision making and lower value creation. They find that acquirer-target social ties lead to entrenchment of target firm CEO and pre-acquisition board of directors, as well as a higher likelihood of bonuses and rich compensation for bidder CEOs upon merger completion. Ishii and Xuan (2014) also find that the more socially connected bidders and targets are, the more likely they are to engage in wasteful M&A and subsequently undergo divestment for performance-related reasons.

Doukas and Petmezas (2007) argue that managerial overconfidence stems from overconfident CEOs feeling they have superior decision-making abilities than their peers and represents the idea that inherent cognitive biases in CEOs have tangible impacts on decisions relating to corporate investment. Moreover, Malmendier and Tate (2008) find that overconfident CEOs tend to undertake acquisitions when their firm has abundant internal resources and are more likely to pursue diversifying mergers and use cash as a finance method. Ferris, Jayaraman and Sabherwal (2013) apply the concept of CEO overconfidence to international M&A activity, arguing that managerial overconfidence is shaped in part by national cultures. Demographic and country patterns are evident in the distribution of overconfident CEOs for a sample of mergers involving Fortune Global 500 firms between 2000 to 2006, suggesting more overconfidence in CEOs leading firms headquartered in Christian countries (Ferris et. al, 2013). Additionally, Ferris et. al (2013) document that countries with national cultures that

emphasis individualism tend to contain more overconfident CEOs while countries with national cultures emphasising long-term orientations tend to have less overconfident CEOs. These measures of national culture are as outlined by Hofstede (1984, 2001). There is scope to argue then that a shared cultural heritage will have some outcome on M&As considering that the negotiation process is heavily influenced by the CEO-to-CEO interaction, who's individual cultural heritage is shown to have a credible impact on other corporate outcomes.

Ahern et. al (2015) measure cultural proximity with measures derived from the World Values Survey, a study conducted on cultural values from 97 societies on six continents. Cultural traits are classified based on survey responses from samples of respondents that are chosen to be representative across sex, age, profession, and geographic region. As such, this measure prescribes indicator traits to each country, and focuses on the interaction between countries and associated cultural values in cross-border M&A. It is found that the national cultural dimensions of trust, hierarchy, and individualism affect merger volume and synergies (Ahern et. al, 2015). Though, this does not address the characteristics of the CEOs leading these firms, nor how their specific cultural heritages impact the merger.

Pan, Siegel, and Wang (2020) identify cultural heritage by using CEO surnames and cross referencing with information from passenger lists of ships arriving from foreign ports to New York between 1820 and 1957, and use the uncertainty avoidance measure to examine the role of cultural heritage in shaping US CEOs' attitudes towards uncertainty in M&A. CEOs with cultural backgrounds that have high uncertainty avoidance tend to avoid acquisitions, and when they do engage in M&A, they prefer targets in familiar industries. This is argued to be a consequence of the ethnic composition of the CEOs parents and result due to the cultural transmission process that begins as a CEOs values are being shaped by their parents in their rearing environment (Pan et. al, 2020).

Generally, the extant literature focuses either on acquiring CEO characteristics or culture and their impacts on M&A, but not on the interaction between bidder and target CEO cultural characteristics and the combined effect on M&A. Studies that do incorporate both bidder and target seem to omit cultural heritage as a consideration, and for those that do not, simply focus on cultural heritage at a firm location or country level. Therefore, there is scope to investigate the effect of target and bidder CEO culture on M&A outcomes and contribute to a burgeoning field within the corporate finance and M&A literature. The focus is placed on US domestic M&A as the US is essentially a country of immigrants and exhibits significant variation in cultural heritage across families as a result, and the majority of CEOs in the sample are either American born or American by nationality. Therefore, extracting the effect of ancestral heritage and the impact it has on the interaction between CEOs in M&A is more efficient in a US domestic setting as it allows for controlled examination of the role of early life family

environments in the transmission of heritage. This allows investigation of their beliefs and values as they manifest in corporate decision making, holding somewhat constant the institutional and economic environments that occur later in life.

3. Expected Results

Private negotiations between bidder and target CEOs are a crucial step in the determination of valuations and prices paid in M&A (Parola and Ellis, 2014; Cartwright and Schoenberg, 2006; Greenwood, Hinings, and Brown, 1994; Jemison and Sitkin, 1986; Marks and Mirvis, 2001; Neal, 1998; Pablo, Sitkin, and Jemison, 1996). It is argued that M&A deals where cooperative negotiations take place up until the deal is finally signed upon are positively correlated with post M&A performance and success (Saorin-Iborra, 2008; Sebenius, 1998). Additionally, M&A failures are partially attributed to poor information exchange between bidders and targets at various stages of the deal (de Beaufort and Lempereur, 2003). Ghauri and Usunier (2003) and Graham, Mintu and Rodgers (1994) posit the M&A negotiation process as three sequential phases: antecedent, concurrent, and consequent. The antecedent phase describes the pre-interaction stage where potential M&A counterparties are identified, and available information is gathered. The concurrent phase is related to the actual interaction and 'negotiation' between both parties (Graham, 1985) and is likely to be the most impacted by bidder and target CEO ancestral culture. Greenlagh, Neslin, and Gilkey (1985) maintain that the behaviours and processes during the concurrent phase act as mediators for the outcomes at the consequent phase. Finally, the consequent phase is the stage at which agreements are reached to finalise and close the M&A deal. Pruit (1981) generalises negotiating as verbalising contradictory demands, concession making and alternative seeking, leading to final agreements. Therefore, the degree to which bidder and target CEOs have common or differing cultural beliefs is likely to impact how the process unfolds and how easily communication occurs, akin to findings in cross border M&A (Ahammad, Tarba, Liu, Glaister, and Cooper, 2016). Under the conditions of easier communications, that is ancestral culture proximity, negotiations are likely to facilitate clear conveyance of agendas between the CEOs, whether it is in shareholder interest, or in self-interest.

The main expected result is then that bidder and target CEO ancestry plays a role in negotiations by facilitating communication on a personal level and influences M&A premiums and shareholder wealth. In other words, CEO ancestry variables will have a non-zero and significant effect on premiums and announcement returns.

Further investigation into the nature of the effect of CEO ancestry on M&A is warranted, namely if the causes for any observed effects on premiums and wealth can be identified. The relationship between premiums and ancestral cultural distance could be an indication of over or under payment. While there is a lack of consensus in the literature on the exact relationship

between premiums and shareholder returns, certain studies have documented a negative effect of excessively high premiums. Diaz, Azofra and Gutierrez (2009) analyse premiums paid in 49 European M&A between 1995 to 2004 and identify an upper limit of 21%; deals for which premiums paid were higher had value destroying effects on bidder returns. Similarly, the 'winner's curse' documented by Varaiya and Ferris (1987) who show acquirors that find themselves paying high premiums due to do bidding wars tend to overestimate targets and cause bidding shareholders significantly negative returns.

As ancestry is used to proxy for vertically transmitted values and beliefs passed down from ancestors, it could be that these are indicators for flaws in judgement or compromised decision making that do not maximise shareholder value. Similarity in ancestry could lead to homophily, a higher likelihood of interacting with and being influenced by those who are similar (McPherson, Smith-Lovin, and Cook, 2001). Moreover, ancestral proximity related effects might be the result of active preferences towards CEOs who are similar or connected in some way. Sarkissian and Schill (2004) show that firms tend to cross-list their stocks in countries where investors are more familiar with them, and the 'home bias' amongst investors suggests the tendency to seek out and make investment decisions that contain a degree of familiarity (Coval and Moskowitz, 1999; French and Poterba, 1991; Grinblatt and Keloharju, 2001). Therefore, two possibilities are investigated. The first is that decision making processes could be warped by homophily and result in value destroying deals, manifesting in Ancestral proximity between CEOs having a negative impact on deal premiums and CARs. The second is that ancestral sameness or closeness indicates collusion between CEOs and will disappear when controlling for the indicators of a professional or personal relationship. These indicators are explored in section 6.4. Finally, the debate on vertical and horizontal transmission of culture has implications on any observed effects of CEO ancestry on M&A outcomes. Mulder, Nunn, and Towner (2006) analyse the means through which culture is transmitted, and find compelling evidence of vertical transmission of culture, from generation to generation. Therefore, it is expected that the effect CEO ancestry has on M&A outcomes is persistent, and that there is no moderation across age groups or later generations.

4. Data and Methodology

4.1 Deal Sample

The sample consists of 678 M&A deals announced during the 27-year period from 1993 to 2020. Data is obtained from Securities Data Company (SDC) US Mergers and Acquisitions database. US domestic firms are chosen to keep later life impacts of economic and institutional effects relatively controlled. Deals are selected on the following criteria. Both acquirer and target are required to be either publicly traded in the US or have stock price and accounting data available for premium, announcement returns, and firm and deal level control variables

to be constructed. Minimum deal size is set at $1 million. The acquisitions must be completed, and the acquirer must acquire 100% of the target after the transaction. Moreover, ownership stake in the target prior to announcement must be less than 51%. SDC provides the acquisition announcement date, the value of the transaction, deal attitudes, premiums and values prior to announcement, percentage of stock and cash used to pay for the acquisition, and additional details such as if bids were challenged. The sample of M&A targets and bidders is merged with Compustat to retrieve financial data, with the Center for Research in Security Prices (CRSP) for data on returns, and Execucomp to retrieve CEO specific details.

Table 1

Sample distributions of the total number of M&A deals across years during the period of 1993–2020. Data are obtained from *SDC Platinum M&A Database*. The sample consists of 678 deals.

Year of Announcement	No. of Deals	Percent of sample
1993	2	0.29
1994	18	2.65
1995	44	6.49
1996	13	1.92
1997	70	10.32
1998	81	11.95
1999	82	12.09
2000	73	10.77
2001	49	7.23
2002	1	0.15
2003	1	0.15
2004	5	0.74
2005	17	2.51
2006	13	1.92
2007	20	2.95
2008	8	1.18
2009	12	1.77
2010	18	2.65
2011	10	1.47
2012	13	1.92
2013	16	2.36
2014	18	2.65
2015	21	3.1
2016	19	2.8
2017	18	2.65
2018	25	3.69
2019	9	1.33
2020	2	0.29
Total	678	100

Table 1 displays the distribution of transactions across years. A high frequency of deals is observed during the late 90s, with around 63% of announcements occurring between 1997 to 2000. More recent deals account for around 24% of the sample, being announced between

2010 to 2020. The high concentration of deals occurring between 1997 – 2000 is not necessarily problematic as there are a significant number of deals occurring more recently from 2010 – 2018. Moreover, as the focal independent variable is the ancestral origins of CEOs, there have not been any important policy or regulatory changes that would affect the interaction of ancestry and how CEOs interact. One aspect that may be affected is the variety of ancestral origins that populate the upper echelons over time, however as the independent variables are either a binary indicator for same-ancestry and established cultural distance measures, the year the deal takes place is unlikely to be correlated or introduce bias in estimation. Specifically as CEO ancestry is assumed to be tied to one aspect of a CEOs sense of identity, this is unlikely to be distorted by time. Table 2 shows the distribution of acquirors and targets across industries as classified by the US Standard Industrial Classification (SIC) codes. There appears to be a high supply of bidders and targets from the Manufacturing industry, accounting for 44% and 43% respectively. Of the 678 deals that make up the full sample, 575 are between firms in the same industry and 103 are diversifying.

Deal premiums are evaluated on target share price 4 weeks prior to announcement and are typically a result of the negotiation process. They reflect how bidding CEO value the target firm and potential synergies, the price at which target shareholders agree to sell their firm, and also represent short term shareholder wealth changes. As the focus of this research is to find out how CEO ancestry affects the interaction between both economic agents involved in M&A, premiums serve as a potential indicator for over or underpayment, as well as how CEOs negotiate. Further, an effect based on same-group ancestry may highlight differences in ease of communication between bidder and target CEOs in line with Fisman, Paravisni and Fig (2017).

Announcement period abnormal returns are estimated as per the methods outlined in Brown and Warner (1985), and Ishii and Xuan (2014) using trading days from -200 to -20 relative to the announcement date as the estimation window for each deal in the sample. Each company's daily returns are regressed on the returns of a value weighted returns on the market portfolio to obtain estimated market betas and generate market model predicted returns. Each stock is required to have at least 30 non-missing daily returns between days -200 through -20. Subtracting the market model predicted returns from actual returns yields daily abnormal returns (AR). Cumulating the ARs over the event window [-1,+1] gives 3-day cumulative abnormal returns (CARs), which is then used as the measure of abnormal performance upon announcement of the acquisition. Any relationship between CARs and CEO ancestry difference in the M&A will reveal if the deals are viewed as value creating or destroying by sophisticated investors. CARs provide information on the capital market's trading activity

response to deal announcements, and thus can elucidate if the effect of ancestry differences on premiums are beneficial to shareholders.

Table 2

Sample distributions of the total number of M&A deals across industries during the period of 1993–2020. Industries are classified according to US SIC codes. Data are obtained from *SDC Platinum M&A Database*. The sample consists of 678 deals.

Industry	Acquiror		Target	
	Obs.	%	Obs.	%
Agriculture, Forestry and Fishing	1	0.1%	2	0.3%
Mining	27	4.0%	28	4.1%
Construction	7	1.0%	8	1.2%
Manufacturing	299	44.1%	290	42.9%
Transportation, Communications, Electric, Gas and Sanitary service	93	13.7%	78	11.5%
Wholesale Trade	18	2.7%	17	2.5%
Retail Trade	31	4.6%	32	4.7%
Finance, Insurance and Real Estate	107	15.8%	116	17.2%
Services	83	12.2%	105	15.5%
Nonclassifiable	12	1.8%	0	0.0%
Total	678	100%	676	100%

4.2 Ancestry Identification

To assign each CEO with a variable value based on ancestry, their ancestry is identified, and scores are calculated based on Hofstede's (1980; 2009) cultural distance dimensions. Identification is multifaceted, involving data sourced from Ancestry.com[1], the Dictionary of American Family Names (Hanks, 2003), forebears.io, and web searches. Ancestry.com data is obtained in line with Pan, Siegel and Wang (2020) who examine the role of US CEO's cultural heritage in their approach towards acquisitions. Specifically, they look at how the uncertainty-avoidance Hofstede measure of their ancestor's origin nation impacts their acquisition decisions. Their main result is that CEOs with more uncertainty-avoiding heritages are less likely to engage in M&A, and that when undertaking M&A, they prefer targets in similar industries and targets that can be more easily integrated. The method for identifying CEO cultural heritage is as follows:

1. Identify CEO surnames in Execucomp
2. Use CEO surname on Ancestry.com to identify passengers with the same surname arriving at the Port of New York between 1820-1957
3. Collating the nationalities / ethnicities of those passengers for each surname, and computing the frequency across reported origin countries

[1] Obtained at www.ancestry.com/search/collections/7488/

4. Each CEO surname is then assigned a country of origin based on the highest frequency of nationality country obtained from passenger records
5. These assigned nationality countries are then used to compute the Hofstede measures of national cultural distance

Table 3 lists the identified ancestries and the observed frequencies of assigned modal passenger country of origin. In total 1,356 CEOs' ancestral heritage country are identified. Notably, there is a high concentration of CEOs of English ancestry, accounting for 503 observations, or 37%. CEOs of English ancestry make up 38.35% of acquiring CEOs and 54.84% of target CEOs. The next most frequent ancestries are German, Irish, and Italian, representing 14.53%, 10.84%, and 5.75% respectively with these four countries of origin cumulatively representing 68.21% of the sample.

Critically this measure differs from other ancestry focused research such as Nguyen, Hagendorff and Eshraghi (2017) who use Ancestry.com's 1940 US census records to trace each CEOs family tree and identify country of origin. This method requires a substantial number of CEOs to have been born before 1940 and is too restrictive on the merger sample. The passenger records method circumvents the birth year restriction and allows inclusion of more recent M&A. Alternatively, collating passenger records data to approximate country of origin based on surname appears to be a somewhat modern workaround for data scarcity when it comes to ethnicity classifications. As justification, Pan et. al (2020) cite Mateos (2007) who conducts a multidisciplinary review and concludes that this approach has strong potential to accurately classify populations into their most common ethnic groups, though it is not without measurement error.

This method effectively assigns a *most likely* name-derived country of origin for each bidder and target CEO, computes their cultural distance using the widely used Hofstede-distance measure, and regresses that on premiums and CARs. Moreover, passenger records that state the nationality as American are ignored as the purpose is to obtain the persistent of cultures that predate the CEOs horizontal cultural transmissions. An additional identification method involves the Dictionary of American Family names, an Oxford reference compiled by Patrick Hanks (2003). It provides the historical and etymological origins of over 70,000 of the most frequent family names in the US, as well as rarer names that are considered important. Details on where, when, and how specific surnames originated are provided and acts as either a verification method for the frequency based Ancestry.com identification, or a backup source for when certain names cannot be found in passenger logs.

Table 3

Full list of distribution of modal / most likely country of ancestral origin for bidder and target CEOs identified by surname. CEO names obtained from *Standard & Poor's Execucomp* database. Ancestry data approximated from arriving New York, US, passenger and crew lists (including Castle Garden and Ellis Island) between 1820-1957 obtained from *Ancestry.com*

Ancestry	**Total**			**Acquiror**		**Target**	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
English	503	37.09	37.09	260	38.35	243	35.84
German	197	14.53	51.62	99	14.6	98	14.45
Irish	147	10.84	62.46	62	9.14	85	12.54
Italian	78	5.75	68.21	47	6.93	31	4.57
Jewish	78	5.75	73.96	29	4.28	49	7.23
French	43	3.17	77.13	15	2.21	28	4.13
Scottish	41	3.02	80.15	21	3.1	20	2.95
Dutch	40	2.95	83.1	18	2.65	22	3.24
Polish	33	2.43	85.53	22	3.24	11	1.62
Spanish	27	1.99	87.52	19	2.8	8	1.18
Indian	20	1.47	88.99	11	1.62	9	1.33
Swedish	19	1.4	90.39	10	1.47	9	1.33
Chinese	17	1.25	91.64	10	1.47	7	1.03
Danish	17	1.25	92.89	9	1.33	8	1.18
Greek	12	0.88	93.77	6	0.88	6	0.88
Swiss	11	0.81	94.58	3	0.44	8	1.18
Russian	8	0.59	95.17	6	0.88	2	0.29
Norwegian	7	0.52	95.69	3	0.44	4	0.59
Croatian	6	0.44	96.13	3	0.44	3	0.44
Welsh	5	0.37	96.5	1	0.15	4	0.59
Armenian	4	0.29	96.79	2	0.29	2	0.29
Czech	4	0.29	97.08	3	0.44	1	0.15
Hungarian	4	0.29	97.37	1	0.15	3	0.44
Yugoslavian	4	0.29	97.66	3	0.44	1	0.15
Romanian	3	0.22	97.88	2	0.29	1	0.15
Syrian	3	0.22	98.1	0	0	3	0.44
Austrian	2	0.15	98.25	0	0	2	0.29
Belgian	2	0.15	98.4	1	0.15	1	0.15
Bulgarian	2	0.15	98.55	0	0	2	0.29
Iranian	2	0.15	98.7	1	0.15	1	0.15
Serbian	2	0.15	98.85	1	0.15	1	0.15
Slovakian	2	0.15	99	0	0	2	0.29
Brazilian	2	0.14	99.21	2	0.30	0	0
Argentinian	1	0.07	99.07	1	0.15	0	0
Canada	1	0.07	99.28	1	0.15	0	0
Finnish	1	0.07	99.35	1	0.15	0	0
Ghana	1	0.07	99.42	0	0	1	0.15
Japanese	1	0.07	99.49	1	0.15	0	0
Lithuanian	1	0.07	99.56	0	0	1	0.15
Maltese	1	0.07	99.63	0	0	1	0.15
Mexican	1	0.07	99.7	1	0.15	0	0

(continued on next page)

Table 3 (continued)

Ancestry	Total			Acquiror		Target	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
Ukrainian	1	0.07	99.84	1	0.15	0	0
Senegal	1	0.07	99.91	1	0.15	0	0
Total	1,356	100		678	100	678	100

There is also the occurrence of CEOs whose family names might have changed during their lives for reasons such as marriage, or migration, specifically during and after World War 2. In order to limit the measurement errors these can introduce; therefore the surname approach is used as an initial step, and additional web searches on Forebears.io and the google search engine are conducted. Forebears.io is a geographically indexed and cross-referenced directory for family history research and provides information on surname meanings as well as their geographic distribution based on genealogical sources. Both Forebears and the Dictionary of American surnames provide some historical insight on each name and where likely, even include historical facts and highlight cases where certain names are modernisations or anglicisations, indicating where name changes might have occured. In some cases, google searches are required for further clarity in disputed or undefined origins, and yield information on specific CEOs such as through biography pages, newspaper obituaries, public interviews etc. For example, several CEO ancestries were identified by finding obituaries of relatives that named them as proud members of various ethnic heritage societies, or podcast interviews where they discuss growing up in a certain familiar culture.

4.3 Cultural Distance Measures

Once nationality or ancestral country of origin is identified A dummy variable *Same_ ancestry* that takes the value one if both CEOs share the same ancestral heritage and zero otherwise is used. This binary approach is motivated by the sociological conception of identity, which suggests that an individual's sense of identity is formed in relation to and through interaction with others in their society, eventually stabilising in two distinction concepts of 'us' and 'them' (Hall and Du Gay, 1996, 2006). Intuitively, the binary same-ancestry variable is to offer an alternate specification of ancestral cultural distance by instead focusing on proximity. A binary indicator also shows whether or not the effects of ancestry on M&A are a result of identity and recognition of similar origins between CEOs within a cultural melting pot setting like the USA.

Then, for granular analysis of how cultural distance effects M&A, an aggregate index is constructed as per Kogut and Singh (1988) based on Hofstede (1984, 2001). The Hofstede-based metric is by far the most established measure of cultural distance in terms of

acceptability and use (e.g., Van Oudenhoven, 2001; and earlier replications in Sondergaard, 1994). Moreover, Kirkman, Lowe, and Gibson (2006) point out that Hofstede's dimensions are widely used tools for calibrating cultural differences in several business disciplines.

The Hofstede dimensions of culture are 6 basic issues that must be contended with for a society to organise itself (Hofstede 1980; 2001). The origins of Hofstede's (1980) dimensions are from surveys conducted on over 117,000 IBM employees across 40 countries between 1967 to 1973 on work-related values. These survey results yield four statistically independent dimensions that explain the inter-country variation in employee responses. The dimensions are Individualism (IDV), Power Distance (PDI), Masculinity (MAS), and Uncertainty Avoidance (UAI). Power distance is defined as the extent to which people believe and accept that power and status are distributed unequally. Uncertainty avoidance is defined as the extent to which people are threatened by uncertain or unstructured situations. Individualism reflects how strongly the role of the individual is emphasised over that of the group. And masculinity is defined as the relative importance of masculine traits such as competitiveness, assertiveness, achievement, ambition, and high earnings over feminine traits such as nurturing, helping others, valuing relationships over money, not showing off, and minding quality of life. Hofstede (2010) formulated 2 further dimensions of Long-term orientation, and Indulgence. Long-term orientation reflects the extent to which one believes that the world is in flux and that preparation for the future is needed over the belief that the world remains as it was created, and the past provides a moral compass. Indulgence meanwhile is defined as the importance placed on freedom, the ability to act on one's impulses, and believing life is good versus being restrained, feeling life is hard and that duty instead of freedom is the normal state of being.

The Hofstede (2010) measures are widely used in international business and managerial preference research, as well as in cross border M&A and corporate outcomes research (Kogut and Singh, 1988; Shenkar 2001; Fu and Zhang, 2019; Lim, Makhija, and Shenkar, 2016). There is little else in the way of credible alternatives to measuring an inherently difficult to quantise concept such as culture, and the measure is considered a reliable tool for research in business settings (Drogendijk and Slangen, 2006). Table 4 shows an excerpt from Hofstede's 6 dimensions[2]. In an example merger between a bidder CEO of British heritage and a target CEO of Chinese heritage, their distance in uncertainty avoidance is calculated as 35-30 = 5. This value is clearly different for a Chinese-Russian CEO transaction where uncertainty avoidance proximity would be 95-30=65.

[2] Obtained at geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/

Table 4
Excerpt from Hofstede's 6 Cultural Dimensions

Country Code	Country	Power Distance (PDI)	Individualism (IDV)	Masculinity (MAS)	Uncertainty Avoidance (UAI)	Long-term Orientation (LTO)	Indulgence (IVR)
GBR	Great Britain	35	89	66	35	51	69
RUS	Russia	93	39	36	95	81	20
CHI	China	80	20	66	30	87	24

Following Lim et. al (2016) and Drogendijk and Slangen (2006), based on Kogut and Singh (1988), the traditional Hofstede cultural distance measure is constructed twice. As an additional check, measures are constructed using all six dimensions, as well as using only the main 4 most common in the literature: UAI, PDI, IDV, and MAS. First, the main four Hofstede dimensions between acquiring and target CEO ethnicity nation scores, corrected for the differences in variance of each dimension and arithmetically averaged. Then, the same is done using all six dimensions, incorporating the later additions of long-term orientation and indulgence measures.

$$TraditionalHofstede1_j = \frac{\sum_{i=1}^{4} \left\{ \left(S_{A,i} - S_{T,i}\right)^2 \Big/ V_i \right\}}{4}$$

$$TraditionalHofstede2_j = \frac{\sum_{i=1}^{6} \left\{ \left(S_{A,i} - S_{T,i}\right)^2 \Big/ V_i \right\}}{6}$$

Where for each deal j, $S_{A,i}$ is the acquiring CEOs ancestry nation's score on dimension i, $S_{T,i}$ is the target CEOs ancestry nation's score on dimension i and V_i is the variance of the score of the dimension. Effectively it is an equal weighted average of the absolute distance in each dimension.

Alternatively, the Euclidian distance version of the Kogut and Singh (1988) is used and is based again on Hofstede's dimensions of cultural distance. The Euclidean version of the Kogut and Singh index relaxes the yet unproven assumption that all cultural dimensions are of equal importance (Drogendijk and Slangen, 2006). Moreover, Konara and Mohr (2019) argue that

the traditional measure is incorrectly specified and captures the squared cultural distance, leading to misleading results by emphasising larger distances over smaller distances. The main difference is that while the Kogut and Singh (1988) index averages the differences in scores on each dimension by the number of dimensions considered, the Euclidian version only takes the square root of this sum. Formally,

$$EuclideanHofstede1_j = \sqrt{\sum_{i=1}^{4} \left\{ \left(S_{A,i} - S_{T,i}\right)^2 \Big/ V_i \right\}}$$

$$EuclideanHofstede2_j = \sqrt{\sum_{i=1}^{6} \left\{ \left(S_{A,i} - S_{T,i}\right)^2 \Big/ V_i \right\}}$$

Where for each deal j, $S_{A,i}$ is the acquiring CEOs ancestry nation's score on dimension i, $S_{T,i}$ is the target CEOs ancestry nation's score on dimension i and V_i is the variance of the score of the dimension. Effectively it is an equal weighted average of the absolute distance in each dimension. Intuitively, the reason for relaxing the equal-weighting assumption is to avoid ignoring the dynamics of how important certain cultural traits may be to different nations. For example the scores presented for Great Britain and China in table 4 indicate a large difference in PDI (power distance) and IDV (individuality) but similar values in the remaining two dimensions. Arguably these are very important dimensions that define the difference in culture between Great Britain and China as they relate to beliefs about societal power structure, authority, and the importance of the individual over the collective good of the group. Relaxing the equal-weighting assumption allows larger differences like these to have more of an effect by essentially allowing these cases where there are fewer but more important drastic cultural differences to be measured as larger observations.

Table 5 presents descriptive statistics on the measures constructed and shows that differences are in fact observed in bidder and target CEO ancestral culture. Different to research into cross-border M&A, there are occurrences of non-distances, or where the cultural dimension distance equals zero, such as in the case of a deal between CEOs that share the same ancestry. Of the 678 deals in the full sample, 135 are between CEOs of the same ancestry. This is illustrated with minimum values obtained of zero, alongside varying and large maximum values indicating the sample covers a variety of cases.

Table 5
Descriptive statistics of the ancestral cultural distance measures calculated between each bidder and target CEO.

Distance Measure	Obs.	Mean	Std. Dev.	Min	Max
Traditional Hofstede (4 Dimensions)	678	1.17493	1.16255	0	5.18468
Traditional Hofstede (6 Dimensions)	678	1.26217	1.02486	0	4.2783
Euclidean Hofstede (4 Dimensions)	678	1.76972	1.25304	0	4.55398
Euclidean Hofstede (6 Dimensions)	678	2.32799	1.46857	0	5.06654
Uncertainty Avoidance	678	1.70301	2.24087	0	12.2371
Individualism	678	1.01681	1.67176	0	11.8285
Masculinity	678	1.1094	2.31795	0	10.4065
Power Distance	678	.8704838	1.449243	0	9.05515
Long-term Orientation	678	1.40472	1.89733	0	9.30362
Indulgence	678	1.46861	2.17885	0	12.1133

4.4 Univariate analyses

As a first step, Premiums, acquiror 3-day CARs, and target 3-day CARs are divided into sub-samples. First based on whether the deal is between CEOs of the same ancestry, or different (non-same) ancestry. Subsequently they are split into sub-samples of high ancestry cultural distance, and low cultural distance. Table 6 reports the mean bid premium, acquiror 3-day CAR, and target 3-day CAR in the above outlined cases. Panel A of Table 6 reveals that the average premia for deals involving CEOs of shared ancestry are lower than deals between CEOs of different ancestry by 5.54%. The sample of shared CEO ancestry deals on average exhibit 33.51% bid premiums paid, as compared to 39.05%, and this difference in means is found to be statistically significant at the 10% level. The means of premiums paid in deals involving ancestrally close CEOs are lower than those reported for ancestrally distant CEOs, which is consistent with the results from panel A. Interestingly, only the difference in means based on high and low distance calculated with all 6 cultural dimensions are found to be statistically significant. These results suggest that there is an effect on premiums being driven by bidder and target CEO ancestry. In the short term, it appears target shareholder wealth is eroded due to the lower premiums on average when deals occur between CEOs of the same or similar ancestry.

Panel B and C report similar univariate results for acquiror and target 3-day CARs in order to address whether there is a clear impact on shareholder wealth. The means reported when CEOs share ancestry are negative for both bidder and target 3-day CARs, however the differences are positive, and notably very small. The differences in means when classified by low and high distance are also not consistent with the differences reported for the same ancestry. Moreover, there is no indication that there is a statistically significant difference in means. The implication is that there is little observable effect of CEO ancestry distance on

CARs, and that the short-term effects on bidder wealth are unclear. As CARs reflect the reactive trading activity of sophisticated external investors, it suggests that the effects are a result of internal negotiations. Market participants can only react to the announcement after it has been made, while the negotiations where bid premiums are deliberated on and determined occurs before that date. The implication is that there is little observable effect of CEO ancestry distance on CARs, and that the short-term effects on bidder wealth are unclear. Considering an effect of CEO ancestral proximity / distance is found in Panel A, but not in Panel B and C, further investigation into the relationship between ancestry and outcomes is warranted.

Table 6

Univariate comparisons of bid premiums (Panel A) and 3-day cumulative abnormal returns for bidder and target around deal announcement (Panel B, C) for each subsample. Subsamples are first by shared or different ancestry, and then by low and high distance in the aggregate Hofstede measure. Means and corresponding t-values are reported. Data is winsorized at 1% and 99% level. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% respectively.

Panel A

4-week Premium	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	33.51	27.24	39.05	29.42	-5.54	2*
Obs.	135		*543*			
	Low Hofstede Distance		High Hofstede Distance		Difference between low and high	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
4 measures	34.33	27.88	39.13	29.37	-4.8	-1.85
Obs.	*167*		*511*			
6 measures	33.89	27.53	39.263	29.45	-5.37	-2.05*
Obs.	*166*		*512*			

Panel B

Acquiror 3-day CARs	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	-0.02	0.0825	-0.02	0.0735	0.001	0.15
Obs.	*116*		488			
	Low Hofstede Distance		High Hofstede Distance		Difference between low and high	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
4 measures	-0.018	0.0835	-0.022	0.072	0.004	0.55
Obs.	*163*		*441*			
6 measures	-0.022	0.0856	-0.021	0.0716	-0.001	-0.1
Obs.	*148*		*456*			

(continued on next page)

Table 6 (continued)

Panel C

Target 3-day CARs	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	-0.02	0.0825	-0.021	0.0735	0.001	0.15
Obs.	*116*		*488*			
	Low Hofstede Distance		High Hofstede Distance		Difference between low and high	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
4 measures	-0.018	0.0835	-0.022	0.072	0.004	0.55
Obs.	*163*		*441*			
6 measures	-0.022	0.0856	-0.021	0.0716	-0.001	-0.1
Obs.	*148*		*456*			

4.5 Regression model

To investigate whether the patterns observed in section 4.4 holds in a multivariate setting, and more deeply examine the nature of the relationship between differences in CEO ancestry, the following regression model is estimated:

$$(1)\ Premium_j = \beta_0 + \beta_1 Ancestral\ Distance\ Measure_j + \sum_{k=2}^{K} \beta_k \times Controls_j^k + \varepsilon_j$$

$$(2)\ CAR_j = \beta_0 + \beta_1 Ancestral\ Distance\ Measure_j + \sum_{m=2}^{M} \beta_m Controls_j^m + \varepsilon_j$$

Where Ancestral Distance Measure is either: the dummy variable *Same Ancestry* that takes the value 1 if both bidder and target CEOs share the same cultural heritage in a deal, and zero if not, or Hofstede cultural distance measures $TraditionalHofstede_1$, $TraditionalHofstede_2$, $EuclideanHofstede_1$, $EuclideanHofstede_2$. *Controls* are a selection of firm- and deal- level control variables outlined in the section 4.7. $Premiums_j$ and CAR_j are the dependent variables for each deal j, 4-week premium of bid price at announcement to target share price, and 3-day CAR over the period [-1,+1] relative to announcement, respectively. All specifications include year- and industry- fixed effects to control for time-varying and industry-varying factors. Equation (1) contains control variables for both bidder and target characteristics as well as deal characteristics. Equation (2) is estimated separately for both Bidder and Target.

Additional regressions are performed using the variance-corrected absolute distance between CEOs on each of the six dimensions as opposed to a composite measure (UAI, IDV, MAS, PDI, LTO, and IVR). Under this specification, equation (1) reports β_1 that captures the effect of CEO ancestral distance / proximity on M&A premiums. For the dummy variable *Same Ancestry* β_1 shows the difference between deals undertaken by CEOs of shared ancestry and differing ancestry, on average. When the Hofstede measures are used, β_1 captures the extent to which premiums change with ancestral distance between bidder and target CEOs.

4.6 Control Variables

Multivariate ordinary least squares (OLS) regression is used, allowing controls for known deal and firm characteristics that affect M&A premiums and the stock market's reaction to the acquisition announcement. Systematic year and industry effects are controlled for with dummy variables. All firm-level variables are winsorized at 1% and 99% to control for the effects of outliers.

Deal and firm specific controls are included based on prior research that examine merger gains and target premiums in M&A (Officer, 2003; Rossi and Volpin, 2004; Ishii and Xuan, 2014; Ahern, Daminelli, and Fracassi, 2015, and Lim, Makhija and Shenkar, 2016). *All Cash* is an indicator variable that equals one if the deal is paid for entirely in cash, and zero otherwise. The method of payment is documented to have effects on both premiums and CARS, with announcements of all cash or all stock deals acting as positive or negative signals to investors (Faccio and Masulis, 2005; Martin, 1996). *Attitude* is an indicator variable that equals one if the deal is reported as friendly in SDC platinum, and zero otherwise. Whether the deal initiation is friendly, or hostile has bearing on premiums as well as CARs, as documented by Betton, Eckbo, and Thorburn (2007). *Tender offer* is an indicator that equals one if the bid involves a tender offer to the target shareholders, and zero otherwise, and as they are direct offers made to all existing shareholders, typically are associated with higher premiums (Walkling and Edmister, 1985). Despite generally representing direct offers to target shareholders, two-tiered or negotiated tender offers do exist (Bhagat et. al, 2005). Oesterle (1986) argue for the role of target managers as a negotiating agent for shareholders in the event of tender offers that can lead to revisions and changes in premium.

As it is argued that the possible observed effects manifest through negotiations, it is worthwhile to control for other effects that are linked to factors that may affect relative strengths or weaknesses during negotiations. Block is an indicator that equals 1 if the bidding firm holds at least 5% of the target firm at announcement, and zero otherwise. The rationale is that if the bidder is already a substantial shareholder of the target, they have increased negotiating power due to a pre-existing relationship or awareness of insider information

(Coates & John, 2010). *Same industry* is an indicator that equals one if bidder and target are from the same industry, determined by their standard industrial classification (SIC) code, and zero otherwise, to control for established effects of diversifying deals on M&A outcomes (Hornstein and Nguyen, 2014). *Challenged deal* is an indicator that equals one if the deal was challenged by one or more bidders, and zero otherwise to control for the impact bidding wars can have on premiums and CARs, specifically causing inflated deal prices as a result of competition (Thum, 2000). *Runup* controls for effects from information leaks and insider trading by measuring the abnormal pre-announcement increase in firms stock price (Tang and Xu, 2016). Following the method of Keown and Pinkerton (1981), the 30 day CAR prior to announcement [-30,-1] is used to control for changes in stock price and wealth that are unexplained by the market.

Size is defined as the natural logarithm of total assets and capture the effects related to the size of the bidder and/or target on premiums and CARs. Size is measured as of the fiscal year-end prior to the announcement date to control for changes in profitability that occur post-merger. *Relative size* captures the variations that occur in premiums and CARs when bidding and target firms are of different relative sizes, as measured by market value of equity (Mantravedi, and Reddy, 2007). *ROA* or return on assets controls for the profitability of bidders and targets and its effect on premiums and CARs. Prior year stock performance is defined as the buy-and-hold return over previous fiscal year, evaluated on the end-of-year date prior to announcement using the CRSP value-weighted index as the market return. Tobin's Q is defined as the book value of assets plus the market value of equity evaluated at the end of the year, minus book value of equity and all scaled by assets. *Risk* is defined as the ratio of retained earnings to total assets. Altman (1968) introduces the use of retained earnings to indicate higher future bankruptcy risk and high leverage. Moreover Paulo (2018) indicates retained earnings has governance and empire-building implications, thus inclusion for this investigation is worthwhile. Following Gomes and Marsat (2018), further standard firm-specific control variables are included: *Market to Book* (the ratio of market value to book value), *Leverage* (total debt divided by total assets), *Sales growth* (average sales growth over the three years prior to announcement, *Liquidity* (current ratio), *R&D* (research and development expenditures scaled by total assets), *ROE* (return on equity), and *CAPEX* (capital expenditures scaled by total assets). *Cashflow* controls for the effect free-cashflow endowments have on M&A outcomes (Lang, Stultz, and Walkling, 1991; Jensen 1988).

Finally, elements of CEO power are included to control for the level of autonomy CEOs have when making unilateral decisions that affect their firms. This is done in an attempt to isolate the ancestral cultural distance effect from otherwise self-interest motivated decision making. Following Veprauskaite and Adams (2013), *Tenure*, *Bonus*, *CEO Slice*, and *CEO Ownership*

are included. Longer tenure suggests a CEO can influence the selection of board members and has more leverage in corporate decisions (Hermalin and Weisbach, 1998). *Bonus* is an indicator that equals one if a CEO receives a performance related bonus and zero otherwise, as Grinstein and Hribar (2004) show that powerful CEOs tend to receive larger bonuses as compared to their less-dominant peers. *CEO Slice* is measured as the annual value of total compensation received by the CEO scaled by total annual compensation of all directors on the board, reflecting the relative decision-making power relative to other board members and bargaining power with regards to compensation negotiation (Veprauskaite and Adams, 2013; Bebchuk, Cremers, and Peyers, 2011). Finally, *CEO Ownership* is an indicator that equals one if the incumbent CEO has a disclosed shareholding greater than 3% (Combs, Ketchen, and Perryman, 2007).

In summary, the control variables included for equations (1) and (2) are as follow:

(1) *All cash, Attitude, Tender, Block, Challenged Deal, Same Industry, Runup, Size, ROA, Q, Leverage, Cashflow, R&D, CAPEX, Prior year stock performance, Risk, Sales growth, Tenure, Bonus, CEO Slice, CEO Ownership*

(2) *All Cash, Same Industry, Tender, Challenged Deal, Attitude, Runup, Block,Size, Q, Leverage, Cashflow, Prior year stock performance, Relative size, Risk*

The focal dependent variables in this chapter are M&A bid premiums, and cumulative abnormal returns for both bidder and target firms. Essentially the purpose of this empirical design is to use ordinary least squares to identify the deterministic relationship that bidder and target CEO ancestry has on short term M&A outcomes, and thus shareholder wealth. While the estimation models include a large number of control variables and may risk overfitting, this done to avoid endogeneity and omitted variable bias as much as possible. Particularly as this chapter is introducing bidder and target CEO ancestry as a novel variable. Thus, precautions are taken to ensure it is robust to the inclusion of several well established determinants of M&A outcomes. Multicollinearity is unlikely to be an issue as there is insufficient evidence to causatively link CEO ancestry to other firm or deal level M&A determinants such as stock price runup or firm size. Rank deficiency is also avoided with a sample size considerably larger than the number of predictors. While overfitting may still

present a risk, subsequent chapters reduce the number of control variables as this chapter successfully establishes a robust effect that can be observed.

5. Results

The final sample spans 1993 to 2020 and consists of 678 M&A deals for regressions with Premiums as the dependent variable, and 597 M&A deals with CARs as the dependent variable. In total, 1,356 CEO ancestry-pairs identified for premiums, and 1,194 for CARs. Of the M&A deals observed, 135 were undertaken by CEOs with shared ancestry, while 543 deals had bidder and target CEOs of differing ancestry. The most significant restrictor to sample size is the availability of CEO names, especially with target firms. As the Hofstede measures considered in this research require scores for both bidding and acquiring CEO, partial name availability for either bidding or target CEO is treated as missing. Further sample size reduction occurs when merging across databases to compile firm, deal, and CEO power specific control variables.

5.1 CEO ancestry and bid premiums

Table 7 reports the coefficients on *Same Ancestry* and the Hofstede based Kogut and Singh (1988) measures with 4-week bid premiums as the dependent variable. Column (1) shows that a strongly significant negative relationship is found, suggesting that in M&A deals where CEOs are of the same ancestral heritage, premiums paid are on average 7% lower. This implies that when ancestral heritage, or cultural values inculcated through early life experiences are closely aligned, there is a tendency for bidding CEOs to make lower offers, and for target shareholders to accept those lower offers. Moreover, columns (2) to (5) present the coefficients on the ancestral culture distance and show consistently positive coefficients. The positive relation suggests that as ancestral cultural distance increases between bidder and target CEOs, so too does the premium. This is consistent with the results in column (1) in showing that the more difference between CEOs' ancestry leads to higher premiums. Only columns (3) to (5) report coefficients on ancestral distance measures with statistically significance. It appears that inclusion of the additional cultural dimensions long-term orientation and indulgence improve the traditional Hofstede measure's ability to explain the relationship observed. Moreover, relaxing the assumption of equivalence between each dimension has the same effect, as observed on the statistical significance at 10% on both Euclidean measure coefficients. Examining columns (3), the coefficient reported suggests a one standard deviation increase in ancestral cultural distance between bidder and target CEO yields approximately 2.1% higher premiums. Similarly, columns (4) and (5) indicate for one standard deviation increase in the Euclidean measures of ancestral cultural distance, bid premiums are 1.9% and 2.5% higher, respectively.

Table 7

Relationship between ancestry distance measures and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Measure	Same Ancestry Dummy	Traditional Hofstede (4 Dimensions)	Traditional Hofstede (6 Dimensions)	Euclidian Hofstede (4 Dimensions)	Euclidian Hofstede (6 Dimensions)
Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)	(5)
Same Ancestry	-7.084***				
	(2.615)				
Traditional Hofstede (4 Dims.)		1.208			
		(0.974)			
Traditional Hofstede (6 Dims.)			2.020*		
			(1.039)		
Euclidean Hofstede (4 Dims.)				1.506*	
				(0.891)	
Euclidean Hofstede (6 Dims.)					1.682**
					(0.731)
All Cash Deal	3.834	3.984	3.996	4.024	4.045
	(2.582)	(2.611)	(2.603)	(2.603)	(2.596)
Deal Attitude	-10.40	-11.25*	-11.15*	-10.96*	-10.76*
	(6.367)	(6.527)	(6.549)	(6.522)	(6.509)
Tender Offer	7.321**	7.204**	7.139**	7.344**	7.319**
	(2.939)	(2.983)	(2.953)	(2.979)	(2.953)
Block Holding	-0.0699	-1.729	-1.493	-1.332	-0.964
	(7.425)	(7.509)	(7.559)	(7.489)	(7.519)
Challenged Deal	2.524	3.244	2.964	3.111	2.786
	(4.000)	(3.913)	(3.938)	(3.922)	(3.956)
Same Industry	0.125	0.0951	0.485	0.141	0.411
	(3.323)	(3.375)	(3.422)	(3.381)	(3.402)
Target Runup	98.31***	97.75***	97.53***	97.91***	97.73***
	(10.28)	(10.36)	(10.33)	(10.32)	(10.30)
Target Size	-1.790	-1.846	-1.808	-1.786	-1.742
	(1.170)	(1.182)	(1.178)	(1.179)	(1.174)
Target ROA	-28.83	-27.60	-28.05	-27.56	-27.86
	(24.23)	(24.22)	(24.29)	(24.12)	(24.19)
Acquiror Size	0.846	0.713	0.684	0.745	0.739
	(1.309)	(1.314)	(1.306)	(1.313)	(1.307)
Acquiror ROA	-59.79*	-57.62*	-58.15*	-59.12*	-59.89*
	(33.17)	(32.84)	(32.78)	(32.76)	(32.75)
Acquiror Tobin's Q	-0.970	-0.929	-0.952	-0.928	-0.934
	(1.341)	(1.342)	(1.340)	(1.340)	(1.337)

(continued on next page)

Target Tobin's Q	-1.805*	-1.837*	-1.845*	-1.843*	-1.853*
	(1.040)	(1.038)	(1.034)	(1.039)	(1.038)
Acquiror Leverage	-0.556	-0.540	-0.518	-0.559	-0.531
	(0.703)	(0.694)	(0.701)	(0.695)	(0.700)
Target Leverage	-0.122	-0.0981	-0.121	-0.133	-0.157
	(0.628)	(0.643)	(0.636)	(0.641)	(0.635)
Acquiror Cashflow	1,627	-1,042	72.92	741.9	1,854
	(28,531)	(28,298)	(28,247)	(28,327)	(28,331)
Target Cashflow	-718.9	-961.8	-815.2	-883.8	-757.6
	(3,874)	(3,888)	(3,875)	(3,874)	(3,863)
Acquiror R&D	29.94	31.10	27.35	28.23	25.67
	(48.07)	(47.37)	(47.32)	(47.56)	(47.57)
Target R&D	1.812	3.822	5.309	3.978	4.916
	(32.68)	(32.79)	(32.72)	(32.79)	(32.73)
Acquiror CAPEX	0.000429	0.000453	0.000484	0.000450	0.000469
	(0.000883)	(0.000893)	(0.000885)	(0.000886)	(0.000879)
Target CAPX	0.00133	0.00161	0.00154	0.00144	0.00133
	(0.00380)	(0.00385)	(0.00379)	(0.00381)	(0.00375)
Acquiror Prior Year Stock Performance	-5.728*	-5.732*	-5.888*	-5.772*	-5.936*
	(3.424)	(3.431)	(3.417)	(3.429)	(3.420)
Target Prior Year Stock Performance	-0.396	-0.370	-0.295	-0.489	-0.419
	(2.970)	(2.967)	(2.940)	(2.981)	(2.959)
Acquiror Firm Risk	13.21*	11.78*	12.24*	12.42*	12.91*
	(6.764)	(6.734)	(6.757)	(6.751)	(6.769)
Target Firm Risk	-2.588	-2.297	-2.370	-2.382	-2.465
	(3.422)	(3.476)	(3.459)	(3.462)	(3.438)
Acquiror Sales Growth	3.082	2.535	3.061	2.636	3.159
	(6.616)	(6.563)	(6.581)	(6.569)	(6.595)
Target Sales Growth	19.29***	19.33***	19.15***	19.40***	19.22***
	(4.472)	(4.572)	(4.509)	(4.540)	(4.482)
Acquiring CEO Tenure	-0.000233	-0.000226	-0.000241	-0.000228	-0.000239
	(0.000149)	(0.000150)	(0.000149)	(0.000149)	(0.000148)
Acquiring CEO Bonus	4.960	4.975	4.897	5.083	4.981
	(3.160)	(3.217)	(3.177)	(3.203)	(3.171)
Acquiring CEO Slice	-3.105	-1.967	-1.835	-2.111	-2.047
	(6.195)	(6.166)	(6.155)	(6.161)	(6.144)
Acquiring CEO Ownership	-2.516	-2.203	-2.096	-2.268	-2.287
	(4.236)	(4.296)	(4.282)	(4.280)	(4.264)
Target CEO Tenure	-0.000173	-0.000160	-0.000156	-0.000160	-0.000157
	(0.000124)	(0.000125)	(0.000126)	(0.000125)	(0.000126)
Target CEO Bonus	-0.380	-0.532	-0.512	-0.568	-0.528
	(2.890)	(2.904)	(2.892)	(2.888)	(2.877)
Target CEI Slice	1.00e-05*	7.68e-06	7.72e-06	8.24e-06	8.47e-06
	(5.60e-06)	(5.77e-06)	(5.63e-06)	(5.61e-06)	(5.56e-06)
Target CEO Ownership	-3.385	-3.949	-3.951	-3.839	-3.709
	(3.742)	(3.710)	(3.700)	(3.707)	(3.698)
Observations	661	661	661	661	661
Adjusted R^2	0.369	0.363	0.365	0.364	0.367

For further context, the maximum distance calculated for the Euclidean distance measure using all six measures is 5.06, implying a premium 8.5% higher than a deal occurring between CEOs of shared ancestry (or zero distance). The results in Table 7 are consistent with expected results, however the effect on shareholder wealth is still unclear. Overall, the results in Table 3 provide evidence for a discernible effect of CEO ancestral heritage on M&A premiums, and for the interaction between bidder and target CEOs' inherited values and biases being an important factor.

Target runup is also found to be highlight statistically significant across all ancestry measures. Column (1) presents a coefficient of 98.3, suggesting that the increase in target stock price unxplained by the market in the month preceding the M&A announcement drastically effects the bid premiums. As runup is included to control for possible effects of information leakages and insider trading, these values suggest a high amount of leakages for the sample and potentially that rumours of an impending M&A encouraged higher insider trading activity . As presented in table 1, there is a concentration of deals that occur between 1997-2000, and a steep drop off thereafter. This coincides with the implementation of rule 10b5-1 by the Securities and Exchange Commission (SEC) which more clearly defined the legislation around insider trading, making it more practical for insiders to trade, or cancel trades, on their owned shares in a legal manner. Notably the rule amended previous legislation to provide insurance against bad outcomes and reduce adverse selection (Lenkey, 2019). The concentration of deals occurring before this important amendment may explain the significance and magnitude of the impact of runup on target premiums.

Target sales growth is also found to be highly significant at the 1% level, reporting a coefficient of 19.29 in column (1). This implies that targets exhibiting positive sales growth over the previous year receive higher premiums paid. This is in line with the understanding on motivations for M&A as it indicates targets that are growing in their core business functions and have healthy operations command higher premiums. Target shareholders would likely demand higher premiums to be willing to give up ownership and autonomy of better performing firms. Similarly, the coefficient on tender offer is significant at the 5% level, and positive. Column (1) reports a coefficient of 7.32 suggesting that on average deals that occur as a result of an offer direct to target shareholders to buy out their shares lead to higher premium, consistent with existing literature (Walkling and Edmister, 1985; Bhagat et. al, 2005)

5.2 Individual dimensions of ancestral cultural dimensions and premiums

While measures using Hofstede's cultural dimensions are reliably used in business research and in the context of M&A, there is the unfortunate drawback of the Kogut and Singh (1988) aggregate measure to amplify measurement issues by invalidly assuming 'equivalence' and ignoring that cultural dimensions underlying these indices are distinct from each other (Shenkar, 2001). Hofstede (2001) notes that some dimensions may be more meaningful than others especially with regards to distances, and that different contexts may lead to different dimensions having varying levels of importance. Given the potential for an aggregate measure to obfuscate key insights, Table 8 examines each of the cultural dimensions individually. Coefficients on control variables have been omitted for clarity, as there are no notable changes to significance, sign or magnitude.

Table 8

Relationship between individual cultural dimension distance and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Measure	Uncertainty Avoidance	Individualism	Masculinity	Power Distance	Long-term Orientation	Indulgence
Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)	(5)	(6)
Uncertainty Avoidance	1.151**					
	(0.519)					
Individualism		1.485**				
		(0.606)				
Masculinity			-0.360			
			(0.506)			
Power Distance				-0.648		
				(0.687)		
Long-term Orientation					0.999*	
					(0.590)	
Indulgence						0.585
						(0.433)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	661	661	661	661
Adjusted R^2	0.367	0.367	0.361	0.361	0.364	0.362

Columns (1) to (4) of Table 8 report the coefficients on the main four distances used to calculate the aggregate measures, while columns (5) and (6) report the coefficients on the

additional long-term orientation and indulgence distances between CEOs. The 4-week premium is the dependent variable. The coefficients on uncertainty avoidance and individualism are found to be statistically significant at the 5% level, with long-term orientation found to be statistically significant at the 10% level. Importantly, all three exhibit positive coefficients, suggesting greater distance between CEOs in terms of their attitudes towards these dimensions is associated with higher premiums. Statistical significance on uncertainty avoidance and individualism is consistent with recent literature that applies cultural distance to M&A (Pan, Siegel, and Wang, 2020; Lim, Makhija, and Shenkar, 2016). Intuitively, uncertainty avoidance captures one's culturally informed tolerance for uncertainty and ambiguity, thus the salience of a counter party's baseline tolerance for uncertainty in M&A would likely lead to judgements made on their risk appetite. Uncertainty avoidance is commonly used in the literature to indicate risk preferences (Fu and Zhang, 2019). Individualism on the other hand psychologically manifests as idiocentrism and is considered positively linked to optimism and self-esteem (Triandis, 2001). Importantly, Heine et al. (1999) find people from individualistic cultures such as the United States over-estimate their own personal abilities. With regards to M&A, differing alignment on individualism is likely to cause judgements on the other's self-assessment of their own ability to effectively manage their firm. This result is also consistent with the literature on the relevance of individualism to CEO decisions (Brochet, Miller, Naranjo, and Yu, 2019). Additionally, low individualism scores suggest collectivism and reflects attitudes towards collaboration (Rozen-Bakher, 2018).

A novel result is the statistically significant coefficient on long-term orientation, as it is a later addition to Hofstede's dimensions, and as such not as exhaustively covered in the literature or in indices such as Kogut and Singh's (1988). Long-term orientation is associated with attitudes towards being prepared for the unknown (Hofstede, 2011), and thus may reveal how CEOs align on attitudes towards running their firms to be resilient to unexpected industry shocks or other surprise events with material impact to profitability. Overall Table 8 suggests that even when broken down into individual dimensions, premiums appear to increase as distance on ancestral cultural dimensions do, causing changes in target shareholder wealth.

5.3 Ancestral cultural distance and shareholder returns

Columns (1) to (5) in Table 9.1 report the coefficients on *Same Ancestry* and the Hofstede based Kogut and Singh (1988) measures, while columns (6) to (11) in Table 9.2 report coefficients on the distances in each of the six individual dimensions. The dependent variable is acquiror 3-day CARs. Column (1) reports a negative, but statistically insignificant effect on 3-day CARs when bidder and target CEOs share the same ancestral heritage. Moreover, the magnitude of -0.00138 is not economically significant, and suggests that capital market participants do not factor CEO ancestry in their response to M&A announcements.

Table 9.1

Relationship between cultural distance and Acquiror cumulative abnormal returns on M&A announcement presents the OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Measure	Same Ancestry	Trad. Hofstede (4 Dims.)	Trad. Hofstede (6 Dims.)	Euclid. Hofstede (4 Dims.)	Euclid. Hofstede (6 Dims.)
Dep. Var = 3 Day Acquiror CARs	(1)	(2)	(3)	(4)	(5)
Same Ancestry	-0.00138				
	(0.00839)				
Trad. Hofstede (4 Dims.)		0.000858			
		(0.00264)			
Trad. Hofstede (6 Dims.)			-0.000108		
			(0.00293)		
Euclid. Hofstede (4 Dims.)				0.000485	
				(0.00257)	
Euclid. Hofstede (6 Dims.)					-0.000196
					(0.00216)
Acquiror Size	-0.00361	-0.00358	-0.00364	-0.00360	-0.00365
	(0.00266)	(0.00265)	(0.00266)	(0.00266)	(0.00266)
Acquiror Tobin's Q	-0.000568	-0.000588	-0.000540	-0.000577	-0.000530
	(0.00269)	(0.00269)	(0.00269)	(0.00270)	(0.00270)
Acquiror Leverage	0.00346**	0.00342**	0.00348**	0.00344**	0.00348**
	(0.00164)	(0.00164)	(0.00164)	(0.00164)	(0.00164)
Acquiror Cashflow	-127.8	-127.6	-128.2	-127.6	-128.3
	(86.64)	(86.26)	(86.62)	(86.45)	(86.65)
Acquiror Prior Year Stock Performance	0.0279***	0.0279***	0.0279***	0.0279***	0.0279***
	(0.00915)	(0.00917)	(0.00917)	(0.00917)	(0.00918)
Acquiror Firm Risk	0.0100	0.0101	0.00976	0.0101	0.00967
	(0.0164)	(0.0163)	(0.0163)	(0.0164)	(0.0164)
Relative Size	3.66e-05***	3.63e-05***	3.68e-05***	3.64e-05***	3.68e-05***
	(1.09e-05)	(1.09e-05)	(1.09e-05)	(1.09e-05)	(1.09e-05)
All Cash Deal	0.00244	0.00238	0.00249	0.00244	0.00249
	(0.00663)	(0.00662)	(0.00661)	(0.00661)	(0.00661)
Same Industry	0.00543	0.00554	0.00544	0.00547	0.00544
	(0.00872)	(0.00871)	(0.00876)	(0.00870)	(0.00870)

(continued on next page)

Table 9.1 (continued)

Measure	Same Ancestry	Trad. Hofstede (4 Dims.)	Trad. Hofstede (6 Dims.)	Euclid. Hofstede (4 Dims.)	Euclid. Hofstede (6 Dims.)
Dep. Var = 3 Day Acquiror CARs	(1)	(2)	(3)	(4)	(5)
Tender Offer	0.0110	0.0112	0.0110	0.0111	0.0109
	(0.00761)	(0.00762)	(0.00761)	(0.00763)	(0.00762)
Challenged Deal	-0.0107	-0.0106	-0.0106	-0.0106	-0.0105
	(0.0116)	(0.0115)	(0.0115)	(0.0115)	(0.0115)
Deal Attitude	-0.00559	-0.00572	-0.00571	-0.00562	-0.00576
	(0.0154)	(0.0154)	(0.0154)	(0.0153)	(0.0154)
Target Runup	0.0264	0.0265	0.0263	0.0265	0.0262
	(0.0259)	(0.0258)	(0.0258)	(0.0258)	(0.0259)
Block Holding	0.00576	0.00568	0.00531	0.00565	0.00520
	(0.0233)	(0.0234)	(0.0233)	(0.0233)	(0.0233)
	(0.0368)	(0.0362)	(0.0363)	(0.0362)	(0.0363)
Observations	596	596	596	596	596
Adjusted R^2	0.181	0.181	0.181	0.181	0.181

Acquiror leverage is found to be significant at the 5% level, with a small but positive coefficient indicating that the more levered a bidder is the higher the announcement CARs for acquirors. While too much debt can lead to distress, some level of debt induces discipline amongst managers to run the firm optimally to avoid costs associated with default or refinancing, as well as benefit from tax shields on interest payments (Modigliani and Miller, 1963, Bhattacharya, 1988). Relative size is found to be statistically significant at the 1% level, however with a very small reported coefficient, it is not found to have an economically significant effect on acquiror CARs. Finally the prior year stock price performance of the acquiror is found to be highly significant and positive. As the evolution of the firms stock price over the previous year signals how the market has been evaluating the firm and its potential growth opportunities, it is reasonable that the sentiment would continue around announcement of an M&A as rational investors may believe the acquiror is capitalising on those opportunities.

The reported coefficients in columns (2) and (3) on the traditional Hofstede measure are found to be statistically insignificant. Therefore, implying lack of a meaningful relationship between acquiror CARs around announcement as bidder and target CEOs become more distant in their ancestry. Moreover, this is echoed in columns (4) and (5) where the coefficients on the

Euclidian measures are reported. Inclusion of the additional dimensions of LTO and IVR do not improve statistical significance.

Even inspection of each dimension alone as reported in columns (6) to (11) yield no significance. Table 9.2 echoes the univariate results obtained in section 4.5, where no statistically significant difference was found between means of low and high distance subsamples. Similarly, the results in Table 9 show no meaningful relationship between 3-day acquiror CARs and bidder-target CEO ancestry distance. That is to say, the proximity between bidder and CEO ancestry has no apparent bearing on how sophisticated investors perceive announcement of an M&A deal between their firms. It also fails to reveal if ancestral proximity / distance creates or destroys acquiring shareholder wealth in the short term. There are also no significant changes to coefficients on control variables in terms of statistical significance or sign. The results in Tables 9.1 and 9.2 do not weaken the documented effect on premiums. In fact, the lack of relationship with acquiror CARs furthers the idea that the observed effect on premiums manifests through negotiations and reflects inherent biases or compromised decision making amongst CEOs.

Table 9.2

Relationship between cultural distance and Acquiror cumulative abnormal returns on M&A announcement presents the OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Measure	UAI	IDV	MAS	PDI	LTO	IVR
Dep. Var = 3 Day Acquiror CARs	(6)	(7)	(8)	(9)	(10)	(11)
UAI	0.00045					
	-0.0013					
Individualism		0.00093				
		-0.0012				
Masculinity			-0.0016			
			-0.0019			
Power Distance				0.00095		
				-0.0021		
Long-term Orientation					-0.0005	
					-0.0014	
Indulgence						-0.0007
						-0.0012
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	596	596	596	596	596	596
Adjusted R^2	0.181	0.182	0.182	0.181	0.181	0.181

When inspecting target CARs, the findings regarding CEO ancestry also do not indicate a notable deterministic effect. Moreover, coefficients on all control variables lose their statistical significance and have been omitted from tables 10.1 and 10.2 for clarity. Columns (1) to (11) in Tables 10.1 and 10.2 report the coefficients on the ancestry measures with the dependent variable as target 3-day CARs. Again, column (1) reports a negative, statistically and economically insignificant effect on 3-day CARs when bidder and target CEOs share the same ancestral heritage. Consistent with Tables 9.1 and 9.2, it suggests that that capital market participants do not factor CEO ancestry in their response to M&A announcements.

The results in tables 9 and 10 do not reveal a relationship between target 3-day CARs and ancestral distance between CEOs. However, it again indicates that trading activity by sophisticated investors does not reflect any effects arising from CEO ancestry. From Tables 7 and 8 it is evident that target shareholder wealth is destroyed as CEOs are more ancestrally and culturally proximate, experiencing lower bid premiums for the sale of their firm. The net effect of CEO ancestry on shareholder value as perceived by stock market participants is left inconclusive.

Table 10.1

Relationship between cultural distance and target cumulative abnormal returns on M&A announcement presents the OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Measure	Same Ancestry	Trad. Hofstede (4 Dims.)	Trad. Hofstede (6 Dims.)	Euclid. Hofstede (4 Dims.)	Euclid. Hofstede (6 Dims.)
Dep. Var = 3 Day Acquiror CARs	(1)	(2)	(3)	(4)	(5)
Same Ancestry	-0.0003				
	-0.0085				
Traditional Hofstede (4 Dims.)		0.00035			
		-0.0027			
Traditional Hofstede (6 Dims.)			0.00032		
			-0.0029		
Euclidean Hofstede (4 Dims.)				0.00014	
				-0.0026	
Euclidean Hofstede (6 Dims.)					-6.61E-05
Other controls	Yes	Yes	Yes	Yes	Yes
Observations	595	595	595	595	595
Adjusted R^2	0.189	0.189	0.189	0.189	0.189

Table 10.2

Relationship between cultural distance and target cumulative abnormal returns on M&A announcement presents the OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Measure	UAI	IDV	MAS	PDI	LTO	IVR
Dep. Var = 3 Day Acquiror CARs	(6)	(7)	(8)	(9)	(10)	(11)
Uncertainty Avoidance	0.00031					
	-0.0013					
Individualism		-0.0012				
		-0.0018				
Masculinity			0.00066			
			-0.0012			
Power Distance				6.83E-05		
				-0.002		
Long-term Orientation					-0.0003	
					-0.0013	
Individualism						0.00026
						-0.0013
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	595	595	595	595	595	595
Adjusted R^2	0.189	0.189	0.189	0.189	0.189	0.189

6. Additional analyses

6.1 Ancestral cultural distance versus difference

As reported, of the 678 M&A deals that make the up the total sample, 135 deals are undertaken by bidder and target CEOs that share the same ancestral heritage. In such cases, their ancestral distance measures would equal zero. This is a novel feature to the US domestic setting. To investigate whether the observed effect on premiums is driven mainly by deals where cultural heritage is shared, or by varying cultural distance, focus is drawn to the remaining 543 deals where the indicator *Same_ancestry* equals zero. Effectively, it is worthwhile to investigate if the effects on premiums are driven by CEOs that are distant in cultural heritage, or CEOs that are just *different* in cultural heritage. Table 11 displays details on the sub-sample of M&A that occurred between CEOs of shared ancestry, and the frequencies by ancestry-pairs. Table 11 reports that CEOs of English heritage dominate the sub-sample accounting for 71.1%, or 96 deals of the 135. German and Irish heritage CEOs pairings additively make up 91% of the sub-sample. The domestic setting is likely to make the nuances of difference between various cultural origins may be less important than the familiarity of a proximate culture.

Table 11

Descriptive statistics of M&A deals undertaken by CEOs of the same ancestry, across ancestries for the period 1993-2020. Deal data are obtained from *SDC Platinum M&A Database* and ancestry data are approximated from *Ancestry.com*. Totals for the full sample, dominant group, and minority group are presented.

Shared Ancestry	Frequency	%	
English	96	71.1%	Dominant group
German	15	11.1%	Total: 123 (91%)
Irish	12	8.9%	
Italian	2	1.5%	Minority group
Jewish	6	4.4%	Total: 12 (9%)
Scottish	1	0.7%	
Chinese	2	1.5%	
Yugoslavian	1	0.7%	
Full sample total	135		

Columns (1) to (4) in Table 12 report the coefficients on the Hofstede based Kogut and Singh (1988) distance measures obtained from a regression on 4-week bid premiums for a sub sample of deals that excludes same-ancestry observations. Columns (5) to (11) report similar coefficients for distances in the six individual dimensions of culture. With regards to the aggregate traditional and Euclidean Hofstede measures, statistical significance is lost when dropping the 135 non-distances from the full sample. Moreover, the coefficients observed do not seem as economically significant relative to those obtained on the Same Ancestry indicator.

The loss of statistical significance in aggregate measures when considering the subsample suggest the previously observed effect on premiums is driven by a binary difference in ancestral culture, as opposed to granular distance. That is, in the CEO-to-CEO interaction during M&A, what matters more is that they are different, rather than how they are different. Examining columns (6) and (8) show the coefficients on individualism and power distance to be statistically significant at the 10% level. These dimensions reflect attitudes towards the individuals place in society as compared to a collective, and the absoluteness of authority and power distribution. Intuitively, in a corporate setting, individualism would reflect one's attitude towards collaboration and prioritising self-interest, while power distance reflects attitudes towards hierarchy and chain-of-command. It is logical that differences in these dimensions would matter to CEOs during the negotiation process, as it may reveal information on corporate culture and possible hurdles to integration post-merger. Moreover, deviating views on these dimensions are likely to make the actual negotiation process more difficult, if for example a highly individualistic and authoritative CEO negotiates with a more collaborative CEO that believes in a flat structure with emphasis on team goals.

Table 12

Relationship between cultural distance and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses) for a subsample that excludes M&A deals between firms helmed by CEOs of the same ancestry. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Traditional Hofstede (4 Dims.)	0.306									
	(1.123)									
Traditional Hofstede (6 Dims.)		0.692								
		(1.348)								
Euclidean Hofstede (4 Dims.)			0.162							
			(1.268)							
Euclidean Hofstede (6 Dims.)				0.494						
				(1.242)						
Uncertainty Avoidance					0.871					
					(0.550)					
Individualism						1.214*				
						(0.626)				
Masculinity							-0.604			
							(0.514)			
Power Distance								-1.275*		
								(0.729)		
Long-term Orientation									0.225	
									(0.644)	
Indulgence										0.207
										(0.501)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	530	530	530	530	530	530	530	530	530	530
Adjusted R^2	0.394	0.395	0.394	0.394	0.398	0.399	0.396	0.398	0.394	0.394

Interestingly, Table 12 indicates a singular hurdle to communication that occurs when counterparty CEOs are of different heritage. In other words, it matters *that* they are different, as opposed to *how* they are different. Being of the same ancestry evidently leads to lower premiums, and it may be the case that communication is facilitated by similarity in values where it is more impactful when CEOs are able to identify with each other. The lack of heritage

similarity in deals undertaken by CEOs of differing ancestry may be enough to create hurdles during the negotiation and obfuscate information pertinent to the valuation of the target, or for clear communication on a personal level. Simard (1980) documents that individuals perceive difficulties communicating with someone culturally dissimilar to them than with someone culturally similar, emphasising a binary distinction of similar/dissimilar. Moreover Gudykunst (1983) finds that people tend to make more assumptions on strangers, perceive conversations as more effortful, prefer to communicate less, and find it harder to predict strangers' behaviour in initial intercultural encounters than in intracultural encounters.

6.2 Additional analysis of the effects of shared ancestry

Despite showing that the observed effect of CEO-to-CEO ancestry on bid premiums is driven by shared ancestry, the implications for shareholder wealth are still vague. It is clear that CEO-to-CEO ancestral proximity has negative relationship with bid premiums on average, and that this is not considered by stock market participants. Moreover, there is the possibility that the observed effect is driven by collusive behaviour occurring between CEOs of the same ancestry. Shared ancestry could be capturing the effect of a prior relationship between the two CEOs on M&A premiums through self-interest prioritising collusion, destroying target shareholder wealth in the process. Gompers, Mukharlyamov and Xuan (2016) show that personal characteristics affect venture capitalists' desire to collaborate, and that it can be costly by reducing probability of investment success. Furthermore, if the importance of shared ancestry overshadows granular differences in ancestry, then it could be the case that horizontal cultural transmission erodes the importance of ancestral culture over time, and that this is a loss of persistence of ancestry driven effects on CEO decision making.

6.3 Effects of shared ancestry on shareholder wealth

Table 13 reports regression results of equation (1), augmented with additional interactions on the shared ancestry dummy variable. Column (1) interacts shared ancestry with all cash deals, (2) with tender offers, (3) with deal attitude, and (4) with where the initial bid was challenged. The coefficient on the interaction between shared ancestry and a deal paid for entirely in cash is not found to be statistically significant, thus there is no marginal effect for all cash deals when undertaken by CEOs of shared ancestry. Deals paid for with stock as opposed to cash are generally viewed by investors as value destroying due to stock deals routinely underperforming cash deals and the interaction of all cash on shared ancestry would indicate the effect on premiums when considering the subset of 'good' deals (Tortoriello and Falk, 2016; Myers and Majluf, 1984).

Moreover, both bidder and target shareholders are likely to be better off with cash deals due to lower mergers costs arising from the need to obtain approval from the Securities and Exchange Commission as in an all-stock deal (Datta, Pinches, Narayanan, 1992). The lack of

an effect indicates deals between CEOs of shared ancestry may not necessarily be value-destructive for acquiring shareholders, however this is not definitive.

Column (2) reports the coefficients on the interaction of shared ancestry on deals that are tender offers. The coefficient is found statistically significant at the 10% level and reports a value of -9.15%. In the case that a deal between CEOs of shared ancestry involves a tender offer, the bid premium is on average 14.3% lower than non-tender offer deals between CEOs of different ancestry. Not only are premiums lower when tender offers occur between CEOs of shared ancestry as compared to the general case of a shared ancestry deal, but tender offers between ancestrally different CEOs exhibit higher premiums under this specification. Tender offers can occur when initial negotiations fall through, and a preliminary bid is rejected by the target CEO and board. Column (2) suggests the consequent premium that eventually leads to deal completion is even lower than the general shared ancestry effect. If bypassing the target CEO with a tender offer and approaching shareholders directly results in even lower premiums when they are of the same ancestry, this result could be indicative of biased decision making by the bidding CEO, and exacerbation of consequently more aggressive effort to acquire the target and dismiss the incumbent target CEO. The impact on target shareholder wealth is even more destructive, however the lower-than-average premium paid in the case of a shared ancestry tender offer might indicate a cheaper acquisition for acquiring shareholders.

The coefficient on the interaction between shared ancestry and deal attitude in column (3) reflects the difference in premiums when these deals are friendly. Deal attitude is equal to one when SDC reports it as friendly, and zero when hostile. Firstly, controlling for the incremental effect of attitude on the difference in premiums when ancestry is shared, the coefficient on standalone shared ancestry is 38.5% lower for hostile deals, drastically lower than the baseline results in table 7. The coefficient on the interaction between shared ancestry and deal attitude reports a highly positive and statistically significant value of 31.9%, suggesting friendly deals that occur between CEOs of shared ancestry exhibit much higher premiums. This indicates a more pronounced impact of negotiations on premiums, as this is circumvented in a hostile takeover. The fact that friendly deals between same-ancestry CEOs exhibit premiums drastically higher on average compared to hostile same-ancestry deals possibly indicates collusive behaviour and misalignment of incentives as friendly deals are shown to destroy shareholder value in the long run (Sudarsanam and Mahate, 2006). It could be that belonging to the same ancestry facilitates more personal communication between bidder and target CEOs in the negotiation. While target shareholders appear to benefit in the short term, it appears shared ancestry can destroy acquiring shareholder value.

Table 13

Relationship between shared ancestry and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with additional variables related to value creation / destruction are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)
Same Ancestry	-7.089**	-5.116*	-38.47**	-7.759***
	(3.024)	(3.087)	(17.51)	(2.691)
Same Ancestry * All Cash Deal	0.0178			
	(5.879)			
All Cash Deal	3.831			
	(2.797)			
Same Ancestry * Tender Offer		-9.152*		
		(5.217)		
Tender Offer		9.169***		
		(3.218)		
Same Ancestry * Deal Attitude			31.93*	
			(17.55)	
Deal Attitude			-13.68**	
			(6.460)	
Same Ancestry * Challenged Deal				16.31*
				(8.488)
Challenged Deal				0.864
				(4.264)
Other Controls	Yes	Yes	Yes	Yes
Observations	661	661	661	661
Adjusted R^2	0.369	0.371	0.372	0.370

Column (4) reports the incremental effect of when a deal between CEOs of shared ancestry involved challenging bidders, and thus a more competitive bidding process. In line with the 'winner's curse', more competitive bidding environments lead to higher premiums and often the long-term result of overpayment (Varaiya and Ferris, 1987). Importantly the reported coefficient of 16.3% higher premiums on average in competitive deals where the CEO shared the same ancestry exceeds the base effect of shared ancestry (-7.8%). Thus, shared ancestry between CEOs appears to amplify the winners curse in competitive bidding scenarios and points towards flawed decision making at the cost of acquiring shareholders, but to the gain of target shareholders. Table 13 suggests that on average, M&A involving CEOs of shared ancestry can destroy shareholder value. Lower premiums in general, arising from shared ancestry erodes target shareholder value. Examination of possible moderating or amplifying effects when shared ancestry is interacted with proxies that signal long-term value

implications of M&A, there is evidence that it can lead to losses in shareholder wealth, and that is a result of flawed decision making.

6.4 Shared ancestry as an indicator for collusion

Considering the effect on premiums shared ancestry can have, it is worthwhile to investigate if this is a result of collusion between the CEOs. Specifically, whether or not CEOs initiate M&A that can destroy target wealth for self-interest and seek out those they trust and already have a relationship with, or if shared ancestry plays its part upon the initial interaction during negotiations. Columns (1) to (3) in Table 14 reports interactions of shared ancestry with variables that proxy the existence of relationships or interactions between CEOs prior to M&A announcement. Column (1) examines incremental effects on shared ancestry for deals where acquirors have pre-existing block holdings in targets, (2) examines incremental effects of shared ancestry deals occurring in the same industry, and (3) examines incremental effects of shared ancestry deals occurring in the same city. Columns (4) to (7) report interactions of shared ancestry with indicators of CEO power that proxy their ability to prioritise self-interest over shareholder-interest. A CEO power index is constructed inspired by Veprauskaite and Adams (2013) and Li et al. (2017) where a score of 1 is awarded if a CEO receives a performance-based bonus, owns at least 3% of their firm, and has an above median CEO slice (or high total compensation as a ratio of total executive compensation, relative to other acquirors in the sample). The index ranges from zero to three, and the indicators High and Low CEO power reflect above and below median grouping.

The interaction between shared ancestry and block holding prior to announcement reported in column (1) suggests no discernible effect. Premiums are not observed to be (statistically) significantly different for deals taking place between CEOs of the same ancestry where there is a prior stake of 5%, as compared to same ancestry deals with no prior stake. A prior block holding is shown to be associated with lower premium bids on average, as it proxies for more informed bidders who are more familiar with the target before embarking on M&A (Dionne, La Haye, and Bergeres, 2015). A block holding would increase the probability that bidder and target CEO have interacted before, and possibly have a professional relationship, thus would indicate the potential for collusive behaviour to occur in the M&A. The lack of marginal effect observed when interacted with shared ancestry suggests the higher likelihood of collusion has no impact on the observed ancestry effect on premiums.

Column (2) interacts shared ancestry with the indicator for deals occurring between firms in the same industry, as classified by their US SIC codes. No incremental effect is found for same ancestry deals occurring in the same industry. If both firms are in the same industry, the likelihood of both CEOs having prior interaction or a professional relationship is greatly increased due to industry-specific events and networks.

Table 14

Relationship between shared ancestry and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with additional variables related probability of prior relationship and CEO power are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Same Ancestry	-6.646**	-6.152	-5.861*	-6.731**	-6.118**	-6.823**	-7.355***
	-2.627	-8.208	-3.105	-2.776	-2.717	(2.718)	(2.676)
Same Ancestry * Block Holding	-13.72						
	-14.8						
Block Holding	6.178						
	-9.71						
Same Ancestry * Same Industry		-1.076					
		-8.643					
Same Industry		0.312					
		-3.469					
Same Ancestry * Same City			-1.74				
			-5.252				
Same City			-3.993				
			-3.114				
Same Ancestry * Both High Power				0.615			
				-7.221			
High CEO Power				1.008			
				-3.101			
Same Ancestry * High vs Low Power					-18.99***		
					-6.818		
High vs Low CEO Power					6.902		
					-5.727		
Same Ancestry * Both Low Power						-3.383	
						(6.980)	
Low-power CEOs						9.775*	
						(5.428)	
Same Ancestry * Low vs High Power							8.666
							(13.54)
Low vs High Power							-13.50
							(8.908)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	661	661	661	665	661	661	661
Adjusted R^2	0.37	0.369	0.372	0.364	0.372	0.372	0.373

The lack of effect observed again indicates no meaningful impact of possible collusion on same ancestry deals. However, when controlling for the shared ancestry deals that occur within the same industry, the base effect of shared ancestry on premiums is no longer significantly different from zero. Column (3) widens the focus in terms of proxies for prior interaction and

considered the interaction of shared ancestry with deals that occurred between firms located in the same city. Proximity by city also indicates higher probability both CEOs have interacted in a personal capacity as well as professional. Once again there appears to be no significant change in premiums for this group, and as such suggests higher likelihood of CEOs knowing each other does not moderate or amplify the effect shared ancestry has on M&A premiums.

While columns (1) to (3) investigate indicators for collusive behaviour leading to the deal in the first place, Columns (4) to (7) address if there is an indication that the effects on premiums are driven by CEOs prioritising self-interest. CEOs with high power have more decision autonomy and require less approvals from their boards and other executives. They have more ability to make decisions that maximise their own self-interest rather than the interest of shareholders. Alternatively low power CEOs are kept more in check and have lower decision-making autonomy, thus their ability for incentive misalignment is reduced. No incremental effects are found for shared ancestry deals where both CEOs are high or low power suggesting even when both parties have an increased or diminished ability to collude and extract personal benefits during negotiations, no difference in premiums is observed in deals where they share ancestry. A coefficient of 18.99 is reported for the interaction of shared ancestry with deals between an acquiror CEO with high power and a target CEO with low power and is statistically significant at the 1% level. When acquiring CEOs are powerful with respect to their firm, and target is a low power with respect to their firm, premiums are lower when they are also both of the same ancestry. The acquiring CEO is more autonomous and thus able to negotiate more freely while the target CEO has less autonomy. Lower premiums could reflect better deal for bidders, at cost of target shareholders, and indicates the opposite of collusive behaviour. Rather it suggests in cases where the power differential is skewed towards the acquiring CEO, they are able to represent their shareholder's interest more effectively. Therefore, it seems shared ancestry in M&A may not necessarily create or destroy shareholder wealth in a definitive pattern, but it is evidently an amplifier of other effects. It is not apparent that collusion affects the impact of shared ancestry on M&A premiums.

6.5 Persistence of shared ancestry

Considering the debate on vertical versus horizontal transmission, it is worthwhile to investigate if the shared ancestry effect on bid premiums is moderated over the course of time. Giavazzi et. al (2019) suggest that the cultural values of higher order generations of immigrants in the US eventually converge to that of the domestic US culture. Effectively, this section addresses whether belonging to the same ancestry group remains as important to CEOs depending on their age and if there are generation gaps between them. If convergence does occur, or rather if shared ancestry effects are not very persistent, then moderating effects are expected on interactions with younger CEOs or when there is a generation gap. Shared

ancestry is interacted with variables constructed to isolate the effects of age and generation differentials in Table 15. Column (1) interacts shared ancestry with deals that occur between CEOs who are both old. A CEO is defined as old if their age at the time of announcement is greater than or equal to 50 as per Li, Low and Makhija (2017) and Yim (2013). Columns (2), (3), and (4) interact shared ancestry with a generation gap between either CEO, evaluated at 20 years, 25 years, and 30 years difference in age, respectively. Finally, column (5) interacts shared ancestry with the raw age differential between CEOs.

Table 15

Relationship between shared ancestry and target premium presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with additional variables related to CEO age and generation gaps between CEOs are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 4.6 for full list of controls.

Dep. Var = 4 Week Premium	(1)	(2)	(3)	(4)	(5)
Same Ancestry	-8.373*	-7.076***	-7.134***	-7.680***	-7.280**
	(4.347)	(2.669)	(2.612)	(2.638)	(3.054)
Same Ancestry * Both Old	1.689				
	(5.188)				
Both Old	1.829				
	(2.500)				
Same Ancestry * Generation Gap 1		0.0696			
		(7.998)			
Generation Gap 1 (20 years)		-3.224			
		(3.204)			
Same Ancestry * Generation Gap 2			0.358		
			(9.845)		
Generation Gap 2 (25 years)			-2.309		
			(3.598)		
Same Ancestry * Generation Gap 3				5.095	
				(9.626)	
Generation Gap 3 (30 years)				-2.343	
				(3.720)	
Same Ancestry * Age Difference					0.0147
					(0.181)
Age Difference					-0.0341
					(0.0764)
Other controls	Yes	Yes	Yes	Yes	Yes
Observations	661	661	661	661	659
Adjusted R^2	0.370	0.370	0.369	0.369	0.369

Evidently there is no indication of a moderating effects of age or generation gap. Had the effect of shared ancestry on premiums been driven by older CEOs who can be seen as culturally less modern at the time of announcement, the interaction of both CEOs being old and shared ancestry should exhibit statistical significance, while the base same ancestry coefficient should

lose significance. When controlling for the difference between old-to-old and young-to-young it is found that the same ancestry effect on bid premiums is still negative and statistically significant at the 10% level. Incidentally, the coefficients in columns (2) to (5) report no changes in the effect of shared ancestry on premiums when accounting for age differentials. A generation gap between either CEO of the same ancestry appears to make no difference even when the gap is evaluated in multiple ways. No evidence is found of the shared ancestry effect weaking over age, or with generational gaps.

7. Conclusion

Strong evidence is presented for the relationship between target premiums and ancestral cultural proximity between bidder and target CEOs. CEOs that share the same ancestral heritage appear to be associated with M&A that exhibit lower premiums on average, and some evidence is present that premiums may increases as they deviate in culturally held beliefs on Hofstede's dimensions. Closer inspection of each dimension yields results that are both consistent with this finding, and with the wider literature. No concrete evidence is apparent on a similarly meaningful relationship between CARs and ancestral cultural distance. Taking the results on CARs in conjunction with the results found for premiums, evidence is presented for ancestral cultural proximity having an impact on the M&A process that manifests through negotiations and deliberations on setting the premium at which deal completion occurs, and that outside investors are not aware of this.

Moreover, there is evidence that this is based on inherent biases and flawed decision making. Interestingly, it appears the effect of ancestral heritage on premiums is driven by shared ancestry more than ancestral distance. This may be indicative of a binary similarity / dissimilarity distinction being made by CEOs in their interactions where hurdles to communication arise when the two are different, but not dependent on how different. The possibility of collusive behaviour is found to not significantly impact the observed effect shared ancestry has on bid premiums. Finally, the effect of shared ancestry on bid premiums is found to be robust to inter-generational differences between CEOs. These results add to our understanding of the impact of ancestry at a top executive level, by introducing observable effects that occur between both CEOs in M&A. Notably it contributes to the extant literature that investigate impacts of a CEOs ancestry with regard to their own firm.

Future steps for this research are to inspect the longer-term effects of shared ancestry in the context of M&A. This research so far has addressed if ancestry has an impact on M&A outcomes and short-term shareholder wealth. To extend the exploration of the impact of shared ancestry in M&A, post-merger firm performance is the focus of the second chapter of this thesis. Examination of long-term cumulative abnormal returns and buy-and-hold abnormal returns over several horizons after merger completion show that deals undertaken

by CEOs of the same ancestry tend to perform worse than deals undertaken by CEOs of different ancestry. This provides a definitive answer to the question of if CEO-to-CEO ancestry relates to acquiring shareholder wealth. Chapter 2 also introduces a novel measure of information asymmetry around an M&A deal and if the transparency of a target's earnings provides more opportunity for ancestry-related value destroying behaviour.

CHAPTER 2: CEO ANCESTRY AND POST-MERGER PERFORMANCE

1. Introduction and literature Review

This research investigates the impact of differences in cultural heritage between the Chief Executive Officer (CEO) of bidding and target firms on the long-term performance and quality of domestic United States (US) mergers and acquisitions (M&A). Chapter 1 of this thesis investigated the impact of bidder and target CEO ancestries in the context of deal premiums and announcement abnormal returns, introducing the novel approach of comparing deals occurring between CEOs of the same ancestry with deals occurring between CEOs of differing ancestry. It was found that on average, same-ancestry deals lead to lower premiums paid to target shareholders, while the effect on bidding shareholder wealth was ambiguous. CEOs that share the same ancestral heritage are associated with M&A that exhibit lower premiums on average, and some evidence was presented that premiums may increases as they deviate in culturally held beliefs based on Hofstede's dimensions. No concrete evidence was found on a meaningful relationship between abnormal returns at announcement and ancestral cultural distance. The implication of the main finding in chapter 1 was that ancestral cultural proximity has an impact on the M&A process that manifests through negotiations regarding the premium at which deal completion occurs, and that outside investors are not aware of this. Robustness tests were conducted to investigate if the observed ancestry effect is not mitigated by controlling for the possibility of prior social or professional interaction, and that it is not affected by age difference between bidding and target CEOs.

This second chapter further investigates the impact of bidder and target CEO ancestry on the long-term performance of M&A and bidding shareholder wealth. Rather than impacts that occur at announcement, the focus is placed on abnormal returns and firm performance in the years following M&A completion. Of interest is the implications of CEO ancestry on abnormal returns at several horizons beyond the completion of the deal as this indicates the opinions of capital market participants on the speculative aspect of the combined firm's synergies. It also indicates if bidding shareholders experience long-term changes in wealth, and if market efficiency leads to further information as time passes. Accounting measures are also of interest for firm performance as these are less speculative in nature and offer a more realised depiction of the combined firm's growth and performance in the period after the deal completes. The binary indicator for same-ancestry deals is used again as the focal independent variable. Hofstede's cultural distance measure are used again for the baseline results due to their prevalence in the extant literature, and for a more complete analysis of an expanded dataset.

While widely used to explore aspects of culture in professional settings, cultural distance measures such as Hofstede's national cultural dimensions are not without limitations.

Hofstede conceptualises culture as collective cognitive programming that distinguishes members of one group from another (Hofstede, 1991). In essence Hofstede (1991) suggests that an individual's culture dictates and establishes their set of values, beliefs, and behaviours. However, this is criticised as an oversimplification that neglects the ambiguous nature of how culture can partly inform an individual's behaviours without outrightly determining it (Signorini, Wiesemes and Murphy, 2009). Spencer-Oatey (2000) suggests that rather than groups forming from identical sets of cognitive processes defined by culture, members of these groups congregate due to a recognition of some familiarity in these processes.

Crucially, Hofstede's dimensions aggregate culture at a national level. That is, it largely assumes national uniformity and incorrectly overlooks cultural heterogeneity within a nation (Bock, 1988, 2000; Etzioni, 1968; O'Reilly and Roberts, 1973; Bhagat, 1979; Freeman, 1983; Merelman, 1984; Zeldin, 1984; Kondo, 1990; Smelser, 1992; Steinmetz, 1999). McSweeney (2002) alternatively suggests national culture to be fragmented within a nation, disintegrating and fusing over time to represent the heterogenous nature of the population within that nation. For example, under Hofstede's cultural dimension measures, the reintegration of Hong Kong into China would suggest the prior existing national culture scores unique to Hong Kong disappear and are replaced by those of China (McSweeney, 2002: 111). An additional issue with Hofstede's dimensions is that the scores themselves predominantly originated from surveys conducted between 1967-1973, and as a result the exact rankings for each nation reflect prevailing beliefs held by people from that time period. When applied to contemporary studies such with samples that focus more on data from the 1990s and beyond, there is likely to be increased measurement error or misrepresentation of cultural distance. Though Hofstede's dimensions do have potential to offer some insight, these issues weaken the overall efficacy of using cultural distance measures as compared to a more binary representation of cultural difference.

Applied to the context of this study, it is possible that the effect of CEO ancestry is therefore less likely to be driven by inherited cultural values and beliefs, but rather a sense of specific cultural identity within the culturally heterogenous national setting. This is corroborated with the findings in chapter 1, as well the results in this chapter. As was argued in chapter 1, the sociological conception of identity suggests that an individual's sense of identity is formed in relation to and through interaction with others in their society, eventually stabilising in two distinction concepts of 'us' and 'them' (Hall and Du Gay, 1996, 2006). A more appropriate conception of culture then would be that it is informed by identity, and that members of different groups distinguish themselves from others through the act of identifying with those who they deem to be similar (Lawler, 2015). Given the enigmatic and ambiguous nature of the concept of both identity and national culture, there is merit to use both the binary shared

ancestry measure and cultural distance measures in trying to discern the impact of CEO ancestry on M&A.

Several studies investigate long-run abnormal stock in the aftermath of M&A and find varying results as to whether they are value creating or destroying for acquiring shareholders. Mandelker (1974) analyses 241 deals occurring between 1941-1962 and finds cumulative abnormal returns (CAR) of -0.014% in the 40-month post-deal period. Limmack (1991) similarly finds significant negative CARs of -9% in the 2-year post-merger period. Additionally, Agarwal, Jaffe and Mandelker (1992) find CARs of -10% over the five years after mergers, indicating wealth destruction for acquiring shareholders. Palepu and Ruback (1992) investigate whether merger return reflects economic gains or, or simply market inefficiency. They find merged firms experience significant improvement in performance relative to their industry after the merger and they attributed this to higher asset productivity and higher post-merger return on operating cash. Da Silva et al. (2004) finds deals conducted using cash based tender offers tend to exhibit abnormally positive returns in the three-year period following target listing whereas acquirers tended to experience negative returns. Moreover, L'Her and Francois (2004) investigate the long-run post-deal performance of Canadian acquisitions between 1980 and 2000 and find no significant abnormal return in the three-year post-acquisition period and that M&A financed entirely by equity underperform relative to cash transactions.

Combining elements and methods from the discussed literature, the main research question is: Does the interaction between CEO ancestries have a meaningful impact on the quality and long-term performance of M&A? The results obtained in section 4 suggest that M&A deals occurring between CEOs of shared ancestry tend to perform poorly and erode acquiring shareholder value, with negative abnormal returns and negative changes in profitability measures measured at 3-years post-deal. While some evidence is found that same-ancestry deals benefit bidder shareholder wealth up to 12-months post deal, longer term gains underperform different ancestry deals, and long term post-deal profitability measures suggest same-ancestry deals tend to underperform different-ancestry deals. It is possible that information about the poor outcomes from the acquisition do not reach market participants immediately, and given time, market efficiency causes this information to become priced into investor trading activities, explaining the observed short term post-deal gains. The results from chapter 1 observe that same-ancestry deals exhibit lower premiums compared to different-ancestry deals, however the results did not find a conclusive impact on short-term acquiror shareholder wealth. Taken in conjunction with the results of chapter 2, the findings thus far add to our understanding of ancestry in M&A by clearly finding both target and bidder shareholders are worse off as a result of both CEOs ancestry. Intuitively, deals occurring

between CEOs of shared ancestry leads to target shareholders generally being paid less, without it resulting in greater long term value creation for the bidding firm shareholders. This effect is also found to be moderated in the presence of higher information asymmetry. The results of this chapter also contribute to extant literature on determinants of long-term post-deal performance, as well as providing a more complete picture on the impact of CEO ancestry on M&A by showing post-deal profitability as one of the channels through which value is destroyed.

The remainder of this chapter is organised as follows. Section 2 discusses expected results. Section 3 describes the methodology, data, empirical strategy and estimation models, and outlines the key variables constructed. Section 4 establishes the main result of estimating the effect of CEO ancestry on post-merger abnormal returns and profitability. Section 5 provides additional analysis of ancestry effects on M&A, and how it is impacted by information asymmetry and when accounting for specific dominant ancestries in the domestic US setting. Section 6 concludes.

2. Expected Results

2.1 Ancestry and Post-Merger Performance

One argument is that shared ancestry between merging CEOs leads to flawed or sub-optimal decision-making stemming from less critical analysis. This could arise from excessive levels of trust that are caused by the principle of homophily, or the increased susceptibility for individuals to be influenced by those who are similar to them (McPherson, Smith-Lovin, and Cook, 2001). More recently, Boucher (2015) formulates a network model of structural homophily and finds that individuals choices of friends are most strongly influenced by racial similarity compared to age and gender differences. Currarini, Jackson and Pin (2009) propose a model of friendship formation in a society and find that individuals prefer to consort and form friendships with similar individuals, and that larger friendship groups are formed with people of their same type as a fraction of the population of their entire network. Mele (2013) also demonstrates with a structural equilibrium model of friendship formation that individuals prefer a racially homogenous set of indirect friends. Furthermore, Bramoulle et. al (2012) posit that even under an assumption that individuals have no preferential bias, having similar characteristics increases their likelihood of meeting and thus would still influence their decision making.

This would manifest in the negotiation process as lower scrutiny on representations of assets or potential value from ongoing projects, and more favourable interpretations of the other participant. Significant empirical evidence exists that show the effect familiarity bias has in investment decision-making, such as the home bias between foreign and international assets

(Coval, and Moskowitz, 1999; French and Poterba, 1991). De Vries et al. (2017) find more generally that investors tend to exhibit a preference to invest in companies with familiar corporate brands that they know relatively better than more obscure companies, even in the case of one being a subsidiary of the other. Moreover, Sarkissian and Schill (2004) show firms are more likely to cross-list their stocks in countries where investors are more familiar with them. As a result, M&A deals where there is heightened familiarity bias at the top executive level may mean overestimated synergy gains and even missing out on better alternatives, and thus poorer post-merger performance. Importantly, agency theory suggests that risk aversion in managers may increases the bidding CEOs preference to doing business with counterparties more connected or familiar to them, increasing the likelihood of missing out on better alternative targets, and pursuing sub optimal targets with the intention of completing the merger (Amihud and Lev, 1981). Taken in conjunction with the previous chapter's findings that shared ancestry deals are associated with higher target premiums and little discernible impact on bidder shareholder wealth, one possible result is that M&A taking place between firms with CEOs of shared ancestry are associated with negative post-merger performance.

Alternatively, based on concepts such as familiarity bias, and the sociological conception of identity, it is possible that shared identity between negotiating CEOs may affect issues of adverse selection or moral hazard. Additionally, it is possible that an overlap of individual experiences and social networks may facilitate more transparent communication at the CEO-to-CEO level. Evidence suggests a level of connection between executives creates channels for information dispersal, for example shared educational networks between mutual fund managers and corporate boards (Cohen, Frazzini, and Malloy, 2008). Overlapping professional networks between bidders and targets such as common venture capital investors or common board members are shown to reduce information asymmetry (Gompers and Xuan, 2008; Cai and Sevilir, 2012). Shared ancestry, being a pre- or early-life factor is likely to subsequently have at least some deterministic effects on social, professional, and educational networks that CEOs develop over their career. Assuming these manifest as improved facilities to share information during negotiations and collaborate, one possible outcome is lower monitoring costs over the post-merger period (Zaheer, McEvily, and Perrone, 1998). Additionally, a converse application of agency theory might also suggest the preference for familiarity rules out potentially value destroying diversifying deals (Gormley and Matsa, 2016). As a result, post-merger integration will be smoother, and it is expected that deals undertaken by CEOs with shared ancestry would display better post-merger performance. An alternative possible result is that M&A taking place between firms with CEOs of shared ancestry are associated with positive post-merger performance.

2.2 Information Asymmetry

The extent of either positive or negative post-merger effects, if resulting from informational asymmetry around M&A, would be more (less) pronounced in deals where target asset value is less (more) transparent. For example, firms possessing more knowledge capital are inherently difficulty to value ex-ante and are harder to integrate. This would mean greater transaction and employee retention costs, especially if the bidder is less familiar with the nature of these assets, such as in the case of diversifying acquisitions (Nejadmalayeri, Iyer, and Singh, 2017; Adhikari, Nguyen, and Sutton, 2018). Moreover, firms in high-tech industries tend to have more intangible resources and assets compared to firms in non-high-tech industries (Song, Zeng, and Zhou, 2021). The value of these assets is typically more implied than directly measurable (Benou and Madura, 2007; Erickson and Rothberg, 2016; Officer, Poulsen and Stegemoller, 2009). The added difficulty in obtaining detailed and non-subjective information on intangible asset quality is likely to distort the estimation of potential synergies and value creation that would arise upon completion of the deal. Thus, the economic impacts of this would manifest in the long-term performance of the merged company, stock market participants' assessment of the company post-merger, and in the price paid by the bidder (Laamanen, 2007). If ancestry effects lead to lower information asymmetry, the level of understanding and thus ability to accurately value the target is improved and long-term performance of deals involving targets with more transparent would improve. However, if the converse is true and ancestry effects worsen information asymmetry, then information opaqueness is likely lead to worse long-term merger outcomes. Formally, that Ancestry effects on post-merger performance are expected to be more pronounced in the presence of higher information asymmetry.

2.3 Dominant Ancestries

Finally, given the setting of M&A that occur domestically in the USA, it is worth noting the possibility of dominant subset of ancestries that make up the majority of CEOs. Prior studies have shown an extent of dominance by few ethnic groups, namely white Anglo-Saxon protestants (WASPs) in the 'Elite' group of American society (Keller, 1963; Matthews, 1960; Mintz, 1975; Baltzell, 1958; 2017). While some prior studies indicate slowly increasing heterogeneity amongst individuals or institutions with significant policy-making and political influence, Baltzell (1987) finds persistent homogeneity in the business sector and exclusive social-club membership. Furthermore, Alba and Moore (1982) posit that even if ethnic or ancestral origin become less important in attaining Elite status, it still plays a crucial part within Elite groups and that achieving Elite status need not mean social acceptance by other Elites. In effect this creates plausibility for the existence of homophily and the exhibition of preference towards CEOs of similar ancestry in the context of M&A. Doane (1997) highlights the lack of attention paid to specific ethnic group dominance in the USA and suggests the

concept of a 'hidden' ethnicity perpetuates said dominance. Of relevance is if 'same-ancestry' effects are more pronounced amongst specific groups, as such a revelation contributes to the understanding of the implications specific-ancestry dominance has on intergroup interactions. Based on the context of social acceptance within Elite groups, M&A deals occurring between CEOs that share the same dominant ancestry, originating from the British Isles or Western Europe, are likely to lead to a stronger ancestry effect. That is, belonging to the same dominant ancestral group would amplify information exchange, or worsen familiarity bias. Ancestry effects on post-merger performance are expected to be more pronounced in M&A undertaken by dominant ancestry pairings.

3. Data and Methodology

3.1 Deal Sample

The sample consist of 2741 M&A deals announced during the 27-year period from 1992 to 2019. Data is obtained from Securities Data Company (SDC) US Mergers and Acquisitions database. US domestic firms are chosen to keep later life impacts of economic and institutional effects relatively controlled. Deals are selected on the following criteria. Both acquirer and target are required to be either publicly traded in the US or have stock price and accounting data available for post-deal abnormal returns, profitability measures, and firm and deal level control variables to be constructed. Minimum deal size is set at $1 million. The acquisitions must be completed, and the acquirer must acquire 100% of the target after the transaction. Moreover, ownership stake in the target prior to announcement must be less than 51%. SDC provides the acquisition announcement date, the value of the transaction, deal attitudes, premiums and values prior to announcement, percentage of stock and cash used to pay for the acquisition, and additional details such as if bids were challenged. The sample of M&A targets and bidders is merged with Compustat to retrieve financial data, with the Center for Research in Security Prices (CRSP) for data on returns, and Execucomp to retrieve CEO specific details.

Table 3.1 displays the distribution of transactions across years. A high frequency of deals is observed during the late 90s to mid-2000s, with around 55% of deals occurring between 1998 to 2006. More recent deals account for around 30% of the sample, being announced between 2009 to 2019. Average deal value by year varies through the sample, with notable highs in 1995, 2000, 2009, and in the latter half of the 2010's. Table 3.2 shows the distribution of acquirors and targets across industries as classified by the US Standard Industrial Classification (SIC) codes. There appears to be a high supply of bidders and targets from the Manufacturing industry, accounting for 50% and 25% respectively. Of the 2741 deals, 666 are diversifying representing 24.3% of the sample. The remaining 2075 deals occur within the same industry.

Table 3.1

Sample distributions of the total number of M&A deals across years during the period of 1992–2019. Data are obtained from SDC Platinum M&A Database. The sample consists of 2741 deals.

Year of Announcement	No. of Deals	Percent of sample	Average Deal Size ($Mil.)
1992	53	1.93	306.79
1993	41	1.5	284.49
1994	51	1.86	477.31
1995	75	2.74	519.55
1996	72	2.63	322.85
1997	105	3.83	327.70
1998	90	3.28	370.69
1999	142	5.18	490.01
2000	176	6.42	577.71
2001	135	4.93	342.93
2002	136	4.96	183.23
2003	150	5.47	226.66
2004	137	5	177.95
2005	180	6.57	358.23
2006	177	6.46	366.75
2007	95	3.47	338.38
2008	93	3.39	239.05
2009	101	3.68	783.48
2010	97	3.54	458.84
2011	77	2.81	407.43
2012	79	2.88	725.73
2013	87	3.17	374.30
2014	88	3.21	1078.30
2015	80	2.92	1283.83
2016	53	1.93	1576.26
2017	58	2.12	491.52
2018	68	2.48	1806.15
2019	45	1.64	286.22
Total	2,741	100	15182.31

Table 3.2

Sample distributions of the total number of M&A deals across industries during the period of 1992–2019. Industries are classified according to US SIC codes. Data are obtained from SDC Platinum M&A Database. The sample consists of 2741 deals.

Industry	Acquiror		Target	
	Obs.	%	Obs.	%
Agriculture, Forestry and Fishing	267	9.74%	240	8.76%
Mining	98	3.58%	783	28.57%
Construction	2	0.07%	0	0.00%
not used	0	0.00%	0	0.00%
Manufacturing	1374	50.13%	697	25.43%
Transportation, Communications, Electric, Gas and Sanitary service	275	10.03%	303	11.05%
Wholesale Trade	140	5.11%	317	11.57%

(continued on next page)

Retail Trade	15	0.55%	0	0.00%
Finance, Insurance and Real Estate	448	16.34%	401	14.63%
Services	108	3.94%	0	0.00%
Public Administration	0	0.00%	0	0.00%
Nonclassifiable	14	0.51%	0	0.00%
Total	2741		2741	

3.2 Ancestry Variables

To assign each CEO with a variable value based on ancestry, their ancestry is identified, and two measures are used following the methods employed in chapter 1. The first is the same-ancestry indicator variable that equals one if a deal involves bidder and target CEOs that share the same ancestry. The second uses scores that are calculated based on Hofstede's (1980; 2009) cultural distance dimensions. Identification is multifaceted, involving data sourced from Ancestry.com[3], the Dictionary of American Family Names (Hanks, 2003), forebears.io, and web searches. An additional identification method involves the Dictionary of American Family names, an Oxford reference compiled by Patrick Hanks (2003). The method used for obtaining these data follows that of the investigation into ancestry effects on announcement returns and premiums in chapter 1.

Table 3.3 lists the identified ancestries and the observed frequencies of assigned countries of origin. In total 5482 CEOs' ancestral heritage country are identified. Notably, there is a high concentration of CEOs of English ancestry, accounting for 2166 observations, or 39.5%. CEOs of English ancestry make up 38.1% of acquiring CEOs and 40.1% of target CEOs. The next most frequent by a large margin is German representing 14.1% of the total sample, or 13.6% of acquiring CEOs and 14.6% of target CEOs. These two countries of origin cumulatively represent 52.2% of the total sample.

Once nationality or ancestral country of origin is identified A dummy variable *Same ancestry* that takes the value one if both CEOs share the same ancestral heritage and zero otherwise is used. Then, for granular analysis of how cultural distance might effect M&A long-term performance, an aggregate index is constructed as per Kogut and Singh (1988) based on Hofstede (1984, 2001). The Hofstede-based metric is by far the most established measure of cultural distance in terms of acceptability and use (e.g., Van Oudenhoven, 2001; and earlier replications in Sondergaard, 1994). Moreover, Kirkman, Lowe, and Gibson (2006) point out that Hofstede's dimensions are widely used tools for calibrating cultural differences in several business disciplines. Following the methods used in chapter 1, the traditional Hofstede measure and Euclidean Hofstede measures are constructed using the main 4 most common dimensions in the literature: Uncertainty Avoidance, Power Distance, Individualism, and

[3] Obtained at www.ancestry.com/search/collections/7488/

Masculinity. For robustness, the measures are constructed again with all six dimensions including the additional Long-term orientation, and Indulgence dimensions.

Table 3.3

Full list of distribution of modal / most likely country of ancestral origin for bidder and target CEOs identified by surname. CEO names obtained from Standard & Poor's Execucomp database. Ancestry data approximated from arriving New York, US, passenger and crew lists (including Castle Garden and Ellis Island) between 1820-1957 obtained from Ancestry.com

Ancestry	**Total**			**Acquiror**		**Target**	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
Argentinian	13	0.24	0	5	0.18	8	0.29
Armenian	28	0.51	0.75	15	0.55	13	0
Austrian	28	0.51	1.26	16	0.58	12	0.44
Belgian	18	0.33	1.59	10	0.36	8	0.29
Brazilian	11	0.2	1.79	5	0.18	6	0.22
Bulgarian	15	0.27	2.06	7	0.26	8	0.29
Canadian	24	0.44	2.5	13	0.47	11	0.4
Chinese	82	1.5	3.99	41	1.5	41	1.5
Croatian	42	0.77	4.76	23	0.84	19	0.69
Czech	24	0.44	5.2	13	0.47	11	0.4
Danish	73	1.33	6.53	36	1.31	37	1.35
Dutch	150	2.74	9.27	86	3.14	64	2.33
English	2,166	39.51	48.78	1,044	38.09	1,122	40.93
Finnish	12	0.22	49	7	0.26	5	0.18
French	140	2.55	51.55	80	2.92	60	2.19
German	773	14.1	65.65	372	13.57	401	14.63
Greek	62	1.13	66.78	31	1.13	31	1.13
Hungarian	18	0.33	67.11	10	0.36	8	0.29
Indian	65	1.19	68.3	36	1.31	29	1.06
Iranian	12	0.22	68.52	7	0.26	5	0.18
Irish	245	4.47	72.98	117	4.27	128	4.67
Italian	332	6.06	79.04	174	6.35	158	5.76
Japanese	12	0.22	79.26	6	0.22	6	0.22
Jewish	399	7.28	86.54	202	7.37	197	7.19
Lithuanian	2	0.04	86.57	1	0.04	1	0.04
Maltese	1	0.02	86.59	1	0.04	0	0
Mexican	3	0.05	86.65	2	0.07	1	0.04
Norwegian	70	1.28	87.92	36	1.31	34	1.24
Pakistani	3	0.05	87.98	1	0.04	2	0.07
Polish	132	2.41	90.39	68	2.48	64	2.33
Romanian	26	0.47	90.86	13	0.47	13	0.47
Russian	65	1.19	92.05	33	1.2	32	1.17
Scottish	136	2.48	94.53	76	2.77	60	2.19
Serbian	14	0.26	94.78	8	0.29	6	0.22

(continued on next page)

Table 3.3 (continued)

Ancestry	Total			Acquiror		Target	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
Slovakian	11	0.2	94.98	5	0.18	6	0.22
Spanish	76	1.39	96.37	43	1.57	33	1.2
Swedish	74	1.35	97.72	38	1.39	36	1.31
Swiss	56	1.02	98.74	25	0.91	31	1.13
Syrian	11	0.2	98.94	5	0.18	6	0.22
Ukrainian	1	0.02	98.96	1	0.04	0	0
Vietnamese	7	0.13	99.09	4	0.15	3	0.11
Welsh	40	0.73	99.82	19	0.69	21	0.77
Yugoslavian	10	0.18	100	6	0.22	4	0.15
Total	5,482	100		2,741	100	2,741	100

Table 3.4 presents descriptive statistics on the measures constructed and shows that differences are in fact observed in bidder and target CEO ancestral culture. Of the 2741 deals in the full sample, 1460 are between CEOs of the same ancestry, and is reflected in the mean value for *same ancestry* being approximately 53%. Different to research into cross-border M&A, there are occurrences of non-distances, or where the cultural dimension distance equals zero, such as in the case of a deal between CEOs that share the same ancestry. illustrated with minimum values obtained of zero, alongside varying and large maximum values indicating the sample covers a variety of cases.

Table 3.4

Descriptive statistics of the ancestral cultural distance measures calculated between each bidder and target CEO.

Distance Measure	Obs.	Mean	Std. Dev.	Min	Max
Same Ancestry	2,741	0.532652	0.499024	0	1
Traditional Hofstede (4 Dimensions)	2,741	1.150057	1.792344	0	9.466908
Traditional Hofstede (6 Dimensions)	2,741	1.156963	1.579862	0	8.168571
Euclidean Hofstede (4 Dimensions)	2,741	1.344249	1.671599	0	6.153668
Euclidean Hofstede (6 Dimensions)	2,741	1.712111	2.002976	0	7.000816

Table 3.5 presents similar descriptive statistics on the ancestral cultural distance measures but only for observations where a deal took place between CEOs of different ancestries, omitting observations of zero-distance. The range of minimum and maximum values show that there is a reasonable level of variation in ancestral cultural distance between CEOs in different-ancestry deals.

Table 3.5

Descriptive statistics of the ancestral cultural distance measures calculated between each bidder and target CEO for deals occurring between CEOs of different ancestry.

Distance Measure	Obs	Mean	Std. Dev.	Min	Max
Traditional Hofstede (4 Dimensions)	1,281	2.511798	1.896361	0.027944	9.466908
Traditional Hofstede (6 Dimensions)	1,281	2.52688	1.410434	0.098133	8.168571
Euclidean Hofstede (4 Dimensions)	1,281	2.935925	1.195273	0.334329	6.153668
Euclidean Hofstede (6 Dimensions)	1,281	3.73936	1.086006	0.767333	7.000816

3.3 Long-term performance variables

3.3.1 Long-Term Abnormal Returns

Post-merger abnormal returns are used as dependent variables to measure long-term performance as assessed by capital market participants over 12-, 24-, and 36-month event windows post-deal. Abnormal returns also convey information about effects on shareholder wealth. The long horizons and three intervals of 1-, 2-, and 3-years post-acquisition is to see if abnormal returns are affected by market efficiency. Rational investor's beliefs and expectations of the bidding firm's shares will incorporate more information the longer the window from the merger. The market adjusted model is used as the benchmark to calculate abnormal returns due to its simplicity, assuming that only the market return predicts returns for a given security for a given period of time and assumes same systematic risk for all assets (Turamari, 2017). For robustness, both BHARs and CARs are computed and used as dependent variables[4]. However, there is no definitive consensus on optimal method to calculate long run abnormal returns (Barber and Lyon, 1997). As is widely used in the literature on M&As, the buy-and-hold abnormal returns (BHAR) of the acquirer's stock over a multi-year period is a suitable post-acquisition performance measure (Mitchell and Stafford, 2000; Barber and Lyon, 1997). BHARs compound the return of securities at predefined intervals, measuring the abnormal returns at the end of a specific period and offering a proxy for the realised wealth for a shareholder. Cumulative abnormal return (CAR) over a multi-year period post-deal is also used as an additional measure of M&A long-term performance. CARs sums returns over a specific interval and measures consistency of the daily abnormal returns over that period in the event study. They also measure whether abnormal returns earned by

[4] Formally, BHARs are calculated following the standard methodology (Barber and Lyon, 1997). Expected returns for acquiring firms are calculated using market index monthly returns as the reference portfolio. In order to calculate the BAR on firm *i* over period t, the expected return of the benchmark market index is subtracted from the return of the bidding firm. As discussed, three periods area chosen for calculation: 12-, 24-, and 36-month intervals. In contrast, CARs are measured by taking the sum of the abnormal returns (AR) over the expected returns obtained from a benchmark. As per the market-adjusted model, the observed returns on the market index are used as a benchmark for obtaining abnormal returns. Abnormal returns are then calculated by subtracting market returns from a firm's monthly return, as per the market-adjusted model. In the case of CARs, these AR are cumulated across 12, 24, and 36 months.

bidding shareholders are continual. CARs are less subject to skewness and there is less likelihood of magnified abnormal returns, as they are not compounded, while there is a risk for BHARs to compound such abnormal returns. However, the benefit of BHAR over cumulative abnormal returns is its suitability to longer horizons, as it represents the difference between realised and expected returns when investors buy and hold the acquirer's stock (Chang and Tsai, 2013). Cumulating these returns as in the case of CARs would introduce bias over such a large multi-year window (Kothari and Warner, 2008; Lyon, Barber, and Chih-Ling, 1999). BHAR also allows for a clear indication of how much the merged firms have over- or under-performed relative to the market return expectations (Francoeur, 2006; Giannopolous et al., 2017). Effectively long-term BHAR as measures for post-acquisition performance allows the gap to be bridged between the potentially underinformed evaluations of synergies proxied with announcement CARs, and the ability for relatively more informed managers to realise their evaluations of synergy gains post-completion.

3.3.2 Long-Term Changes in Profitability

Additionally, for consistency with the literature several accounting-based measures of firm profitability are used to construct dependent variables (He, Yu, and Du, 2020). Return on assets (ROA), defined as net income over total book assets, indicates how effective the firm is in generating profits using its assets and available resources. Return on equity (ROE), defined as net income divided by shareholders equity is used as an alternate measure of profitability. By taking on debt firms can report higher levels of assets due to the influx of cash, which could cause variations in ROA that are not strictly related to its relevance to profitability or economic value, while ROE ignores how levered a firm is. Sales growth rates are also used as they are a common proxy for synergistic gains from the merger, with quicker post-merger growth indicating smoother integration. Additionally, return on invested capital (ROI), defined as net income over sum of fixed assets and net working capital, is used as it focuses on how efficient the firm is at generating income from assets that have been allocated for the purpose of generating economic value.

In order to appropriately capture the long-term performance of the M&A and if execution of the deal led to improved firm performance as a result of the deal, the four-year window between 1 year prior to 3 years after the deal is focused on and variables that measure the change in profitability measures over this period are constructed. For example, the constructed variable ΔROA measures the percentage change in the acquirers ROA from year t+3 to year t-1 scaled by ROA in year t-1. Similarly, this construction method is employed for the other profitability measures to obtain ΔROE, ΔROI, ΔSales growth. All changes in profitability measures are expressed in percentage form. Thus, this allows an assessment

mergers' performance, as well as its quality and if it was value-creating for acquiring shareholders.

3.4 Regression models

3.4.1 Baseline Regressions

The main independent variables are the ancestry measures 'Same Ancestry', an indicator variable which equals one if a deal is identified to have occurred between CEOs who share the same ancestry, and the Hofstede-based cultural distance measures. Long-term BHARs are calculated at the 12-, 24-, and 36-month horizons. Long term CARs are also calculated over these same horizons for robustness. Accounting based dependent variables focus on the four-year window from 1 year prior and 3 years after the M&A and measure percentage change in ROA, ROE, ROI, and sales growth over the 4-year period.

The main regression equations take the following form:

$$BHAR_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{k=2}^{K} \beta_k \times Controls_j^k + \varepsilon_j$$

$$CAR_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{k=2}^{K} \beta_k \times Controls_j^k + \varepsilon_j$$

$$\Delta\ ROA_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{m=2}^{M} \beta_m Controls_j^m + \varepsilon_j$$

$$\Delta\ ROE_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{m=2}^{M} \beta_m Controls_j^m + \varepsilon_j$$

$$\Delta\ ROI_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{m=2}^{M} \beta_m Controls_j^m + \varepsilon_j$$

$$\Delta\ sales\ growth_j = \beta_0 + \beta_1 Ancestry\ Measure_j + \sum_{m=2}^{M} \beta_m Controls_j^m + \varepsilon_j$$

Under this specification, β_1 captures the relationship between CEO ancestral cultural distance on post-merger abnormal returns and changes in acquiring firm profitability when the ancestry measure is one of the Hofstede distance measures. When the dummy variable *Same Ancestry* is included as the independent variable, β_1 shows the difference in post-deal

abnormal returns and changes in profitability measures exhibited by same-ancestry deals, relative to different-ancestry deals, on average.

3.4.2 Information Asymmetry

An important aspect of M&A covered in the literature is the issue of adverse selection bidders face due to information asymmetry (Arrow, 1974). The imbalance of available information between bidders and targets creates hurdles for an accurate evaluation of potential synergy gains before the merger is complete (Balakrishnan and Koza, 1993; Coff, 1999). Targets may mis-represent or obfuscate the true value of their assets and bidders may inaccurately evaluate targets, leading to deal terms that do not translate to the expected post-merger performance. These informational issues may also cause unforeseen integration issues between the merging firms ex-post (Grossman and Hart, 1986; Ravenscraft and Scherer, 1987, Robinson, 2008). This would have further impact on the ex-ante terms of M&A; therefore, it becomes important to evaluate variables of interest in a long-term post-merger setting. One method to investigate the effect of the level of information asymmetry is to investigated industry specific levels of information asymmetry, as prior research has shown greater post-deal costs associated with diversifying acquisitions (Nejadmalayeri, Iyer, and Singh, 2017; Adhikari, Nguyen, and Sutton, 2018). Effects of industry-based information asymmetry are proxied for with an interaction term between the ancestry measure and the same-industry indicator.

To operationalise the extent of information asymmetry in M&A deals, a novel measure is constructed based on a target's pre-merger level of information opacity. Inspiration for this measure comes from prior studies on earnings transparency and the returns-earnings relationship (Park and Ha, 2020; Barth et al., 2013; Francis et al., 2004). Barth et al. (2013) devise a measure for earnings transparency using the extent to which earnings captures changes in firms' economic value, relying on the explanatory power of the returns-earnings relationship. The intuition is that when a firm exhibits low earnings transparency, information on earnings which is easily available fails to convey relevant information on economic value to investors, and acquiring additional information is costly, thus higher information asymmetry is present. Earnings figures reported by firms are susceptible to various sources of obfuscation, such as misrepresentation of un-realised value from future contracts, variations in accounting practices, or the amount of opportunistic discretion managers have. The extent to which earnings can explain stock returns suggests lower obfuscation of true firm value and easier assessment of a firm's economic value by market participants in an efficient market. Studies that operationalise the explanatory power of the returns-earnings relationship do so with a two-step process regressing a firm's annual stock return on earnings and earnings per share (EPS) over the previous year, and then taking the sum of the adjusted R^2 to arrive at a proxy variable for the explanatory power of the returns-earnings relationship (Park and Ha, 2020).

This study proposes an alternative approach, where the desired proxy variable is for earnings opacity instead of transparency. Using a similar two-step approach of regressing target firms' annual stock return over the previous year's EPS and change in EPS, the residuals are sought instead of the adjusted R^2. The residuals from the first step present the unexplained variance in the target's pre-merger stock performance that would be attributable to their reported earnings and change in earnings. Therefore, the residuals allow for an ad-hoc indication of the level of overall obfuscation in the information conveyed by the target's earnings during the time of the acquisition and are able to capture the specific and unique information scenarios for each deal. Formally:

$$Return_{i,t} = \alpha_0 + \gamma_1 \left({}^{E_{i,t}}\!/_{P_{i,t-1}} \right) + \gamma_2 \left({}^{\Delta E_{i,t}}\!/_{P_{i,t-1}} \right) + \theta_{i,t}$$

Where Return is annual return from the second quarter of year t to the first quarter of year t+1. E_t/P_{t-1} is EPS, $\Delta E_t/P_{t-1}$ is change in EPS, with both standardised at the stock price in year t-1. θ_t then gives the unexplained variance between a target's pre-merger stock return and earnings. The absolute value of θ_t is calculated for each firm and included as a variable, as well as interacted with the ancestry measure in section 5.3.2.

The benefit of using the deal-specific residuals is that this method is agnostic to the source of variations in earnings transparency, as higher transparency will result in higher explanatory power, and thus lower unexplained variance, and lower opacity. Moreover, when opacity is higher this measure also captures the extent to which the value assumptions made by bidder CEOs and stock market participants are speculative and subjective, as opposed to being based on more concrete indicators such as earnings. The way that earnings translate to firm value can also vary across firms for reasons unrelated to accounting. Assumptions of firm value may differ with how much analyst coverage exists, or if the main source of information is the firm's own earnings calls. Variations in managerial incentives would also account for how much discretion managers have to act opportunistically either for the firm, themselves, or both.

3.4.3 Dominant groups

In order to investigate if the observed ancestry effect is capturing identification between individuals belonging to the elite group in US society, two aspects are considered. First, if the effect is driven by the dominant ancestries that make up the sample, and the ancestry effect occurs only in deals taking place between two CEOs belonging to the dominant group, as opposed to sharing the same specific ancestry. And second, if the same-ancestry effect is moderated or augmented when deals occur between CEOs with the same dominant ancestry.

An indicator variable is constructed that equals one if a deal occurs between CEOs with ancestries identified as part of the sample-dominant group, and the baseline regression model is re-estimated with this alternative specification. Then, the dominant-ancestry indicator is interacted with same-ancestry to ascertain if the effect persists or is moderated when controlling for dominant-ancestry effects.

3.5 Control Variables

To isolate the effects of CEO ancestry interactions on post-merger performance of the combined firm, controls for deal, acquirer, target and CEO power pre-merger characteristics that have been shown to impact post-merger outcomes are included. Deal characteristics are accounted for with an indicator variable for if the deal is paid for entirely in cash, whether the deal is a diversifying merger based on the 3 digit SIC codes, whether or not the acquirer and target were advised by a financial adviser, if the deal was hostile or not, if the deal was a tender offer, if the deal was challenged, and the relative size of the deal. Acquirer and target pre-merger characteristics are controlled for with the inclusion of Tobin's Q, cash flow, leverage, and cash holdings. Finally, characteristics of CEO power are controlled for with characteristics such as CEO tenure, an indicator that equals one if a CEO receives a performance related bonus or not, and the proportion of a CEOs compensation relative to total top executive compensation (CEO slice). Systematic year and industry effects are controlled for with dummy variables. All firm-level variables are winsorized at 1% and 99% to control for the effects of outliers.

4. Empirical Results

4.1 Ancestry and Shareholder Wealth

Inspecting table 4.a, it is found that deals occurring between CEOs of the same ancestry on average have favourable implications for acquiring shareholder wealth one-year post-merger, but not at longer horizons. Column (1) reports a statistically significant coefficient of 0.0631 on the same ancestry indicator variable for 1-year BHARs. This suggests the returns from buying and holding the acquiring firms' shares for one year after the merger are on average 6.3% higher than similar strategies using acquiring firms that undertook an M&A with a firm where the target CEO's ancestry differed. However, inspecting column (6) shows that same-ancestry deals exhibit lower long-term CARs. As far as same-ancestry deals are concerned, the economic intuition of these results suggest that stock market participants have more positive sentiments towards firms emerging from a same-ancestry M&A initially, but given time seem to reverse this view, leading to same-ancestry deals underperforming different-ancestry deals in the long run. Notable control variables that exhibit strong statistical significance are Acquiring CEO tenure, acquiror market to book ratio, and acquiror cash flow. In general, the coefficient between acquiring CEO tenure and long run abnormal returns is negative,

suggesting the longer an incumbent CEO has held their position, the lower long run abnormal returns are. This may relate to recent studies finding a hump-shaped CEO tenure-firm value relationship, with a decline in value after a certain duration of tenure attributed to resistance to change and inability to keep up with the pace of particularly dynamic industries (Brochet et. al, 2021). The generally negative coefficients on acquiror market to book ratio suggest that acquiring firms seen as relatively more expensive investments, with higher market price compared to the book value of assets, tend to experience lower abnormal returns in the long run, perhaps because of overpricing and not reflecting the true or fair value of the firm's assets. Acquiror cashflow is shown to have a positive relationship with abnormal long-term returns at horizons of 2 and 3 years post-merger. The presence of increased cashflow suggests that the combined firm is essentially not in a precarious financial situation as a result of merging, and possibly able to operate effectively and profitably.

Table 4a
Relationship between ancestry distance measures and post-merger bidder abnormal returns presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) BHAR (12 months)	(2) BHAR (24 months)	(3) BHAR (36 months)	(4) CAR (12 months)	(5) CAR (24 months)	(6) CAR (36 months)
Same Ancestry	0.0631***	-0.00133	-0.0424	0.0400**	-0.0177	-0.0786**
	(0.0212)	(0.0315)	(0.0363)	(0.0178)	(0.0263)	(0.0321)
Relative Size	0.0288	0.0259	0.0338	-0.000652	-0.0291	-0.0701*
	(0.0255)	(0.0378)	(0.0436)	(0.0213)	(0.0316)	(0.0386)
Acquiror Fin. Advisor	0.0264	0.0679*	0.0546	0.00258	0.0517*	0.0193
	(0.0250)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)
Hostile	0.0284	0.0952	0.150	0.0206	0.0803	0.0653
	(0.0724)	(0.107)	(0.124)	(0.0606)	(0.0897)	(0.110)
Challenged	0.151**	0.0852	-0.0683	0.119**	0.0443	0.0354
	(0.0707)	(0.105)	(0.121)	(0.0592)	(0.0876)	(0.107)
All cash	0.0458*	0.0818**	0.0913**	0.0204	0.0442	0.0763**
	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)
Diversifying	-0.00874	0.0140	-0.00411	0.00761	0.0136	0.00352
	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)
Target Fin. Advisor	-0.0143	0.0204	0.0455	0.00158	0.0485	0.0762**
	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)
Tender offer	-0.0522	-0.132***	-0.145**	-0.0262	-0.115***	-0.135***
	(0.0329)	(0.0488)	(0.0563)	(0.0276)	(0.0408)	(0.0498)
Acq. CEO Tenure	-0.00676***	-0.00864***	-0.0161***	-0.00533***	-0.00914***	-0.0109***
	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)
Acq. CEO slice	-0.0209	-0.0207	0.119	0.112	0.236**	0.513***
	(0.0873)	(0.130)	(0.149)	(0.0731)	(0.108)	(0.132)

(continued on next page)

Table 4a (continued)

VARIABLES	(1) BHAR (12 months)	(2) BHAR (24 months)	(3) BHAR (36 months)	(4) CAR (12 months)	(5) CAR (24 months)	(6) CAR (36 months)
Target CEO slice	0.0104	0.00295	0.133	0.0294	0.0223	0.0718
	(0.103)	(0.153)	(0.176)	(0.0861)	(0.127)	(0.156)
Acq. CEO Bonus	0.191***	0.0726*	-0.0502	0.165***	0.112***	0.0278
	(0.0292)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0443)
Target CEO Bonus	-0.0275	-0.00303	0.0154	-0.0318	0.00445	-0.0209
	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)
Acq. Tobin Q	-0.00162	0.00246	0.00153	-0.00270	-0.00250	-0.00314
	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)
Acq. Cash Flow	0.0749	0.410***	0.388***	0.0226	0.194***	0.165*
	(0.0571)	(0.0848)	(0.0977)	(0.0478)	(0.0708)	(0.0865)
Acq. Cash holding	-0.0131	-0.197	0.0175	0.0157	0.0475	0.0444
	(0.0913)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)
Acq. Leverage	-0.000306	-0.00310	-0.00313	-0.000173	-0.00297	-0.00174
	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)
Acq. Market to book	-7.91e-06***	-1.07e-05***	-1.05e-05***	-5.36e-06***	-2.81e-06	-1.49e-06
	(2.24e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.40e-06)
Acq. Size	-0.00229	-0.0186*	0.0214*	-0.000192	-0.0240***	-0.0164*
	(0.00647)	(0.00960)	(0.0111)	(0.00541)	(0.00801)	(0.00979)
Target Size	0.00893	0.00563	-0.0315	0.00212	0.00919	-0.00384
	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)
Target Tobin Q	-0.00974	0.0638	0.0175	0.00965	0.0696	0.141**
	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)
Target Cash Flow	0.142	0.773**	0.769*	0.218	0.645**	0.758**
	(0.232)	(0.345)	(0.397)	(0.194)	(0.288)	(0.352)
Target Cash Holdings	0.0444	0.0475	0.0475	0.0157	-0.197	-0.0131
	(0.138)	(0.113)	(0.113)	(0.0765)	(0.136)	(0.0913)
Target Leverage	0.00830*	0.0156**	-0.00279	0.00416	0.00715	0.00483
	(0.00499)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00756)
Target Market to book	-3.89e-06	-1.32e-05*	6.83e-06	-9.01e-07	-5.54e-06	-6.33e-06
	(4.76e-06)	(7.06e-06)	(8.13e-06)	(3.98e-06)	(5.89e-06)	(7.20e-06)
Observations	2,690	2,690	2,690	2,690	2,690	2,690
R-squared	0.105	0.189	0.230	0.136	0.209	0.215

For ease of discussion on the remaining focal coefficients, table 4.4 presents a summary of the relevant ancestry related coefficients. See appendix A for full outputs for the baseline regressions using abnormal return-based measures for long-term performance post-merger. No substantial changes to control variables sign or statistical significance is observed, thus have been omitted in further analysis. The negative and statistically significant coefficients on

each of the distance measures in column (1) are consistent with the results for the same-ancestry dummy, as they suggest increasing ancestral cultural distance leads to lower BHARs one year post merger. The reported coefficient estimates on the traditional Hofstede measures that give each of the 4 main dimensions an equal weighting in column (1) is -0.00982 and is statistically significant at the 10% level. Including all 6 dimensions in the traditional Hofstede measure improves statistical significance to the 5% level and indicates a coefficient of -0.0139 in column. The Euclidian Hofstede measure that focuses more on the absolute distance of each dimension reports a coefficient of -0.0155 when considering the 4 main dimensions in column (1), which is significant at the 5% level. The Euclidian cultural distance measure incorporating all six cultural dimensions in its construction appears to be the most statistically significant at the 1% level with an estimated value of -0.014 in column.

Table 4.4

Summary table of relationships between ancestry distance measures and post-merger bidder abnormal returns. OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	BHAR (12 months)	BHAR (24 months)	BHAR (36 Months)	CAR (12 months)	CAR (24 months)	CAR (36 months)
Same Ancestry	0.0631***	-0.0013	-0.0424	0.0400**	-0.0177	-0.0786**
	(0.0212)	(0.0315)	(0.0363)	(0.0178)	(0.0263)	(0.0321)
Traditional Hofstede (4 Dimensions)	-0.00982*	-0.0052	0.00252	-0.0048	0.0077	0.0259***
	(0.0058)	(0.0086)	(0.0099)	(0.0049)	(0.0072)	(0.0088)
Traditional Hofstede (6 Dimensions)	-0.0139**	-0.0045	0.00424	-0.008	0.00811	0.0262***
	(0.0066)	(0.0098)	(0.0113)	(0.0056)	(0.0082)	(0.01)
Euclidean Hofstede (4 Dimensions)	-0.0155**	-0.0041	0.00656	-0.00910*	0.00666	0.0270***
	(0.0063)	(0.0093)	(0.0107)	(0.0053)	(0.0078)	(0.0095)
Euclidian Hofstede (6 Dimensions)	-0.0140***	-0.0021	0.00645	-0.00882**	0.00509	0.0204**
	(0.0053)	(0.0078)	(0.009)	(0.0044)	(0.0065)	(0.008)
Observations	2741	2741	2741	2741	2741	2741

Generally, at the 12-month horizon it appears that a unitary increase in cultural distance between bidder and target CEO ancestries leads to BHARs that are on average lower by approximately 1.5%, thus suggesting acquiring shareholders are best off when the CEOs share ancestry and are increasingly worse off the more distant the ancestral heritage is between

CEOs. This is corroborated with the coefficients in column (4) of table 4.4 between the 12-month CARs and the same ancestry dummy (0.04) and the Euclidian Hofstede measures using 4 dimensions (-0.0091) and 6 dimensions (-0.00882). The implication is that at 12 months post-merger, there is evidence that acquiring shareholders for firms helmed by CEOs that undertook takeovers of target firms with CEOs of the same ancestry are better off compared to scenarios where a deal takes place between CEOs of different ancestry. Moreover, it suggests this is reflected in the trading activity of external investors, and that this information may be manifesting in a way that eventually becomes incorporated into their trading strategies, up to 1 year after the merger.

The results in columns (1) and (4) of table 4.4 indicate that when considering the initial 12 months post-merger, shared ancestry between bidder and target CEOs leads to improvements in acquiring shareholder wealth, and thus indicate relatively positive post-merger performance. Taken in conjunction with the coefficients on cultural distance measures at the 1-year horizon, indicates that the observed positive effect on shareholder wealth may arise from the fact that the CEOs are culturally proximate at an ancestral level, and thus are able to facilitate better information exchanges. A possible reason for the reduced statistical significance when considering 12-month CARs is that in the process of cumulating the returns over the longer period, biases are introduced that would downplay the extent to which the acquiring firm's share price changed between the beginning and end the estimation period. In the case of each independent variable of interest, the absolute values of the reported coefficients are in fact smaller.

Examining columns (2) and (5) of table 4.4 show that at longer horizons post-merger, acquiring shareholders tend to be worse off and that the positive impact on wealth do not last for more than 1 year. The coefficients on the same ancestry dummy, and all of the Hofstede cultural distance measures are not shown to be statistically different from zero. This is true for both 24-month BHARs and CARs and suggests both that when considering the period of 24 months post-merger, there is no discernible difference in acquiring shareholder abnormal returns based on the ancestries of the involved CEOs. With regards to an assessment of the performance of the merger, the absence of a significant effect on acquiring shareholder wealth over 24 months, but the presence of a positive effect over 12 months suggests initial gain that then dissipates over time.

Looking further at columns (3) and (6) in table 4.4, no effect is observed in the 3-year BHARs, but strongly significant evidence is found that the 36-month period post-merger CARs are lower for deals occurring between CEOs of shared ancestry, and that they increase as ancestral cultural distance increases. This implies that acquiring shareholder wealth is eroded in deals occurring between CEOs that share ancestry as opposed to the sample mean. The coefficient

on the same ancestry dummy is -0.0786 and is statistically significant at the 5% level. This suggests that over the 36-month period post-merger, acquiring shareholders experience CARs 7.86% lower when the CEOs of their firms engage in M&A with targets helmed by CEOs of the same ancestry. The traditional Hofstede cultural distance measure is consistent with this and highly statistically significant coefficients of 0.0259 and 0.0262 are reported when considering the main 4, or all 6 dimensions respectively. Similarly, the Euclidian Hofstede measures report coefficients of 0.027 when 4 dimensions are considered, and 0.0204 when 6 dimensions are considered, significant at the 1% and 5% level respectively. These results suggest that for unitary increases in ancestral cultural distance between bidder and target CEOs, 36-month CARs increase approximately between 2.04% – 2.7%. This is indicative of poorer post-merger long-term performance as assessed by external capital markets participants and thus represents negative wealth effects for acquiring shareholders. Contrasting with the results obtained at the 12-month horizon, it would seem that deals undertaken by CEOs of shared ancestry have outcomes that cause positive reactions by stock market participants in the first 12 months post-merger, but that this initial reaction gets corrected or possibly over-corrected over the longer horizon of 36 months post-merger. Examining the magnitude of the coefficients in columns (1) to (6) reveals that the absolute values are larger, and thus there is a stronger negative effect at 36 months, relative to the smaller positive effect at 12 months. The reason for the reversal may be attributable to the fact that as time passes, the initial assessments on the potential synergies are revised as more information of the quality and potential of the merger come to light. That is, when market efficiency is given more time to reduce the speculative aspect of the combined firms share price relevant to the deal, investors on average have a negative assessment of the synergies resulting from the merger. This could be due to failures of the merged firm to deliver on the potential synergies that were speculated on at announcement, or underperformance relative to what investors had expected in those same-ancestry deals. Therefore, it is possible that in same-ancestry deals there is a greater upward distortion in how investors assess the trajectory of the combined firm in the short run, and thus leading to a stronger negative correction over the longer horizon.

The coefficients on the independent variables in table 4.4 at the 3-year suggest that deals occurring between CEOs of shared ancestry are associated with negative post-merger performance. Interestingly the fact that the 12-month horizon supports the opposite suggests that with more time for information regarding the actual deliverability of synergistic gains from the merger to reach market participants, the assessment of the quality of the merger, and thus the performance and acquiring shareholder wealth is overall negative. Effectively, given time for market efficiency to reveal more information, same ancestry deals tend to erode shareholder value.

4.2 Ancestry and Firm Performance

An alternative measure of post-merger performance is derived from accounting-based variables reported by the acquiring firm, as opposed to movements in its share price. Table 4b shows that there is a statistically and economically significant effect of deals being undertaken by CEOs of the same ancestry. The coefficient between the same ancestry dummy and bidder change in ROA over the 4-year period is reported as -9.945% in column (1) which is significant at the 1% level. On average, deals involving CEOs of the same ancestry exhibit almost 10% smaller changes in ROA between 1 year prior to 3 years after the merger. The implication is that acquisitions made on targets run by CEOs that have the same ancestry as the bidding CEO experience smaller changes in profitability as compared to deals occurring between CEOs of differing ancestry. The coefficients on the dependent variable change in sales growth echo this result, as column (4) indicates that on average, acquiring firms that undertake same-ancestry deals exhibit 4.08% smaller changes in sales growth during 1 year before and 3 years after the acquisition relative to the control group. Column (2) suggests that on average, acquiring firms that undertake same-ancestry deals exhibit approximately 54% larger changes in ROE in the 4-year period. This conflicts with the results obtained for the change in profitability measures ROA and Sales growth that point towards worse post-acquisition performance when deals are undertaken by CEOs who share ancestry.

Notable strongly statistically and economically significant control variables for change in ROA include the involvement of target financial advisors and target leverage. Financial advisors may help to structure the initial terms of the deal more favourably and facilitate greater transparency in financial information conveyed to the bidder by the target. As a result, the combined firm may then be engaging in deals with more clarity on how to make the acquisition of these new assets more profitable in the years that follow, explaining the positive coefficient of 9.226. Interestingly target leverage also has a positive coefficient of 1.639, implying the more levered the target is the greater the increase in profitability of the merged firm in the long run. It is possible that during the acquisition, when the bidder takes on the target firms' debts, they are able to more easily make repayments on these new debts due to the increased size. It may also be that the targets debts induce more discipline to management and thus lead to more profitable operation with greater incentive (Bhattacharya, 1099). With regards to change in ROE in column (2), Acquiring CEO tenure and acquiring CEO bonus are found to be strongly significant and positively related. Both tenure and bonus have implications for the incentives of the CEO to maximise shareholder wealth, and it is possible that one channel through which this occurs around the merger is through actions that increase the value of equity. CEOs with longer tenure are likely to have also accrued more ownership of the firm, and thus are incentivised to maximise shareholders equity, possibly also explaining higher

bonuses as a reward from shareholders. Finally inspecting column (4), notable coefficients on controls for change in sales growth are acquiror CEO tenure and acquiror size. Contrasting with change in ROE, the coefficient between tenure and change in sales growth is negative, implying longer serving CEOs are associated with combined firms with declining sales. This links to the previously discussed hump-shaped CEO tenure-firm value relation, where longer serving CEOs start to falter in terms of adaptability and dynamism (Brochet et. al, 2021). Larger acquirers also seem to lead to negative sales growth over the 4 year window, possibly from a lack of growth opportunities that exist for larger firms.

Table 4b

Relationship between ancestry distance measures and post-merger changes in profitability measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)
VARIABLES	ΔROA (%)	ΔROE	ΔROI	ΔSales Growth
Same Ancestry	-9.945***	54.13***	-2.247	-4.084***
	-2.724	-9.51	-1.696	-1.243
Relative Size	5.731*	22.74**	-2.196	-0.184
	-3.426	-11.17	-2.08	-1.518
Acquiror Fin. Advisor	-1.942	-0.436	-0.903	0.52
	-3.18	-11.03	-1.984	-1.451
Hostile	3.452	45.31	1.44	-0.479
	-8.982	-30.9	-5.603	-4.086
Challenged	3.731	-0.75	1.241	2.723
	-8.78	-29.26	-5.485	-3.973
All cash	-1.888	4.154	3.434*	-1.681
	-3.013	-10.43	-1.88	-1.376
Diversifying	-4.204	-0.504	-0.895	-0.209
	-3.244	-11.25	-2.029	-1.485
Target Fin. Advisor	9.226***	12.22	-1.397	1.372
	-3.206	-11.18	-1.998	-1.46
Tender offer	-10.25**	-7.841	-1.573	-2.035
	-4.19	-14.46	-2.615	-1.909
Acq. CEO Tenure	0.41	4.305***	-0.314**	-0.548***
	-0.255	-0.862	-0.159	-0.117
Acq. CEO slice	-1.603	-51.53	-3.329	3.06
	-10.56	-34.77	-6.653	-4.856
Target CEO slice	4.233	20.28	3.896	-6.099
	-12.8	-45.18	-7.966	-5.941
Acq. CEO Bonus	0.828	65.47***	2.712	3.268*
	-3.715	-13.06	-2.326	-1.71
Target CEO Bonus	4.06	16.88	5.233*	-0.101
	-4.751	-16.5	-2.979	-2.173

(continued on next page)

Table 4b (continued)

VARIABLES	(1) ΔROA (%)	(2) ΔROE	(3) ΔROI	(4) ΔSales Growth
Acq. Tobin Q	-0.557	1.811	-0.23	-0.455
	-0.737	-2.425	-0.457	-0.335
Acq. Cash Flow	-0.798	3.995	1.194	4.522
	-8.923	-24.29	-4.657	-3.399
Acq. Cash holding	-6.749	-38.76	-2.666	-7.46
	-11.24	-36.8	-7.052	-5.147
Acq. Leverage	-0.383**	-0.129	0.0177	-0.0406
	-0.193	-0.654	-0.12	-0.089
Acq. Market to book	0.000802***	-0.00147	-5.25E-05	-0.00016
	-0.00028	-0.00103	-0.00018	-0.00013
Acq. Size	-1.923**	-1.496	-0.686	-1.442***
	-0.84	-2.813	-0.518	-0.383
Target Size	3.559*	5.158	3.068**	-0.834
	-2.067	-7.102	-1.293	-0.944
Target Tobin Q	-12.28**	-30.18	-2.403	2.013
	-5.569	-19.29	-3.459	-2.533
Target Cash Flow	-38.54	30.3	-10.06	2.91
	-28.23	-109.2	-17.73	-13.84
Target Cash Holdings	-6.587	-7.381	-6.665	-6.603
	-11.24	-5.151	-11.25	-11.24
Target Leverage	1.639***	4.117*	0.508	-0.139
	-0.626	-2.135	-0.392	-0.287
Target Market to book	-0.00045	-0.00043	-0.00042	0.00015
	-0.0006	-0.00204	-0.00038	-0.00028
Observations	2741	2741	2741	2741
R-squared	0.06	0.364	0.034	0.082

For ease of discussion on the remaining focal coefficients, table 4.5 presents a summary of the relevant ancestry related coefficients. See appendix B for full outputs for the baseline regressions with the accounting-based measures for long-term firm performance post-merger.

Inspecting table 4.5 the positive and strongly statistically significant coefficients on the cultural distance measures in column (1) are consistent with this and suggest a unitary increase in ancestral cultural distance between the involved CEOs leads to larger changes in ROA over the 4-year period somewhere between 2.1% to 2.86%. The implication is that acquisitions made on targets run by CEOs that have the same ancestry as the bidding CEO experience smaller changes in profitability as compared to deals occurring between CEOs of

differing ancestry. Moreover, it appears that the more different the CEOs are with regards to their ancestral background, the better the post-merger change in profitability is.

Table 4.5

Summary table of relationships between ancestry distance measures and post-merger changes in profitability measures. OLS regression coefficient estimates, and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

	-1	-2	-3	-4
VARIABLES	ΔROA	ΔROE	ΔROI	ΔSales Growth
Same Ancestry	-9.945***	54.13***	-2.247	-4.084***
	(2.724)	(9.51)	(1.696)	(1.243)
Traditional Hofstede (4 Dimensions)	2.095***	-10.25***	0.118	0.971***
	(0.76)	(2.672)	(0.472)	(0.347)
Traditional Hofstede (6 Dimensions)	2.864***	-13.12***	0.205	1.109***
	(0.86)	(3.023)	(0.535)	(0.393)
Euclidean Hofstede (4 Dimensions)	2.750***	-13.61***	0.386	1.172***
	(0.814)	(2.852)	(0.506)	(0.371)
Euclidian Hofstede (6 Dimensions)	2.483***	-12.17***	0.359	0.989***
	(0.679)	(2.379)	(0.423)	(0.31)
Observations	2741	2741	2741	2741

The coefficients on the dependent variable change in sales growth echo this result, as column (4) indicates that on average, acquiring firms that undertake same-ancestry deals exhibit 4.08% smaller changes in sales growth during 1 year before and 3 years after the acquisition relative to the control group. Similarly, the coefficients on the Hofstede measures suggest improvements to changes in sales growth over the 4-year period of approximately 1% for a unitary increase in the CEOs' ancestral cultural distance. Change in sales growth also proxies for effects on long-term synergies resulting from the merger, and thus the negative relationship with ancestral proximity suggests that same-ancestry deals tend to be less profitable and create fewer synergies for the acquiring firm.

The results in columns (1) and (4) of table 4.5 suggest shared ancestry is associated with negative post-merger performance relative to deals occurring between CEOs of differing ancestries. Therefore, there is support for the possibility that familiarity bias induces poorer decision making at the CEO level. The negative relationship with the proxy for changes in

synergistic gains further suggests that the shared ancestry between CEOs leads to lower scrutiny and critical assessment of target firms.

With regards to change in return on invested capital, no statistical significance is found in column (3) of table 4.5. Despite the signs on the coefficients suggesting worse measures of profitability for same ancestry deals, there is insufficient evidence to suggest a meaningful difference in changes to ROI between 1 year prior to 3 years after the acquisition. Changes in return on equity however appear to have a strongly significant and positive relationship with shared ancestry and ancestral proximity. Column (2) suggests that on average, acquiring firms that undertake same-ancestry deals exhibit approximately 54% larger changes in ROE in the 4-year period. This is consistent with the coefficients on the cultural distance measures that indicate a reduction of between 10.25% to 13.61% in the 4-year change in ROE for a unitary increase in ancestral cultural distance.

This conflicts with the results obtained for the change in profitability measures ROA and Sales growth that point towards worse post-acquisition performance when deals are undertaken by CEOs who share ancestry, or who have low ancestral cultural distance. To investigate the difference in changes to profitability measures as measured by ROA and ROE, further checks into the accounting variables used to construct these measures is conducted. ROA is constructed by scaling net income by total book assets, and the change in the measure is measured as the percentage change between 1 year before to 3 years after the deal, scaled by ROA in year t-1. ROE on the other hand is constructed by scaling net income by shareholders equity, with the percentage change over the 4-year period calculated in the same way.

Table 4.6

Univariate comparisons of percentage change in total book assets and stockholders' equity during 1-year prior to 3-years post deal (Panel A, B) and level change in total book assets and stockholders' equity during 1-year prior to 3-years post deal (Panel C,D) for each subsample. Subsamples are split into deals occurring between CEOs of the same ancestry, and deals occurring between CEOs of different ancestry. Means and corresponding t-values are reported. Data is winsorized at 1% and 99% level. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% respectively.

Panel A

Percentage Change in Total Book Assets	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	0.3159519	0.6236606	0.4832652	0.5580052	0.16731	5.6637***
Obs.	1460		*1281*			

(continued on next page)

Table 4.6 (continued)

Panel B Percentage Change in Stockholders Equity	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	0.0270206	0.9593324	0.3838559	0.6741125	0.35684	9.4924***
Obs.	1460		*1281*			

Panel C Level Change in Total Book Assets	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	1873.725	35495.21	10340.47	38537.6	1494.91	6.7885***
Obs.	1460		*1281*			

Panel D Level Change in Stockholders Equity	Same Ancestry		Different Ancestry		Difference between same and different	
	Mean	Std. Dev	Mean	Std. Dev	(1) - (2)	t-Value (t-test)
Same Ancestry	-1746.722	25020.75	2737.261	14327.3	4483.98	5.2521***
Obs.	1460		*1281*			

Table 4.6 presents univariate analysis for the denominators used to construct the 4-year change in ROA and ROE used as dependent variables, namely total book assets and stockholders' equity respectively. Panel A presents for each deal, the percentage change in acquiring firm total book assets during 1 year prior to 3 years after the acquisition, divided into sub-samples of whether the deal is between CEOs of the same ancestry, or different ancestry. The means reported thus show the average percentage change in total book assets of the acquiror over the 4-year period. Panel C similarly reports sub-sample means based on same-ancestry and different-ancestry deals for percentage change in the acquiring firm's stockholder equity over the 4-year period post-acquisition. In order to assess if the actual level of total book assets and stockholders' equity fell post-merger as opposed to change at a smaller rate, Panel B reports sub-sample means based on same and different ancestry deals for the 4-year level change in bidder total book assets, while panel D reports sub-sample means based on same and different ancestry deals for the 4-year level change in bidder stockholders' equity.

Panel A of table 4.6 reports that the mean percentage change in total book assets over the 4-year period is approximately 32% for same ancestry deals, compared to 48% for different

ancestry deals. The 16.7% difference is significant at the 1% level and supports the baseline results as same-ancestry deals seem to exhibit smaller levels of growth in total assets post-acquisition. Panel B reports the means for percentage change in stockholder equity over the 4-year period of 2.7% for same-ancestry deals is drastically smaller than the mean percentage change of 38% in different-ancestry deals, with the 35.7% difference being statistically significant at the 1% level. Moreover panel D shows the mean level change in stockholders' equity over the 4-year period is negative for same-ancestry deals. Panel C shows that the mean 4-year level change in bidder total book assets is positive for both types of deals. Therefore, this suggests that while same ancestry deals seem to perform worse in the long term as indicated by the baseline results on the 4-year post-deal changes in ROA and sales growth, there is also a reduction in stockholder equity over the same period that leads to a positive association with 4-year post-deal change in ROE. That is, because stockholder's equity decreases, both the numerator and denominator are negative in the calculation of the 4-year change in ROA for same-ancestry deals, leading to a positive coefficient on the same ancestry indicator variable. Net income is lower, but so too is stockholder equity leading to negative implications for post-merger performance and bidding shareholder wealth.

The baseline results therefore suggest that M&A occurring between CEOs of shared ancestry are associated with negative post-merger performance. Measuring post-merger changes in profitability shows that same-ancestry deals tend to cause poorer performance in bidding firms as compared to different-ancestry deals during 1 year prior to 3 years after the deal. This is consistent with the longer horizon 36-month CARs indicating reduced shareholder wealth in same-ancestry deals and suggests that while external market participants may react positively up to 1-year post-deal, by 3 years market efficiency has allowed revelation of information on the relatively poor deal quality.

5. Additional Analyses

The results of section 4 show a distinct effect of ancestry on post-merger performance. Specifically, that ancestral proximity is a factor, and that same-ancestry deals tend to have a more economically significant effect compared to cultural distance. Of the 2,741 M&A deals that make up the entire sample, 1,460 are deals undertaken by bidder and target CEOs that share the same ancestry. While distance measures were used in the baseline regressions for more complete analysis, additional analysis will focus on using the same ancestry dummy as the sample is made up of a high fraction of same-ancestry deals. See appendix C for a re-estimation of the baseline results with a restricted sample of only different-ancestry deals, showing a loss of statistical and economic significance.

Table 5.1 reports details on the sub-sample of deals that occurred between CEOs of shared ancestry, and the frequencies by ancestry-pairs. The sample is dominated by deals taking place

between English and German ancestry-pairs. Deals between bidder and target CEOs who are both of English ancestry populate 48.7% of the sample with German ancestry pairs being the next largest group at 12.95%. Between them, 61.65% of the sample consists of either English-to-English or German-to-German deals.

Table 5.1

Details on dominant ancestry pairs in subsample of deals that occurred between CEOs of shared ancestry. Ancestry data is approximated from data obtained from Ancestry.com, and additional sources outlined in section 3.

Shared Ancestry	Frequency	%	
English	**711**	**48.7**	Sample majority
German	**189**	**12.95**	Total: 900 (61.65%)
Jewish	90	6.16	Rest of sample
Italian	75	5.14	Total: 560 (38.35%)
Irish	60	4.11	
Scottish	32	2.19	
Dutch	31	2.12	
French	27	1.85	
Polish	25	1.71	
Danish	20	1.37	
Chinese	18	1.23	
Spanish	18	1.23	
Indian	17	1.16	
Russian	15	1.03	
Swedish	15	1.03	
Swiss	15	1.03	
Greek	12	0.82	
Norwegian	11	0.75	
Welsh	8	0.55	
Austrian	7	0.48	
Croatian	7	0.48	
Czech	7	0.48	
Armenian	6	0.41	
Canadian	5	0.34	
Argentinian	4	0.27	
Belgian	4	0.27	
Bulgarian	4	0.27	
Romanian	4	0.27	
Slovakian	4	0.27	
Brazilian	3	0.21	
Serbian	3	0.21	
Finnish	2	0.14	
Iranian	2	0.14	
Japanese	2	0.14	
Hungarian	1	0.07	
Lithuanian	1	0.07	
Mexican	1	0.07	

(continued on next page)

Table 5.1 (continued)

Shared Ancestry	Frequency	%
Pakistani	1	0.07
Syrian	1	0.07
Vietnamese	1	0.07
Yugoslavian	1	0.07
Full sample total	1,460	100

While the baseline results present evidence of a value destroying effect of shared ancestry between CEOs in M&A, as assessed by the long-term performance of the deals. The baseline results do not make clear whether this effect is a result of, or affected by, the level of information asymmetry in a deal. Information asymmetry is explored further in section 5.1. Furthermore, while the baseline results establish that ancestral identity plays a more significant role than ancestral culture, there is a possibility that what is being captured is shared identity with respect to their ancestral group's societal standing. As Table 5.1 shows that 61.65% of same-ancestry deals occurred between CEOs of English and German descent, it can be said that the sample may be proxying for familiarity and identification between individuals belonging to the dominant elite group of American society that is dominated by WASPs (Keller, 1991; Matthews, 1960; Mintz, 1975; Baltzell, 1958; 2017). Dominant ancestry pairing is explored in section 5.2.

5.1 Information asymmetry and shared ancestry

5.1.1 Industry

Table 5.2 reports results from the OLS regressions estimating whether the impact of shared CEO ancestry on post-deal performance is affected by industry related information asymmetry. The same ancestry dummy is interacted with an indicator for deals occurring between firms in the same industry, as classified by their US SIC codes.

Column (1) reports a positive 1-year BHAR coefficient of 6%, and column (4) reports a positive 1-year CAR coefficient of 3.84%, both statistically significant at the 5% level. Both of these 1-year abnormal returns results are consistent with the baseline findings, suggesting that on average deals occurring between CEOs of shared ancestry tend to exhibit slightly larger BHARs and CARs 1 year after the deal. The coefficients on the interaction term between same ancestry and same industry indicators are not found to be statistically significant, thus the impact of shared ancestry on 1-year BHARs and CARs does not appear to change with regards to differences in industry familiarity between bidder and target. Similarly, column (6) reports a negative coefficient between shared ancestry and 3-year CARs of 9.32% that is significant at the 1% level and consistent with the baseline results. Again, no moderating effects of industry-

based information asymmetry are found with the non-significance of the coefficient on the interaction term in column (6). Columns (7), (8), and (10) report highly statistically significant coefficients between shared ancestry and changes in ROA, ROE, and sales growth during 1 year prior to 3 years post-deal that are consistent with the baseline results. On average, same-ancestry deals tend to exhibit 10.12% smaller changes in ROA, 4.18% smaller changes in sales growth, and 54.6% larger changes in ROE over the 4-year period. The interaction between same ancestry and same industry deals yields a coefficient that is statistically not different from zero in columns (7), (8), and (10) suggesting no impact on the observed ancestry-effect resulting from industry relatedness between bidder and target.

Table 5.2

Relationship between shared ancestry and post-deal performance measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with indicator variables for deals taking place within the same industry are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

VARIABLES	(1) BHAR (12m)	(2) BHAR (24m)	(3) BHAR (36m)	(4) CAR (12m)	(5) CAR (24m)	(6) CAR (36m)	(7) ΔROA	(8) ΔROE	(9) ΔROI	(10) ΔSales Growth
Same Ancestry	0.0601**	-0.00294	-0.0425	0.0384**	-0.0345	-0.0932***	-10.12***	54.60***	-0.244	-4.183***
	(0.0234)	(0.0346)	(0.0399)	(0.0195)	(0.0289)	(0.0353)	(2.995)	(10.37)	(0.186)	(1.366)
Same Ancestry * Same Industry	0.0154	0.00845	-0.000186	0.00872	0.0910	0.0781	0.815	-0.903	0.107	0.582
	(0.0533)	(0.0791)	(0.0912)	(0.0446)	(0.0659)	(0.0806)	(6.807)	(23.93)	(0.426)	(3.108)
Same Industry	-0.0448	-0.0970	-0.0684	-0.0484	-0.162***	-0.167***	-0.452	-20.28	-0.175	-1.252
	(0.0412)	(0.0612)	(0.0705)	(0.0345)	(0.0510)	(0.0624)	(5.623)	(20.51)	(0.351)	(2.561)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	2741	2741	2741	2741	2741	2741	2741	2741	2741	2741
Adjusted R^2	0.106	0.190	0.231	0.137	0.212	0.218	0.060	0.364	0.034	0.082

These results do not present support that ancestry effects on post-merger performance are more pronounced in the presence of higher information asymmetry. Rather, the ancestry effects are found to be robust to an interaction with deals occurring in the same industry and thus suggests that industry-based information asymmetry has no bearing the mechanisms that cause the observed ancestry effect to impact post-deal performance.

5.1.2 Earnings Opacity

While industry relatedness is a useful proxy for information asymmetry in M&A, it risks over generalising the information environments specific to each deal and may not be capturing a

target's transparency or opacity with regards to the valuation process. Further testing on shared ancestry and information asymmetry is conducted with the measure constructed for the target's earnings opacity at the time of the merger.

Table 5.3 reports results from the OLS regressions estimating whether the impact of shared CEO ancestry on post-deal performance is affected by target earnings opacity. The same ancestry dummy is interacted with the absolute residuals from a regression of target annual stock returns over target earnings per share and change in earnings per share over the previous year. Column (1) reports a positive coefficient on the same ancestry dummy significant at the 10% level, suggesting on average same ancestry deals exhibit 4.06% larger BHARs 1-year post-deal. This is consistent with the baseline results and no moderating effect is found with regards to the interaction with target earnings opacity in column (1). Similarly, column (3) reports a negative coefficient on the same ancestry dummy statistically significant at the 10% level suggesting same ancestry deals tend to exhibit 6.99% lower BHARs 3 years post-acquisition compared to the non-same ancestry deals. Column (6) reports further consistent results of a highly significant negative coefficient between same ancestry and 3-year CARs, suggesting same-ancestry deals tend to exhibit CARs 12.1% lower than different-ancestry deals 36 months post-deal. Again, no moderating impacts are found with regards to the interaction between same ancestry and target earnings opacity in column (6) and (3). Column (5) however reports a negative association between 2-year CARs and same ancestry significant at the 10% level, as well as a negative coefficient on the interaction term of -0.169 significant at the 5% level. This implies that on average, same ancestry deals tend to exhibit 4.8% lower CARs 24 months post-deal relative to different ancestry deals, and that 24-month CARs decrease further as the target's earnings opacity increases. That is for a supposed unitary increase in unexplained variance between the targets EPS and stock returns at the time of the deal, a same-ancestry deal would mean bidder shareholders are worse off after 2 years with 21.7% lower CARs (4.8% + 16.9%). The signs of the coefficients in column (5) are the same and suggest target earnings opacity augments the ancestry effects on post-merger performance.

Columns (7), (8), and (10) report the estimation results with changes in profitability measures during 1 year before and 3 years after the acquisition. Column (7) presents results with 4-year post-deal change in ROA as the dependent variable, reporting a coefficient of -9.508% on the same ancestry indicator significant at the 1% level, and a coefficient of 19.05% on the interaction with target earnings opacity significant at the 5% level. This suggests that on average, same-ancestry deals tend to experience smaller post-deal changes in ROA relative to different-ancestry deals, however when a target has a higher level of earnings opacity the post-deal change in ROA improves significantly. A hypothetical unitary increase in target earning opacity negates the ancestry effect and the acquiring firm would show a net change of 9.542%

(-9.508%+19.05%). With regards to change in ROA post-merger, it appears that more information asymmetry leads to moderation of the ancestry effect. Column (8) presents results with 4-year post-deal change in ROE as the dependent variable, reporting a coefficient of 63% on the same ancestry indicator significant at the 1% level, and a coefficient of -51.38% on the interaction with target earnings opacity significant at the 5% level. Therefore, while on average same-ancestry deals seem to experience relatively larger growth in ROE post-acquisition, higher target opacity again leads to a moderation of the ancestry effect. The results in columns (7) and (8) suggest that the effect of shared ancestry on post-merger performance is less pronounced the presence of higher information asymmetry.

Column (10) presents results with 4-year post-deal change in sales growth as the dependent variable, reporting a coefficient of -3.421% on the same ancestry indicator significant at the 1% level, and a coefficient of -7.268% on the interaction with target earnings opacity significant at the 5% level. Interestingly the coefficient on the interaction between the same ancestry dummy and target earnings opacity proxy shares the same sign, contrasting the results obtained on changes in ROA and ROE. Column (10) suggests that same-ancestry deals on average exhibit 3.421% lower changes in sales growth over the 4-year period, and that this change is even smaller as target-specific information asymmetry increases. A hypothetical unitary increase in a target's earnings opacity leads to a 4-year changes in sales growth that are 10.69% smaller (-3.421% - 7.268%). The results in column (10) present evidence that suggests the effects of shared ancestry on post-deal change in sales growth are more pronounced in the presence of higher information asymmetry.

The results in table 5.3 appear to suggest several nuances to how target opacity changes the effect of shared ancestry on post-deal performance. The coefficients on the same ancestry dummy and its interaction with target earnings opacity in column (1) both share a negative sign, suggesting that the incremental effect of target opacity in same ancestry deals is complementary. That is, the observed smaller change in sales growth in same ancestry deals is even smaller the opaquer a target is at the time of merger. The consistency in sign for the coefficients suggest that when measured in more objective terms less susceptible to creative accounting, same-ancestry deals tend to perform worse, and this is only worsened the more obfuscation of information there is. It is possible that when targets are more opaque at the time of merger, the miscalculations regarding potential synergies from the merger that occur in same ancestry deals are exacerbated, and the end result is a combined firm that experiences poorer growth as a result of the merger. With this context, the coefficients in columns (7) and (8) suggest that target opacity moderates the effect of ancestry on post-merger performance to an extent. In the case of change in ROA, the incremental effect of target earnings opacity in same ancestry deals is positive. It is possible that for highly opaque same ancestry deals, total

assets decrease in the post-deal period as well as net income, meaning both numerator and denominator are negative and resulting in the observed positive coefficient. In contrast, regarding change in ROE, the incremental effect is negative suggesting an increase in stockholder's equity for same ancestry deals with more opaque targets.

In the context of change in sales growth as a measure of post-merger performance, the effects of shared CEO ancestry are more pronounced. However, in the context of change in ROA and change in ROE, the effects of shared CEO ancestry are less pronounced.

Table 5.3

Relationship between shared ancestry and post-deal performance measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with variable measuring absolute targets earnings opacity are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

VARIABLES	(1) BHAR (12m)	(2) BHAR (24m)	(3) BHAR (36m)	(4) CAR (12m)	(5) CAR (24m)	(6) CAR (36m)	(7) ΔROA	(8) ΔROE	(9) ΔROI	(10) ΔSales Growth
Same Ancestry	0.0406*	-0.0256	-0.0699*	0.0258	-0.0480*	-0.121***	-9.508***	63.00***	-2.562	-3.421***
	(0.0235)	(0.0348)	(0.0397)	(0.0190)	(0.0279)	(0.0352)	(3.066)	(9.363)	(1.927)	(1.230)
Same Ancestry * Target Earnings Opacity	0.0386	-0.0267	-0.116	0.0229	-0.169**	-0.0735	19.05**	-51.38**	-4.314	-7.268**
	(0.0586)	(0.0867)	(0.0990)	(0.0472)	(0.0695)	(0.0878)	(7.729)	(23.43)	(4.812)	(3.062)
Target Earnings Opacity	-0.171***	-0.107	-0.274***	-0.168***	-0.0818	-0.185**	-2.210	-146.5***	0.475	4.867*
	(0.0523)	(0.0774)	(0.0883)	(0.0421)	(0.0621)	(0.0783)	(6.797)	(20.83)	(4.276)	(2.718)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2741	2741	2741	2741	2741	2741	2741	2741	2741	2741
Adjusted R^2	0.112	0.177	0.217	0.144	0.236	0.225	0.068	0.393	0.037	0.101

5.2 Elite groups and Shared Ancestry

In order to investigate if the observed ancestry effect is capturing identification between individuals belonging to the elite group in US society, two aspects are considered. First, if the effect is driven by the dominant ancestries that make up the sample, and the ancestry effect occurs only in deals taking place between two CEOs belonging to the dominant group, as opposed to sharing the same specific ancestry. And second, if the same-ancestry effect is moderated or augmented when deals occur between CEOs with the same dominant ancestry.

That is, if the same-ancestry effect is more pronounced in English-to-English CEO ancestry deals, or German-to-German CEO ancestry deals.

Table 5.4 reports results from the OLS regressions estimating whether deals occurring when bidder and target CEOs are both from the dominant ancestry group, meaning both CEOs have either English or German ancestry. An indicator variable is constructed that takes the value one if both bidder and target CEO have either English or German ancestry, and zero otherwise. This captures deals involving the bidder-target CEO ancestry pairs of: English-English, English-German, German-English, and German-German.

Inspecting columns (1) and (4), positive associations between the dominant ancestry indicator and 12-month abnormal returns significant at the 5% level are reported. On average, it appears dominant-ancestry deals exhibit 1-year BHARs that 4.95% higher, and 1-year CARs that are 3.89% higher than deals not involving dominant-ancestry CEOs. Little evidence is found with regards to changes in profitability measures during 1 year prior to 3 years after the deal, except for the coefficient on change in sales growth reported in column (10). On average, dominant-ancestry deals tend to exhibit smaller changes in sales growth over the 4-year window relative to non-dominant ancestry deals. The results in Table 5.4 are considerably weaker than those obtained in the baseline results, however, are consistent with the positive association at 12-month abnormal returns, and negative association with change in sales growth. The smaller magnitudes suggest less economic significance of a dominant-ancestry effect, and moreover provide little evidence to suggest that ancestry effects on post-merger performance are more pronounced in M&A undertaken by dominant ancestry pairings.

Table 5.4

Relationship between CEOs being of dominant ancestry and post-deal performance measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

VARIABLES	(1) BHAR (12m)	(2) BHAR (24m)	(3) BHAR (36m)	(4) CAR (12m)	(5) CAR (24m)	(6) CAR (36m)	(7) ΔROA	(8) ΔROE	(9) ΔROI	(10) ΔSales Growth
Dominant Ancestry	0.0495**	0.000617	0.0177	0.0389**	-0.0265	-0.0368	0.868	0.312	-1.518	-2.281*
	(0.0212)	(0.0315)	(0.0363)	(0.0178)	(0.0263)	(0.0322)	(2.682)	(9.315)	(1.670)	(1.223)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2741	2741	2741	2741	2741	2741	2741	2741	2741	2741
Adjusted R^2	0.104	0.189	0.230	0.136	0.209	0.214	0.055	0.354	0.033	0.079

Table 5.5 reports results from the OLS regressions estimating whether the impact of shared CEO ancestry on post-deal performance is more pronounced for sample-dominant ancestries. The same ancestry dummy is interacted with the dominant ancestry indicator, thus yielding a value of one if a deal occurs between two CEOs both belonging to the same dominant ancestry, and zero otherwise. Effectively, it captures the incremental effect of shared ancestry in the case of bidder-target CEO ancestry pairs of English-English and German-German. Columns (1), (7), (8), and (10) report statistically significant coefficients between the same ancestry dummy and 1-year BHARs, change in ROA, change in ROE, and change in Sales growth respectively. While these are consistent with the baseline results in terms of sign and general magnitude, the lack of statistical significance found on the interaction terms indicates no moderating or augmenting effects resulting from the deal occurring between CEOs of the same dominant ancestry. Therefore, there is no evidence to suggest that the effect of shared ancestry on post-merger performance are more pronounced in M&A undertaken by dominant ancestry pairings.

Table 5.5

Relationship between shared ancestry and post-deal performance measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). Interaction terms of shared ancestry with indicator variables for deals taking place between CEOs belonging to the dominant ancestry group are included. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 3.5 for full list of controls.

VARIABLES	(1) BHAR (12m)	(2) BHAR (24m)	(3) BHAR (36m)	(4) CAR (12m)	(5) CAR (24m)	(6) CAR (36m)	(7) ΔROA	(8) ΔROE	(9) ΔROI	(10) ΔSales Growth
Same Ancestry	0.0595**	0.0434	-0.0156	0.0322	0.0198	-0.0502	-15.48***	74.51***	-2.890	-3.414**
	(0.0286)	(0.0425)	(0.0489)	(0.0240)	(0.0355)	(0.0434)	(3.570)	(12.45)	(2.227)	(1.629)
Same Dominant Ancestry	-0.0293	-0.158**	-0.178**	-0.0155	-0.0912	-0.102	8.717	-21.40	3.447	-1.506
	(0.0527)	(0.0782)	(0.0901)	(0.0442)	(0.0653)	(0.0799)	(6.679)	(23.17)	(4.193)	(3.073)
Dominant Ancestry	0.0450	0.112*	0.174**	0.0362	0.0401	0.0728	0.441	-14.97	-3.125	0.532
	(0.0440)	(0.0652)	(0.0751)	(0.0368)	(0.0544)	(0.0666)	(5.675)	(19.79)	(3.565)	(2.617)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2741	2741	2741	2741	2741	2741	2741	2741	2741	2741
Adjusted R^2	0.106	0.190	0.232	0.137	0.210	0.216	0.063	0.367	0.034	0.082

6. Conclusion

Baseline results suggest that in the long-term, there is a negative effect of CEO ancestry on post-merger performance. Despite an initial positive reaction in capital markets at the 12-month horizon, over the 36 months post deal completion same-ancestry deals tend to perform worse than deals undertaken by CEOs of differing ancestry. Results in section 4 suggest that deals occurring between CEOs of shared ancestry are associated with negative post-merger performance. The fact that the 12-month horizon initially showed the opposite suggests that

with more time for information regarding the actual deliverability of synergistic gains from the merger to reach market participants, the assessment of the quality of the merger, is overall negative. Effectively, given time for market efficiency to reveal more information, same ancestry deals tend to erode shareholder value. Thus same-ancestry deals can also be said to have negative implications for shareholder wealth. A similar effect is observed when measuring firm performance with accounting measures. Measuring post-merger changes in profitability shows that same-ancestry deals tend to cause poorer performance in bidding firms as compared to different-ancestry deals during 1 year prior to 3 years after the deal. This is consistent with the longer horizon 36-month CARs indicating reduced shareholder wealth in same-ancestry deals and suggests that while external market participants may react positively up to 1-year post-deal, by 3 years market efficiency has allowed revelation of information on the relatively poor deal quality. The findings thus far add to our understanding of ancestry in M&A by clearly finding both target and bidder shareholders are worse off as a result of both CEOs ancestry. Intuitively, deals occurring between CEOs of shared ancestry leads to target shareholders generally being paid less, without it resulting in greater long term value creation for the bidding firm shareholders.

The additional analyses on the effect of information asymmetry around the deal on ancestry-effects did not present evidence to suggest that ancestry effects on post-merger performance are more pronounced in the presence of higher information asymmetry. Rather, the ancestry effects are found to be robust to an interaction with deals occurring in the same industry and thus suggests that industry-based information asymmetry has no bearing the mechanisms that cause the observed ancestry effect to impact post-deal performance. Rather it is possible that higher information opacity at the time of the merger leads to miscalculations regarding potential synergies from the merger that occur in same ancestry deals and thus relatively underperforming the growth targets envisioned during negotiations. In the context of change in ROA and change in ROE, the effects of shared CEO ancestry are less pronounced. Furthermore, analyses regarding the effect of dominant ancestries in the sample provide little evidence to suggest that ancestry effects on post-merger performance are more pronounced in M&A undertaken by dominant ancestry pairings. On average, dominant-ancestry deals tend to exhibit smaller changes in sales growth over the 4-year window relative to non-dominant ancestry deals. The inclusion of a dominant ancestry indicator variable also weakens the results obtained from the baseline regressions.

Taken together with the results obtained from chapter 1, the overall results thus far indicate that deals undertaken by CEOs of the same ancestry leave both bidder and target shareholders worse off. Target shareholders are immediately worse off due to receiving lower deal premiums on average, while bidder shareholders are eventually worse off due to the relative

underperformance of the combined firm over time. Though the initial response of the market may be positive, as time passes and information on the deliverability of potential synergies is revealed, acquiring shareholder wealth is ultimately eroded. With these results as a background, the next step is to investigate how the CEOs themselves are affected in same-ancestry deals, with a logical focus being their compensation. The third chapter of this thesis investigates the impact of ancestry and M&A on the change in executive compensation around the deal, as well as the change in sensitivity of CEO pay to firm performance around the deal. Specifically, it investigates the difference in effect on pay and the pay-for-performance mechanism between same-ancestry deals and different-ancestry deals.

CHAPTER 3: CEO ANCESTRY, EXECUTIVE COMPENSATION, AND PAY-FOR-PERFORMANCE.

1. Introduction and Literature Review

This chapter investigates if changes in executive compensation provide a possible explanation for CEO ancestry's value-destroying effects observed in previous chapters on M&A. Chapter 1 of this thesis investigates the effect CEO ancestry has on M&A announcement returns and deal premiums. The main finding is that deal premiums are on average lower in deals undertaken between CEOs of the same ancestry, with no discernible effect on announcement abnormal returns. It is concluded that target shareholders are worse off while acquiring shareholders do not see the same wealth improvements.

Chapter 2 then assesses the long-term implications of CEO ancestry in M&A by assessing the acquiring shareholders' abnormal returns over the 36 months following deal completion. It was found on average that despite a short-term positive wealth effect upto 1 year, over the long run same-ancestry deals tend to leave acquiring shareholders worse off in the 36 months post-deal. Moreover, the performance of the combined firm is generally worse in the long-term, experiencing poorer profitability relative to different ancestry-deals. Therefore, it is implied that shared CEO ancestry in M&A lead to value destroying deals on average, costing both acquiring and target shareholders.

What is still unclear is if the CEOs themselves tend to gain from the value destroying M&As that are associated with shared ancestry between bidder and target CEOs. A possible mechanism for the value destruction to occur could be CEO ancestry's effects on agency costs arising from the separation of ownership and control. In effect if same-ancestry deals are associated with changes in the wealth consequences for CEOs around M&A, they might be more likely to undertake M&A that were suboptimal decisions. To assess what effect same-ancestry deals have on CEO wealth, the ideal topic to consider is executive compensation and the sensitivity of a CEOs pay to performance of the firm. The effect of CEO ancestry on compensation may reveal if the value-destroying effect is a result of incentive misalignment and personal benefit extraction by CEOs.

It is well documented that when shareholders appoint and grant control of their firm to an agent, there is a tendency for conflicts of interest to arise (Jensen and Meckling, 2019). Early literature argues that managers do not always act in shareholders' interest, and often realise large personal gains from inefficient use of cash flows generated by their firm (Jensen, 1986). Empirical evidence exists in support of this (Lang, Stultz, Walkling, 1991; Morck, Shleifer, and Vishny, 1990), and thus the Free Cash Flow hypothesis is crucial as a background for the issues in corporate governance. The favoured method of studies measuring the impact of the

separation of ownership and control has been the analysis of acquisition decisions by managers. Mergers and Acquisitions (M&A) offer an easily observable form of corporate investment and allow for relatively accurate analysis of if a manager is attempting to maximise shareholder value or wasting corporate resources for self-benefit. When conflicts of interest exist within a corporation, M&A decisions tend to intensify their impact and offer clear indications of value destruction to shareholders (Means, 2017; Jensen and Meckling, 2019). Rather than return cash generated to shareholders, managers engage in Empire building, or inefficient investment decisions. This reveals a core issue pertaining to all corporate decisions and gives need for investigation into mechanisms that may allow mitigation.

In addition to the agency explanation of entrenchment, other studies have investigated the incentive alignment hypothesis, established by Jensen and Meckling (1976). It suggests that more equity compensation to controlling executives incentivises them to maximize the value of the firm, as their own wealth is then sensitive to firm performance. Thus, aligning shareholder and CEO incentives. This is supported partly in the literature on executive compensation, suggesting precedence for a 'pay-for-performance' mechanism (Minnick, Unal and Yang, 2011). In other words, this mechanism suggests that CEOs should be paid well when their firm performs well, and that their compensation should be directly related to key performance indicators of firm performance. Murphy (1985) empirically shows that executive compensation is strongly positively related to corporate performance measures such as shareholder return and growth in sales. Furthermore, the findings of Minnick, Unal and Yang (2011) show the existence of a Pay-for-Performance sensitivity in Bank CEOs, where higher sensitivity encourages better acquisition decisions that exhibit better post-merger performance. Thus, internal mechanisms such as remuneration also have a significant effect on shareholder value. More recent studies observe that CEOs who have more power in their firms proxied for with variables such as tenure and block-ownership tend to have smaller relationships between their pay and the firm's performance (Ntim et. Al, 2019).

CEO compensation is, however, a controversial issue. Agrawal and Walkling (1994) show that M&A is more frequent in industries where CEO compensation is higher. Grinstein and Hribar (2004) find a positive relation between CEO post-merger bonus compensations and CEO effort but fail to find the same between CEO bonuses and post-merger firm performance. An important finding is that firms with weaker shareholder rights (more powerful managers) tend to award the highest bonuses regardless of deal performance (Grinstein and Hribar, 2004). This extends the results of Core, Holthausen, and Larcker (1998), who find a negative relation between post-merger performance and compensation.

Harford and Li (2007) find that successful M&A reduces the sensitivity of a CEO's short-term remuneration to the point of near insensitivity. This means that upon completion of an M&A

deal, the manager's remuneration is not as dependent on firm performance as compared to before a merger. Therefore, if this post-deal insensitivity phenomenon is considered alongside the agency explanation, a manager may seek to complete M&A deals, regardless of synergies in order to decouple their wealth from the performance of the firm in the short term (Harford and Li, 2007). This is a particularly important result, and provides the focus of this chapter, as wealth decoupling is taken to mean a reduction in importance of the firm's performance in the compensation CEOs are awarded. Moreover as it is established that M&A can lead to changes in the pay-for-performance mechanism in CEO compensation, it is of interest to see if a deal occurring between CEOs of shared ancestry augments or decreases this phenomenon.

The pay-for-performance and wealth decoupling context offers an optimal setting to further investigate the effect of CEO ancestry and there is a scope for contribution to the discussion (Himmelberg and Hubbard, 2000; Schaeffer, 1998; Mishra, McConaughy, and Gobeli, 2000; Brick, Palmon, and Wald, 2012; Ouyang, Xiong, and Fan, 2019). While contemporary studies investigate the pay-for-performance mechanism in contexts such as strategic investment (Shi, Connelly, and Mackey, 2019), information asymmetry (Olaniyi, 2019), and managerial power (Gox and Hemmer, 2020), In the context of this research, the question being asked and answered is if same-ancestry deals lead to more occurrences of wealth decoupling, relative to different-ancestry deals. In other words, wealth decoupling is when CEOs undertake specific actions in pursuit of the outcome that their compensation becomes less related, or sensitive, to the performance of their firm. In effect, this chapter establishes two channels through which change in executive compensation in same-ancestry deals might be leading to weaker ex-post firm performance. The first is through the change in CEOs overall compensation as a result of undertaking a deal with a CEO of the same ancestry, and the second is through changes in how sensitive a CEOs compensation is to post-merger firm performance in the event of a same-ancestry deal.

Results of this chapter indicate that compared to different-ancestry deals, same-ancestry deals lead to relatively higher compensation for incumbent acquiring CEOs when comparing their pre- and post-deal pay. This is observed for their annual cash salary, bonus, and long-term incentives that comprise their compensation packages. The pay-for-performance mechanism is also found to be impacted more in same-ancestry deals, with sensitivity of pay to indicators of firm profitability are found to be reduced after undertaking an M&A. That is, despite having relatively higher overall levels of pay, the extent to which their pay is based on firm performance is weakened. Taking the results of chapters 1 and 2 alongside these findings adds to our understanding of the role of CEO ancestry in M&A by indicating it leads to situations where agency costs and incentive misalignments are more pronounced, leading to value destruction. Intuitively, same-ancestry deals not only erode the wealth of the shareholders

involved but reward incumbent CEOs and possibly make them apathetic to the performance of the combined firm. These results thus far contribute to the literature on executive compensation and its role in corporate finance and corporate governance, by introducing ancestry as a factor when comparing pre- and post-deal compensations. Additionally it completes the narrative investigated in this thesis by defining a significant channel through which ancestry effects on shareholder wealth and performance manifest around M&A.

The structure of this chapter is as follows: Section 2 describes the data, methodology, empirical strategy and estimation models, and outlines the key variables used and constructed. Section 3.1 presents the results of estimating the effect of ancestry on the difference between pre- and post-deal CEO compensation. Section 3.2 presents the results of estimating the effect of ancestry on changes in sensitivity of CEO compensation to firm performance around M&A. Section 4 concludes.

2. Data and Methodology

2.1 Deal Sample

The sample consist of 1398 M&A deals announced between 2000 to 2019. Data is obtained from Securities Data Company (SDC) US Mergers and Acquisitions database following the same filtering strategy as the previous chapters. US domestic firms are chosen to keep later life impacts of economic and institutional effects relatively controlled. Deals are selected on the following criteria. Both acquirer and target are required to be either publicly traded in the US or have stock price and accounting data available for post-deal abnormal returns, profitability measures, and firm and deal level control variables to be constructed. Minimum deal size is set at $1 million. The acquisitions must be completed, and the acquirer must acquire 100% of the target after the transaction. Moreover, ownership stake in the target prior to announcement must be less than 51%. SDC provides the acquisition announcement date, the value of the transaction, deal attitudes, premiums and values prior to announcement, percentage of stock and cash used to pay for the acquisition, and additional details such as if bids were challenged. The sample of M&A targets and bidders is merged with Compustat to retrieve financial data, with the Center for Research in Security Prices (CRSP) for data on returns, and Execucomp to retrieve CEO specific details.

Table 2.1.1 displays the distribution of transactions across years. A high frequency is observed during the early to mid-2000s with around 65% of the deals occurring between 2000 to 2010. Average deal value by year varies through the sample, with notable highs in 2009, 2012, 2014 and 2015.

Table 2.1.1

Sample distributions of the total number of M&A deals across years during the period of 2000–2019. Data are obtained from SDC Platinum M&A Database. The sample consists of 1398 deals.

Year of Announcement	No. of Deals	Percent of sample	Average Deal Size ($Mil.)
2000	124	8.87%	492.70
2001	90	6.44%	378.42
2002	71	5.08%	264.32
2003	76	5.44%	289.29
2004	76	5.44%	213.79
2005	69	4.94%	347.25
2006	86	6.15%	280.91
2007	75	5.36%	266.36
2008	81	5.79%	224.46
2009	94	6.72%	780.69
2010	80	5.72%	375.81
2011	64	4.58%	425.84
2012	64	4.58%	823.02
2013	56	4.01%	201.57
2014	57	4.08%	1542.07
2015	49	3.51%	1613.86
2016	40	2.86%	221.58
2017	50	3.58%	453.90
2018	55	3.93%	698.87
2019	41	2.93%	251.39
Total	1398		

Table 2.1.2

Sample distributions of the total number of M&A deals across industries during the period of 2000–2019. Industries are classified according to US SIC codes. Data are obtained from SDC Platinum M&A Database. The sample consists of 1398 deals.

Industry	Acquiror		Target	
	Obs.	%	Obs.	%
Agriculture, Forestry and Fishing	180	12.88%	126	9.01%
Mining	14	1.00%	401	28.68%
Construction	0	0.00%	0	0.00%
not used	0	0.00%	0	0.00%
Manufacturing	968	69.24%	391	27.97%
Transportation, Communications, Electric, Gas and Sanitary service	71	5.08%	152	10.87%
Wholesale Trade	5	0.36%	149	10.66%
Retail Trade	4	0.29%	0	0.00%
Finance, Insurance and Real Estate	114	8.15%	179	12.80%
Services	35	2.50%	0	0.00%
Public Administration	0	0.00%	0	0.00%
Nonclassifiable	7	0.50%	0	0.00%
Total	1398		1398	

Table 2.1.2 shows the distribution of acquirors and targets across industries as classified by the US Standard Industrial Classification (SIC) codes. There appears to be a high supply of bidders and targets in the manufacturing industry, accounting for around 69% and 28% respectively. Of the 1398 deals, 298 are diversifying representing 21.3% of the sample. The remaining 1100 deals occur within the same industry. Within the set of diversifying deals, the most common occurrence is between an acquiror in the manufacturing industry and targets in the mining industry, representing 102 of the 298 deals.

2.2 Ancestry Variables

The variable assigned to each deal is the same-ancestry indicator. As it was found in previous chapters that ancestral identity seemed to drive the observed effects more than granular variations in ancestral culture, the sole variable used in this chapter is the same-ancestry indicator. While widely used to explore aspects of culture in professional settings, cultural distance measures such as Hofstede's national cultural dimensions are not without limitations. Hofstede conceptualises culture as collective cognitive programming that distinguishes members of one group from another (Hofstede, 1991). Crucially, Hofstede's dimensions aggregate culture at a national level. That is, it largely assumes national uniformity and incorrectly overlooks cultural heterogeneity within a nation (Bock, 1999, 2000; Etzioni, 1968; O'Reilly and Roberts, 1973; Bhagat, 1979; Freeman, 1983; Merelman, 1984; Zeldin, 1984; Kondo, 1990; Smelser, 1992; Steinmetz, 1999). McSweeney (2002) alternatively suggests national culture to be fragmented within a nation, disintegrating and fusing over time to represent the heterogenous nature of the population within that nation. it is possible that the effect of CEO ancestry is therefore less likely to be driven by inherited cultural values and beliefs, but rather a sense of specific cultural identity within the culturally heterogenous national setting. As was argued in previous chapters, the sociological conception of identity suggests that an individual's sense of identity is formed in relation to and through interaction with others in their society, eventually stabilising in two distinction concepts of 'us' and 'them' (Hall and Du Gay, 1996, 2006). A more appropriate conception of culture then would be that it is informed by identity, and that members of different groups distinguish themselves from others through the act of identifying with those who they deem to be similar (Lawler, 2015).

The ancestry of each bidder and target CEO is first identified, then each deal is assigned a value of one if both CEOs share the same ancestry, and zero otherwise. Thus, splitting the sample into same-ancestry deals, and different-ancestry deals. Of the 1398 deals, 633 occur between CEOs of shared ancestry and the remaining 765 occur between CEOs of different ancestry. Identification is multifaceted, involving data sourced from Ancestry.com[5], the Dictionary of

[5] Obtained at www.ancestry.com/search/collections/7488/

American Family Names (Hanks, 2003), forebears.io, and web searches. An additional identification method involves the Dictionary of American Family names, an Oxford reference compiled by Patrick Hanks (2003). The method used for obtaining these data follows that of the investigation into ancestry effects on announcement returns and premiums in chapter 1, and on long-term post-merger performance in chapter 2. Table 2.2.1 lists an abridged list of the identified ancestries, presenting the top and bottom 5 ancestral countries of origin by frequency. A full table presenting all observed ancestry countries of origins is available in the appendix F. In total 2796 CEOs' ancestral country of origin are identified, describing two CEOs per each 1398 deals. Notable, there is a high concentration of CEOs of English ancestry, accounting for 1124 observations, or 40.2%. CEOs of English ancestry make up 42.2% of acquiring CEOs and 38.2% of target CEOs. The next most frequent by a large margin is German representing 14.38% of the total sample, or 14.52% of acquiring CEOs and 14.23% of target CEOs. These two countries of ancestral origin cumulatively represent 54.58% of the total sample.

Table 2.2.1

Abridged list of distribution of modal / most likely country of ancestral origin for bidder and target CEOs identified by surname. CEO names obtained from Standard & Poor's Execucomp database. Ancestry data approximated from arriving New York, US, passenger and crew lists (including Castle Garden and Ellis Island) between 1820-1957 obtained from Ancestry.com

Ancestry	**Total**			**Acquiror**		**Target**	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
English	1124	40.20%	40.20%	590	42.20%	534	38.20%
German	402	14.38%	54.58%	203	14.52%	199	14.23%
Jewish	198	7.08%	61.66%	101	7.22%	97	6.94%
Italian	160	5.72%	67.38%	76	5.44%	84	6.01%
Irish	125	4.47%	71.85%	64	4.58%	61	4.36%
...							
Maltese	2	0.07%	99.79%	1	0.07%	1	0.07%
Ukraine	2	0.07%	99.86%	1	0.07%	1	0.07%
Lithuanian	1	0.04%	99.90%	1	0.07%	0	0.01%
Mexican	1	0.05%	99.95%	0	0.00%	1	0.10%
Pakistan	1	0.05%	100.00%	1	0.07%	0	0.03%
Total	2796	100%		1398	100%	1398	100%
Same Ancestry	633	Different Ancestry	765				

2.3 Performance Measures

To examine pay changes around M&A and the effect of CEO ancestries, the compensation of CEOs of acquiring firms in the sample is regressed on several performance variables outlined in the executive compensation literature (Murphy, 1985; Agrawal and Walkling, 1994; Yermack, 1995; Core, Holthausen, Larcker, 1999; Grinstein and Hribar, 2004). Several accounting-based measures of firm profitability are used to construct dependent variables (He, Yu, and Du, 2020). The primary profitability measure is Return on assets (ROA), defined as net income over total book assets, indicates how effective the firm is in generating profits using its assets and available resources. As ROA indicates profitability, it should have an impact on CEO pay, as high ROA is likely to be rewarded with higher pay or lead to higher levels of future pay in order to retain a strong performing manager. The stability of this profitability should also have an impact on pay as a high standard deviation of ROA suggests an inconsistent manager (Yermack, 1995). Similarly return on equity (ROE), defined as net income divided by shareholders equity is used as an alternate measure of profitability. By taking on debt firms can report higher levels of assets due to the influx of cash, which could cause variations in ROA that are not strictly related to its relevance to profitability or economic value, while ROE ignores how levered a firm is. The standard deviation of ROE is also included as a performance measure.

While ROE as a measure is included to check the robustness of obtained results on ROA, chapter 2 revealed that ROE is also subject to changes, specifically reductions, in shareholders equity that indicated a positive overall change even during decreases in net income. This unpredictability in changes in shareholders equity may not reflect the same measure of how profitable the firm is with respect to its assets, however it can still indicate how effective the CEO is at converting the equity financing available to the firm into profits. As such the primary performance measure of interest is ROA. The annual return of the firm's shares is also used as a performance measure. As it is the purpose of a manager to maximize the value of a firm to principal shareholders, their compensation should be sensitive to the performance of the stock price (Murphy, 1989). This offers an alternative to accounting profits, which are subject to manipulations that may distort or bias results. It is expected that the level of the firm's performance as indicated by these measures will be lower for same-ancestry deals after completion of the merger based on the results obtained in chapter 2. It is also expected that same-ancestry deals will exhibit lower sensitivities of CEO compensation to firm performance, giving a potential explanation for the sub-optimal decision making. In all cases, the change in performance is measured over the prior year.

2.4 Regression Models

2.4.1 Shared ancestry and changes in CEO compensation

Two estimation models are used, with the first being to investigate the effect of shared ancestry on changes in acquiring CEO pay around M&A. The second investigates the effect of shared ancestry on changes in sensitivity of acquiring CEO pay to firm performance. Model 1 takes the form of a linear regression of the difference between the level of pre- and post-merger compensation on the same-ancestry indicator and a selection of control variables. Formally:

$$(\mathbf{1})\Delta \boldsymbol{Compensation_i} = \boldsymbol{\alpha_i} + \boldsymbol{\beta_1 Same\_Ancestry_i} + \boldsymbol{control\ variables} + \boldsymbol{\varepsilon_i}$$

The dependent variable is the natural log-difference between post- and pre-merger compensation. Thus β_1 reports the average difference in the percentage change in compensation around deals that occurred between CEOs of shared ancestry. The compensation measures used in model 1 are Salary, Bonus, and Long-term incentives defined as the value of stock and option grants. For example, when using salary as a compensation measure, the LHS takes the form:

$$\Delta \boldsymbol{Salary_i} = \boldsymbol{LN(post - merger\ salary) - LN(pre - merger\ salary)}$$

As the purpose of model 1 is to investigate and establish whether there is an observable difference in change in compensation around M&A when deals occur between CEOs of shared ancestry, the selection of control variables includes firm performance measures, as well as CEO and deal characteristics. As justified in chapter 1, standard control variables are included with established determinants from the M&A literature. Performance controls include Δ firm size, Δ market-to-book ratio, Δ return on assets, Δ leverage, Δ Tobin's Q, Δ firm risk, and firm stock price return over the period examined. The focal window for number of years before and after the merger considered is [-1,+1], with windows of [-2,+2], and [-3,+3] additionally examined for robustness and to check for persistence of any observed effects. Controls for CEO characteristics include CEO ownership percentage and CEO tenure to control for elements of CEO power and ability to dictate compensation. Deal characteristics are accounted for with an indicator variable for if the deal is paid for entirely in cash, whether the deal is a diversifying merger based on the 3 digit SIC codes, if the deal was hostile or not, if the deal was a tender offer, and if the deal bid was challenged. Systematic year and industry effects are controlled for with dummy variables.

2.4.2 Shared Ancestry and Pay-for-Performance Sensitivity

The second model investigates changes in sensitivity of CEO compensation to firm performance during M&A, and how this is affected when deals occur between CEOs of shared ancestry. The full sample of 1398 deals is split into two sub samples of 633 same-ancestry deals, and 765 different-ancestry deals. Then, similar to the event study method used to obtain cumulative abnormal returns, the year of a merger is treated as year zero and observations for CEO compensation and firm performance are collated from 2 years prior till 2 years after the event year and arranged by firm to form the focal window. Additional windows of [-3,+3] and [-4,+4] are also considered to check for robustness and persistence. To compare pay sensitivity changes resulting from M&A the following panel regressions are estimated on both subsamples of same- and different-ancestry deals.

$$(2)\mathbf{log}\,(\mathbf{Compensation})_{i,t} = \boldsymbol{\gamma_0} + \boldsymbol{\delta_1}\mathbf{Performance\ Measure}_{i,t} + \boldsymbol{\delta_2}\mathbf{Post\ Takeover}_{i,t} + \boldsymbol{\delta_3}\left(\mathbf{Performance\ Measure}_{i,t} \times \mathbf{Post\ Takeover}_{i,t}\right) + \mathbf{control\ variables} + \boldsymbol{\varepsilon}_{i,t}$$

The dependent variable is the logarithm of one of the CEO compensation measures for firm i at time t. Performance Measure represents one of the variables used as performance measures as outlined in section 2.3. Performance is measured over the preceding period, i.e., from period *t-1* to *t*. Compensation is regressed on each measure separately, as opposed to in a single estimation model, to gauge the respective sensitivities. Only one performance indicator is used at a time to also avoid issues that may arise due to multicollinearity, as though there are subtle differences, all performance measures gauge the profitability of the firm in different ways. The coefficient δ_1 shows the sensitivity of compensation to a performance measure in the period before the deal is completed, and Post Takeover is an indicator variable that takes the value one if observations are in the years following the merger. The interaction between performance measure and the post-takeover dummy is to yield $(\delta_1 + \delta_3)$ which shows the sensitivity in the post-merger period. Therefore, δ_3 represents the marginal change in sensitivity of compensation to performance in the period after deal completion. Examining the marginal change in sensitivity of pay to performance would reveal wealth decoupling effects arising as a result of the deal, and possibly explaining the results from previous chapters that found same-ancestry deals to leave acquiring shareholders generally worse off. For example, in the case that δ_3 is found to be equal in value but opposite in sign to δ_1, it implies a post-merger change in sensitivity of pay to performance that brings it to zero. In other words, CEO compensation is decoupled from or no longer tied to the performance of the firm because of

completing the M&A deal. Comparison of the coefficients obtained in both sub samples then show if this effect is present for different-ancestry deals, or isolated to same-ancestry deals. In the context of this research and previous findings of shared-ancestry deals leading to shareholder value destruction, an expected outcome is for δ_3 to be opposing in sign to δ_1, but to have a similar absolute value in the subsample of same-ancestry deals. That is, if the incremental post-merger effect on sensitivity of compensation to performance negates the pre-merger sensitivity, it can be concluded that same-ancestry deals tend to lead to CEO wealth decoupling and insensitivity of compensation to post-deal firm performance.

The compensation variables used are Total compensation as reported by WRDS, standalone salary, and bonus. Three measures of long-term incentives are used and defined as follow: *Long-term 1* is the value of stock and option grants, *Long-term 2* is the value of stock awarded and *Long-term 3* is constructed by subtracting total cash compensation from total compensation including all long-term incentive pay-outs. Long-term 3 is constructed for the purpose of avoiding any potential errors or misreported information that may be present in the other long-term incentive variables obtained from Execucomp. Control variables are included to control for deal, firm, and CEO characteristics. Deal characteristics are accounted for with an indicator variable for if the deal is paid for entirely in cash, whether the deal is a diversifying merger based on the 3 digit SIC codes, if the deal was hostile or not, if the deal was a tender offer, if the deal was challenged, if the acquiror was a block holder prior to the deal, and the relative size of the deal. Firm characteristics are controlled for with the inclusion of Tobin's Q, cash flow, leverage, firm size, market-to-book ratio, earnings-per-share, and cash holdings. Finally, characteristics of CEO power are controlled for with characteristics such as CEO tenure, and CEO ownership percentage. Systematic year and industry effects are controlled for with dummy variables.

To summarise, the compensation variables investigated are reported in table 2.4.1 and 2.4.2:

Table 2.4.1
Summary of compensation variables used in model 1

Model 1	
Compensation Variable	**Definition**
Salary	Dollar value of the base salary earned by named executive officer during the fiscal year
Bonus	Dollar value of a bonus earned by named executive officer during the fiscal year
Long-term Incentives	Amount paid out to the executive under the company's long-term incentive plan

Table 2.4.2
Summary of compensation variables used in model 2

Model 2

Compensation Variable	Definition
Salary	Dollar value of the base salary earned by named executive officer during the fiscal year
Bonus	Dollar value of a bonus earned by named executive officer during the fiscal year
Long-term 1	Dollar Value of stock and option grants
Long-term 2	Dollar Value of stock awarded
Long-term 3	Total compensation – Total cash compensation

3. Results

3.1 Shared Ancestry and Changes in CEO Compensation

Table 3.1.1 reports the coefficients on the indicator variable that equals 1 when deals occur between CEOs of the same ancestry with percentage change between pre- and post-merger compensation as the dependent variable. Change in compensation variables is calculated as the log-difference between compensation reported 1-year post-merger less compensation reported 1 year pre-merger. A selection of control variables is included to control for effects arising from changes in firm performance, CEO characteristics, and deal characteristics. Results obtained using wider windows of [-2,+2] and [-3,+3] are largely similar to those obtained in table 3.1.1, and presented in appendix D for clarity. Where different, specific findings are mentioned for the purpose of comparison to baseline results found with the [-1,+1] window.

Column (1) of table 3.1.1 presents results of regressing a CEOs salary component of compensation on the same-ancestry dummy and control variables. The coefficient on same ancestry indicates that post-merger salary is approximately 63.4% higher in same ancestry deals as compared to different ancestry deals and is found to be statistically significant at the 1% level. It is also found that post-merger salaries tend to be higher the larger the increase in size of the firm, and in increase in growth opportunities as proxied for with Tobin's Q. Positive and statistically significant coefficients are reported of 0.288 and 0.207 respectively. Interestingly a negative association is found between change in salary and change in ROA with a coefficient of -1.489, suggesting post-merger salaries tend to increase more when post-merger ROA declines. This is consistent with results from previous chapters that indicate a loss in shareholder wealth and poor post-merger performance in same-ancestry deals and suggests this could be due to misalignment of incentives between CEOs and shareholders. As they appear to experience higher post-merger salaries on average, CEOs may become more apathetic to maximising firm value and as a result profitability suffers.

Table 3.1.1

Relationship between shared ancestry indicator and change in compensation around deals presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Percentage change in compensation between years [-1,+1] around deal			
Measure	Δ Salary	Δ Bonus	Δ Long-term incentives
	(1)	(2)	(3)
Same Ancestry	0.634***	0.418***	0.265***
	(0.0723)	(0.0787)	(0.0779)
Δ Size	0.288***	0.260**	-0.133
	(0.0927)	(0.101)	(0.103)
Δ Market-to-book	2.59e-07	1.18e-07	1.61e-06
	(1.48e-06)	(1.61e-06)	(1.57e-06)
Δ ROA	-1.489***	-1.537***	-0.522
	(0.318)	(0.346)	(0.348)
Δ Leverage	0.00158	0.00194	0.0150**
	(0.00621)	(0.00676)	(0.00659)
Δ Tobin's Q	0.207***	0.285***	-0.115***
	(0.0342)	(0.0372)	(0.0392)
Δ Risk	-0.000443	0.00243	0.00713***
	(0.00248)	(0.00270)	(0.00264)
Δ Return	-0.0638	0.312***	0.400***
	(0.0656)	(0.0714)	(0.0744)
CEO Ownership	-0.0330	0.00764	0.0143
	(0.0223)	(0.0243)	(0.0267)
All Cash Deal	0.0454	0.0399	-0.0451
	(0.0539)	(0.0586)	(0.0572)
CEO Tenure	-0.00335	0.00462	0.0382***
	(0.00780)	(0.00849)	(0.00850)
Diversifying Deal	-0.118*	-0.0745	0.154**
	(0.0611)	(0.0665)	(0.0654)
Tender Offer	0.0394	0.0982	0.0405
	(0.0773)	(0.0841)	(0.0820)
Challenged Deal	0.0152	-0.179	-0.0801
	(0.167)	(0.182)	(0.180)
Deal Attitude	0.134	0.0980	0.109
	(0.208)	(0.226)	(0.225)
Observations	1398	1398	1398
Adjusted R^2	0.227	0.232	0.495

Column (2) of table 3.1.1 uses the change in bonus component of compensation as the dependent variable and finds on average that same ancestry deals lead to an approximately 41.8% larger increase in bonus post-merger as compared to different ancestry deals and is found to be statistically significant at the 1% level. Increases in firm size are also positively associated with increases in post-merger bonus with a reported coefficient of 0.26 though less

significant at the 5% level. A positive and highly significant relationship between changes in Tobin's Q and change in bonus is observed with a coefficient of 0.285. Change in ROA is found to be negatively associated with change in bonus and highly significant, with a reported coefficient of -1.537. Additionally change in firm stock price return is found to be positively associated with change in bonus, and highly significant at the 1% level. This could be due to aspects of CEO bonuses being tied to achieving stock price targets, and thus higher stock returns post-merger may explain higher post-merger bonuses.

Column (3) of table 3.1.1 presents results using the change in long-term incentives, defined here as the reported value of stock and option grants included in a CEOs compensation. A positive and significant association is found with the same ancestry indicator. It is suggested that there is an approximately 26.5% higher increase in the long-term component of compensation when deals are undertaken by CEOs of shared ancestry, relative to deals occurring between CEOs of different ancestry. The long-term component does not appear to be affected by change in firm size but is associated negatively with change in growth opportunities. This may be caused by an attempt to foster a longer-horizon approach in CEOs when shareholders notice a decline in growth opportunities and incentivise them to take action to create future growth opportunities. This seems consistent with the results on change in Tobin's Q and change in firm risk and stock price return. There is a positive association with change in firm risk and change in firm stock return, suggesting that a CEOs long-term incentive may change to encourage more risk taking for future payoff. Interestingly different results are obtained when using change in long-term incentives as the dependent and considering a window of [-3,+3], presented in Appendix D. When considering a window of 7 years around a deal, it is suggested that there is an approximately 38.9% higher increase in the long-term component of compensation when deals are undertaken by CEOs of shared ancestry, relative to deals occurring between CEOs of different ancestry. The long-term component appears to be affected by change in firm size with a negative and significant coefficient of -0.353. It is possible that as firm size grows, the importance of fostering a long-term mindset is less important for shareholders, and instead more compensation is awarded through more immediate forms.

Notable coefficients on control variables that are strongly statistically and economically significant with regards to change in salary are size Tobin's Q. The positive coefficient between change in salary and changes in size and Tobin's Q is consistent with the extant literature, as CEO compensation tends to increase with firm size, as well as the market value of the firm and relative competitive advantage as proxied by the Q ratio (Bebchuk and Grinstein, 2005). A similar finding is observed with regards to change in bonus, which is also positively associated with bon change in size and Q ratio. With regards to change in long-term incentives (LTIs),

change in leverage, Tobin's Q, firm risk, stock return and tenure are found to be statistically and economically significant. The positive association between change in leverage and LTIs may result from an attempt to tie a CEOs future wealth to the firm, encouraging their capital structure and investment decisions to be more critical. This likely also applies to the positive coefficient on change in firm risk. The positive coefficients between stock price return and Tobin's Q is likely to be a result of the value of these rewards increasing with the performance of the combined firm in terms of the value of the firm's shares and competitive position.

Considering the results obtained in tables 3.1.1 it can be concluded that ancestry effects do not consistently impact long-term incentives. The more current cash-based forms of compensation seem to experience a more consistent and persistent ancestry effect. CEOs who undertake deals with targets helmed by CEOs of the same ancestry tend to receive higher post-merger salaries and bonuses. The difference between their pre- and post-merger salaries and bonuses is largest in the 3 years around the deal. This is found to be the case in wider estimation windows around the deal with coefficients of 0.576 and 0.549 on the same-ancestry variable when considering [-2,+2] and [3,+3] respectively (presented in Appendix D, tables 3.1.2 and 3.1.3). The observation that post-merger compensation tends to increase more for same-ancestry deals, taken with results from previous chapters that same-ancestry deals tend to perform poorly in the long-term and destroy acquiring shareholder wealth, justifies the subsequent investigation into how ancestry effects sensitivity of CEO compensation to firm performance around M&A. Moreover the finding that change in compensation is negatively associated with change in ROA adds further credibility to these prior results.

3.2 Shared Ancestry and Pay-for-Performance Sensitivity

3.2.1 Return on Assets

The sample of 1398 deals are split into two sub samples of 633 same-ancestry deals, and 765 different-ancestry deals. The year of a merger is treated as year zero and observations for CEO compensation and firm performance are collated from 2 years prior till 2 years after the event year and arranged by firm to form the focal window. Additional windows of [-3,+3] and [-4,+4] are also considered to check for robustness and persistence, yielding consistent results and are presented in Appendix E. To compare pay sensitivity changes resulting before and after M&A, the panel regressions are estimated on both subsamples of same- and different-ancestry deals. For the remainder of the discussion summary tables are presented with coefficients salient to the investigation into the effect of CEO ancestry on post-merger pay-for-performance sensitivity. Non-focal control variables pertaining to firm, deal, and CEO characteristics are omitted for clarity. Tables in this section present results from the panel regression of CEO compensation on the performance measures with Panel A reporting coefficients when restricting the sample to same-ancestry deals and panel B reporting

coefficients when the restricting the sample to different-ancestry deals. The coefficient between each performance measure and the compensation the top row of each table represents the pre-merger sensitivities, while the coefficients on the interaction between performance measures and 'Post Merger' represent the marginal change post-merger. Combining both coefficients yields the post-merger sensitivity of a compensation variable to a performance measure.

Table 3.2.1

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 2.4 for full list of controls.

Dep. Var = Logarithm of compensation over event window years [-2,+2] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.586**	0.281	0.723*	0.88	1.494	-0.944
	(0.283)	(0.198)	(0.396)	(0.906)	(1.935)	(1.26)
Post Merger	0.0196	0.0921***	-0.017	-0.164	-0.288	0.0381
	(0.03)	(0.02)	(0.042)	(0.103)	(0.215)	(0.139)
ROA X Post Merger	-0.829**	-0.532**	-0.964**	1.813	3.75	-3.423**
	(0.335)	(0.22)	(0.469)	(1.111)	(2.401)	(1.541)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.387**	0.0883	0.364*	0.383*	0.444	-0.106
	(0.155)	(0.126)	(0.212)	(0.221)	(0.301)	(0.313)
Post Merger	-0.0533**	0.0592***	-0.018	0.0115	0.0601	-0.002
	(0.026)	(0.021)	(0.037)	(0.035)	(0.041)	(0.054)
ROA X Post Merger	-0.04	-0.063	-0.274	0.706**	-0.352	0.195
	(0.226)	(0.182)	(0.332)	(0.327)	(0.44)	(0.478)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table 3.2.1 presents results from the panel regression of CEO compensation on the performance measure return on assets. Column (1) in panel A shows a positive coefficient between total pay and ROA of 0.586 pre-merger. The coefficient on the interaction term between ROA and the post-merger dummy shows the incremental change in sensitivity of total pay to ROA post-merger and is reported as -0.829. Thus, the overall sensitivity of total

compensation to ROA is -0.243 after completion of the deal and is significant at the 5% level. Undertaking and completing an M&A deal reduces the sensitivity of CEO total compensation to ROA, and apparently leads to a negative relationship that is closer to 0 than pre-merger. This suggests the presence of a wealth decoupling effect arising a result of undertaking a same-ancestry M&A deal as sensitivity of pay becomes closer to zero. Moreover, as the post-merger sensitivity is slightly negative, it even suggests that total compensation increases inspite of poorer post-merger return on assets. Observing column (1) in panel B shows no significant coefficient on the interaction between post-merger and ROA, implying that this same effect does not occur for different-ancestry deals when considering total compensation. These results indicate that when deals are undertaken between CEOs of the same ancestry, it is more likely that they receive compensation that is less sensitive to performance and thus leading to the poorer post-merger performance and shareholder wealth erosion observed in prior chapters.

Column (2) in panel A shows no significant pre-merger sensitivity of salary to ROA, however, presents a negative coefficient of -0.532 on the interaction between ROA and the post-merger dummy. Sensitivity of salary to ROA becomes negative post-merger and suggests salaries increase when firm performance is worse after a same-ancestry deal. Column (2) of panel B shows no significance on the post-merger interaction term, suggesting that this same effect does not occur in different ancestry deals. Again, the implication is that same-ancestry deals tend to make it more likely that acquiring CEOs are less incentivised to ensure optimal firm performance post-merger relative to undertaking deals with CEOs of different ancestry.

Column (3) in panel A reports the pre-deal sensitivity of bonus to ROA as 0.723, significant at the 10% level. The interaction between ROA and post-merger is reported -0.964, significant at the 5% level bringing post-deal sensitivity of bonus to ROA for same-ancestry deals to -0.241. The post-merger marginal effect on sensitivity of bonus to ROA is opposing in sign and close in magnitude, bringing it closer to 0 and suggesting a wealth decoupling effect in same-ancestry deals of CEO bonuses. The absence of significance on the interaction term between bonus and post-merger in column (3) of panel B suggests that this does not occur in different-ancestry deals. This is consistent with the results on salary and total pay, and indicates a reduction in overall sensitivity of bonus to performance after completion of a same-ancestry deal. Taken together, same-ancestry deals tend to make it more likely that the immediate cash compensation for CEOs is less sensitive to firm performance post-deal. Moreover the fact that the post-deal sensitivities are slightly negative suggest that there is a greater chance of acquiring CEOs being rewarded for worse performance post deal when engaging in M&A with target CEOs of the same ancestry. This points towards a compensation-based explanation for why chapters 1 and 2 presented results that same-ancestry deals tended to erode shareholder

value and perform worse than different-ancestry deals. Additionally, as ROA indicates how efficiently the firm is using its assets to generate profits, these findings suggest that same ancestry deals lead to a situation where incumbent CEOs are rewarded even if the firm does not show signs of increased productivity after the deal is completed.

The results obtained between measures of long-term incentives and ROA are less clear-cut. Column (6) of panel A only presents a significant coefficient on the interaction between ROA and post-merger of -3.423. Longterm 3 is constructed by subtracting total cash compensation from total compensation including all long-term pay-outs. The negative coefficient suggests that as ROA declines post-deal, the non-cash components of CEO compensation increase. This may occur in an attempt to 're-couple' CEO wealth to future firm performance and improve profitability in future periods. Inspecting Panel B, columns (4) to (6) do not show this effect existing for different-ancestry deals, however in column (4) positive and significant coefficients are reported in both pre-and post-merger sensitivities of Longterm 1 to ROA. Longterm 1 is the value of stock and option grants, and it appears that while pre-merger sensitivity to ROA is 0.383, it increases by 0.706 to 1.089 becoming more sensitive to ROA than before the merger for different-ancestry deals. Interestingly this presents an opposite effect on the longer-term component of CEO wealth compared to the effect observed on more immediate measures such as salary and bonus. It is possible that when undertaking a same-ancestry deal, CEOs are able to set their immediate compensation to be less sensitive to the firm post-merger, but at the cost of agreeing to more performance dependent long-term components of their compensation. Looking just at the relationship between pay and ROA as a performance measure, it seems that same-ancestry deals lead to higher likelihood of immediate wealth decoupling and reward for poor immediate post-merger performance. However, it also seems that there is a stronger pay-for-performance mechanism on long-term components of pay. This could be intended to realign incentives and foster long-term mindsets in CEOs as a result of completing the same-ancestry deal, however taken with the results obtained in chapters 1 and 2, it does not appear to be an effective precaution as it is observed that same-ancestry deals tend to perform poorly several years after completion when considering changes in ROA.

3.2.2 Return on Equity

Table 3.2.2 presents results from the panel regression of CEO compensation on the performance measure return on equity. As previously stated, ROE as a measure has shown to be problematic in chapter 2 due to unpredictable changes in shareholders equity, however, still has scope to reveal the presence of wealth decoupling as it ignores how levered the firm is and represents how efficiently the firm's equity financing is converted into profits.

Table 3.2.2

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 2.4 for full list of controls.

Dep. Var = Logarithm of compensation over event window years [-2,+2] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	1.054***	0.432*	1.247**	0.833	0.580	-1.745
	(0.358)	(0.225)	(0.502)	(0.766)	(1.459)	(1.693)
Post Merger	0.0336	0.102***	-0.000719	-0.168	-0.306	-0.0411
	(0.0314)	(0.0211)	(0.0440)	(0.104)	(0.228)	(0.149)
ROE X Post Merger	-1.000***	-0.639***	-1.17 6**	1.447	2.526	-0.936
	(0.368)	(0.230)	(0.516)	(1.018)	(2.208)	(1.763)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	-0.00611	-0.00325	0.00155	0.0565	-0.0297	0.143**
	(0.0324)	(0.0310)	(0.0494)	(0.0484)	(0.0372)	(0.0650)
Post Merger	0.0165	0.0467	0.103**	0.0452	-0.00389	-0.0219
	(0.0303)	(0.0291)	(0.0454)	(0.0368)	(0.0340)	(0.0598)
ROE X Post Merger	0.00727	0.00447	-0.00191	0.0789	0.0300	-0.150**
	(0.0313)	(0.0300)	(0.0484)	(0.0734)	(0.0364)	(0.0636)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Column (1) in panel A shows a positive coefficient between total pay and ROE of 1.054 pre-merger. The coefficient on the interaction term between ROE and the post-merger dummy shows the incremental change in sensitivity of total pay to ROE post-merger and is reported as -1.0. Thus, the overall sensitivity of total compensation to ROE to 0.054 after completion of the deal and is significant at the 1% level. Undertaking and completing a same-ancestry M&A deal reduces the sensitivity of CEO total compensation to ROE to near insensitivity. This suggests the presence of a wealth decoupling effect arising a result of undertaking a same-ancestry M&A deal. Observing column (1) in panel B shows no significant coefficient on the interaction between post-merger and ROE, implying that this decoupling effect does not exist

in different-ancestry deals when considering total compensation. Similar to results obtained with ROA, it appears that same-ancestry deals are more likely to lead to situations where CEO total pay is less sensitive to the performance of the merged firm when considering ROE. This implies that after a same-ancestry deal, total CEO pay is not as strongly tied to their ability to run the firm more profitably or make efficient decisions that make the best use of the equity financing available.

Column (2) in panel A of 3.2.2 shows a pre-merger sensitivity of salary to ROE of 0.432 significant at 10%, and a 1% significant negative coefficient of -0.639 on the interaction between ROE and the post-merger dummy. Sensitivity of salary to ROE becomes -0.207 post-deal which is closer to 0 and negative. This suggests a wealth decoupling effect as well as an increase in salary when ROE performance is worse after a same-ancestry deal, similar to the results obtained in table 3.2.1. Column (2) of panel B shows no significance on the post-merger interaction term, suggesting that this same effect does not occur in different ancestry deals. A key difference here is that the post-merger relationship between salary and ROE is negative in same-ancestry deals, indicating that acquiring CEO salaries increase as ROE decreases. When examining Column (3) in panel A, the pre-deal sensitivity of bonus to ROE as 1.247, significant at the 5% level, and the interaction between ROA and post-merger is reportedly -1.176, significant at the 5% level. Post-deal sensitivity of bonus to ROE for same-ancestry deals is ultimately 0.071, which is very close to zero but still positive. While bonuses seem to be decoupled from ROE in same-ancestry deals, the post-merger marginal effect on sensitivity of bonus to ROE brings it down to near insensitivity strongly indicates a wealth decoupling effect in same-ancestry deals. The absence of significance on the interaction term between bonus and post-merger in column (3) of panel B suggests that this does not occur in different-ancestry deals. Based on the two measures of profitability, ROA and ROE, the results so far indicate that completion of same-ancestry deals is more likely to make the immediate cash-based components of CEO pay less related to firm profitability.

Columns (4) to (6) in panel A of 3.2.2 do not present any significant evidence of changes in sensitivity of long-term incentives to ROE either pre- or post-deal in same-ancestry deals. Interestingly column (6) of panel B reports a positive and significant coefficient of 0.143 between ROE and Longterm 3, with a negative and significant coefficient of -0.15 on the interaction between ROE and Post-merger. Contrary to the results obtained when considering ROA, it seems post-merger sensitivity of the non-cash components of long-term incentives are closer to 0 and slightly negative in different-ancestry deals. It is possible that non-cash incentives may increase as ROE declines post-merger to encourage incumbent CEOs to take action and improve profitability over time.

3.2.3 Return on Stock Price

Table 3.2.3 presents results from the panel regression of CEO compensation on the performance measure firm stock price return.

Table 3.2.3

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 2.4 for full list of controls.

Dep. Var = Logarithm of compensation over event window years [-2,+2] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Return	0.0311***	0.0188***	0.0158***	0.0305**	-0.0027	0.00444
	-0.0081	-0.007	-0.0057	-0.013	-0.0075	-0.0141
Post Merger	-0.107***	0.023	-0.101***	0.0114	0.0239	-0.0236
	-0.0263	-0.0232	-0.0184	-0.0421	-0.0237	-0.0452
Return X Post Merger	-0.0056	-0.0089	0.00072	-0.0163	0.0113	0.00824
	-0.0127	-0.011	-0.009	-0.0198	-0.0116	-0.022
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Return	0.0311***	0.0232***	0.00386	0.00796	0.00262	0.00116
	-0.0089	-0.0085	-0.0142	-0.0105	-0.0105	-0.0184
Post Merger	0.0184	0.0473	0.119**	0.0306	-0.0139	-0.0144
	-0.031	-0.0298	-0.0463	-0.0378	-0.0348	-0.0613
Return X Post Merger	-0.0197	-0.0135	-0.0321	0.00865	0.0148	-0.0117
	-0.0138	-0.0132	-0.0217	-0.016	-0.0162	-0.0285
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Inspecting column (1) of panel A shows a positive and statistically significant coefficient of 0.0311 between return and total compensation, however no significance is found on the interaction between return and post-merger. Therefore, while total compensation is positively related to stock price return before the merger is completed, there is no discernible change to sensitivity after the deal. Moreover, the same is true for salary, bonus, and Long-term 1, that

report pre-merger sensitivities of 0.0188, 0.0158, and 0.0305 respectively. Long-term 1 is the value of stock and option grants to CEOs as reported by WRDS/ Execucomp. The absence of significance in the interaction terms in panel A suggest that when considering firm stock price return as a performance measure, there is no significant change in the pay-for-performance sensitivities post-deal in same-ancestry deals. This is similarly observed in panel B for different-ancestry deals. This could be since stock price and stock price return are determined by market participants and sophisticated investors that operate external to the firm, as compared to internally reported measures such as ROA or ROE. That is, expected return of a firm's stock price is a function of current market prices and speculated risks associated with it, rather than a direct function of accounting information (Martin and Wagner, 2015). Stock price return is also more of a reflection of investor sentiment and speculation on future cashflows, rather than the achieved profitability of the firm.

3.2.4 Standard Deviation of Return on Assets

Table 3.2.4 presents results from the panel regression of CEO compensation on the performance measure standard deviation of ROA. Standard deviation of ROA is considered as it reflects the stability of firm performance and profitability around deals, which should also factor into how CEOs are rewarded.

Table 3.2.4

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 2.4 for full list of controls.

Dep. Var = Logarithm of compensation over event window years [-2,+2] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Std. Dev. ROA	-0.65	0.69	-1.291*	2.355	1.404**	0.8
	-0.797	-0.796	-0.694	-1.926	-0.606	-1.059
Post Merger	-0.120***	0.0487***	-0.119**	1.364***	0.0461	0.0123
	-0.0307	-0.0165	-0.0559	-0.17	-0.0414	-0.0704
Std. Dev. ROA X Post Merger	1.272***	-0.0775	2.263***	-4.241*	-0.374	1.198
	-0.451	-0.229	-0.844	-2.57	-0.626	-1.063
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

(continued on next page)

Table 3.2.4 (continued)

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Std. Dev. ROA	-0.153	-0.336	0.281	2.374**	0.39	0.729
	-0.321	-0.411	-0.373	-1.109	-0.342	-0.649
Post Merger	-0.166***	0.0327	-0.100**	2.199***	0.0694*	0.0362
	-0.0518	-0.0479	-0.0477	-0.189	-0.0367	-0.0785
Std. Dev. ROA X Post Merger	0.271	-0.237	-0.158	-5.176***	-0.163	-0.125
	-0.509	-0.481	-0.476	-1.843	-0.368	-0.784
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Column (1) in panel A shows no significant pre-merger sensitivity of total compensation to standard deviation of ROA, but a highly significant positive post-merger sensitivity of 1.272. This suggests the higher the variability of ROA, the higher total compensation tends to be when CEOs undertake same-ancestry deals. Observing column (3) in Panel A, it seems this effect is present for the change in sensitivities of bonuses to the standard deviation of ROA. The pre-merger sensitivity of bonus is -1.291, while the marginal post-merger change is 2.263, making the post-merger sensitivity of bonus to standard deviation of ROA 0.972. The pre-merger sensitivity of bonus to volatility of ROA is negative and indicates lower bonuses when firm profitability is less consistent. However, for the sample of same-ancestry deals, bonuses tend to increase post-merger with the variability of ROA. Considering that this effect is found only in panel A, it seems that this is more likely to occur when deals occur between CEOs of shared ancestry and that higher post-deal volatility in firm profitability is rewarded with higher bonuses relative to different-ancestry deals. Taken alongside results on ROA, it suggests same-ancestry deals lead to situations where CEOs are more incentivised to take risks post-deal with the hope that it translates to improved performance of the combined firm. Given results from previous chapters and tables 3.2.1 and 3.2.2, this appears to ultimately cost shareholders and only benefit incumbent CEOs. The absence of this effect for different-ancestry deals in panel B suggest that this could be a result of CEOs being able to negotiate higher bonuses for themselves at the expense of acquiring shareholders, as previous chapters show that same-ancestry deals tend to erode shareholder value. It seems that the terms of the incumbent CEOs compensation after these M&A deals become skewed towards being more beneficial to the CEO than to shareholders.

Column (4) in panel A of 3.2.4 reports a negative post-merger sensitivity of Long-term 1 to the standard deviation of ROA of -4.241, suggesting the value of stock and option grants increases as variability in ROA decreases after same-ancestry deals. A negative post-deal sensitivity is found in column (4) of panel B for different ancestry deals. As this effect seems to exist for both same- and different- ancestry deals, it may be due to a reduction in the value of stocks and options where the firm is the underlying asset, and nominally forming a smaller part of CEO compensation. Little evidence is presented of wealth decoupling when considering standard deviation of ROA as a performance measure.

3.2.5 Standard Deviation of Return on Equity

Table 3.2.5 presents results from the panel regression of CEO compensation on the performance measure standard deviation of ROE. Columns (1) to (5) in panel A show no significant pre-merger sensitivity of CEO compensation to standard deviation of ROE for same-ancestry deals. Moreover, no significance is found on the interaction terms between standard deviation of ROE and post-merger in columns (1) to (5) suggesting little evidence for changes in the pay-for-performance sensitivities when considering variability in ROE. Column (6) in panel A finds a significant pre-deal sensitivity of 0.161 between Long-term 3 and the standard deviation of ROE, and a significant coefficient on the post-merger interaction term of -0.115. The implied post-merger sensitivity of Long-term 3 to variability of ROE is 0.046 and does present evidence a wealth decoupling effect after same-ancestry deals as it is brought closer to zero. Long-term 3 is defined as total compensation minus total cash compensation. This effect seems to also exist in different ancestry deals, as inspecting column (5) in panel B shows a pre-merger coefficient of -15.71, and a marginal post-merger change of 15.73 in the coefficient on the interaction term. This brings the post-deal sensitivity of Long-term 3 to the standard deviation of ROE to 0.02, even closer to 0 than observed for same-ancestry deals. A distinction here is that for same-ancestry deals, the incremental effect post-merger is negative, while the converse is true in different ancestry deals. That is, in the subsample of firms that undertake same-ancestry deals, the long-term component of acquiring CEO pay is positively associated with the volatility of ROE suggesting they receive more long-term oriented compensation the more volatile firm profitability is, and completion of the deal makes this component less sensitive to standard deviation of ROE. Conversely, for different ancestry deals the long-term component of CEO pay is negatively associated with volatility of ROE implying they are paid better the less risky the profitability of the firm is. However, after the deal this sensitivity also becomes close to zero. This could provide an explanation for why the deals in each subsample occur, as CEOs who undertake same-ancestry deals appear to be incentivised to take more risks and go on to complete deals that are shown to erode shareholder value, perhaps a sign that those risks then fail to pay off on average.

Table 3.2.5

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively. Control variables omitted for clarity, see section 2.4 for full list of controls.

Dep. Var = Logarithm of compensation over event window years [-2,+2] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Std. Dev. ROE	0.0253	0.0584	-0.0221	0.0203	0.0104	0.161**
	-0.0497	-0.051	-0.0421	-0.121	-0.0363	-0.0631
Post Merger	-0.0787***	0.0466***	-0.04	1.217***	0.0376	0.064
	-0.0267	-0.0145	-0.0474	-0.144	-0.0352	-0.0599
Std. Dev. ROE X Post Merger	0.0227	-0.0013	0.00307	-0.0811	0.0113	-0.115*
	-0.0238	-0.0117	-0.052	-0.165	-0.0361	-0.0607
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(5)
Std. Dev. ROE	-4	-3.027	-0.6	-0.535	1.944	-15.71***
	-2.554	-3.017	-2.774	-9.068	-2.489	-4.732
Post Merger	-0.155***	0.0174	-0.109***	1.912***	0.0624**	0.0193
	-0.0438	-0.0402	-0.04	-0.16	-0.0308	-0.0659
Std. Dev. ROE X Post Merger	3.993	3.03	0.599	0.534	-1.943	15.73***
	-2.554	-3.016	-2.773	-9.066	-2.488	-4.731
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Moreover, the magnitude of the coefficients in panel B are higher than in panel A in table 3.2.5. The implication is that for same ancestry deals, the non-cash elements of long-term incentives tend to increase with higher variability in ROE pre-deal, while the opposite is true for different ancestry deals. More than wealth decoupling, it possibly suggests that CEOs that go on to undertake same-ancestry deals were rewarded even when delivering variable performance before the deal. Meanwhile CEOs that go on to undertake different-ancestry deals are

rewarded for their consistency. Considering prior results on the generally poor outcomes of same-ancestry deals, this may speak to the idea that same-ancestry deals are more likely to occur and be the result of sub-optimal decision making by acquiring CEOs.

4. Conclusion

The results of this chapter presented evidence of a greater change in compensation after M&A occur between CEOs of shared ancestry, and some evidence of a reduction in the sensitivity of CEO compensation to firm performance after undertaking same-ancestry deals. These results add to the findings of chapter 1 of this thesis that investigated the effect CEO ancestry on M&A announcement returns and deal premiums, where it was found that target premiums are on average lower for same-ancestry deals, with no discernible effect on announcement abnormal returns. Chapter 2 then found on average that despite a short-term positive wealth effect, over the long run same-ancestry deals tend to leave acquiring shareholders worse off. Against this background that implies shared CEO ancestry in M&A leads to value destroying deals on average, it seems that CEOs themselves tend to gain from value destroying M&As. Evidence of a wealth decoupling effect is observed when CEOs undertake deals with target CEOs of the same ancestry that is not so clearly observed for different-ancestry deals.

It is found that CEO compensation is on average higher when M&A deals are completed between CEOs of the same ancestry. Model 1 regresses changes in compensation between 1 year prior to 1 year after deal completion and finds that on average CEO salaries are 63.4% higher when completing same-ancestry deals, relative to different-ancestry deals. Similarly, CEO bonuses are found to be 41.8% higher, and the value of long-term incentives are found to be 26.5% higher on average over the 3-year window around same-ancestry deals, relative to different ancestry deals. Moreover, it is found that the change between pre- and post-deal performance measures of profitability such as ROA are negatively associated with CEO compensation, suggesting pay increases inspite of performance decreasing. With these findings as a background, model 2 investigates the changes in sensitivity of CEO pay to firm performance around M&A deals, splitting the sample into two subsets: same-ancestry and different ancestry deals. Notable results are that completion of same-ancestry deals tend to lead to the immediate cash-based components of CEO compensation becoming less sensitive to measures of profitability such as ROA and ROE after completing same-ancestry deals. The same effect is not observed for different ancestry deals. It is found that as a result of completing a same-ancestry deals, sensitivity of CEO pay to ROA and ROE is closer to zero in the years after deal completion. Moreover, sensitivity of CEO pay to ROA is found to be slightly negative after deal completion, indicating that same-ancestry deals are more likely to lead to situations where CEOs are rewarded inspite of delivering less profitable firms. Interestingly same-ancestry deals also lead to situations where CEO bonuses are more sensitive and positively

related to volatility of ROA, suggesting more risk-taking incentives after completing a same-ancestry deal. The long-term components of CEO pay are found to be negatively associated with ROA in the years after same-ancestry deals, possibly suggesting an attempt to re-couple CEO wealth to the future profitability of the firm. The negative association means that as ROA declines post-deal, the long-term component of CEO compensation increases and may indicate an attempt by shareholders to incentivise incumbent CEOs to deliver on the potential synergies used to justify undertaking the same-ancestry deal. However, considering results in previous chapters show that same-ancestry M&A tends to lead to poor performance in the years after completion, it appears that CEOs are better off with higher cash-based components of compensation while acquiring shareholders are worse off.

The resulting misalignment in incentives between CEOs and acquiring shareholders provides a possible explanation for prior results and suggests that shared ancestry between CEOs exacerbate the effects of agency costs arising from the separation of ownership and control. The overall narrative presented by the results of all three chapters is that when deals involve CEOs of the same ancestry, they are able to negotiate lower deal premiums that are accepted by target shareholders, and would also increase the likelihood that acquiring shareholders approve the M&A. These deals however tend to erode acquiring shareholder value as the performance of the combined firm is found to be on average worse than deals that occur between CEOs of different ancestries. Evidence is presented in this chapter that suggests same-ancestry deals provide opportunity for CEOs to undertake M&A to increase their own compensation and decouple their pay from the need to deliver growth in performance, thereby suggesting they can act in their own self-interest over the interest of shareholders. The overall conclusion is that shared CEO ancestry in M&A leads to negative outcomes for shareholders and is partly driven by more pronounced wealth decoupling effects on compensation that occur in same-ancestry deals.

CONCLUDING REMARKS

This research makes several important contributions to understanding how shared ancestry and cultural heritage between CEOs of bidding and target firms influence corporate mergers and acquisitions. The analysis reveals that when bidder and target CEOs share ancestral origins, M&A outcomes are substantially impacted across multiple dimensions.

The first key finding is that CEOs undertaking deals with executives of the same ancestry pay lower premiums to target shareholders on average. This effect is shown to be driven by the sameness of CEO ancestry and suggests a sense of identity is more important than granular differences in values and cultural traits. These conclusions are drawn from the first chapter which focuses on CEO ancestry's impact on deal premiums and shareholders CARs. Notably a same-ancestry indicator variable is introduced that takes a value of 1 if bidder and target CEOs are identified to be of the same ancestry, and zero otherwise. The main finding is that cultural distance does not seem to have an impact when compared to the same-ancestry variable. When limiting the sample to deals that occur between CEOs of different ancestries, their distances in cultural dimension scores do not seem to significantly impact deal premiums or announcement CARs. What is found however is that shared ancestry between CEOs in an M&A deal are associated with deal premiums that are lower on average. Target shareholders appear to be worse off when deals occur between CEOs of the same ancestry, receiving smaller premiums when being bought out relative to deals occurring between CEOs of different ancestry. This is found robust to standard control variables included in M&A and corporate finance literature, controlling for deal and firm-level characteristics.

This finding of a shared-ancestry impact on deal premiums is found to be robust to additional analyses controlling for the likelihood of CEO collusion, CEO power, and generation gaps between CEOs. Inclusion of indicator variables that proxy for a higher likelihood of a personal or professional relationship and interacting them with the same-ancestry variable are not generally found to diminish the observed effect of same-ancestry on premiums. Variables such as an indicator that equals one if the bidder was a block-holder prior to the deal, or if both firms are headquartered in the same city are used to this effect. The lack of marginal effect observed when interacted with shared ancestry suggests the higher likelihood of collusion has little impact on the observed ancestry effect on premiums. Lower premiums suggests that if the power differential is skewed towards the acquiring CEO, they can negotiate lower prices to facilitate approval from bidder shareholders. Chapter 1 then tests if the shared ancestry effect on bid premiums is moderated over the course of time with respect to the age of CEOs. Our results show that a generation gap between either CEO of the same ancestry appears to make no difference even when the gap is evaluated in multiple ways, or when inspecting moderating effects of deals occurring between young-to-young and old-to-old CEOs.

Chapter 2 further investigates the ways in which CEO ancestry impacts M&A by looking at post-merger performance of the firm, long-term abnormal returns, and information opacity at the time of the deal. Examination of post-merger performance and long-term abnormal returns indicates that same-ancestry deals initially benefit from a post-merger increase in shareholder wealth but ultimately destroy value for acquiring shareholders. The initial positive reaction gives way to underperformance over 36 months, suggesting the market slowly recognizes flawed deal logic and overpayment for speculative synergies. At longer horizons post-merger, acquiring shareholders tend to be worse off and the positive impact on wealth do not last for more than 1 year.

The reason for the reversal may be attributable to the fact that as time passes, the initial assessments on the potential synergies are revised as more information of the quality and potential of the merger come to light. Therefore, it is possible that in same-ancestry deals there is a greater upward distortion in how investors assess the trajectory of the combined firm in the short run, and thus leading to a stronger negative correction over the longer horizon. Measuring post-merger performance using accounting information with dependent variables constructed as changes in ROA, ROE, ROI, and sales growth of the acquirer between 1 year prior to 3 years after the deal yields evidence that performance is worse for same-ancestry deals. This means that the bidders undertaking same-ancestry deals saw smaller changes in sales growth and ROA compared to bidders undertaking different-ancestry deals. This is consistent with the longer horizon CARs indicating reduced shareholder wealth in same-ancestry deals and suggests that while external market participants may react positively up to 1-year post-deal, by 3 years market efficiency has revealed a relatively poorer deal quality.

As additional analysis, chapter 2 investigates the effect of information asymmetry around deals, and the effect of CEOs belonging to a dominant ancestral group in the population. We construct a novel measure for information asymmetry in the form of earnings opacity. Using a two-step approach of regressing target firms' annual stock return over the previous year's Earnings Per Share (EPS) and change in EPS, we treat the residuals as the unexplained variance in the target's pre-merger stock performance that would be attributable to their reported earnings and change in earnings. It seems that for highly opaque same ancestry deals, total assets decrease in the post-deal period as well as net income, meaning both numerator and denominator are negative and resulting in the observed positive coefficient. In contrast, regarding change in ROE, the incremental effect is negative suggesting an increase in stockholder's equity for same ancestry deals with more opaque targets. Results found for 2-year CARs suggest that 24-month CARs decrease further as the target's earnings opacity increases. Furthermore, analyses regarding the effect of dominant ancestries in the sample provide little evidence to support that ancestry effects on post-merger performance are more

pronounced in M&A undertaken by dominant ancestry pairings, defined as English and German ancestries. On average, dominant-ancestry deals tend to exhibit smaller changes in sales growth over the 4-year window relative to non-dominant ancestry deals.

As chapters 1 and 2 investigate the impact of shared ancestry on M&A outcomes in the short- and long-term horizons around deals, chapter 3 explores the effects of M&A on overall CEO compensation, as well as if same-ancestry deals lead to wealth decoupling, relative to different-ancestry deals. Wealth decoupling is when CEO compensation becomes relatively less sensitive to the performance of the firm. We find that CEO compensation is on average higher when M&A deals are completed between CEOs of the same ancestry. We also find that the change between pre- and post-deal performance measures of profitability such as ROA are negatively associated with CEO compensation. We then find that completion of same-ancestry deals leads to short-term components of CEO compensation becoming less sensitive to profitability. The same effect is not observed for different ancestry deals. It is found that as a result of completing a same-ancestry deals, sensitivity of CEO pay to ROA and ROE is closer to zero in the years after deal completion. Moreover, sensitivity of CEO pay to ROA is negative after deal completion, indicating that same-ancestry deals are more likely to lead to situations where CEOs are not adversely affected by weaker firm performance. The resulting misalignment in incentives between CEOs and acquiring shareholders provides a possible explanation for prior results and suggests that shared ancestry between CEOs exacerbate the effects of agency costs arising from the separation of ownership and control. Against this background, the overall conclusion is that shared CEO ancestry in M&A leads to value destroying deals on average, and that CEOs themselves tend to gain from these shareholder-value destroying M&As. Evidence of a wealth decoupling effect is observed when CEOs undertake deals with target CEOs of the same ancestry, but not for different-ancestry deals.

The empirical evidence indicates that ancestral ties and a common identity factor between executives significantly shape the M&A process and its outcomes. The amplified agency costs, governance problems, and value destruction have implications for theory and practice, as it seems shared ancestry allows CEO rent extraction. CEO cultural heritage emerges as an important factor for corporate leadership, strategy, and performance, and could possibly influence policy by providing regulators with an additional flag for collusion to scrutinise the CEOs themselves when approving potential deals. This research opens several areas for future research at the intersection of culture, executive and CEO characteristics, and finance. Further exploration of how executive identity influences major corporate policies can enhance understanding of the antecedents of firm behaviour and performance. There is also opportunity to refine measures and methods to capture nuanced cultural interactions in

business. Overall, this thesis underscores the subtle but substantial ways in which the human elements of executives matter to present-day boardrooms.

This thesis also provides a critique of Hofstede's cultural dimensions and its applicability for measuring individual culture, especially in a cultural melting-pot setting such as the USA. Hofstede's measures of culture are widely used to examine cultural distances and offer a straight-forward method to operationalise culture for quantitative analysis. This does not capture the binary sense of cultural identity, and instead focus on granular cultural distances. Hofstede assumes that culture represents a collective cognitive programming that differentiates one group from another by dictating an individual's values, beliefs, and behaviours. However, this notion oversimplifies the intricate relationship between culture and individual behaviour. This limitation is especially relevant when considering the impact of CEO ancestry on M&A, as a more binary recognition of simply originating from the same country and specific culture is what could be happening between CEOs and other executives during negotiations. In other words, it matters *that* they are different, as opposed to *how* they are different.

When assessing the effect of CEO ancestry, it is less likely to be solely driven by inherited cultural values and beliefs, and more by a sense of specific cultural identity within a culturally heterogeneous national setting. This perspective is supported by the findings in the study. The sociological concept of identity suggests that an individual's sense of identity is shaped through interactions with others in their society, eventually solidifying into an 'us' versus 'them' dichotomy (Hall and Du Gay, 1996, 2006). In this context, culture is better understood as being informed by identity, with different groups distinguishing themselves based on shared similarities. The use of both binary shared ancestry measures and cultural distance measures is essential in understanding the impact of CEO ancestry on M&A.

BIBLIOGRAPHY

Adhikari, H.P., Nguyen, T.T. and Sutton, N.K., 2018. The power of control: the acquisition decisions of newly public dual-class firms. *Review of Quantitative Finance and Accounting*, *51*, pp.113-138.

Agrawal, A. and Walkling, R.A., 1994. Executive careers and compensation surrounding takeover bids. The Journal of Finance, 49(3), pp.985-1014.

Agrawal, A., Jaffe, J.F. and Mandelker, G.N., 1992. The post-merger performance of acquiring firms: a re-examination of an anomaly. *The Journal of finance*, *47*(4), pp.1605-1621.

Ahammad, M.F., Tarba, S.Y., Liu, Y., Glaister, K.W. and Cooper, C.L., 2016. Exploring the factors influencing the negotiation process in cross-border M&A. *International Business Review*, *25*(2), pp.445-457.

Ahern, K.R., Daminelli, D. and Fracassi, C., 2015. Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*, *117*(1), pp.165-189.

Aktas, N., De Bodt, E., Bollaert, H. and Roll, R., 2012, May. CEO narcissism and the takeover process: From private initiation to deal completion. In *AFA 2012 Chicago Meetings Paper*.

Alba, R.D. and Moore, G., 1982. Ethnicity in the American elite. *American sociological review*, pp.373-383.

Altman, E.I., 1968. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The journal of finance*, *23*(4), pp.589-609.

Amihud, Y. and Lev, B., 1981. Risk reduction as a managerial motive for conglomerate mergers. *The bell journal of economics*, pp.605-617.

Ancestry.com. *New York, U.S., Arriving Passenger and Crew Lists (including Castle Garden and Ellis Island), 1820-1957* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2010.

Andre, P., Kooli, M. and L'her, J.F., 2004. The long-run performance of mergers and acquisitions: Evidence from the Canadian stock market. *Financial Management*, pp.27-43.

Arrow, K.J., 1971. The economic implications of learning by doing. In *Readings in the Theory of Growth* (pp. 131-149). Palgrave Macmillan, London.

Arrow, K.J., 1974. *The limits of organization*. WW Norton & Company.

Balakrishnan, S. and Koza, M.P., 1993. Information asymmetry, adverse selection and joint-ventures: Theory and evidence. *Journal of economic behavior & organization*, *20*(1), pp.99-117.

Balmaceda, F., 2009. Mergers and CEO power. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, pp.454-486.

Baltzell, E.D., 1958. Philadelphia Gentlemen: The Making ofa New Upper Class. New Brunswick.

Baltzell, E.D., 1987. *The protestant establishment: Aristocracy & caste in America*. Yale University Press.

Baltzell, E.D., 2017. Thorstein Veblen: Scientism and the Modern Mood. In *Veblen's Century* (pp. 89-96). Routledge.

Bamber, L.S., Jiang, J. and Wang, I.Y., 2010. What's my style? The influence of top managers on voluntary corporate financial disclosure. *The accounting review*, *85*(4), pp.1131-1162.

Barber, B.M. and Lyon, J.D., 1997. Detecting long-run abnormal stock returns: The empirical power and specification of test statistics. *Journal of financial economics*, *43*(3), pp.341-372.

Barber, B.M. and Lyon, J.D., 1997. Firm size, book-to-market ratio, and security returns: A holdout sample of financial firms. *The Journal of Finance*, *52*(2), pp.875-883.

Barker III, V.L. and Mueller, G.C., 2002. CEO characteristics and firm R&D spending. *Management Science*, *48*(6), pp.782-801.

Barth, M.E., Konchitchki, Y. and Landsman, W.R., 2013. Cost of capital and earnings transparency. *Journal of Accounting and Economics*, *55*(2-3), pp.206-224.

Bebchuk, L.A. and Grinstein, Y., 2005. Firm expansion and CEO pay.

Bebchuk, L.A., Cremers, K.M. and Peyer, U.C., 2011. The CEO pay slice. *Journal of financial Economics*, *102*(1), pp.199-221.

Benmelech, E. and Frydman, C., 2015. Military ceos. *Journal of Financial Economics*, *117*(1), pp.43-59.

Benou, G., Gleason, K.C. and Madura, J., 2007. Impact of visibility and investment advisor credibility on the valuation effects of high-tech cross-border acquisitions. *Financial Management*, *36*(1), pp.69-89.

Bernile, G. and Kang, M., 2016, November. Learning to negotiate takeovers? The role of target CEO experience. In *The Role of Target CEO Experience (November 10, 2016). Asian Finance Association (AsianFA) 2017 Conference*.

Bernile, G., Bhagwat, V. and Rau, P.R., 2017. What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behavior. *The Journal of Finance*, *72*(1), pp.167-206.

Bertrand, M. and Schoar, A., 2003. Managing with style: The effect of managers on firm policies. *The Quarterly journal of economics*, *118*(4), pp.1169-1208.

Betton, S., Eckbo, E. and Thorburn, K., 2007. Takeovers, restructurings, and corporate control. *Handbook of Corporate Finance: Empirical Corporate Finance*, *2*.

Bhagat, R.S., 1979. Black-white ethnic differences in identification with the work ethic: Some implications for organizational integration. *Academy of Management Review*, *4*(3), pp.381-391.

Bhagat, S., Dong, M., Hirshleifer, D. and Noah, R., 2005. Do tender offers create value? New methods and evidence. *Journal of Financial Economics*, *76*(1), pp.3-60.

Bhattacharya, S., 1988. Corporate finance and the legacy of Miller and Modigliani. *Journal of Economic Perspectives*, *2*(4), pp.135-147.

Biggs, T., Raturi, M., & Srivastava, P. (2002). Ethnic networks and access to credit: Evidence from the manufacturing sector in Kenya. Journal of Economic Behavior & Organization, 49(4), 473–486.

Bisin, A. and Verdier, T., 2001. The economics of cultural transmission and the dynamics of preferences. *Journal of Economic theory*, *97*(2), pp.298-319.

Bock, P.K., 1988. *Rethinking psychological anthropology: Continuity and change in the study of human action*. WH Freeman/Times Books/Henry Holt & Co.

Bock, P.K., 2000. Culture and personality revisited. *American Behavioral Scientist*, *44*(1), pp.32-40.

Borgerhoff Mulder, M., Nunn, C.L. and Towner, M.C., 2006. Cultural macroevolution and the transmission of traits. *Evolutionary Anthropology: Issues, News, and Reviews: Issues, News, and Reviews*, *15*(2), pp.52-64.

Boucher, V., 2015. Structural homophily. *International Economic Review*, *56*(1), pp.235-264.

Boyd, R. and Richerson, P.J., 1988. *Culture and the evolutionary process*. University of Chicago press.

Bramoullé, Y., Currarini, S., Jackson, M.O., Pin, P. and Rogers, B.W., 2012. Homophily and long-run integration in social networks. *Journal of Economic Theory*, *147*(5), pp.1754-1786.

Brick, I.E., Palmon, O. and Wald, J.K., 2012. Too much pay-performance sensitivity?. *Review of Economics and Statistics*, *94*(1), pp.287-303.

Brochet, F., Limbach, P., Schmid, M. and Scholz-Daneshgari, M., 2021. CEO tenure and firm value. *The Accounting Review*, *96*(6), pp.47-71.

Broughman, B., 2017. CEO side payments in mergers and acquisitions. *BYU L. Rev.*, p.67.

Cai, Y. and Sevilir, M., 2012. Board connections and M&A transactions. *Journal of Financial Economics*, *103*(2), pp.327-349.

Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: Recent advances and future opportunities. British Journal of Management, 17, S1–S5.

Cavalli-Sforza, L.L. and Feldman, M.W., 1981. *Cultural transmission and evolution: A quantitative approach*. Princeton University Press.

Chang, S.C. and Tsai, M.T., 2013. Long-run performance of mergers and acquisition of privately held targets: evidence in the USA. *Applied Economics Letters*, *20*(6), pp.520-524.

Chhaochharia, V. and Grinstein, Y., 2009. CEO compensation and board structure. The Journal of Finance, 64(1), pp.231-261.

Coates, I.V. and John, C., 2010. The powerful and pervasive effects of ownership on M&A. *Available at SSRN 1884157*.

Coff, R.W., 1999. How buyers cope with uncertainty when acquiring firms in knowledge-intensive industries: Caveat emptor. *Organization science*, *10*(2), pp.144-161.

Cohen, L., Frazzini, A. and Malloy, C., 2008. The small world of investing: Board connections and mutual fund returns. *Journal of Political Economy*, *116*(5), pp.951-979.

Combs, J.G., Ketchen Jr, D.J., Perryman, A.A. and Donahue, M.S., 2007. The moderating effect of CEO power on the board composition–firm performance relationship. *Journal of Management Studies*, *44*(8), pp.1299-1323.

Core, J.E., Holthausen, R.W. and Larcker, D.W., 1998. Corporate governance, chief executive officer compensation, and firm performance. Journal of Financial Economics, 51, p.371.

Coval, J.D. and Moskowitz, T.J., 1999. Home bias at home: Local equity preference in domestic portfolios. *The Journal of Finance*, *54*(6), pp.2045-2073.

Currarini, S., Jackson, M.O. and Pin, P., 2009. An economic model of friendship: Homophily, minorities, and segregation. *Econometrica*, *77*(4), pp.1003-1045.

da Silva Rosa, R., Limmack, R., Supriadi and Woodliff, D., 2004. The equity wealth effects of method of payment in takeover bids for privately held firms. *Australian Journal of Management*, *29*(1_suppl), pp.93-110.

Datta, D.K., Pinches, G.E. and Narayanan, V.K., 1992. Factors influencing wealth creation from mergers and acquisitions: A meta-analysis. *Strategic management journal*, *13*(1), pp.67-84.

Davidson, R., Dey, A. and Smith, A., 2015. Executives'"off-the-job" behavior, corporate culture, and financial reporting risk. *Journal of Financial Economics*, *117*(1), pp.5-28.

Davie, S. S. K. (2005). The politics of accounting, race and ethnicity: A story of a chiefly-based preferencing. Critical Perspectives on Accounting, 16, 551–577.

de Beaufort, V. and Lempereur, A.P., 2003. Negotiating mergers and acquisitions in the European Union. *International business negotiation*, pp.291-324.

De Vries, A., Erasmus, P.D. and Gerber, C., 2017. The familiar versus the unfamiliar: Familiarity bias amongst individual investors. *Acta Commercii*, *17*(1), pp.1-10.

Dionne, G., La Haye, M. and Bergerès, A.S., 2015. Does asymmetric information affect the premium in mergers and acquisitions?. *Canadian Journal of Economics/Revue canadienne d'économique*, *48*(3), pp.819-852.

Doane, A.W., 1997. Dominant group ethnic identity in the United States: The role of "hidden" ethnicity in intergroup relations. *The Sociological Quarterly*, *38*(3), pp.375-397.

Doidge, C., Karolyi, G.A. and Stulz, R.M., 2007. Why do countries matter so much for corporate governance?. *Journal of financial economics*, *86*(1), pp.1-39.

Doukas, J.A. and Petmezas, D., 2007. Acquisitions, overconfident managers and self-attribution bias. *European Financial Management*, *13*(3), pp.531-577.

Drogendijk, R. and Slangen, A., 2006. Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises. *International business review*, *15*(4), pp.361-380.

Du, Q., Yu, F. and Yu, X., 2017. Cultural proximity and the processing of financial information. *Journal of Financial and Quantitative Analysis (JFQA)*.

Du, X., 2019. What's in a surname? The effect of auditor-CEO surname sharing on financial misstatement. *Journal of Business Ethics*, *158*(3), pp.849-874.

Dyreng, S.D., Hanlon, M. and Maydew, E.L., 2010. The effects of executives on corporate tax avoidance. *The accounting review*, *85*(4), pp.1163-1189.

Efferin, S., & Hopper, T. (2007). Management control, culture and ethnicity in a Chinese Indonesian company. Accounting, Organizations and Society, 32, 223–262.

Ellahie, A., Tahoun, A. and Tuna, I., 2017. Do common inherited beliefs and values influence CEO pay?. *Journal of Accounting and Economics*, *64*(2-3), pp.346-367.

Elnahas, A.M. and Kim, D., 2017. CEO political ideology and mergers and acquisitions decisions. *Journal of Corporate Finance*, *45*, pp.162-175.

Epstein, S., 1979. The stability of behavior: I. On predicting most of the people much of the time. *Journal of personality and social psychology*, *37*(7), p.1097.

Erickson, S. and Rothberg, H.N., 2016. Intangible dynamics in financial services. *Journal of Service Theory and Practice*, *26*(5), pp.642-656.

Etzioni, A., 1968. The active society.

Faccio, M. and Masulis, R.W., 2005. The choice of payment method in European mergers and acquisitions. *The Journal of Finance*, *60*(3), pp.1345-1388.

Fama, E.F. and Jensen, M.C., 1983. Separation of ownership and control. *The journal of law and Economics*, *26*(2), pp.301-325.

Fernández, R. and Fogli, A., 2006. Fertility: The role of culture and family experience. *Journal of the European economic association*, *4*(2-3), pp.552-561.

Fernandez, R. and Fogli, A., 2009. Culture: An empirical investigation of beliefs, work, and fertility. *American economic journal: Macroeconomics*, *1*(1), pp.146-77.

Ferris, S.P. and Sainani, S., 2021. Do CFOs matter? Evidence from the M&A process. *Journal of Corporate Finance*, *67*, p.101856.

Ferris, S.P., Jayaraman, N. and Sabherwal, S., 2013. CEO overconfidence and international merger and acquisition activity. *Journal of Financial and Quantitative Analysis*, pp.137-164.

Fich, E.M., Cai, J. and Tran, A.L., 2011. Stock option grants to target CEOs during private merger negotiations. *Journal of Financial Economics*, *101*(2), pp.413-430.

Fisman, R., Paravisini, D. and Vig, V., 2017. Cultural proximity and loan outcomes. *American Economic Review*, *107*(2), pp.457-92.

Francis, J., LaFond, R., Olsson, P.M. and Schipper, K., 2004. Costs of equity and earnings attributes. *The accounting review*, *79*(4), pp.967-1010.

Francoeur, C., 2006. The long-run performance of cross-border mergers and acquisitions: Evidence to support the internalization theory. *Corporate Ownership & Control*, *4*(2), pp.312-323.

Freeman, D., 1983. *Margaret Mead and Samoa: The making and unmaking of an anthropological myth*. Australian National University Press.

French, K.R. and Poterba, J.M., 1991. Investor diversification and international equity markets. *The American Economic Review*, *81*(2), pp.222-226.

Fu, X. and Zhang, Z., 2019. CFO cultural background and stock price crash risk. *Journal of International Financial Markets, Institutions and Money*, *62*, pp.74-93.

Funder, D.C. and Colvin, C.R., 1991. Explorations in behavioral consistency: properties of persons, situations, and behaviors. *Journal of personality and social psychology*, *60*(5), p.773.

Ghauri, P.N. and Usunier, J.C., 2003. Some general guidelines for negotiating international business. *International Business Negotiations*, pp.461-479.

Giannopoulos, G., Holt, A., Khansalar, E. and Mogoya, P., 2017. The long-run performance of US bidding firms in the post M&A period: the impact of bid type, payment method and industry specialisation. *International Journal of Business and Management*, *12*(2), pp.230-245.

Giavazzi, F., Petkov, I. and Schiantarelli, F., 2019. Culture: Persistence and evolution. *Journal of Economic Growth*, *24*(2), pp.117-154.

Gomes, M. and Marsat, S., 2018. Does CSR impact premiums in M&A transactions?. *Finance Research Letters*, *26*, pp.71-80.

Gompers, P.A. and Xuan, Y., 2009, February. Bridge building in venture capital-backed acquisitions. In *AFA 2009 San Francisco Meetings Paper*.

Gompers, P.A., Mukharlyamov, V. and Xuan, Y., 2016. The cost of friendship. *Journal of Financial Economics*, *119*(3), pp.626-644.

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

Göx, R.F. and Hemmer, T., 2020. On the relation between managerial power and CEO pay. *Journal of Accounting and Economics*, *69*(2-3), p.101300.

Graham, J.L., 1985. The influence of culture on the process of business negotiations: An exploratory study. *Journal of International Business Studies*, *16*(1), pp.81-96.

Graham, J.L., Mintu, A.T. and Rodgers, W., 1994. Explorations of negotiation behaviors in ten foreign cultures using a model developed in the United States. *Management Science*, *40*(1), pp.72-95.

Graham, J.R., Harvey, C.R. and Puri, M., 2015. Capital allocation and delegation of decision-making authority within firms. *Journal of financial economics*, *115*(3), pp.449-470.

Greenwood, R., Hinings, C. R., & Brown, J. (1994). Merging professional service firms. Organization Science, 5, 239–257.

Griffin, D., Li, K., Yue, H. and Zhao, L., 2009. Cultural values and corporate risk-taking. *University of British Columbia and Peking University Working Paper*.

Grinblatt, M. and Keloharju, M., 2001. How distance, language, and culture influence stockholdings and trades. *The Journal of Finance*, *56*(3), pp.1053-1073.

Grinstein, Y. and Hribar, P., 2004. CEO compensation and incentives: Evidence from M&A bonuses. *Journal of financial economics*, *73*(1), pp.119-143.

Grossman, S.J. and Hart, O.D., 1986. The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of political economy*, *94*(4), pp.691-719.

Gudykunst, W.B., 1983. *Intercultural Communication Theory: Current Perspectives. International and Intercultural Communication Annual, Volume VII*.

Hall, S. and Du Gay, P. eds., 1996. *Questions of cultural identity: SAGE Publications*. Sage.

Hall, S. and Du Gay, P. eds., 2006. *Questions of cultural identity* (pp. pp-273). Crane Resource Centre.

Hambrick D.C. (2018) Upper Echelons Theory. In: Augier M., Teece D.J. (eds) The Palgrave Encyclopedia of Strategic Management. Palgrave Macmillan, London.

Hambrick, D.C. and Mason, P.A., 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, *9*(2), pp.193-206.

Hanks, P. ed., 2003. *Dictionary of American family names*. Oxford University Press.

Harford, J. and Li, K., 2007. Decoupling CEO wealth and firm performance: The case of acquiring CEOs. The Journal of Finance, 62(2), pp.917-949.

Hartzell, J.C., Ofek, E. and Yermack, D., 2004. What's in it for me? CEOs whose firms are acquired. *The Review of Financial Studies*, *17*(1), pp.37-61.

Hax, A.C. and Majluf, N.S., 1982. Competitive cost dynamics: the experience curve. *Interfaces*, *12*(5), pp.50-61.

He, Z., Yu, H. and Du, L., 2020. Cohabitation before marriage: do prior alliances enhance post-merger performance?. *Review of Quantitative Finance and Accounting*, *54*, pp.1315-1349.Hofstede 1991

Healy, P.M., Palepu, K.G. and Ruback, R.S., 1992. Does corporate performance improve after mergers?. *Journal of financial economics*, *31*(2), pp.135-175.

Heitzman, S., 2011. Equity grants to target CEOs during deal negotiations. *Journal of Financial Economics*, *102*(2), pp.251-271.

Henderson, B., 1968. The Experience Curve. Boston Consulting Group.

Hermalin, B.E. and Weisbach, M.S., 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review*, pp.96-118.

Himmelberg, C.P. and Hubbard, R.G., 2000, June. Incentive pay and the market for CEOs: An analysis of pay-for-performance sensitivity. In *Tuck-JFE Contemporary Corporate Governance Conference*.

Hofstede, G., 1980. Culture's Consequences, International Differences in Work-related Values, Beverly Hills.

Hofstede, G., 1984. *Culture's consequences: International differences in work-related values* (Vol. 5). sage.

Hofstede, G., 1984. *Culture's consequences: International differences in work-related values* (Vol. 5). sage.

Hofstede, G., 2001. *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.

Hofstede, G., 2009. Geert Hofstede cultural dimensions.

Hofstede, G., 2010. Geert hofstede. *National cultural dimensions*, pp.2-7.

Hofstede, G., 2011. Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*, *2*(1), pp.2307-0919.

Hofstede, G., Hofstede, G.J. and Minkov, M., 2010. Cultures and Organizations: Software of the Mind. Revised and expanded 3rd Edition. *N.-Y.: McGraw-Hill*.

Hornstein, A.S. and Nguyen, Z., 2014. Is more less? Propensity to diversify via M&A and market reactions. *International Review of Financial Analysis*, *34*, pp.76-88.

Index to Alien Crewmen Who Were Discharged or Who Deserted at New York, New York, May 1917-Nov. 1957. Microfilm Publication A3417. NAI: 4497925. National Archives at Washington, D.C.

Ishii, J. and Xuan, Y., 2014. Acquirer-target social ties and merger outcomes. *Journal of Financial Economics*, *112*(3), pp.344-363.

Jemison, D. B., & Sitkin, S. B. (1986). Corporate acquisitions: A process perspective. Academy of Management Review, 11, 145–163.

Jensen, M.C. and Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), pp.305-360.

Jensen, M.C. and Meckling, W.H., 2019. Theory of the firm: Managerial behavior, agency costs and ownership structure. In Corporate Governance (pp. 77-132). Gower.

Jensen, M.C. and Murphy, K.J., 1990. CEO incentives: It's not how much you pay, but how.

Jensen, M.C., 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, *76*(2), pp.323-329.

Jin, L. and Myers, S.C., 2006. R2 around the world: New theory and new tests. *Journal of financial Economics*, *79*(2), pp.257-292.

Johl, S., Subramaniam, N. and Zain, M.M., 2012. Audit committee and CEO ethnicity and audit fees: some Malaysian evidence. *The International Journal of Accounting*, *47*(3), pp.302-332.

Kanagaretnam, K., Lim, C.Y. and Lobo, G.J., 2014. Influence of national culture on accounting conservatism and risk-taking in the banking industry. *The Accounting Review*, *89*(3), pp.1115-1149.

Keller, S.I., 1991. *Beyond the ruling class: strategic elites in modern society*. Transaction Publishers.

Keown, A.J. and Pinkerton, J.M., 1981. Merger announcements and insider trading activity: An empirical investigation. *The journal of finance*, *36*(4), pp.855-869.

Kirkman, B.L., Lowe, K.B. and Gibson, C.B., 2006. A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of international business studies*, *37*(3), pp.285-320.

Kogut, B. and Singh, H., 1988. The effect of national culture on the choice of entry mode. *Journal of international business studies*, *19*, pp.411-432.

Konara, P. and Mohr, A., 2019. Why we should stop using the Kogut and Singh index. *Management International Review*, *59*(3), pp.335-354.

Kondo, D.K., 1990. *Crafting selves: Power, gender, and discourses of identity in a Japanese workplace*. University of Chicago Press.

Kothari and Warner, 2008; Lyon, Barber, and Chih-Ling, 1999).

Kwok, C.C. and Tadesse, S., 2006. National culture and financial systems. *Journal of International business studies*, *37*(2), pp.227-247.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 1999. The quality of government. *The Journal of Law, Economics, and Organization*, *15*(1), pp.222-279.

La Porta, R.; F. Lopez-de-Silanes; A. Shleifer; and R. Vishny. "Agency Problems and Dividend Policies around the World." Journal of Finance, 55 (2000)

Laamanen, T., 2007. On the role of acquisition premium in acquisition research. *Strategic Management Journal*, *28*(13), pp.1359-1369.

Lang, L.H., Stulz, R. and Walkling, R.A., 1991. A test of the free cash flow hypothesis: The case of bidder returns. *Journal of Financial Economics*, *29*(2), pp.315-335.

Lawler, S., 2015. *Identity: sociological perspectives*. John Wiley & Sons.

Lenkey, S.L., 2019. Cancellable insider trading plans: an analysis of SEC rule 10b5-1. *The Review of Financial Studies*, *32*(12), pp.4947-4996.

Li, X., Low, A. and Makhija, A.K., 2017. Career concerns and the busy life of the young CEO. *Journal of Corporate Finance*, *47*, pp.88-109.

Lim, J., Makhija, A.K. and Shenkar, O., 2016. The asymmetric relationship between national cultural distance and target premiums in cross-border M&A. *Journal of Corporate Finance*, *41*, pp.542-571.

Limmack, R.J., 1991. Corporate mergers and shareholder wealth effects: 1977-1986. *Accounting and Business Research*, *21*(83), pp.239-252.

Liu, X., 2013. *Cultural origins and CEO incentive contracts* (pp. 307-327). unpublished working paper.

Long, W., Tian, G.G., Hu, J. and Yao, D.T., 2020. Bearing an imprint: CEOs' early-life experience of the Great Chinese Famine and stock price crash risk. *International Review of Financial Analysis*, p.101510.

Malmendier, U. and Tate, G., 2008. Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of financial Economics*, *89*(1), pp.20-43.

Mandelker, G., 1974. Risk and return: The case of merging firms. *Journal of financial economics*, *1*(4), pp.303-335.

Mantravadi, P. and Reddy, A.V., 2007. Relative size in mergers and operating performance: Indian experience. *Economic and Political Weekly*, pp.3936-3942.

Marks, M. L., & Mirvis, P. H. (2001). Making mergers and acquisitions work: Strategic and psychological preparation. Academy of Management Executive, 15(2), 80–92.

Martin, I.W. and Wagner, C., 2019. What is the Expected Return on a Stock?. *The Journal of Finance*, *74*(4), pp.1887-1929.

Martin, K.J., 1996. The method of payment in corporate acquisitions, investment opportunities, and management ownership. *The Journal of finance*, *51*(4), pp.1227-1246.

Masulis, R.W., Wang, C. and Xie, F., 2007. Corporate governance and acquirer returns. *the Journal of Finance*, *62*(4), pp.1851-1889.

Matthews, M., 2011. *Privilege in the Soviet Union: a study of elite life-styles under communism*. Routledge.

McPherson, M., Smith-Lovin, L. and Cook, J.M., 2001. Birds of a feather: Homophily in social networks. *Annual review of sociology*, *27*(1), pp.415-444.

McSweeney, B., 2002. Hofstede's model of national cultural differences and their consequences: A triumph of faith-a failure of analysis. *Human relations*, *55*(1), pp.89-118.

Means, G., 2017. The modern corporation and private property. Routledge.

Mele, A., 2013. A structural model of segregation in social networks. *Available at SSRN 2294957*.

Merelman, R.M., 1984. *Making something of ourselves: On culture and politics in the United States*. Univ of California Press.

Minnick, K., Unal, H. and Yang, L., 2011. Pay for performance? CEO compensation and acquirer returns in BHCs. The Review of Financial Studies, 24(2), pp.439-472.

Mintz, B., 1975. The President's Cabinet, 1891-1912: A Contribution to the Power Structure Debate. *Insurgent Sociologist*, *5*(3), pp.131-148.

Mishra, C.S., McConaughy, D.L. and Gobeli, D.H., 2000. Effectiveness of CEO pay-for-performance. *Review of Financial Economics*, *9*(1), pp.1-13.

Mitchell, M.L. and Lehn, K., 1990. Do bad bidders become good targets?. Journal of Political Economy, 98(2), pp.372-398.

Mitchell, M.L. and Stafford, E., 2000. Managerial decisions and long-term stock price performance. *The Journal of Business*, *73*(3), pp.287-329.

Modigliani, F. and Miller, M.H., 1963. Corporate income taxes and the cost of capital: a correction. *The American economic review*, *53*(3), pp.433-443.

Moeller, S.B., Schlingemann, F.P. and Stulz, R.M., 2004. Firm size and the gains from acquisitions. *Journal of financial economics*, *73*(2), pp.201-228.

Morck, R., Shleifer, A. and Vishny, R.W., 1990. Do managerial objectives drive bad acquisitions?. The Journal of Finance, 45(1), pp.31-48.

Murphy, K.J., 1985. Corporate performance and managerial remuneration: An empirical analysis. Journal of accounting and economics, 7(1-3), pp.11-42.

Neal, M. (1998). The cultural factor: cross-national management and the Foreign venture. London: Macmillan Press.

Nejadmalayeri, A., Iyer, S.R. and Singh, M., 2017. Is there an optimally diversified conglomerate? Gleaning answers from capital markets. *Review of Quantitative Finance and Accounting*, *49*, pp.117-158.

Nguyen, D.D., Hagendorff, J. and Eshraghi, A., 2018. Does a CEO's cultural heritage affect performance under competitive pressure?. *The Review of Financial Studies*, *31*(1), pp.97-141.

Nguyen, N.H. and Truong, C., 2013. The information content of stock markets around the world: A cultural explanation. *Journal of International Financial Markets, Institutions and Money*, *26*, pp.1-29.

Ntim, C.G., Lindop, S., Thomas, D.A., Abdou, H. and Opong, K.K., 2019. Executive pay and performance: The moderating effect of CEO power and governance structure. *The International Journal of Human Resource Management*, *30*(6), pp.921-963.

Oesterle, D.A., 1986. Negotiation Model of Tender Offer Defenses and the Delaware Supreme Court. *Cornell L. Rev.*, *72*, p.117.

Officer, M.S., 2003. Termination fees in mergers and acquisitions. *Journal of Financial economics*, *69*(3), pp.431-467.

Officer, M.S., Poulsen, A.B. and Stegemoller, M., 2009. Target-firm information asymmetry and acquirer returns. *Review of Finance*, *13*(3), pp.467-493.

Olaniyi, C., 2019. Asymmetric information phenomenon in the link between CEO pay and firm performance: An innovative approach. *Journal of Economic Studies*, *46*(2), pp.306-323.

O'Reilly, C.A. and Roberts, K.H., 1973. Job satisfaction among whites and nonwhites: A cross-cultural approach. *Journal of Applied Psychology*, *57*(3), p.295.

Ouyang, C., Xiong, J. and Fan, L., 2019. Do insiders share pledging affect executive pay-for-performance sensitivity?. *International Review of Economics & Finance*, *63*, pp.226-239.

Pablo, A. L., Sitkin, S. B., & Jemison, D. B. (1996). Acquisition decision-making processes: The central role of risk. Journal of Management, 22, 723–746.

Pan, Y., Siegel, S. and Wang, T.Y., 2016. Corporate risk culture. *Available at SSRN 2675594*.

Pan, Y., Siegel, S. and Yue Wang, T., 2020. The Cultural Origin of CEOs' Attitudes toward Uncertainty: Evidence from Corporate Acquisitions. *The Review of Financial Studies*, *33*(7), pp.2977-3030.

Park, H.J. and Ha, M.H., 2020. Corporate social responsibility and earnings transparency: Evidence from Korea. *Corporate Social Responsibility and Environmental Management*, *27*(3), pp.1498-1508.

Parola, H. and Ellis, K.M., 2014. M&A negotiation stage: A review and future research directions. In *Advances in mergers and acquisitions*. Emerald Group Publishing Limited.

Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C.

Passenger Lists of Vessels Arriving at New York, New York, 1820-1897. Microfilm Publication M237, 675 rolls. NAI: 6256867. Records of the U.S. Customs Service, Record Group 36. National Archives at Washington, D.C.

Passenger Lists, 1962-1972, and Crew Lists, 1943-1972, of Vessels Arriving at Oswego, New York. Microfilm Publication A3426. NAI: 4441521. National Archives at Washington, D.C.

Paulo, A., 2018. Abnormal retained earnings around the world. *Journal of Multinational Financial Management*, *46*, pp.63-74.

Personality and Social Psychology, Vol. 37, 1979, pp. 1097–126.

Porta, R.L., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W., 1998. Law and finance. *Journal of political economy*, *106*(6), pp.1113-1155.

Pruitt, D. G. (1981). Negotiation Behavior. New York: Academic Press.

Ravenscraft, D.J. and Scherer, F.M., 1987. Life after takeover. *The Journal of Industrial Economics*, pp.147-156.

Robalino, N. and Robson, A.J., 2013. Genes, culture, and preferences. *Biological Theory*, *8*(2), pp.151-157.

Robert, L., 1988. On the mechanics of economic development. *Journal of monetary economics*.

Robinson, D.T., 2008. Strategic alliances and the boundaries of the firm. *The Review of Financial Studies*, *21*(2), pp.649-681.

Roll, R., 1986. The hubris hypothesis of corporate takeovers. *Journal of business*, pp.197-216.

Rossi, S. and Volpin, P.F., 2004. Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*, *74*(2), pp.277-304.

Rozen-Bakher, Z., 2018. How do each dimension of Hofstede's national culture separately influence M&A success in cross-border M&As?. *Transnational Corporations Review*, *10*(2), pp.131-146.

Saorín-Iborra, M.C., 2008. Time pressure in acquisition negotiations: Its determinants and effects on parties' negotiation behaviour choice. *International Business Review*, *17*(3), pp.285-309.

Sarkissian, S. and Schill, M.J., 2004. The overseas listing decision: New evidence of proximity preference. *The Review of Financial Studies*, *17*(3), pp.769-809.

Schaefer, S., 1998. The Dependence of pay—Performance Sensitivity on the Size of the Firm. *Review of Economics and Statistics*, *80*(3), pp.436-443.

Sebenius, J.K., 1998. Negotiating cross-border acquisitions. *MIT Sloan Management Review*, *39*(2), p.27.

Shi, W., Connelly, B.L., Mackey, J.D. and Gupta, A., 2019. Placing their bets: The influence of strategic investment on CEO pay-for-performance. *Strategic Management Journal*, *40*(12), pp.2047-2077.

Signorini, P., Wiesemes, R. and Murphy, R., 2009. Developing alternative frameworks for exploring intercultural learning: a critique of Hofstede's cultural difference model. *Teaching in Higher Education*, *14*(3), pp.253-264.

Simard, L.M., 1981. Cross-cultural interaction: Potential invisible barriers. *The Journal of Social Psychology*, *113*(2), pp.171-192.

Smelser, N.J., 1992. Culture: coherent or incoherent. *Theory of culture*, pp.3-28.

Søndergaard, M., 1994. Research note: Hofstede's consequences: a study of reviews, citations and replications. *Organization studies*, *15*(3), pp.447-456.

Song, S., Zeng, Y. and Zhou, B., 2021. Information asymmetry, cross-listing, and post-M&A performance. *Journal of Business Research*, *122*, pp.447-457.

Sorkin, A. R., 2002, "Those Sweet Trips to the Merger Mall," New York Times, April 7, section 3, page 1

Spencer-Oatey, H., 2000. Rapport management: A framework for analysis. *Culturally speaking: Managing rapport through talk across cultures*, *1146*.

Steinmetz, G. ed., 1999. *State/culture: State-formation after the cultural turn*. Cornell University Press.

Stulz, R.M. and Williamson, R., 2003. Culture, openness, and finance. *Journal of financial Economics*, *70*(3), pp.313-349.

Sudarsanam, S. and Mahate, A.A., 2006. Are friendly acquisitions too bad for shareholders and managers? Long-term value creation and top management turnover in hostile and friendly acquirers. *British Journal of Management*, *17*(S1), pp.S7-S30.

Sunder, J., Sunder, S.V. and Zhang, J., 2017. Pilot CEOs and corporate innovation. *Journal of Financial Economics*, *123*(1), pp.209-224.

Supplemental Manifests of Alien Passengers and Crew Members Who Arrived on Vessels at New York, New York, Who Were Inspected for Admission, and Related Index, compiled 1887-1952. Microfilm Publication A3461, 21 rolls. NAI: 3887372. RG 85, Records of the Immigration and Naturalization Service, 1787-2004; Records of the Immigration and Naturalization Service; National Archives, Washington, D.C.

Tang, Z. and Xu, X., 2016. What Causes the Target Stock Price Run-Up Prior to M&A Announcements?. *Journal of Accounting and Finance*, *16*(6), p.106.

Thum, O., 2000. *Competitive bidding in mergers and acquisitions*. Stanford University.

Tortoriello, R. and Falk, R., 2016. The Good, the Bad, and the Ugly (and how to tell them apart).

Triandis, H.C., 2001. Individualism-collectivism and personality. *Journal of personality*, *69*(6), pp.907-924.

Turamari, R.I., 2017. Measurement of Long-Term Post-Merger Performance and Method of Payment. *Journal of Management in Practice (Online Only)*, *2*(1).

Van Oudenhoven, J.P., 2001. Do organizations reflect national cultures? A 10-nation study. *International Journal of Intercultural Relations*, *25*(1), pp.89-107.

Veprauskaitė, E. and Adams, M., 2013. Do powerful chief executives influence the financial performance of UK firms?. *The British accounting review*, *45*(3), pp.229-241.

Walkling, R.A. and Edmister, R.O., 1985. Determinants of tender offer premiums. *Financial Analysts Journal*, *41*(1), pp.27-37.

Wulf, J., 2004. Do CEOs in mergers trade power for premium? Evidence from "mergers of equals". *Journal of Law, Economics, and Organization*, *20*(1), pp.60-101.

Yermack, D., 1995. Do corporations award CEO stock options effectively?. Journal of financial economics, 39(2-3), pp.237-269.

Yılmaz, I.S. and Tanyeri, B., 2016. Global merger and acquisition (M&A) activity: 1992–2011. *Finance Research Letters*, *17*, pp.110-117.

Yim, S., 2013. The acquisitiveness of youth: CEO age and acquisition behavior. *Journal of financial economics*, *108*(1), pp.250-273.

Zagefka, H., 2009. The concept of ethnicity in social psychological research: Definitional issues. *International Journal of Intercultural Relations*, *33*(3), pp.228-241.

Zaheer, A., McEvily, B. and Perrone, V., 1998. Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization science*, *9*(2), pp.141-159.

Zeldin, T. *The French*. Flamingo: London, 1984.

Zollo, M., & Singh, H. (2004). Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in U.S. bank mergers. Strategic Management Journal, 25, 1233–1256.

APPENDICES

Chapter 2

Appendix A

Full outputs for baseline regressions using abnormal return-based measures for long-term performance post-merger.

Table A1
Relationship between ancestry distance measures and post-merger bidder abnormal returns presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) BHAR (12 months)	(2) BHAR (24 months)	(3) BHAR (36 months)	(4) CAR (12 months)	(5) CAR (24 months)	(6) CAR (36 months)
Same Ancestry	0.0631***	-0.00133	-0.0424	0.0400**	-0.0177	-0.0786**
	(0.0212)	(0.0315)	(0.0363)	(0.0178)	(0.0263)	(0.0321)
Relative Size	0.0288	0.0259	0.0338	-0.000652	-0.0291	-0.0701*
	(0.0255)	(0.0378)	(0.0436)	(0.0213)	(0.0316)	(0.0386)
Acquiror Fin. Advisor	0.0264	0.0679*	0.0546	0.00258	0.0517*	0.0193
	(0.0250)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)
Hostile	0.0284	0.0952	0.150	0.0206	0.0803	0.0653
	(0.0724)	(0.107)	(0.124)	(0.0606)	(0.0897)	(0.110)
Challenged	0.151**	0.0852	-0.0683	0.119**	0.0443	0.0354
	(0.0707)	(0.105)	(0.121)	(0.0592)	(0.0876)	(0.107)
All cash	0.0458*	0.0818**	0.0913**	0.0204	0.0442	0.0763**
	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)
Diversifying	-0.00874	0.0140	-0.00411	0.00761	0.0136	0.00352
	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)
Target Fin. Advisor	-0.0143	0.0204	0.0455	0.00158	0.0485	0.0762**
	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)
Tender offer	-0.0522	-0.132***	-0.145**	-0.0262	-0.115***	-0.135***
	(0.0329)	(0.0488)	(0.0563)	(0.0276)	(0.0408)	(0.0498)
Acq. CEO Tenure	-0.00676***	-0.00864***	-0.0161***	-0.00533***	-0.00914***	-0.0109***
	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)
Acq. CEO slice	-0.0209	-0.0207	0.119	0.112	0.236**	0.513***
	(0.0873)	(0.130)	(0.149)	(0.0731)	(0.108)	(0.132)
Target CEO slice	0.0104	0.00295	0.133	0.0294	0.0223	0.0718
	(0.103)	(0.153)	(0.176)	(0.0861)	(0.127)	(0.156)
Acq. CEO Bonus	0.191***	0.0726*	-0.0502	0.165***	0.112***	0.0278
	(0.0292)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0443)
Target CEO Bonus	-0.0275	-0.00303	0.0154	-0.0318	0.00445	-0.0209
	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)
Acq. Tobin Q	-0.00162	0.00246	0.00153	-0.00270	-0.00250	-0.00314
	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)
Acq. Cash Flow	0.0749	0.410***	0.388***	0.0226	0.194***	0.165*
	(0.0571)	(0.0848)	(0.0977)	(0.0478)	(0.0708)	(0.0865)

Acq. Cash holding	-0.0131	-0.197	0.0175	0.0157	0.0475	0.0444
	(0.0913)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)
Acq. Leverage	-0.000306	-0.00310	-0.00313	-0.000173	-0.00297	-0.00174
	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)
Acq. Market to book	-7.91e-06***	-1.07e-05***	-1.05e-05***	-5.36e-06***	-2.81e-06	-1.49e-06
	(2.24e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.40e-06)
Acq. Size	-0.00229	-0.0186*	0.0214*	-0.000192	-0.0240***	-0.0164*
	(0.00647)	(0.00960)	(0.0111)	(0.00541)	(0.00801)	(0.00979)
Target Size	0.00893	0.00563	-0.0315	0.00212	0.00919	-0.00384
	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)
Target Tobin Q	-0.00974	0.0638	0.0175	0.00965	0.0696	0.141**
	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)
Target Cash Flow	0.142	0.773**	0.769*	0.218	0.645**	0.758**
	(0.232)	(0.345)	(0.397)	(0.194)	(0.288)	(0.352)
Target Cash Holdings	0.0444	0.0475	0.0475	0.0157	-0.197	-0.0131
	(0.138)	(0.113)	(0.113)	(0.0765)	(0.136)	(0.0913)
Target Leverage	0.00830*	0.0156**	-0.00279	0.00416	0.00715	0.00483
	(0.00499)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00756)
Target Market to book	-3.89e-06	-1.32e-05*	6.83e-06	-9.01e-07	-5.54e-06	-6.33e-06
	(4.76e-06)	(7.06e-06)	(8.13e-06)	(3.98e-06)	(5.89e-06)	(7.20e-06)
Observations	2,690	2,690	2,690	2,690	2,690	2,690
R-squared	0.105	0.189	0.230	0.136	0.209	0.215

Table A2

Relationship between ancestry distance measures and post-merger bidder abnormal returns presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) BHAR (12 months)	(2) BHAR (24 months)	(3) BHAR (36 months)	(4) CAR (12 months)	(5) CAR (24 months)	(6) CAR (36 months)	(7) BHAR (12 months)	(8) BHAR (24 months)	(9) BHAR (36 months)	(10) CAR (12 months)	(11) CAR (24 months)	(12) CAR (36 months)
Traditional Hofstede (4 Dim.)	-0.00982*	-0.00521	0.00252	-0.00483	0.00770	0.0259***						
	(0.00582)	(0.00862)	(0.00994)	(0.00487)	(0.00720)	(0.00879)						
Traditional Hofstede (6 Dim.)							-0.0139**	-0.00452	0.00424	-0.00802	0.00811	0.0262***
							(0.00662)	(0.00982)	(0.0113)	(0.00555)	(0.00820)	(0.0100)
Relative Size	0.0294	0.0259	0.0334	-0.000259	-0.0292	-0.0708*	0.0295	0.0259	0.0333	-0.000237	-0.0292	-0.0709*
	(0.0255)	(0.0378)	(0.0436)	(0.0214)	(0.0316)	(0.0386)	(0.0255)	(0.0378)	(0.0436)	(0.0214)	(0.0316)	(0.0386)
Acquiror Fin. Advisor	0.0259	0.0680*	0.0550	0.00227	0.0518*	0.0196	0.0257	0.0679*	0.0551	0.00214	0.0520*	0.0203
	(0.0251)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)	(0.0250)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)
Hostile	0.0304	0.0927	0.147	0.0225	0.0820	0.0691	0.0286	0.0930	0.148	0.0210	0.0822	0.0691
	(0.0725)	(0.107)	(0.124)	(0.0607)	(0.0897)	(0.110)	(0.0725)	(0.107)	(0.124)	(0.0607)	(0.0897)	(0.110)
Challenged	0.149**	0.0876	-0.0653	0.117**	0.0427	0.0318	0.152**	0.0878	-0.0666	0.120**	0.0416	0.0286
	(0.0708)	(0.105)	(0.121)	(0.0593)	(0.0876)	(0.107)	(0.0708)	(0.105)	(0.121)	(0.0593)	(0.0877)	(0.107)
All cash	0.0459*	0.0819**	0.0914**	0.0204	0.0441	0.0760**	0.0458*	0.0818**	0.0914**	0.0204	0.0442	0.0762**
	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)
Diversifying	-0.00795	0.0140	-0.00461	0.00810	0.0133	0.00242	-0.00765	0.0141	-0.00470	0.00828	0.0131	0.00192
	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)
Target Fin. Advisor	-0.0141	0.0203	0.0452	0.00178	0.0486	0.0764**	-0.0141	0.0203	0.0452	0.00170	0.0486	0.0763**
	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)
Tender offer	-0.0536	-0.131***	-0.143**	-0.0274	-0.116***	-0.135***	-0.0528	-0.131***	-0.143**	-0.0268	-0.116***	-0.136***
	(0.0329)	(0.0488)	(0.0563)	(0.0276)	(0.0408)	(0.0498)	(0.0329)	(0.0489)	(0.0563)	(0.0276)	(0.0408)	(0.0498)
Acq. CEO Tenure	-0.00673***	-0.00861***	-0.0161***	-0.00532***	-0.00918***	-0.0110***	-0.00671***	-0.00862***	-0.0161***	-0.00530***	-0.00918***	-0.0110***
	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)
Acq. CEO slice	-0.0243	-0.0212	0.120	0.110	0.237**	0.519***	-0.0240	-0.0209	0.120	0.110	0.237**	0.517***
	(0.0874)	(0.130)	(0.149)	(0.0732)	(0.108)	(0.132)	(0.0874)	(0.130)	(0.149)	(0.0731)	(0.108)	(0.132)

Target CEO slice	0.00808	0.00795	0.138	0.0266	0.0184	0.0622	0.00910	0.00644	0.137	0.0280	0.0196	0.0670
	(0.103)	(0.153)	(0.176)	(0.0863)	(0.127)	(0.156)	(0.103)	(0.153)	(0.176)	(0.0862)	(0.127)	(0.156)
Acq. CEO Bonus	0.194***	0.0716*	-0.0524	0.166***	0.112***	0.0272	0.194***	0.0720*	-0.0523	0.166***	0.112***	0.0260
	(0.0293)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0442)	(0.0292)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0442)
Target CEO Bonus	-0.0267	-0.00291	0.0150	-0.0314	0.00412	-0.0222	-0.0264	-0.00285	0.0149	-0.0311	0.00397	-0.0227
	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)
Acq. Tobin Q	-0.00173	0.00247	0.00162	-0.00278	-0.00248	-0.00302	-0.00174	0.00247	0.00162	-0.00278	-0.00247	-0.00299
	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)
Acq. Cash Flow	0.0726	0.411***	0.390***	0.0208	0.193***	0.165*	0.0742	0.411***	0.390***	0.0220	0.193***	0.163*
	(0.0572)	(0.0848)	(0.0977)	(0.0479)	(0.0708)	(0.0865)	(0.0572)	(0.0848)	(0.0978)	(0.0479)	(0.0708)	(0.0865)
Acq. Cash holding	-0.0121	-0.198	0.0157	0.0168	0.0487	0.0472	-0.0123	-0.198	0.0159	0.0164	0.0482	0.0454
	(0.0914)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)	(0.0914)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)
Acq. Leverage	-0.000222	-0.00308	-0.00317	-0.000125	-0.00301	-0.00190	-0.000237	-0.00310	-0.00317	-0.000130	-0.00300	-0.00184
	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)
Acq. Market to book	-7.84e-06***	-1.08e-05***	-1.05e-05***	-5.30e-06***	-2.77e-06	-1.42e-06	-7.86e-06***	-1.08e-05***	-1.05e-05***	-5.32e-06***	-2.78e-06	-1.47e-06
	(2.25e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.39e-06)	(2.24e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.40e-06)
Acq. Size	-0.00201	-0.0186*	0.0212*	-1.74e-05	-0.0241***	-0.0167*	-0.00212	-0.0187*	0.0212*	-7.75e-05	-0.0240***	-0.0165*
	(0.00647)	(0.00960)	(0.0111)	(0.00542)	(0.00801)	(0.00979)	(0.00647)	(0.00960)	(0.0111)	(0.00542)	(0.00801)	(0.00979)
Target Size	0.00817	0.00560	-0.0310	0.00165	0.00944	-0.00278	0.00850	0.00572	-0.0311	0.00183	0.00924	-0.00345
	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)
Target Tobin Q	-0.00810	0.0638	0.0164	0.0107	0.0692	0.139**	-0.00845	0.0637	0.0165	0.0105	0.0694	0.140**
	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)
Target Cash Flow	0.145	0.765**	0.761*	0.222	0.651**	0.773**	0.146	0.769**	0.762*	0.221	0.648**	0.760**
	(0.233)	(0.345)	(0.397)	(0.195)	(0.288)	(0.352)	(0.232)	(0.345)	(0.397)	(0.195)	(0.288)	(0.352)
Target Cash Holdings	0.0155	0.0480	0.0457	-0.0134	-0.198	0.0169	0.0159	0.0481	0.0463	-0.0131	-0.198	0.0165
	(0.0765)	(0.113)	(0.138)	(0.0913)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)	(0.0914)	(0.136)	(0.156)
Target Leverage	0.00792	0.0155**	-0.00255	0.00392	0.00728	0.00536	0.00807	0.0156**	-0.00259	0.00401	0.00718	0.00503
	(0.00500)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00755)	(0.00500)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00756)
Target Market to book	-3.80e-06	-1.32e-05*	6.79e-06	-8.51e-07	-5.59e-06	-6.51e-06	-3.91e-06	-1.33e-05*	6.82e-06	-9.11e-07	-5.51e-06	-6.26e-06
	(4.76e-06)	(7.06e-06)	(8.14e-06)	(3.99e-06)	(5.89e-06)	(7.20e-06)	(4.76e-06)	(7.06e-06)	(8.14e-06)	(3.98e-06)	(5.89e-06)	(7.20e-06)

Observations	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690
R-squared	0.103	0.189	0.230	0.135	0.209	0.216	0.104	0.189	0.230	0.135	0.209	0.215

Table A3
Relationship between ancestry distance measures and post-merger bidder abnormal returns presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) BHAR (12 months)	(2) BHAR (24 months)	(3) BHAR (36 months)	(4) CAR (12 months)	(5) CAR (24 months)	(6) CAR (36 months)	(7) BHAR (12 months)	(8) BHAR (24 months)	(9) BHAR (36 months)	(10) CAR (12 months)	(11) CAR (24 months)	(12) CAR (36 months)
Euclidean Hofstede (4 Dim.)	-0.0155**	-0.00410	0.00656	-0.00910*	0.00666	0.0270***						
	(0.00628)	(0.00932)	(0.0107)	(0.00526)	(0.00778)	(0.00950)						
Euclidean Hofstede (6 dim.)							-0.0140***	-0.00206	0.00645	-0.00882**	0.00509	0.0204**
							(0.00526)	(0.00780)	(0.00899)	(0.00440)	(0.00651)	(0.00796)
Relative Size	0.0291	0.0258	0.0335	-0.000432	-0.0291	-0.0703*	0.0293	0.0259	0.0334	-0.000368	-0.0292	-0.0706*
	(0.0255)	(0.0378)	(0.0436)	(0.0214)	(0.0316)	(0.0386)	(0.0255)	(0.0378)	(0.0436)	(0.0213)	(0.0316)	(0.0386)
Acquiror Fin. Advisor	0.0261	0.0680*	0.0549	0.00243	0.0517*	0.0194	0.0259	0.0679*	0.0550	0.00230	0.0519*	0.0198
	(0.0250)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)	(0.0250)	(0.0371)	(0.0428)	(0.0210)	(0.0310)	(0.0379)
Hostile	0.0277	0.0931	0.149	0.0204	0.0816	0.0698	0.0273	0.0939	0.149	0.0199	0.0813	0.0683
	(0.0725)	(0.107)	(0.124)	(0.0607)	(0.0897)	(0.110)	(0.0724)	(0.107)	(0.124)	(0.0606)	(0.0897)	(0.110)
Challenged	0.150**	0.0868	-0.0666	0.119**	0.0436	0.0330	0.152**	0.0864	-0.0676	0.120**	0.0433	0.0321
	(0.0708)	(0.105)	(0.121)	(0.0592)	(0.0876)	(0.107)	(0.0708)	(0.105)	(0.121)	(0.0593)	(0.0876)	(0.107)
All cash	0.0458*	0.0818**	0.0914**	0.0204	0.0442	0.0764**	0.0457*	0.0818**	0.0914**	0.0204	0.0442	0.0764**
	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)	(0.0237)	(0.0352)	(0.0406)	(0.0199)	(0.0294)	(0.0359)
Diversifying	-0.00821	0.0139	-0.00451	0.00795	0.0134	0.00295	-0.00802	0.0140	-0.00459	0.00807	0.0134	0.00262
	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)	(0.0259)	(0.0384)	(0.0443)	(0.0217)	(0.0321)	(0.0392)
Target Fin. Advisor	-0.0143	0.0203	0.0453	0.00158	0.0486	0.0766**	-0.0144	0.0203	0.0454	0.00153	0.0486	0.0765**
	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)	(0.0253)	(0.0375)	(0.0432)	(0.0212)	(0.0313)	(0.0383)
Tender offer	-0.0523	-0.131***	-0.144**	-0.0264	-0.116***	-0.136***	-0.0518	-0.132***	-0.144**	-0.0260	-0.116***	-0.136***
	(0.0329)	(0.0489)	(0.0563)	(0.0276)	(0.0408)	(0.0498)	(0.0329)	(0.0489)	(0.0563)	(0.0276)	(0.0408)	(0.0498)
Acq. CEO Tenure	-0.00673***	-0.00863***	-0.0161***	-0.00531***	-0.00916***	-0.0109***	-0.00674***	-0.00863***	-0.0161***	-0.00531***	-0.00915***	-0.0109***
	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)	(0.00205)	(0.00304)	(0.00351)	(0.00172)	(0.00254)	(0.00310)

Acq. CEO slice	-0.0237	-0.0208	0.120	0.110	0.236**	0.517***	-0.0235	-0.0207	0.120	0.111	0.236**	0.516***
	(0.0874)	(0.130)	(0.149)	(0.0731)	(0.108)	(0.132)	(0.0873)	(0.130)	(0.149)	(0.0731)	(0.108)	(0.132)
Target CEO slice	0.0118	0.00654	0.135	0.0296	0.0200	0.0638	0.0110	0.00493	0.135	0.0297	0.0211	0.0686
	(0.103)	(0.153)	(0.176)	(0.0862)	(0.127)	(0.156)	(0.103)	(0.153)	(0.176)	(0.0862)	(0.127)	(0.156)
Acq. CEO Bonus	0.193***	0.0717*	-0.0516	0.166***	0.112***	0.0279	0.193***	0.0721*	-0.0516	0.166***	0.112***	0.0268
	(0.0292)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0442)	(0.0292)	(0.0434)	(0.0500)	(0.0245)	(0.0362)	(0.0442)
Target CEO Bonus	-0.0270	-0.00306	0.0151	-0.0315	0.00434	-0.0215	-0.0270	-0.00305	0.0151	-0.0315	0.00432	-0.0215
	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)	(0.0380)	(0.0563)	(0.0649)	(0.0318)	(0.0470)	(0.0575)
Acq. Tobin Q	-0.00174	0.00247	0.00162	-0.00278	-0.00247	-0.00299	-0.00171	0.00247	0.00160	-0.00276	-0.00248	-0.00303
	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)	(0.00214)	(0.00318)	(0.00366)	(0.00179)	(0.00265)	(0.00324)
Acq. Cash Flow	0.0741	0.411***	0.389***	0.0219	0.194***	0.164*	0.0754	0.411***	0.388***	0.0229	0.194***	0.164*
	(0.0572)	(0.0848)	(0.0977)	(0.0479)	(0.0708)	(0.0865)	(0.0572)	(0.0848)	(0.0978)	(0.0479)	(0.0708)	(0.0865)
Acq. Cash holding	-0.0131	-0.198	0.0165	0.0159	0.0481	0.0463	-0.0134	-0.198	0.0169	0.0155	0.0480	0.0457
	(0.0914)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)	(0.0913)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)
Acq. Leverage	-0.000229	-0.00310	-0.00317	-0.000125	-0.00300	-0.00185	-0.000256	-0.00310	-0.00316	-0.000142	-0.00299	-0.00181
	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)	(0.00161)	(0.00239)	(0.00275)	(0.00135)	(0.00199)	(0.00243)
Acq. Market to book	-7.91e-06***	-1.08e-05***	-1.05e-05***	-5.36e-06***	-2.78e-06	-1.39e-06	-7.91e-06***	-1.07e-05***	-1.05e-05***	-5.36e-06***	-2.79e-06	-1.45e-06
	(2.24e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.40e-06)	(2.24e-06)	(3.33e-06)	(3.84e-06)	(1.88e-06)	(2.78e-06)	(3.40e-06)
Acq. Size	-0.00214	-0.0186*	0.0213*	-8.99e-05	-0.0240***	-0.0165*	-0.00224	-0.0187*	0.0213*	-0.000159	-0.0240***	-0.0164*
	(0.00647)	(0.00960)	(0.0111)	(0.00542)	(0.00801)	(0.00979)	(0.00647)	(0.00960)	(0.0111)	(0.00542)	(0.00801)	(0.00979)
Target Size	0.00822	0.00564	-0.0310	0.00167	0.00939	-0.00293	0.00853	0.00568	-0.0312	0.00187	0.00928	-0.00340
	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)	(0.0164)	(0.0244)	(0.0281)	(0.0138)	(0.0203)	(0.0249)
Target Tobin Q	-0.00841	0.0637	0.0165	0.0105	0.0693	0.140**	-0.00857	0.0637	0.0166	0.0104	0.0693	0.140**
	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)	(0.0433)	(0.0642)	(0.0740)	(0.0362)	(0.0536)	(0.0655)
Target Cash Flow	0.137	0.767**	0.767*	0.216	0.649**	0.774**	0.141	0.770**	0.766*	0.218	0.647**	0.762**
	(0.232)	(0.345)	(0.397)	(0.195)	(0.288)	(0.352)	(0.232)	(0.345)	(0.397)	(0.194)	(0.288)	(0.352)
Target Cash Holdings	0.0164	0.0482	0.0454	-0.0123	-0.198	0.0159	0.0168	0.0487	0.0472	-0.0121	-0.198	0.0157
	(0.0765)	(0.113)	(0.138)	(0.0914)	(0.136)	(0.156)	(0.0765)	(0.113)	(0.138)	(0.0914)	(0.136)	(0.156)
Target Leverage	0.00798	0.0156**	-0.00257	0.00395	0.00724	0.00522	0.00814	0.0156**	-0.00264	0.00406	0.00718	0.00499
	(0.00499)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00755)	(0.00499)	(0.00741)	(0.00854)	(0.00418)	(0.00618)	(0.00756)

Target Market to book	-3.78e-06	-1.32e-05*	6.77e-06	-8.33e-07	-5.58e-06	-6.50e-06	-3.89e-06	-1.32e-05*	6.82e-06	-9.00e-07	-5.54e-06	-6.32e-06
	(4.76e-06)	(7.06e-06)	(8.14e-06)	(3.98e-06)	(5.89e-06)	(7.20e-06)	(4.76e-06)	(7.06e-06)	(8.14e-06)	(3.98e-06)	(5.89e-06)	(7.20e-06)
Observations	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690	2,690
R-squared	0.104	0.189	0.230	0.135	0.209	0.216	0.105	0.189	0.230	0.136	0.209	0.215

Appendix B

Full outputs for the baseline regressions with the accounting-based measures for long-term firm performance post-merger.

Table B1

Relationship between ancestry distance measures and post-merger changes in profitability measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)
VARIABLES	ΔROA (%)	ΔROE	ΔROI	ΔSales Growth
Same Ancestry	-9.945***	54.13***	-2.247	-4.084***
	-2.724	-9.51	-1.696	-1.243
Relative Size	5.731*	22.74**	-2.196	-0.184
	-3.426	-11.17	-2.08	-1.518
Acquiror Fin. Advisor	-1.942	-0.436	-0.903	0.52
	-3.18	-11.03	-1.984	-1.451
Hostile	3.452	45.31	1.44	-0.479
	-8.982	-30.9	-5.603	-4.086
Challenged	3.731	-0.75	1.241	2.723
	-8.78	-29.26	-5.485	-3.973
All cash	-1.888	4.154	3.434*	-1.681
	-3.013	-10.43	-1.88	-1.376
Diversifying	-4.204	-0.504	-0.895	-0.209
	-3.244	-11.25	-2.029	-1.485
Target Fin. Advisor	9.226***	12.22	-1.397	1.372
	-3.206	-11.18	-1.998	-1.46
Tender offer	-10.25**	-7.841	-1.573	-2.035
	-4.19	-14.46	-2.615	-1.909
Acq. CEO Tenure	0.41	4.305***	-0.314**	-0.548***
	-0.255	-0.862	-0.159	-0.117
Acq. CEO slice	-1.603	-51.53	-3.329	3.06
	-10.56	-34.77	-6.653	-4.856
Target CEO slice	4.233	20.28	3.896	-6.099
	-12.8	-45.18	-7.966	-5.941
Acq. CEO Bonus	0.828	65.47***	2.712	3.268*
	-3.715	-13.06	-2.326	-1.71
Target CEO Bonus	4.06	16.88	5.233*	-0.101
	-4.751	-16.5	-2.979	-2.173
Acq. Tobin Q	-0.557	1.811	-0.23	-0.455
	-0.737	-2.425	-0.457	-0.335
Acq. Cash Flow	-0.798	3.995	1.194	4.522
	-8.923	-24.29	-4.657	-3.399
Acq. Cash holding	-6.749	-38.76	-2.666	-7.46
	-11.24	-36.8	-7.052	-5.147
Acq. Leverage	-0.383**	-0.129	0.0177	-0.0406
	-0.193	-0.654	-0.12	-0.089

Acq. Market to book	0.000802***	-0.00147	-5.25E-05	-0.00016
	-0.00028	-0.00103	-0.00018	-0.00013
Acq. Size	-1.923**	-1.496	-0.686	-1.442***
	-0.84	-2.813	-0.518	-0.383
Target Size	3.559*	5.158	3.068**	-0.834
	-2.067	-7.102	-1.293	-0.944
Target Tobin Q	-12.28**	-30.18	-2.403	2.013
	-5.569	-19.29	-3.459	-2.533
Target Cash Flow	-38.54	30.3	-10.06	2.91
	-28.23	-109.2	-17.73	-13.84
Target Cash Holdings	-6.587	-7.381	-6.665	-6.603
	-11.24	-5.151	-11.25	-11.24
Target Leverage	1.639***	4.117*	0.508	-0.139
	-0.626	-2.135	-0.392	-0.287
Target Market to book	-0.00045	-0.00043	-0.00042	0.00015
	-0.0006	-0.00204	-0.00038	-0.00028
Observations	2741	2741	2741	2741
R-squared	0.06	0.364	0.034	0.082

Table B2
Relationship between ancestry distance measures and post-merger changes in profitability measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) ΔROA (%)	(2) ΔROE	(3) ΔROI	(4) ΔSales Growth	(5) ΔROA (%)	(6) ΔROE	(7) ΔROI	(8) ΔSales Growth
Traditional Hofstede (4 dim.)	2.095***	-10.25***	0.118	0.971***				
	-0.76	-2.672	-0.472	-0.347				
Traditional Hofstede (6 Dim.)					2.864***	-13.12***	0.205	1.109***
					-0.86	-3.023	-0.535	-0.393
Relative Size	5.667*	23.53**	-2.222	-0.205	5.688*	23.45**	-2.22	-0.206
	-3.431	-11.22	-2.081	-1.519	-3.428	-11.21	-2.081	-1.519
Acquiror Fin. Advisor	-1.946	-0.792	-0.87	0.507	-1.92	-0.934	-0.871	0.532
	-3.184	-11.07	-1.985	-1.452	-3.181	-11.06	-1.985	-1.452
Hostile	3.487	45.68	1.326	-0.44	3.722	44.47	1.356	-0.389
	-8.995	-31.04	-5.606	-4.089	-8.989	-31.01	-5.607	-4.089
Challenged	3.864	-1.431	1.421	2.718	3.318	0.592	1.369	2.565
	-8.793	-29.4	-5.489	-3.977	-8.791	-29.38	-5.491	-3.979
All cash	-1.982	4.816	3.435*	-1.725	-1.967	4.911	3.434*	-1.704
	-3.017	-10.47	-1.881	-1.377	-3.015	-10.46	-1.881	-1.376
Diversifying	-4.274	-0.319	-0.924	-0.23	-4.313	-0.287	-0.926	-0.246
	-3.248	-11.3	-2.03	-1.486	-3.245	-11.29	-2.03	-1.486
Target Fin. Advisor	9.360***	11.28	-1.4	1.433	9.322***	11.27	-1.4	1.406

	-3.21	-11.23	-1.999	-1.461	-3.208	-11.22	-1.999	-1.461
Tender offer	-10.23**	-7.526	-1.536	-2.026	-10.34**	-6.914	-1.547	-2.06
	-4.196	-14.52	-2.616	-1.91	-4.193	-14.51	-2.616	-1.91
Acq. CEO Tenure	0.396	4.421***	-0.316**	-0.554***	0.396	4.408***	-0.316**	-0.554***
	-0.255	-0.865	-0.16	-0.117	-0.255	-0.865	-0.159	-0.117
Acq. CEO slice	-0.878	-55.63	-3.203	3.367	-0.935	-55.22	-3.204	3.33
	-10.58	-34.91	-6.655	-4.859	-10.57	-34.88	-6.655	-4.858
Target CEO slice	4.164	19.38	4.183	-6.096	4	20.25	4.148	-6.054
	-12.82	-45.39	-7.971	-5.945	-12.81	-45.34	-7.97	-5.945
Acq. CEO Bonus	0.718	66.58***	2.644	3.210*	0.665	66.58***	2.644	3.181*
	-3.719	-13.11	-2.326	-1.711	-3.716	-13.1	-2.326	-1.711
Target CEO Bonus	4.174	16.62	5.242*	-0.0568	4.098	17.01	5.239*	-0.0895
	-4.757	-16.57	-2.981	-2.175	-4.753	-16.55	-2.981	-2.175
Acq. Tobin Q	-0.598	1.997	-0.24	-0.471	-0.568	1.886	-0.238	-0.46
	-0.738	-2.435	-0.457	-0.335	-0.737	-2.433	-0.457	-0.335
Acq. Cash Flow	-0.523	2.031	1.356	4.594	-0.892	3.258	1.326	4.526
	-8.934	-24.39	-4.658	-3.401	-8.93	-24.38	-4.659	-3.402
Acq. Cash holding	-6.665	-39.92	-2.75	-7.381	-6.587	-39.91	-2.734	-7.399
	-11.25	-36.96	-7.055	-5.151	-11.24	-36.93	-7.055	-5.151
Acq. Leverage	-0.396**	-0.055	0.0159	-0.0472	-0.392**	-0.0718	0.016	-0.0453
	-0.193	-0.657	-0.12	-0.0891	-0.193	-0.656	-0.12	-0.0891
Acq. Market to book	0.000806***	-0.0015	-5.57E-05	-0.0002	0.000808***	-0.0015	-5.52E-05	-0.0002
	-0.0003	-0.001	-0.0002	-0.0001	-0.0003	-0.001	-0.0002	-0.0001
Acq. Size	-2.006**	-1.134	-0.714	-1.467***	-1.958**	-1.307	-0.71	-1.455***
	-0.84	-2.824	-0.517	-0.383	-0.84	-2.822	-0.518	-0.384
Target Size	3.691*	4.372	3.092**	-0.783	3.630*	4.732	3.089**	-0.806
	-2.069	-7.131	-1.293	-0.944	-2.067	-7.124	-1.293	-0.944
Target Tobin Q	-12.74**	-28.85	-2.473	1.822	-12.62**	-29.42	-2.469	1.876
	-5.575	-19.38	-3.46	-2.535	-5.571	-19.36	-3.46	-2.534
Target Cash Flow	-39.27	29.94	-10.66	2.847	-39.25	32.1	-10.62	2.594
	-28.27	-109.7	-17.74	-13.85	-28.24	-109.6	-17.74	-13.85
Target Cash Holdings	-6.603	-40.09	-2.674	-7.368	-6.518	-2.69	-7.379	-7.399
	-11.24	-36.86	-7.054	-5.149	-11.24	-7.054	-5.149	-5.151
Target Leverage	1.691***	3.835*	0.519	-0.118	1.662***	3.983*	0.517	-0.129
	-0.626	-2.144	-0.392	-0.287	-0.626	-2.142	-0.392	-0.287
Target Market to book	-0.0005	-0.0004	-0.0004	0.00015	-0.0004	-0.0005	-0.0004	0.00015
Relative Size	-0.0006	-0.002	-0.0004	-0.0003	-0.0006	-0.002	-0.0004	-0.0003
Observations	2741	2741	2741	2741	2741	2741	2741	2741
R-squared	0.058	0.358	0.033	0.081	0.06	0.36	0.033	0.081

Table B3
Relationship between ancestry distance measures and post-merger changes in profitability measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	(1) ΔROA (%)	(2) ΔROE	(3) ΔROI	(4) ΔSales Growth	(5) ΔROA (%)	(6) ΔROE	(7) ΔROI	(8) ΔSales Growth
Euclidean Hofstede (4 Dim.)	2.750***	-13.61***	0.386	1.172***				
	-0.814	-2.852	-0.506	-0.371				
Euclidean Hofstede (6 Dim.)					2.483***	-12.17***	0.359	0.989***
					-0.679	-2.379	-0.423	-0.31
Relative Size	5.705*	23.21**	-2.212	-0.192	5.706*	23.16**	-2.211	-0.197
	-3.428	-11.2	-2.081	-1.519	-3.426	-11.19	-2.081	-1.519
Acquiror Fin. Advisor	-1.981	-0.529	-0.891	0.503	-1.946	-0.675	-0.886	0.523
	-3.182	-11.05	-1.985	-1.451	-3.18	-11.04	-1.985	-1.451
Hostile	3.719	44.29	1.42	-0.355	3.73	44.09	1.428	-0.371
	-8.988	-30.98	-5.606	-4.087	-8.984	-30.96	-5.605	-4.087
Challenged	3.768	-1.142	1.331	2.706	3.492	-0.007	1.289	2.621
	-8.784	-29.33	-5.487	-3.974	-8.782	-29.32	-5.488	-3.975
All cash	-1.952	4.647	3.429*	-1.706	-1.931	4.673	3.432*	-1.691
	-3.015	-10.45	-1.88	-1.376	-3.013	-10.44	-1.88	-1.376
Diversifying	-4.236	-0.528	-0.912	-0.213	-4.258	-0.471	-0.915	-0.224
	-3.245	-11.27	-2.03	-1.485	-3.244	-11.26	-2.03	-1.485
Target Fin. Advisor	9.354***	11.31	-1.385	1.425	9.315***	11.38	-1.39	1.404
	-3.207	-11.21	-1.999	-1.461	-3.206	-11.2	-1.999	-1.461
Tender offer	-10.31**	-7.167	-1.564	-2.064	-10.38**	-6.808	-1.575	-2.086
	-4.192	-14.5	-2.616	-1.909	-4.191	-14.48	-2.616	-1.909
Acq. CEO Tenure	0.4	4.379***	-0.316**	-0.552***	0.403	4.353***	-0.316**	-0.551***
	-0.255	-0.864	-0.159	-0.117	-0.255	-0.863	-0.159	-0.117
Acq. CEO slice	-1.046	-54.67	-3.209	3.289	-1.102	-54.34	-3.216	3.266
	-10.57	-34.84	-6.654	-4.856	-10.56	-34.81	-6.654	-4.856
Target CEO slice	3.886	20.89	4.014	-6.192	3.962	20.86	4.014	-6.123
	-12.81	-45.3	-7.97	-5.943	-12.8	-45.25	-7.969	-5.942
Acq. CEO Bonus	0.8	65.98***	2.675	3.248*	0.746	66.05***	2.669	3.224*
	-3.716	-13.09	-2.326	-1.71	-3.714	-13.08	-2.326	-1.71
Target CEO Bonus	4.182	16.55	5.253*	-0.0484	4.137	16.78	5.247*	-0.069
	-4.753	-16.54	-2.98	-2.174	-4.751	-16.52	-2.98	-2.174
Acq. Tobin Q	-0.582	1.942	-0.237	-0.465	-0.562	1.856	-0.234	-0.457
	-0.737	-2.43	-0.457	-0.335	-0.737	-2.428	-0.457	-0.335
Acq. Cash Flow	-0.691	2.908	1.284	4.549	-0.914	3.863	1.252	4.497
	-8.927	-24.35	-4.658	-3.4	-8.924	-24.33	-4.659	-3.4
Acq. Cash holding	-6.603	-39.89	-2.69	-7.379	-6.518	-40.09	-2.674	-7.368
	-11.24	-36.89	-7.054	-5.149	-11.24	-36.86	-7.054	-5.149

Acq. Leverage	-0.395**	-0.0616	0.0154	-0.0464	-0.390**	-0.0862	0.016	-0.0442
	-0.193	-0.656	-0.12	-0.089	-0.193	-0.655	-0.12	-0.089
Acq. Market to book	0.000815***	-0.0015	-5.25E-05	-0.0002	0.000812***	-0.0015	-5.27E-05	-0.0002
	-0.0003	-0.001	-0.0002	-0.0001	-0.0003	-0.001	-0.0002	-0.0001
Acq. Size	-1.961**	-1.312	-0.703	-1.451***	-1.927**	-1.451	-0.697	-1.442***
	-0.84	-2.819	-0.518	-0.383	-0.84	-2.817	-0.518	-0.383
Target Size	3.671*	4.512	3.093**	-0.789	3.620*	4.819	3.086**	-0.809
	-2.067	-7.117	-1.293	-0.944	-2.066	-7.112	-1.293	-0.944
Target Tobin Q	-12.61**	-29.18	-2.475	1.871	-12.53**	-29.46	-2.464	1.904
	-5.57	-19.34	-3.46	-2.533	-5.568	-19.32	-3.46	-2.533
Target Cash Flow	-38.07	27.07	-10.28	3.141	-38.45	30.05	-10.32	2.869
	-28.25	-109.5	-17.74	-13.85	-28.23	-109.4	-17.74	-13.85
Target Cash Holdings	-6.603	-40.09	-2.674	-7.368	-6.518	-2.69	-7.379	-6.518
	-11.24	-36.86	-7.054	-5.149	-11.24	-7.054	-5.149	-11.24
Target Leverage	1.679***	3.900*	0.518	-0.123	1.655***	4.025*	0.514	-0.132
	-0.626	-2.14	-0.392	-0.287	-0.626	-2.138	-0.392	-0.287
Target Market to book	-0.0005	-0.0003	-0.0004	0.00014	-0.0004	-0.0004	-0.0004	0.00015
	-0.0006	-0.002	-0.0004	-0.0003	-0.0006	-0.002	-0.0004	-0.0003
Observations	2741	2741	2741	2741	2741	2741	2741	2741
R-squared	0.06	0.361	0.033	0.082	0.061	0.362	0.033	0.082

Appendix C

Re-estimation of the baseline results with a restricted sample of only different-ancestry deals.

Table C1

Relationship between cultural distance and post-merger performance measures presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses) for a subsample that excludes M&A deals between firms helmed by CEOs of the same ancestry. All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

VARIABLES	BHAR (12 months)		BHAR (24 months)		BHAR (36 months)	
Panel A						
Euclidean Hofstede (4 Dimensions)	0.000259		-0.0219		-0.0136	
	(0.0101)		(0.0153)		(0.0192)	
Euclidean Hofstede (6 Dimensions)		-0.000613		-0.0187		-0.0181
		(0.0106)		(0.0159)		(0.0200)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1281	1281	1281	1281	1281	1281
Adjusted R^2	0.202	0.202	0.282	0.281	0.332	0.332

VARIABLES	CAR (12 months)		CAR (24 months)		CAR (36 months)	
Panel B						
Euclidean Hofstede (4 Dimensions)	0.00391		0.00493		0.0250	
	(0.00987)		(0.0149)		(0.0174)	
Euclidean Hofstede (6 Dimensions)		0.000667		0.00442		0.0154
		(0.0103)		(0.0155)		(0.0182)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1281	1281	1281	1281	1281	1281
Adjusted R^2	0.200	0.200	0.261	0.261	0.351	0.350

VARIABLES	ΔROA (%)		ΔROE		ΔROI		ΔSales Growth	
Panel C								
Euclidean Hofstede (4 Dimensions)	0.673		0.00129		-0.673		0.371	
	(1.220)		(0.00291)		(1.539)		(0.792)	
Euclidean Hofstede (6 Dimensions)		1.220		0.00286		-0.923		0.256
		(1.265)		(0.00304)		(1.598)		(0.822)
Other Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1281	1281	1281	1281	1281	1281	1281	1281
Adjusted R^2	0.148	0.148	0.131	0.132	0.075	0.076	0.106	0.106

Chapter 3

Appendix D

Full output table for results obtained with Model 1. Model 1 presents results of linear regressions of change in compensation variables on the same-ancestry indicator and change in performance measures

Table D1
Relationship between shared ancestry indicator and change in compensation around deals presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Percentage change in compensation between years [-2,+2] around deal

Measure	Δ Salary	Δ Bonus	Δ Long-term incentives
	(1)	(2)	(3)
Same Ancestry	0.576***	0.296***	0.0531
	(0.0682)	(0.0752)	(0.0750)
Δ Size	0.221**	0.183*	-0.149
	(0.0883)	(0.0973)	(0.0993)
Δ Market-to-book	8.72e-07	9.90e-07	2.17e-06
	(1.47e-06)	(1.62e-06)	(1.60e-06)
Δ ROA	-1.555***	-1.638***	-0.697**
	(0.313)	(0.345)	(0.350)
Δ Leverage	-0.000752	-0.00219	0.00995
	(0.00620)	(0.00683)	(0.00672)
Δ Tobin's Q	0.206***	0.295***	-0.0927**
	(0.0337)	(0.0371)	(0.0394)
Δ Risk	0.000964	0.00560**	0.0123***
	(0.00238)	(0.00262)	(0.00259)
Δ Return	-0.0668	0.296***	0.456***
	(0.0636)	(0.0702)	(0.0738)
CEO Ownership	-0.0162	0.0411*	0.0483*
	(0.0218)	(0.0241)	(0.0267)
All Cash Deal	0.0556	0.0591	-0.0165
	(0.0538)	(0.0593)	(0.0585)
CEO Tenure	-0.00672	-0.00244	0.0251***
	(0.00753)	(0.00830)	(0.00839)
Diversifying Deal	-0.103*	-0.0522	0.153**
	(0.0610)	(0.0672)	(0.0667)
Tender Offer	0.0308	0.0878	0.0479
	(0.0771)	(0.0850)	(0.0837)
Challenged Deal	0.0480	-0.147	-0.0968
	(0.167)	(0.184)	(0.183)
Deal Attitude	0.0939	0.0410	0.134
	(0.208)	(0.229)	(0.231)
Observations	1398	1398	1398
Adjusted R^2	0.216	0.201	0.464

Table D2
Relationship between shared ancestry indicator and change in compensation around deals presents OLS regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Percentage change in compensation between years [-3,+3] around deal			
Measure	Δ Salary	Δ Bonus	Δ Long-term incentives
	(1)	(2)	(3)
Same Ancestry	0.549***	0.168***	0.389***
	(0.0511)	(0.0565)	(0.0669)
Δ Size	0.0835	0.194**	-0.353***
	(0.0819)	(0.0905)	(0.110)
Δ Market-to-book	7.50e-07	8.61e-07	1.80e-06
	(1.52e-06)	(1.68e-06)	(1.97e-06)
Δ ROA	-1.390***	-1.480***	-0.880**
	(0.315)	(0.348)	(0.421)
Δ Leverage	-0.00251	-0.000700	0.0152*
	(0.00642)	(0.00709)	(0.00835)
Δ Tobin's Q	0.195***	0.284***	-0.153***
	(0.0337)	(0.0372)	(0.0472)
Δ Risk	0.000702	-0.00147	-0.00522**
	(0.00182)	(0.00201)	(0.00238)
Δ Return	0.0199	0.289***	0.849***
	(0.0582)	(0.0643)	(0.0798)
CEO Ownership	0.0167	0.0400	0.0628*
	(0.0222)	(0.0245)	(0.0323)
All Cash Deal	0.0880	0.0706	-0.0538
	(0.0553)	(0.0611)	(0.0720)
CEO Tenure	-0.00785	-0.00301	0.0573***
	(0.00674)	(0.00744)	(0.00889)
Diversifying Deal	-0.0647	-0.00346	0.0775
	(0.0627)	(0.0693)	(0.0821)
Tender Offer	-0.0327	0.0844	0.0323
	(0.0797)	(0.0880)	(0.104)
Challenged Deal	0.0470	-0.233	-0.282
	(0.173)	(0.191)	(0.228)
Deal Attitude	0.0708	-0.0551	0.271
	(0.216)	(0.238)	(0.287)
Observations	1398	1398	1398
Adjusted R^2	0.134	0.114	0.151

Appendix E

Full output tables for results obtained with Model 2. Model 2 presents results of panel regressions of compensation on performance measures pre- and post-deal.

$$\textit{Model 2}: \log(\text{Compensation})_{i,t} = \gamma_0 + \delta_1 \text{Performance Measure}_{i,t} + \delta_2 \text{Post Takeover}_{i,t} + \delta_3 (\text{Performance Measure}_{i,t} \times \text{Post Takeover}_{i,t}) + \text{control variables} + \varepsilon_{i,t}$$

Additional summary tables of model 2 coefficients for event windows of [3-,+3] (Tables E1 to E10).

Table E1

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-3,+3] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.573*	0.397*	0.666*	1.439	-0.402	-1.363
	(0.296)	(0.221)	(0.404)	(0.917)	(2.004)	(1.367)
Post Merger	0.0146	0.0834***	-0.0140	-0.0707	-0.138	0.0508
	(0.0318)	(0.0229)	(0.0434)	(0.116)	(0.225)	(0.152)
ROA X Post Merger	-0.833**	-0.506**	-0.944**	1.403	4.301*	-3.310**
	(0.349)	(0.244)	(0.476)	(1.218)	(2.408)	(1.655)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.0498	-0.0243	0.0215	0.120	0.470	0.0462
	(0.181)	(0.176)	(0.188)	(0.299)	(0.294)	(0.286)
Post Merger	-0.00469	0.0314	0.0741**	-0.000722	0.0985***	-0.0203
	(0.0309)	(0.0300)	(0.0338)	(0.0437)	(0.0360)	(0.0492)
ROA X Post Merger	0.342	0.228	-0.215	1.361***	-0.384	0.596
	(0.269)	(0.261)	(0.292)	(0.437)	(0.399)	(0.430)
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E2

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-3,+3] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	1.160***	0.462*	1.448***	1.092	0.174	-1.498
	-0.367	-0.245	-0.502	-0.777	-1.447	-1.795
Post Merger	0.0363	0.0939***	0.0154	-0.0866	-0.11	-0.0024
	-0.0335	-0.0243	-0.0458	-0.118	-0.239	-0.164
ROE X Post Merger	-1.111***	-0.643**	-1.353***	1.077	2.433	-1.273
	-0.378	-0.253	-0.518	-1.003	-2.171	-1.865
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	-0.001	-0.0038	0.00792	0.101*	-0.325*	0.132***
	-0.0303	-0.0295	-0.0324	-0.0571	-0.186	-0.048
Post Merger	0.00168	0.0363	0.0696**	0.0331	0.0709**	-0.0088
	-0.0302	-0.0293	-0.0329	-0.0424	-0.0347	-0.0479
ROE X Post Merger	0.00207	0.00422	-0.0078	0.00161	0.0188	-0.139***
	-0.03	-0.0292	-0.0321	-0.0837	-0.179	-0.0476
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E3

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-3,+3] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Return	-0.0005	0.00027	-0.0007	-0.00262*	-0.0025	-0.001
	-0.0004	-0.0003	-0.0006	-0.0016	-0.0023	-0.002
Post Merger	-0.0368	0.0752***	-0.0791	-0.0096	-0.164	0.128
	-0.0368	-0.0235	-0.0527	-0.125	-0.219	-0.173
Return X Post Merger	0.00047	-0.0006	0.00132	0.00202	0.00895*	-0.0005
	-0.0008	-0.0005	-0.0011	-0.0032	-0.0047	-0.0036
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Return	0.00105**	0.000903**	0.00121**	0.00187***	-4.54E-05	6.65E-05
	-0.0004	-0.0004	-0.0005	-0.0007	-0.0005	-0.0007
Post Merger	0.0119	0.0525	0.0464	0.00652	0.0723	-0.0413
	-0.0406	-0.0399	-0.0465	-0.0578	-0.0463	-0.0655
Return X Post Merger	-0.0007	-0.0009	-0.00153**	-0.0008	0.00019	-0.0009
	-0.0006	-0.0006	-0.0007	-0.0011	-0.0009	-0.0011
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E4

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-3,+3] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROA	-0.282	0.423	-0.283	-2.728	0.885	-0.449
	-0.416	-0.828	-0.554	-2.584	-5.295	-1.539
Post Merger	0.0239	0.0742***	-0.0013	-0.0804	-0.225	0.164
	-0.0298	-0.0209	-0.0405	-0.107	-0.209	-0.139
Std. Dev. ROA X Post Merger	-0.481*	-0.235	-0.557	0.856	2.8	-5.428***
	-0.257	-0.177	-0.348	-1.131	-2.169	-1.168
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. Roa	-0.032	0.16	0.15	0.671	1.715**	1.964***
	-0.271	-0.27	-0.311	-0.633	-0.784	-0.616
Post Merger	-0.0289	0.0166	0.0770**	-0.0127	0.115***	0.0109
	-0.0302	-0.0294	-0.0343	-0.0424	-0.0367	-0.0501
Std. Dev. ROA X Post Merger	0.482**	0.295	-0.0435	1.591***	-0.0571	0.896**
	-0.214	-0.209	-0.245	-0.376	-0.38	-0.362
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E5

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-3,+3] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROE	-0.193	-0.089	-0.228	-0.311	-0.0478	-0.328
	-0.132	-0.278	-0.175	-0.353	-0.556	-0.485
Post Merger	0.0121	0.0773***	-0.0115	-0.128	-0.179	0.0617
	-0.0295	-0.0207	-0.0401	-0.102	-0.214	-0.138
Std. Dev. ROE X Post Merger	-0.128	-0.222*	-0.224	1.269	1.314	-2.115***
	-0.181	-0.133	-0.245	-0.842	-1.866	-0.806
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROE	0.00691*	0.00915**	0.0022	-0.0974**	2.08E-02	1.10E-02
	-0.0036	-0.0036	-0.0041	-0.0445	-0.0881	-0.0078
Post Merger	-0.0193	0.0237	0.0770**	0.0198	0.116***	0.0349
	-0.0299	-0.0291	-0.034	-0.042	-0.0356	-0.0497
Std. Dev. ROE X Post Merger	0.00483	0.00547*	0.00153	0.0525	-0.233**	0.00162
	-0.0032	-0.0032	-0.0037	-0.0773	-0.0926	-0.0068
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Additional summary tables of model 2 coefficients for event windows of [-4,+4] (Tables 3.2.11 to 3.2.15)

Table E6

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-4,+4] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.573*	0.397*	0.666*	1.439	-0.402	-1.363
	-0.296	-0.221	-0.404	-0.917	-2.004	-1.367
Post Merger	0.0146	0.0834***	-0.014	-0.0707	-0.138	0.0508
	-0.0318	-0.0229	-0.0434	-0.116	-0.225	-0.152
ROA X Post Merger	-0.833**	-0.506**	-0.944**	1.403	4.301*	-3.310**
	-0.349	-0.244	-0.476	-1.218	-2.408	-1.655
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	0.0498	-0.0243	0.0215	0.12	4.70E-01	4.62E-02
	-0.181	-0.176	-0.188	-0.299	-0.294	-0.286
Post Merger	-0.0047	0.0314	0.0741**	-0.0007	0.0985***	-0.0203
	-0.0309	-0.03	-0.0338	-0.0437	-0.036	-0.0492
ROA X Post Merger	0.342	0.228	-0.215	1.361***	-0.384	0.596
	-0.269	-0.261	-0.292	-0.437	-0.399	-0.43
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E7

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-4,+4] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	1.160***	0.462*	1.448***	1.092	0.174	-1.498
	-0.367	-0.245	-0.502	-0.777	-1.447	-1.795
Post Merger	0.0363	0.0939***	0.0154	-0.0866	-0.11	-0.0024
	-0.0335	-0.0243	-0.0458	-0.118	-0.239	-0.164
ROE X Post Merger	-1.111***	-0.643**	-1.353***	1.077	2.433	-1.273
	-0.378	-0.253	-0.518	-1.003	-2.171	-1.865
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
ROE	-0.001	-0.0038	0.00792	0.101*	-0.325*	0.132***
	-0.0303	-0.0295	-0.0324	-0.0571	-0.186	-0.048
Post Merger	0.00168	0.0363	0.0696**	0.0331	0.0709**	-0.0088
	-0.0302	-0.0293	-0.0329	-0.0424	-0.0347	-0.0479
ROE X Post Merger	0.00207	0.00422	-0.0078	0.00161	0.0188	-0.139***
	-0.03	-0.0292	-0.0321	-0.0837	-0.179	-0.0476
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E8

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-4,+4] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Return	-0.0005	0.00027	-0.0007	-0.00262*	-0.0025	-0.001
	-0.0004	-0.0003	-0.0006	-0.0016	-0.0023	-0.002
Post Merger	-0.0368	0.0752***	-0.0791	-0.0096	-0.164	0.128
	-0.0368	-0.0235	-0.0527	-0.125	-0.219	-0.173
Return X Post Merger	0.00047	-0.0006	0.00132	0.00202	0.00895*	-0.0005
	-0.0008	-0.0005	-0.0011	-0.0032	-0.0047	-0.0036
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Return	0.00105**	0.000903**	0.00121**	0.00187***	-4.54E-05	6.65E-05
	-0.0004	-0.0004	-0.0005	-0.0007	-0.0005	-0.0007
Post Merger	0.0119	0.0525	0.0464	0.00652	0.0723	-0.0413
	-0.0406	-0.0399	-0.0465	-0.0578	-0.0463	-0.0655
Return X Post Merger	-0.0007	-0.0009	-0.00153**	-0.0008	0.00019	-0.0009
	-0.0006	-0.0006	-0.0007	-0.0011	-0.0009	-0.0011
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E9

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-4,+4] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROA	-0.282	0.423	-0.283	-2.728	0.885	-0.449
	-0.416	-0.828	-0.554	-2.584	-5.295	-1.539
Post Merger	0.0239	0.0742***	-0.0013	-0.0804	-0.225	0.164
	-0.0298	-0.0209	-0.0405	-0.107	-0.209	-0.139
Std. Dev. ROA X Post Merger	-0.481*	-0.235	-0.557	0.856	2.8	-5.428***
	-0.257	-0.177	-0.348	-1.131	-2.169	-1.168
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. Roa	-0.032	0.16	0.15	0.671	1.715**	1.964***
	-0.271	-0.27	-0.311	-0.633	-0.784	-0.616
Post Merger	-0.0289	0.0166	0.0770**	-0.0127	0.115***	0.0109
	-0.0302	-0.0294	-0.0343	-0.0424	-0.0367	-0.0501
Std. Dev. ROA X Post Merger	0.482**	0.295	-0.0435	1.591***	-0.0571	0.896**
	-0.214	-0.209	-0.245	-0.376	-0.38	-0.362
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Table E10

Relationship between shared ancestry indicator and sensitivity of compensation to performance around deals presents panel regression coefficient estimates and corresponding robust standard errors clustered by deal (in parentheses). All specifications include year and industry fixed effects. ***, **, and * correspond to statistical significance at 1%, 5%, and 10% level, respectively.

Dep. Var = Logarithm of compensation over event window years [-4,+4] around deal

Panel A: Same Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROE	-0.193	-0.089	-0.228	-0.311	-0.0478	-0.328
	-0.132	-0.278	-0.175	-0.353	-0.556	-0.485
Post Merger	0.0121	0.0773***	-0.0115	-0.128	-0.179	0.0617
	-0.0295	-0.0207	-0.0401	-0.102	-0.214	-0.138
Std. Dev. ROE X Post Merger	-0.128	-0.222*	-0.224	1.269	1.314	-2.115***
	-0.181	-0.133	-0.245	-0.842	-1.866	-0.806
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	633	633	633	633	633	633

Panel B: Different Ancestry Deals

Measure	Total Compensation	Salary	Bonus	Longterm 1	Longterm 2	Longterm 3
	(1)	(2)	(3)	(4)	(5)	(6)
Std. Dev. ROE	0.00691*	0.00915**	0.0022	-0.0974**	2.08E-02	1.10E-02
	-0.0036	-0.0036	-0.0041	-0.0445	-0.0881	-0.0078
Post Merger	-0.0193	0.0237	0.0770**	0.0198	0.116***	0.0349
	-0.0299	-0.0291	-0.034	-0.042	-0.0356	-0.0497
Std. Dev. ROE X Post Merger	0.00483	0.00547*	0.00153	0.0525	-0.233**	0.00162
	-0.0032	-0.0032	-0.0037	-0.0773	-0.0926	-0.0068
Additional Controls	Yes	Yes	Yes	Yes	Yes	Yes
No. of Deals	765	765	765	765	765	765

Appendix F

Complete table of observed CEO ancestries in chapter 3.

Table F1

Full list of distribution of modal / most likely country of ancestral origin for bidder and target CEOs identified by surname. CEO names obtained from Standard & Poor's Execucomp database. Ancestry data approximated from arriving New York, US, passenger and crew lists (including Castle Garden and Ellis Island) between 1820-1957 obtained from Ancestry.com

Ancestry	Total			Acquiror		Target	
	Frequency (count)	Frequency (%)	Cumulative Frequency (%)	Frequency (count)	Frequency (%)	Frequency (count)	Frequency (%)
Argentinian	7	0.24%	0.24%	2	0.14%	5	0.34%
Armenian	12	0.43%	0.67%	7	0.50%	5	0.36%
Austrian	14	0.51%	1.18%	6	0.43%	8	0.59%
Belgian	9	0.33%	1.51%	6	0.43%	3	0.23%
Brazilian	6	0.20%	1.71%	1	0.07%	5	0.33%
Bulgarian	8	0.27%	1.98%	6	0.43%	2	0.11%
Canadian	20	0.72%	2.69%	12	0.86%	8	0.57%
Chinese	42	1.50%	4.19%	19	1.36%	23	1.64%
Croatian	18	0.64%	4.84%	7	0.50%	11	0.79%
Czech	12	0.44%	5.28%	8	0.57%	4	0.31%
Danish	37	1.33%	6.61%	20	1.43%	17	1.23%
Dutch	77	2.74%	9.35%	40	2.86%	37	2.62%
English	1124	40.20%	49.55%	590	42.20%	534	38.20%
Finnish	6	0.22%	49.77%	4	0.29%	2	0.15%
French	71	2.55%	52.32%	35	2.50%	36	2.60%
German	402	14.38%	66.70%	203	14.52%	199	14.23%
Greek	32	1.13%	67.83%	15	1.07%	17	1.19%
Hungarian	9	0.33%	68.16%	3	0.21%	6	0.45%
Indian	33	1.19%	69.35%	19	1.36%	14	1.02%
Iranian	4	0.14%	69.49%	2	0.14%	2	0.14%
Irish	125	4.47%	73.96%	64	4.58%	61	4.36%
Italian	160	5.72%	79.68%	76	5.44%	84	6.01%
Japanese	6	0.22%	79.90%	4	0.29%	2	0.15%
Jewish	198	7.08%	86.98%	101	7.22%	97	6.94%
Lithuanian	1	0.04%	87.02%	1	0.07%	0	0.01%
Maltese	2	0.07%	87.09%	1	0.07%	1	0.07%
Mexican	1	0.05%	87.14%	0	0.00%	1	0.10%
Norwegian	36	1.28%	88.42%	14	1.00%	22	1.56%
Pakistani	1	0.05%	88.47%	1	0.07%	0	0.03%
Polish	67	2.41%	90.88%	19	1.36%	48	3.46%
Romanian	13	0.47%	91.35%	8	0.57%	5	0.37%
Russian	32	1.14%	92.50%	10	0.72%	22	1.57%
Scottish	66	2.36%	94.86%	24	1.72%	42	3.00%
Serbian	7	0.26%	95.12%	3	0.21%	4	0.31%
Slovakian	6	0.20%	95.32%	2	0.14%	4	0.26%
Spanish	39	1.39%	96.71%	18	1.29%	21	1.49%
Swedish	34	1.22%	97.93%	16	1.14%	18	1.29%
Swiss	26	0.93%	98.86%	14	1.00%	12	0.86%
Syrian	6	0.20%	99.06%	3	0.21%	3	0.19%
Ukrainian	2	0.07%	99.13%	1	0.07%	1	0.07%
Vietnamese	4	0.13%	99.26%	2	0.14%	2	0.12%

Welsh	16	0.57%	99.83%	9	0.64%	7	0.50%
Yugoslavian	5	0.18%	100.01%	2	0.14%	3	0.22%
Total	2796	100%		1398	100%	1398	100%
Same Ancestry	633	Different Ancestry	765				