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Aggressive CEOs and Bank Mergers and Acquisitions

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Aggressive CEOs and Bank Mergers and Acquisitions

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Abstract: The U.S. banking industry has seen waves of mergers since the 1980s. Despite a significant body of research on the determinants of these waves, there are few studies of how CEOs influence banks' mergers and acquisitions (M&As). This paper studies the effect of CEO aggressiveness on bank M&As. We construct a new measure of bank CEO aggressiveness based on CEOs' ancestral countries of origin and data on inter-country wars. We find that aggressive CEOs are more likely to acquire other banks. Moreover, the impact of CEO aggressiveness on bank M&A decisions is more pronounced when the CEOs are from larger and more profitable banks, when CEOs have a longer tenure, and when CEOs' ancestral country of origin has a more masculine culture. Moreover, we show that aggressive CEOs are more likely to make acquisitions when CEOs possess more cultural maintenance, which captures the extent to which CEOs retain their original cultural values and beliefs. Finally, we document positive short-term stock market reactions to bank M&As initiated by aggressive CEOs.

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1. Introduction

Aggressive CEOs are not rare. CEO aggressiveness can be observed in their leadership styles and their corporate actions. For example, Bloomberg described Tyco International's CEO, Dennis Kozlowski, as an aggressive CEO after his unexpected acquisition of CIT Group in 2001.[1] During his tenure as the CEO of Tyco, Kozlowski spent $53 billion and made over 120 acquisitions. His aggressiveness was obvious—although CIT was one of the nation's largest independent commercial finance company, acquiring CIT was a very risky action for Kozlowski because Tyco, as a security systems company, had limited experience in the competitive financial industry. In fact, aggressive CEOs can affect not only external but also internal corporate actions. For example, Mark Pincus, the CEO of Zynga from 2007 to 2013, treated his staff aggressively—he was reported to track employee performance analytics and set harsh deadlines.[2] Nonetheless, the effects of aggressive CEOs on business outcomes are unclear. In an interview, Ray Zinn, former CEO of Micrel, said that an aggressive CEO makes a big difference.[3] However, there are no empirical studies of exactly what aggressive CEOs bring to firms. This paper constructs a new measure of CEO aggressiveness based on CEOs' ancestral countries of origin and examines whether aggressive CEOs in the banking industry are more likely to make acquisitions.

There is no consensus on how to define CEO aggressiveness. The Interpersonal Behavior Survey (IBS) measures various dimensions of aggressive behavior, such as hostile stance, expression of anger, disregard for others' rights, and verbal and physical aggressiveness (Mauger et al. 1980). In line with this notion, we consider a CEO to be aggressive if the CEO exhibits

[1] The Most Aggressive CEO: https://www.bloomberg.com/news/articles/2001-05-27/the-most-aggressive-ceo
[2] Zynga's Tough Culture Risks a Talent Drain: https://www.cnbc.com/2011/11/28/zyngas-tough-culture-risks-a-talent-drain.html
[3] Zinn: An aggressive CEO makes a big difference: https://www.embedded-computing.com/lessons-from-a-leader/zinn-an-aggressive-ceo-makes-a-big-difference-3

hostility, assertiveness, and argumentativeness. To measure aggressiveness, we identify the country of origin of the CEO's ancestors and use information on that country's culture to construct a measure of CEO aggressiveness.

CEO aggressiveness can be inherited because people's disposition to behave aggressively can be genetically inherited (Moffitt 2005). Aggressiveness varies among nations and cultures (Margalit and Mauger 1985; Fernandez and Fogli 2009). When individuals migrate from their home country to another country, they keep their cultural beliefs and values, although their external economic and institutional environments change (Fernández 2011). Immigrants not only bring their cultural beliefs and values to the new country, they also transmit their cultural beliefs and values to their descendants (Guiso et al. 2006). Thus, country of origin can be used as a proxy for CEO aggressiveness. Specifically, we use the number of inter-country wars initiated by a country as a measure of the aggressiveness of that country's cultural values and beliefs. A country is considered more aggressive if it has historically initiated inter-country wars more frequently, and CEOs are considered more aggressive if their families are from aggressive countries.

Aggressiveness can be captured by inter-country wars for the following two reasons. First, behavioral research suggests that human aggression can be explained by a culture pattern model, in which individuals learn aggressive behavior through dominant cultural characteristics (Sipes 1973). Moreover, Ember and Ember (1992) find that wars lead to the socialization of aggression and violence in the local community. The evidence suggests that human aggressiveness is a cultural consequence of wars. Similarly, children and adolescents exposed to military violence (e.g., wars) show aggressive and antisocial behavior (Qouta et al. 2008), which implies that wars can cultivate aggressive attitudes. Second, cultural beliefs and values can be passed down from ancestors to descendants (Fernandez and Fogli 2009; Guiso et al. 2006). Even though most of the

CEOs in our sample grew up in the U.S., the cultural beliefs and values of their ancestral countries of origin can affect them. This allows us to use CEOs' ancestral countries' cultural values and beliefs as a measure of CEO aggressiveness. Specifically, we construct a measure for CEO aggressiveness based on the number of inter-country wars initiated in the 1823–2003 period by the CEO's countries of origin. An advantage of using historical wars as a proxy for CEO aggressiveness is that they are exogenous to any contemporaneous factors that may affect CEOs' behavior.

CEO aggressiveness in our context is distinct from CEO overconfidence. Aggressiveness is one possible outcome of overconfidence. For example, overconfident CEOs are more aggressive in innovation investments (Hirshleifer et al. 2012), banks with overconfident CEOs are more likely to lend aggressively (Ho et al. 2016), and managerial overconfidence is associated with more aggressive financial reporting. However, CEOs' aggressive behavior can exist in the absence of overconfidence. Bertrand and Schoar (2003) find that managers who have an MBA are more aggressive in making strategic and operational decisions. In addition, Gormley et al. (2013) find that compensation contracts can affect the aggressiveness of CEO risk-taking. Together, these studies demonstrate that CEO overconfidence differs from aggressiveness. Moreover, overconfidence is an individual characteristic that varies among individuals, whereas this study considers aggressiveness as a cultural characteristic that varies among nations and cultures. For example, CEO overconfidence is often measured by stock options, and the variables capture differences between individual CEOs. In contrast, our measure of CEO aggressiveness captures cultural differences between groups of CEOs.

We focus on M&As because M&As are corporate actions that can be easily affected by an aggressive CEO. CEOs are more involved in M&A deals than in other corporate actions.

Aggressive CEOs are ambitious and pursue prestige and power rather than enjoying a quiet life. Thus, more aggressive CEOs are more likely to make acquisitions. Moreover, studies of the determinants of M&As document the agency costs of M&As (Jensen 1986, 1993) and find that CEOs may make acquisitions for reasons (e.g., empire-building) other than value maximization. For example, studies show that bank acquisitions are associated with CEO compensation (Bliss and Rosen 2001) and managerial ownership (Hughes et al. 2003). In other words, CEOs engage in M&As to maximize their own utility at the expense of shareholders. Therefore, CEO aggressiveness may be a non-value-maximizing driver of M&As.

It is also possible that frequent inter-country wars initiated by CEOs' ancestral countries may reduce CEOs' aggressiveness. If immigrants from a war-torn country are war-weary, they may despise aggression and pass nonaggressive attitudes to their descendants. If these descendants become CEOs, they may be less aggressive than the average CEO. In this case, our measure of CEOs' aggressiveness would not influence or would negatively influence bank M&As. We empirically test these opposing predictions.

We focus on the U.S. banking industry because although M&As have been widespread in the U.S. since the 1980s, there is mixed evidence on the determinants of bank M&As. Berger et al. (1999) and DeYoung et al. (2009) list the following causes of bank M&As: financial and technological innovation, financial conditions, deregulation, and international consolidation. Some empirical studies attribute bank mergers to value-maximizing drivers, such as cost efficiency (Berger and Humphrey 1992), profitability improvements (Knapp et al. 2006), and positive revaluations of bidders and targets (Houston et al. 2001). However, studies show that market reactions to M&As are negative (Houston and Ryngaert 1994) and there is no performance improvement following M&As (Knapp et al. 2005). Thus, investigating the non-value-maximizing

motives for bank M&As is important. In addition, we focus on the banking industry because bank mergers affect the stability of the entire financial system. On one hand, small or poorly performing banks can be absorbed by large and well-functioning banks through M&As. On the other hand, acquiring other banks can make big banks "too big to fail," increasing systematic risk in the financial market (Mishkin 1999; De Nicolo and Kwast 2002).

Using a sample of 1,075 bank-year observations from the 1993–2018 period, we find that more aggressive CEOs are more likely to acquire other banks. Specifically, CEOs whose ancestral countries of origin have initiated more inter-country wars make more acquisitions. We find that a one standard deviation (0.292) increase in CEO aggressiveness (*AGGRESSIVENESS*) is associated with a 4.35% increase in the likelihood that CEOs acquire other banks. The magnitude of the effect of CEO aggressiveness on bank M&As is approximately half that of bank size (10.44%). Our findings are robust to alternative measures of CEO aggressiveness, an alternative sample, and keeping only CEOs with dominant countries of origin.

Although our measure of CEO aggressiveness is not likely to suffer from reverse causality, it is possible that omitted variables such as unobserved bank or CEO characteristics are correlated with both CEO aggressiveness and bank M&As. To address this concern, we perform two omitted variable analyses. First, following Frank (2000), we apply the impact threshold for the confounding variable (ITCV) method. The ITCV method determines a threshold that an omitted variable must cross to overturn the significant effect of the focal independent variable. As we control for a broad set of variables, we find no evidence that invalidates the significant effect of CEO aggressiveness. Second, we apply a method for omitted variable analysis recently developed by Oster (2019) that tests the coefficient estimate sensitivity to changes in R^2. Our findings indicate

that the coefficient on CEO aggressiveness is robust, and the coefficient on CEO aggressiveness is unlikely to be zero because of omitted variables.

Next, we examine the mechanisms behind the CEO aggressiveness effect. We start the analysis by examining how bank and CEO characteristics affect the association between CEO aggressiveness and bank M&As. We find that larger banks and more profitable banks are more aggressive in acquiring other banks. CEOs from larger and more profitable banks have more bargaining power and thus can make acquisitions more easily. We also expect that as CEOs with longer tenure are more powerful, they will be more aggressive in acquiring other banks. We find evidence consistent with these expectations.

In our setting, CEO aggressiveness is related to CEOs' cultural heritage. We expect that CEOs possessing greater cultural maintenance are more likely to exhibit the cultural values of their ancestral countries of origin. We measure cultural maintenance using CEOs' first names. If a CEO's first name suggests the same country of origin as his or her surname, we classify the CEO as having greater cultural maintenance. That is, if a CEO's first name and surname originate from the same country, he or she is likely to share the cultural beliefs and values of that country. We test our conjecture by splitting the sample into low and high cultural maintenance subsamples and find that the effect of CEO aggressiveness on bank M&As is stronger in the high cultural maintenance subsample. Furthermore, CEOs are more likely to hold the cultural values and beliefs of their ancestral countries of origin if those countries share more cultural similarities with the United States. Therefore, we use culture distance, which is defined as the standardized deviation in culture dimensions between two countries, to measure cultural maintenance. We expect that a shorter cultural distance between a CEO's ancestral country of origin and the United States indicates more cultural maintenance. Our findings are consistent with the conjecture that the effect

of CEO aggressiveness on bank M&As is stronger when the culture of the CEO's ancestral country of origin is similar to that of the U.S.

In addition, we examine whether masculinity affects CEO aggressiveness. Masculinity is considered an important predictor of the need for achievement. Masculinity is also related to risk-taking behavior. We predict that CEOs whose ancestral country of origin has a more masculine culture are more likely to make acquisitions because of their stronger need for achievement. We find consistent evidence that CEOs more connected to the masculine culture are more likely to acquire other banks.

Finally, we examine the market reactions to acquisitions made by aggressive CEOs. We find evidence of positive market reactions to aggressive acquisitions that last for 3 to 6 months after the effective merger dates. There are two possible explanations for these findings. First, investors may value aggressive acquisitions because of the belief that managers learn from their errors (Roll 1986). As aggressive CEOs make more acquisitions than their peers, they are more experienced and have more opportunities to learn from the acquisition process. Second, it may be more difficult for target banks to negotiate with aggressive CEOs, and thus aggressive CEOs get better acquisition deals.

This paper adds to the literature on the determinants of bank M&As. We document that CEO aggressiveness is one explanation for bank M&As, and is positively associated with bank M&As. We also add to the literature on the impact of CEOs on corporate activities (Barker and Mueller 2002; Kaplan et al. 2012; Jenter and Lewellen 2015; Pan et al. 2019), particularly the literature on the economic effects of CEOs' cultural beliefs and values. Culture has significant effects on economic outcomes. For example, culture explains differences in economic growth between countries (Barro and McCleary 2003; Tabellini 2010) and the design of labor market

institutions (Algan and Cahuc 2010). However, few studies examine the economic and financial outcomes of CEOs' cultural beliefs and values. By examining CEOs' ethnicity, Ellahie et al. (2017) study the effect of inherited beliefs and values on CEO pay. They document that ethnicity affects CEO pay and performance-firing sensitivities. Liu (2016) studies corporate insiders' corruption culture by examining the corruption indices of insiders' ancestral countries and finds that insiders' corruption culture is associated with firm misconduct, such as earnings management, accounting fraud, option backdating, and opportunistic insider trading. Pan et al. (2019) discuss the consequence of CEOs' uncertainty avoidance as measured by their cultural background. They find that CEOs with higher uncertainty avoidance are less likely to make acquisitions. This study examines the economic outcomes of CEOs' culturally determined aggressiveness.

2. Data and Sample Selection

2.1. Bank M&As Sample

Our initial sample consists of 56,108 transformation events during the 1936–2020 period recorded in the Federal Reserve System's National Information Center (NIC). We then delete any events not related to M&As, and M&As between two bank holding companies with the same parent holding companies,[4] which leaves a sample of 3,444 transformation events. As the Federal Reserve Bank of New York only provides links between the RSSD9001 code used to identify banks and the Center for Research in Security Prices's permanent company identifier PERMCO[5] for the 1986–2018 period, our sample period ends in December 2018. We drop M&A observations for which there are no public survivors or no available CEO names. We collect CEOs' information

[4] M&As between banks owned by the same parent bank holding company are not applicable to our research setting. We retain observations in which neither the survivor nor the non-survivor bank has a parent bank holding company in the M&A.
[5] PERMCO-RSSD links: https://www.newyorkfed.org/research/banking_research/datasets.html

from DEF14A filings in EDGAR. As EDGAR files are available from 1993, our sample period is from 1993 to 2018, which reduces our sample to 1,365 bank-year observations. We also construct a matched sample consisting of bank holding companies that make no acquisition in the acquiring year of the matched company in the M&As sample. To be included in the matched sample, a bank holding company must be headquartered in the same state as the acquiring bank. In addition, the difference in total assets between a matched and acquiring bank must be within a ± 25% limit. Similarly, we drop matched banks for which CEO names are not available. Our final sample of bank M&As consists of 1,075 unique bank-year observations, including 360 bank-year observations of M&As and a matched sample of 715 bank-year observations without M&As (see sample description in Appendix E).[6] The final sample covers 383 unique banks from 24 U.S. states. Table 1 presents the distribution of banks across states. On average, there are 31 bank-year observations in each state, with a minimum of 10 and a maximum 173. In our sample, there are 500 unique CEOs with 421 unique surnames. They are aged from 40 to 75 years old with a mean age of 56. Around 98.4% of the CEOs are male.

[INSERT TABLE 1 HERE]

To show that our sample is representative of bank M&As in the U.S., we compare the sample distribution of bank-year observations among the states with the distribution of bank M&As in the NIC dataset. As shown in Appendix C, the complete NIC sample contains 3,292 bank-year M&As observations from the 1993–2018 period, and the top 10 states account for around 47% of all of the observations. In addition, the 17 least active states account for less than 1% of the total observations. This implies that bank M&As are not evenly distributed across states.

[6] To validate our sample, we perform a t-test on the characteristics of acquiring and non-acquiring banks. As shown in Appendix B, there are no significant differences in the characteristics of acquiring and non-acquiring banks.

We find that our sample distribution is roughly consistent with that of the complete dataset. For example, the top 10 states with the most observations in the NIC dataset are the same as in our sample, except for Minnesota (MN). Moreover, the 20 top states in our sample are all in the top 30 states in the NIC dataset. The differences between our sample and the dataset may be because our study focuses on publicly listed banks, and we drop all nonpublic bank holding companies. We believe that given the data availability, our sample reflects the distribution of M&As in the U.S.

2.2. CEOs' Aggressiveness

We use the number of inter-country wars initiated by a CEO's country of origin as a proxy for CEO aggressiveness. We first use surnames to identify a CEO's country of origin. As a surname can be associated with more than one country of origin, we examine the frequency of a surname in different countries and weight each country according to the relative frequency of the surname. Then, we use the number of inter-country wars initiated in the 1823–2003 period as a proxy for a country's aggressiveness. Finally, we develop a measure of a CEO's aggressiveness based on the weighted aggressiveness of their potential countries of origin.

2.2.1. Identifying CEOs' Countries of Origin

To identify a CEO's ancestral country of origin, we use CEO surnames and the New York Passenger and Crew Lists, which lists the passenger ships arriving from foreign ports to the port of New York from 1820 to 1957.[7] The data set includes each passenger's name, nationality, arrival date, port of departure, and birth year. We match CEOs' surnames with passengers who share the same surname, so that we can link the CEO's surname with the matching passengers' countries of

[7] The data set is available at https://www.ancestry.com/.

origin. We exclude passenger records with missing or ambiguous ethnicity and nationality data, which account for 3.43% of all of the records. Around 19.35% of the records are returning U.S. citizens, and we drop these U.S. citizens' records following Pan et al. (2019). The top 10 countries of origin are England (33.31%), Ireland (13.16%), Germany (8.26%), Scotland (5.36%), Italy (2.76%), Scandinavia (1.52%), China (1.41%), France (1.21%), Netherlands (1.09%), and Canada (1.00%).[8]

Given that each surname may be associated with multiple countries of origin, we calculate the percentage of people with a given surname who come from each possible country of origin. For example, 90.91%, 8.33%, and 0.76% of the people with the surname "Aichele" are from Germany, Russia, and Switzerland, respectively. Finally, once each surname is linked to all known countries of origin, the country of origin is calculated as the weighted value of the percentage of people with that surname from each potential country. Using this process, we identify 100 possible countries of origin for the CEOs in our sample. On average, each surname is associated with 19 possible countries of origin, and each country is linked to 90 CEOs. Moreover, around 79.34% of the surnames in our final sample have a dominant country of origin (i.e., over 50% of the people with that surname come from a dominant country). For example, the dominant country for "Aichele" is Germany.

2.2.2. Inter-country Wars Data

Our measure for CEOs' aggressiveness relies on the inter-country wars data set developed by Sarkees and Wayman (2010). The data set includes 95 inter-country wars during the 1823–

[8] The distribution of countries of origin in our sample is consistent with the distribution in Pan et al. (2019). For example, the top 10 countries of origin in Pan et al. (2019) are England, Germany, Ireland, Italy, Jewish, Scotland, France, Scandinavia, Russia, and Poland. Given those with Jewish ethnicity are all grouped as Jewish instead of using citizenship information, we remove all the "Jewish" CEOs from our sample for robustness check. We find that our results remain. The results are untabulated but available upon request.

2003 period between 105 territory entities. It records the key data on the war, including war name, initiator, combatants, start and end date, outcome, and battle deaths. A conflict is classified as a war based on the status of the territorial entities, and a war is classified as an inter-country war if it involves more than one country.[9] We aggregate entities in our data set to match the data in the inter-country wars data set. For example, we aggregate England, Scotland, and Wales as the United Kingdom.

The 10 countries that initiated the most inter-country wars in the data set are Russia, France, Japan, the U.S., the U.K., Italy, Germany, China, Pakistan, and Israel (See Appendix D). For example, Russia, France, and Japan initiated 10, 8, and 7 inter-country wars in the 1823–2003 period, accounting for 9.17%, 7.34%, and 6.42% of all inter-country wars in the data set, respectively.

2.2.3. Measure of CEO Aggressiveness

We measure a country's aggressiveness as the number of inter-country wars initiated by the country. As not all inter-country wars may reflect the same level of aggression, each war is weighted by the pervasiveness of a war. Specifically, we use combatant fatalities, measured as the ratio of battle deaths to the total population of the initiator country, as a proxy for the pervasiveness of the war. Then, our measure of a country's aggressiveness is computed as the weighted total number of inter-country wars, which can be expressed by the following equation [10]:

$$Aggressiveness_{country} = \sum_{s=1}^{n} weight_s \times 1 \quad (1)$$

[9] Detailed definitions and descriptions of inter-country wars are available at correlatesofwar.org/data-sets/COW-war.
[10] To reduce the concern that the probability of initiating an inter-country war is associated with country-level characteristics, we regress the number of inter-country wars initiated by a country on its country characteristics (i.e., the number of neighbor countries, total population, economic growth, and land area). We find no association between the number of inter-country wars and these country level characteristics.

The subscript *s* denotes the s^{th} inter-country war initiated by a country, $weight_s$ represents combatant fatalities in the war, and *n* denotes the total number of inter-country wars initiated by the country. Then, CEO aggressiveness is computed as the weighted value of $Aggressiveness$ for all of the possible countries of origin of the CEO's surname. The calculation of CEOs' aggressiveness can be expressed as follows:

$$Aggressiveness_{surname} = \sum_{k=1}^{q} Percentage_k \times Aggressiveness_{country_k} \quad (2)$$

The subscript *k* denotes the k^{th} country of origin with respect to a surname, $percentage_k$ represents the percentage of people with a given surname from country *k*, and *q* denotes the total number of possible countries of origin. Given that there is no exact economic explanation for the magnitude of CEOs' aggressiveness, we rank $Aggressiveness_{surname}$ in our CEO sample, and use the deciles of $Aggressiveness_{surname}$ to measure CEOs' aggressiveness (*AGGRESSIVENESS*).

3. Aggressive CEOs and Bank M&As

3.1. Baseline Results

To examine how CEO's aggressiveness impacts bank mergers and acquisition decisions, we estimate the following regression equation:

$$M\&A_{ij} = \beta_0 + \beta_1 AGGRESSIVENESS_{ij} + \boldsymbol{\alpha X_{ij}} + \varepsilon_{ij} \quad (3)$$

$M\&A_{ij}$ is an indicator variable that equals 1 if bank i made at least one acquisition in year j, and 0 otherwise. $AGGRESSIVENESS_{ij}$ is the proxy for the aggressiveness of bank *i*'s CEO in year *j*. X_{ij} is a set of control variables, and we control for both bank characteristics and CEO characteristics. We control for the following variables: bank size, measured as the natural logarithm of total assets (*SIZE*); *ROA*, measured as net income scaled by total assets; *ROE*,

measured as net income scaled by total equity; equity to asset ratio (*EQUITY*), measured as total equity scaled by total assets; net interest (*INTEREST*), measured as net interest scaled by total assets; cost to income ratio (*COST_INCOME*), measured as total costs scaled by total income; and loan loss provision (*LOAN_LOSS_PROVISION*), measured as loan loss provision scaled by lagged total loans. In addition, we control for CEO gender (*CEO_GENDER*) and CEO age (*CEO_AGE*). Detailed definitions of the control variables are given in Appendix A.

[INSERT TABLE 2 HERE]

We report the summary statistics of the variables used in the baseline regression in Table 2. On average, 33.5% of banks make at least one acquisition each year. The mean of *AGGRESSIVENESS* is 0.541 with a standard deviation of 0.292. The correlation matrix is reported in Panel A of Table 3. We can see that there is a positive and significant correlation between *M&A* and *AGGRESSIVENESS*.

We next investigate mergers and acquisitions changes upon CEO changes to provide a general trend on the relation between CEO aggressiveness changes and how the likelihood of an M&A would change accordingly. Specifically, we look at CEO changes 1) from non-aggressive to aggressive CEOs, 2) from aggressive to non-aggressive CEOs, and 3) from aggressive (non-aggressive) to aggressive (non-aggressive) CEOs. To do so, we first keep banks that experience CEO changes in our sample. We classify CEOs as aggressive or non-aggressive based on the median value of CEO aggressiveness index (0.227). Next, we categorize three types of CEO changes, i.e. non-aggressive to aggressive, aggressive to non-aggressive, and aggressive (non-aggressive) to aggressive (non-aggressive) CEOs. In our sample, there are 27 aggressive CEOs succeed non-aggressive CEOs, 18 non-aggressive CEOs succeed aggressive CEOs, and 58 aggressive (or non-aggressive) CEOs succeed aggressive (or non-aggressive) CEOs. To see

whether the changes of CEOs are associated with bank M&As changes, we take the mean difference in the number of M&As made by CEOs before and after the change. As shown in Panel B of Table 3, the mean difference in the number of M&As made by non-aggressive (before) to aggressive (after) CEOs (group 1) is positive (0.296), which indicates that when CEO changes from a non-aggressive to an aggressive one, the likelihood of M&As has an increase of 0.296. Consistently, in group 2 where aggressive CEOs change to non-aggressive CEOs, we find that the mean difference is negative (but small at a value of -0.055). In group 3, we also investigate whether there is a difference in M&As likelihood when the changes of CEOs do not result in aggressiveness changes. We find that the absolute difference in group 3 (0.034) is smaller than that in group 1 or group 2. Taken together, the results in Panel B of Table 3 provide initial and direct evidence on how the likelihood of an M&A would change in response to the CEO change.[11]

[INSERT TABLE 3 HERE]

We show the results of regressing *M&A* on *AGGRESSIVENESS* using an ordinary least squares (OLS) regression in Table 4. As shown in column 1, the coefficient on *AGGRESSIVENESS* is positive and significant. Columns 2 and 3 present the results after controlling for bank characteristics and CEO characteristics, respectively. Column 4 includes state and year fixed effects to control for unobserved time-invariant state-level characteristics and time-variant unobserved variables that are common to all banks. The coefficients on *AGGRESSIVENESS* remain positive and statistically significant, suggesting that CEO aggressiveness is positively associated with bank M&As.[12] To explain the economic magnitude, we use the results in column

[11] Due to very small sample size on CEO changes, we did not further produce the regression analysis.

[12] We acknowledge that the length of time since a family immigrated to the U.S. affects the transmission of cultural beliefs and values. The longer they have been in the U.S., the less likely they are to retain their beliefs and values of their ancestral country of origin. We search for data on CEOs' parents or families, but the historical data are very

4 as an example. The estimated coefficient on *AGGRESSIVENESS* is 0.149, suggesting that a one standard deviation (0.292) increase in CEO aggressiveness is associated with a 4.35% increase in the likelihood that a CEO will acquire a bank. The effect of CEO aggressiveness on M&As is approximately half the effect of bank size (10.44%).

[INSERT TABLE 4 HERE]

Aggressive CEOs can affect bank M&As in a few ways. First, CEOs are much more involved in M&A deals than in other corporate actions, and thus their aggressiveness may have more direct effect on M&As. Second, aggressive CEOs are ambitious and pursue prestige, so making acquisitions may be an important strategy for expanding their business. Moreover, more aggressive CEOs are less likely to enjoy the quiet life (Bertrand and Mullainathan 2003), and more likely to aggressively pursue acquisitions.

3.2. Robustness Tests

To investigate the robustness of our results, we perform another set of tests. First, we use two alternative measures for CEO aggressiveness. The first alternative measure is the raw value of *AGGRESSIVENESS* instead of deciles of *AGGRESSIVENESS*. The second alternative measure is based on the number of inter-country wars weighted by the length of each war. In other words, instead of using battle deaths, we use the length of the war as a proxy for its impact. The results

limited. It is not possible to determine the length of time that a CEO's family has been in the U.S. To alleviate this concern, we collect CEO education information from various sources, including EDGAR's DEF14A filings and Wikipedia. We conjecture that if a CEO received an undergraduate degree in the U.S., it is likely that his/her family has been in the U.S. for longer time than a CEO who received an undergraduate degree in another country. Among the 500 unique CEOs in our sample, we identify the undergraduate degrees of 352 CEOs, and 96% of them (338 CEOs) received U.S. undergraduate degrees. This suggests that most of the CEOs have resided in the U.S. for a long time and therefore, the time factor that could impact how their culture beliefs and values are kept is attenuated. As a robustness check, we remove all the CEOs without U.S. undergraduate degrees and repeat our baseline regressions. In the untabulated results, there are 787 observations left, and we find that the effect of CEO aggressiveness remains positive and significant.

are reported in Panel A of Table 5. We continue to find a positive association between CEO aggressiveness and bank M&As.

[INSERT TABLE 5 HERE]

Second, we use CEOs' dominant country of origin to measure CEO aggressiveness. That is, instead of a weighted value of all possible countries of origin, we only use the dominant country of origin of a CEO's surname for computing *AGGRESSIVENESS*. We remove 89 CEOs without a dominant country of origin from our sample. The results for this alternative measure are presented in Panel B of Table 5. The effect of CEO aggressiveness is still positive and significant.

Third, we use different matching samples. Specifically, we change the criterion for matching banks with M&As to banks with no M&As. We allow the total assets of the matching bank to deviate ±20% or ±30% from that of acquiring banks. As presented in Panel C of Table 5, we find that the magnitude of the coefficients on *AGGRESSIVENESS* are similar, which supports our main findings.

3.3. Omitted Variable Analysis

As our measure of CEO aggressiveness is based on historical inter-country war data, it is unlikely that our findings are affected by reverse causality. However, endogeneity problems could be caused by omitted variables. For example, unobserved CEO characteristics could be correlated with both CEO aggressiveness and bank M&As. To address this concern, we provide two additional analyses, i.e., an ITCV analysis, following Frank (2000), and a coefficient sensitivity analysis, following the approach developed by Oster (2019).

To invalidate the significant effect of *AGGRESSIVENESS*, an unobserved variable would have to be correlated with both the dependent and the independent variables, which in this study

are CEO aggressiveness and bank M&As. According to this notion, Frank (2000) derives a threshold (i.e., ITCV) that an unobserved variable must cross to significantly affect an explanatory variable. The ITCV is defined as the lowest product of the partial correlation between the confounding variable and the independent variable and the partial correlation between the confounding variable and the dependent variable. If the impact of an unobserved confounding variable exceeds the ITCV, the significance of the explanatory variable is overturned. That is, a higher ITCV means that it is less likely an omitted variable could invalidate the inference based on the explanatory variable.

[INSERT TABLE 6 HERE]

Following Frank (2000), we calculate the ITCV threshold for *AGGRESSIVENESS* and report the results in column 1 of Panel A in Table 6. As shown, the ITCV for *AGGRESSIVENESS* is 0.030, which indicates that the impact of an omitted variable has to be at least as large as 0.030 to overturn the significant effect of *AGGRESSIVENESS*. In particular, such an omitted variable has to be correlated with both *AGGRESSIVENESS* and *M&A*, and each correlation needs to be 0.174 (the square root of 0.030). Though ITCV provides a threshold, we are not able to observe such an omitted variable and evaluate its impact. Following Frank (2000) and Larcker and Rusticus (2010), we examine the effects of the control variables on the coefficient on *AGGRESSIVENESS*. We first report the partial impact of each control variable in column 2 in Panel A of Table 6. The impact of each control variable is calculated as the product of the correlation between *AGGRESSIVENESS* and the control variable, and the correlation between *M&A* and the control variable, conditional on all the other control variables. Similarly, we report the raw impact of each control variable in column 3, where the raw impact is calculated as the unconditional correlations between *AGGRESSIVENESS* and *M&A* with the control variable. A positive (negative) impact

implies that the inclusion of a control variable makes the coefficient on *AGGRESSIVENESS* less (more) positive. *CEO_AGE* has the largest partial impact (0.009) on the coefficient on *AGGRESSIVENESS* in column 2. However, the magnitude of the impact of *CEO_AGE* is much smaller than the ITCV of *AGGRESSIVENESS* (0.030), which implies that any unobserved omitted variable would have to be more strongly correlated with *AGGRESSIVENESS* and *M&A* than *CEO_AGE*. As we have controlled for a set of variables that capture bank characteristics and CEO characteristics, the probability that there is an unobserved omitted variable with an effect large enough to invalidate the effect of *AGGRESSIVENESS* is extremely low. We find consistent evidence in column 3, where the largest raw impact comes from *CEO_AGE*. However, the raw impact of *CEO_AGE* (0.008) is not large enough to overturn the significant effect of *AGGRESSIVENESS*.

We further reduce the omitted variable concern by performing a coefficient sensitivity analysis following the approach developed by Oster (2019). This approach evaluates the sensitivity of the coefficient to an explanatory variable by comparing the change in R^2 between an uncontrolled regression (i.e., a univariate regression without fixed effects) and a controlled regression (i.e., a regression with control variables and fixed effects). Our model is not likely to suffer from the omitted variable problem if the coefficient on the explanatory variable is stable as R^2 increases from the uncontrolled regression to the controlled regression. The approach has been widely used in recent studies (Heimer et al. 2019; Dixon et al. 2021).

We report the results of the coefficient sensitivity analysis in Panel B of Table 6. Column 1 reports the coefficient on *AGGRESSIVENESS*, the standard error, and R^2 from the uncontrolled regression, which has no control variables or fixed effects. Column 2 reports the coefficient on *AGGRESSIVENESS*, the standard error, and R^2 from the controlled regression, which includes all

of the control variables and fixed effects. Following Oster (2019), we implement two methods for establishing the robustness of the coefficient stability. First, the coefficient stability can be evaluated by the robustness of the coefficient on *AGGRESSIVENESS*. Assuming that R_{max} is the R-squared from the regression with an omitted variable, the coefficient is stable if the bias-adjusted coefficient ($\tilde{\beta}$) is comparable to the baseline effect coefficient and the controlled effect coefficient on *AGGRESSIVENESS*. Following Oster (2019), we set $R_{max} = 0.134$ ($R_{max} = R_{controlled} \times 1.3$), and report the bias-adjusted β. As shown in column 3, the estimated coefficient on *AGGRESSIVENESS* is 0.152. The coefficient on *AGGRESSIVENESS* is clearly stable as R^2 increases to 0.134, assuming $\delta = 1$ (i.e., the degree of selection on unobservable variables is just as important as the selection on control variables). Second, the extent to which unobservable variables could turn the coefficient on *AGGRESSIVENESS* to zero provides a benchmark for coefficient stability. We report the estimated δ by assuming $\beta = 0$ and $R_{max} = 0.134$. The result, $\delta = 37.514$, implies that to make the coefficient on *AGGRESSIVENESS* zero, the unobserved variables have to be 37.514 times more influential than the control variables. Given our broad set of control variables, it is unlikely that any unobserved variables meet this criterion. Together, these robustness analyses suggest that the coefficient on *AGGRESSIVENESS* is insensitive to omitted variables and the concerns on unobserved confounding factors are alleviated.

4. Cross-Sectional Analysis

In this section, we examine factors that may moderate the relation between CEO aggressiveness and bank M&As. These factors include both bank characteristics and CEO characteristics.

4.1. Bank Size, Profitability, and CEO Tenure

We first examine how bank size and profitability influence the effect of CEO aggressiveness on bank M&As. CEOs from larger and more profitable banks tend to have more bargaining power when negotiating M&As. Moreover, larger banks can integrate resources more easily and improve bank efficiency after M&As. We therefore expect that aggressive CEOs from larger and more profitable banks will make more acquisitions. We perform subsample analyses based on bank size and profitability in Table 7. We split the sample into subsamples based on the median bank size and median profitability in columns 1 and 2 of Table 7, respectively. Bank size is measured by total assets, and profitability is measured by ROA. As shown in column 1 (column 2), the coefficient on *AGGRESSIVENESS* is positive and significant (insignificant) for the big (small) bank subsample. Similarly, we find that the effect of CEO aggressiveness is only positive and significant in the high bank profitability subsample. Overall, the results are consistent with our expectations; that is, the effect of CEO aggressiveness on bank M&As is stronger in larger and more profitable banks.

[INSERT TABLE 7 HERE]

We then investigate how CEO characteristics, specifically CEO tenure, moderate the relationship between CEO aggressiveness and bank M&As. CEO tenure is an important dimension of CEO power (Morck et al. 1988; Brookman and Thistle 2009). CEOs with longer tenure are more entrenched and more likely to make decisions based on their own needs. We therefore expect CEO tenure to facilitate aggressive acquisition activities. In other words, we expect that CEO tenure strengthens the effect of CEO aggressiveness on bank M&As. In Table 8, we split the sample into long and short CEO tenure subsamples according to median tenure, with tenure measured by the number of years since a CEO took the helm. We find that the association between

CEO aggressiveness and bank M&As is significant only in the long CEO tenure subsample (column 1) and is insignificant in the short CEO tenure subsample (column 2).

[INSERT TABLE 8 HERE]

4.2. Cultural Maintenance

Immigrants to the U.S. may retain their culture and traditions to various degrees. Immigrants are more likely to transmit their original cultural values and beliefs to their descendants if they have greater cultural maintenance. Thus, we expect that cultural maintenance may enhance the effect of CEO aggressiveness on bank M&As. We use CEOs' first names and the cultural distance between CEOs' countries of origin and the U.S. as two proxies for cultural maintenance.

The choice of first names is considered an indicator of culture assimilation (Alba and Nee 2009). For example, an immigrant with an "American" name would be considered to have lost cultural distinctiveness. Interestingly, Goldstein and Stecklov (2016) find that immigrant children who have "American"-sounding names tend to have more occupational success. Thus, immigrant parents face a trade-off between transmitting cultural values and beliefs to their descendants and maximizing their descendants' opportunity for success by giving up their ethic-sounding names. Immigrant parents who give their children first names that are common in their countries of origin are more likely to maintain ethnic distinctiveness. That is, a CEO whose first name and surname reflect the same country of origin is more likely to hold the cultural values and beliefs of that country. Thus, we expect a more positive association between CEO aggressiveness and bank M&As if the CEOs' first and last names are from the same country.

We use behindthename.com and name.org to classify the country of origin of the CEOs' first names. We then compare CEOs' first names' countries of origin with their surnames'

countries of origin. If the country of origin of a CEO's first name matches one of the countries of origin of his or her surname, we use the weighted sum of the surname's countries of origin to measure the extent to which the surname and first name share the same country of origin. We compute *SAME_ORIGIN* as follows:

$$SAME\_ORIGIN = \sum_{k=1}^{q} Percentage_k \times FirstName_k \quad (4)$$

$Percentage_k$ indicates the weighted country of origin of a surname, and the subscript q denotes the total number of potential countries of origin for a surname. $FirstName_k$ is a dummy variable that equals 1 if country k is among the potential countries of origin for the CEO's first name, and 0 otherwise.

Then, we perform a subsample analysis by splitting the sample based on the median of *SAME_ORIGIN*. A higher value of *SAME_ORIGIN* indicates a CEO is more likely to retain the cultural values of his or her countries of origin. The results are presented in the first two columns of Table 9. The coefficient on CEO aggressiveness is only significant for the high *SAME_ORIGIN* subsample (column 1). This result is consistent with our conjecture that CEO aggressiveness has a stronger impact on bank M&A decisions for CEOs who retain the cultural values of their ancestral countries of origin.

The culture distance between CEOs' ancestral countries of origin and the U.S. may affect cultural maintenance. A closer cultural distance indicates fewer religious and linguistic differences, making it easier for people to maintain their cultural values. Consequently, we expect that the impact of CEO aggressiveness on M&As is more pronounced when the CEO's country of origin is similar to the U.S. We construct a measure for cultural distance following Sampath and Rahman

(2018), in which cultural distance is defined as the difference between a CEO's country of origin and the U.S., in terms of the four culture dimensions defined by Hofstede (1984). Cultural distance (*CD)* is calculated as follows:

$$\mathrm{CD}_i = \frac{1}{4}\sum_{l=1}^{4}\frac{(C_{il} - C_{ul})^2}{V_l} \tag{5}$$

The subscript *i* denotes the i^{th} country of origin, and CD_i represents the cultural distance between the U.S. and country *i*. The subscript *l* denotes the l^{th} culture dimension i.e., power distance (PDI), uncertainty avoidance (UAI), individualism (IDV), and masculinity (MAS). C_{il} represents the index of culture *l* in country *i*, C_{ul} represents the index of culture *l* in the U.S., and V_l is the variance in the index of culture *l* among all of the countries of origin associated with one surname. Then, the culture distance between CEOs' countries of origin and the U.S. is computed as the weighted culture distance of all possible countries of origin.

[INSERT TABLE 9 HERE]

We split the sample by the median of cultural distance and perform a subsample analysis in columns 3 and 4 of Table 9. The results show that the effect of CEO aggressiveness is more positive and significant when cultural distance is closer (column 3). Overall, our findings support the view that cultural maintenance increases the effect of CEO aggressiveness on bank M&As.

4.3. CEOs' Need for Achievement

CEOs' aggressiveness could be increased by a need for achievement. There are many studies of the role of achievement motivation in entrepreneurial actions. McClelland (1961) posits that a high need for achievement is associated with entrepreneurship, as it may provide more achievement satisfaction. Moreover, it is documented that the need for achievement is a key

component of entrepreneurial activities (Cover and Johnson 1976). Thus, a CEO with a high need for achievement may attain achievement satisfaction through acquisitions.

We use masculinity as a proxy for CEOs' need for achievement, as studies show that masculinity is a predictor of the need for achievement (Hofstede 1984). Masculinity is the opposite pole of femininity and countries can be classified as masculine or feminine. Therefore, we expect that CEOs whose families are from countries with high masculinity scores are more likely to engage in M&As.

[INSERT TABLE 10 HERE]

We perform a subsample analysis of CEOs' need for achievement in Table 10. We split the sample by the median of *MASCULINITY*, where *MASCULINITY* is defined as the weighted masculinity index defined by Hofstede (1984). Hofstede (1984) provides country level measures of masculinity, which assign each country a score between 0 and 100. A higher score indicates greater masculinity. The results show that the effect of CEO aggressiveness on bank M&As is only statistically significant in the high masculinity subsample (column 1). This suggests that CEOs' need for achievement, as captured by the masculine culture of their ancestral countries, has a positive effect on the association between CEO aggressiveness and bank M&As.

5. Post-M&A Performance

The previous analyses show that CEO aggressiveness leads to more bank M&As. In this section, we explore the real impact of CEO aggressiveness, that is, the market reactions to bank M&As. Specifically, we examine the effect of CEO aggressiveness on buy-and-hold abnormal returns 3 and 6 months after a merger. Table 11 presents the results of regressing buy-and-hold abnormal returns on CEO aggressiveness. The results show that there is a positive association

between buy-and-hold abnormal returns and M&As by aggressive CEOs at 3 and 6 months post-merger. These results indicate that the market responds positively to aggressive CEOs' acquisition of banks. This implies that the market perceives acquisitions made by aggressive CEOs as value enhancing in the short term.

[INSERT TABLE 11 HERE]

There are two possible reasons for the positive market response to aggressive CEOs' acquisitions. First, aggressive CEOs make more acquisition over their career than other CEOs. As Roll (1986) points out, it is difficult for CEOs who make few acquisitions to learn from their mistakes. In contrast, aggressive CEOs who make many acquisitions are more likely to learn from their mistakes. Consequently, aggressive CEOs may perform better in the bidding process and improve the efficiency of mergers. Second, CEOs play an important role in the negotiation process during acquisitions. Aktas et al. (2016) find that narcissistic CEOs negotiate faster and are more likely to initiate deals. Therefore, it is more difficult for target CEOs to negotiate with aggressive acquiring CEOs, which may lead to favorable acquisition deals by aggressive acquiring CEOs.

6. Conclusion

This paper examines the effect of CEO aggressiveness, as determined by their cultural background, on bank M&As. We link CEOs' aggressiveness to the aggressiveness of their ancestral countries of origin, which are identified using CEOs' surnames. The proxy for a country's aggressiveness is the number of inter-country wars initiated by the country. We find a positive association between CEO aggressiveness and bank M&As. That is, more aggressive CEOs are more likely to make acquisitions. We perform a series of robustness tests and show that our findings are robust to alternative samples and alternative measures of CEO aggressiveness.

We also examine the mechanisms driving the relationship. First, we examine the bank and CEO characteristics that affect the association between CEO aggressiveness and bank M&As. We document that CEO aggressiveness has a more positive and pronounced effect on bank M&As when the banks are larger and more profitable. Also, CEOs who have longer tenure are more likely to make aggressive acquisitions. In addition, we investigate the role of cultural maintenance in transmitting aggressive cultural beliefs and values across generations. CEOs from families with higher cultural maintenance and CEOs whose cultures have close cultural ties with the U.S. are more likely to maintain their aggressive cultural heritage and make aggressive acquisitions. Moreover, we study the effect of CEOs' need for achievement, which is measured by the masculinity score of their country of origin. We show that CEOs with a higher need for achievement are more likely to make acquisitions. Finally, we examine the post-M&A performance of acquiring banks. We find that there is a short-term positive effect of *AGGRESSIVENESS* on buy-and-hold abnormal returns. This implies that the market values M&As made by aggressive CEOs in the short term.

This paper has several implications. First, CEOs' personal preferences, values, or attitudes can be captured by their cultural heritage. Further studies could explore the effect of CEOs' preferences, values, or attitudes on corporate internal and external activities. Second, aggressive CEOs may affect not only M&As but also other investment activities and financing policies. It would be interesting to examine whether there are any differences in firm outcomes between aggressive and moderate CEOs.

References

Aktas, N., E. de Bodt, H. Bollaert, and R. Roll. 2016. CEO narcissism and the takeover process: From private initiation to deal completion. *Journal of Financial and Quantitative Analysis* 51 (1):113-137.

Alba, R. D., and V. Nee. 2009. *Remaking the American mainstream: Assimilation and contemporary immigration*: Harvard University Press.

Algan, Y., and P. Cahuc. 2010. Inherited trust and growth. *American Economic Review* 100 (5):2060-2092.

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

Barro, R. J., and R. McCleary. 2003. Religion and economic growth: National Bureau of Economic Research.

Berger, A. N., R. S. Demsetz, and P. E. Strahan. 1999. The consolidation of the financial services industry: Causes, consequences, and implications for the future. *Journal of Banking & Finance* 23 (2-4):135-194.

Berger, A. N., and D. B. Humphrey. 1992. Megamergers in banking and the use of cost efficiency as an antitrust defense. *The Antitrust Bulletin* 37 (3):541-600.

Bertrand, M., and S. Mullainathan. 2003. Enjoying the quiet life? Corporate governance and managerial preferences. *Journal of Political Economy* 111 (5):1043-1075.

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

Bliss, R. T., and R. J. Rosen. 2001. CEO compensation and bank mergers. *Journal of Financial Economics* 61 (1):107-138.

Brookman, J., and P. D. Thistle. 2009. CEO tenure, the risk of termination and firm value. *Journal of Corporate Finance* 15 (3):331-344.

Cover, J. D., and N. R. Johnson. 1976. Need achievement, phase movement and the business cycle. *Social Forces* 54 (4):760-774.

De Nicolo, G., and M. L. Kwast. 2002. Systemic risk and financial consolidation: Are they related? *Journal of Banking & Finance* 26 (5):861-880.

DeYoung, R., D. D. Evanoff, and P. Molyneux. 2009. Mergers and acquisitions of financial institutions: A review of the post-2000 literature. *Journal of Financial Services Research* 36 (2-3):87-110.

Dixon, J., B. Hong, and L. Wu. 2021. The robot revolution: Managerial and employment consequences for firms. *Management Science* 67 (9):5586-5605.

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

Ember, C. R., and M. Ember. 1992. Warfare, aggression, and resource problems: Cross-cultural codes. *Behavior Science Research* 26 (1-4):169-226.

Fernández, R. 2011. Does culture matter? In *Handbook of social economics*: Elsevier, 481-510.

Fernandez, R., and A. Fogli. 2009. Culture: An empirical investigation of beliefs, work, and fertility. *American Economic Journal-Macroeconomics* 1 (1):146-177.

Frank, K. A. 2000. Impact of a confounding variable on a regression coefficient. *Sociological Methods & Research* 29 (2):147-194.

Goldstein, J. R., and G. Stecklov. 2016. From Patrick to John F.: Ethnic names and occupational success in the last era of mass migration. *Am Sociol Rev* 81 (1):85-106.

Gormley, T. A., D. A. Matsa, and T. Milbourn. 2013. CEO compensation and corporate risk: Evidence from a natural experiment. *Journal of Accounting and Economics* 56 (2-3):79-101.

Guiso, L., P. Sapienza, and L. Zingales. 2006. Does culture affect economic outcomes? *Journal of Economic Perspectives* 20.

Heimer, R. Z., K. O. R. Myrseth, and R. S. Schoenle. 2019. YOLO: Mortality beliefs and household finance puzzles. *The Journal of Finance* 74 (6):2957-2996.

Hirshleifer, D., A. Low, and S. H. Teoh. 2012. Are overconfident CEOs better innovators? *Journal of Finance* 67 (4):1457-1498.

Ho, P.-H., C.-W. Huang, C.-Y. Lin, and J.-F. Yen. 2016. CEO overconfidence and financial crisis: Evidence from bank lending and leverage. *Journal of Financial Economics* 120 (1):194-209.

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

Houston, J. F., C. M. James, and M. D. Ryngaert. 2001. Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders. *Journal of Financial Economics* 60 (2-3):285-331.

Houston, J. F., and M. D. Ryngaert. 1994. The overall gains from large bank mergers. *Journal of Banking & Finance* 18 (6):1155-1176.

Hughes, J. P., W. W. Lang, L. J. Mester, C.-G. Moon, and M. S. Pagano. 2003. Do bankers sacrifice value to build empires? Managerial incentives, industry consolidation, and financial performance. *Journal of Banking & Finance* 27 (3):417-447.

Jensen, M. C. 1986. Agency costs of free cash flow, corporate-finance, and takeovers. *American Economic Review* 76 (2):323-329.

———. 1993. The modern industrial-revolution, exit, and the failure of internal control-systems. *Journal of Finance* 48 (3):831-880.

Jenter, D., and K. Lewellen. 2015. CEO preferences and acquisitions. *Journal of Finance* 70 (6):2813-2852.

Kaplan, S. N., M. M. Klebanov, and M. Sorensen. 2012. Which CEO characteristics and abilities matter? *Journal of Finance* 67 (3):973-1007.

Knapp, M., A. Gart, and D. Becher. 2005. Post‐merger performance of bank holding companies. *The Financial Review* 40 (4):549-574.

Knapp, M., A. Gart, and M. Chaudhry. 2006. The impact of mean reversion of bank profitability on post-merger performance in the banking industry. *Journal of Banking & Finance* 30 (12):3503-3517.

Larcker, D. F., and T. O. Rusticus. 2010. On the use of instrumental variables in accounting research. *Journal of Accounting and Economics* 49 (3):186-205.

Liu, X. D. 2016. Corruption culture and corporate misconduct. *Journal of Financial Economics* 122 (2):307-327.

Margalit, B. A., and P. A. Mauger. 1985. Aggressiveness and assertiveness - A cross-cultural-study of Israel and the United-States. *Journal of Cross-Cultural Psychology* 16 (4):497-511.

Mauger, P. A., D. R. Adkinson, S. K. Zoss, G. Firestone, and D. Hook. 1980. *Interpersonal behavior survey (IBS)*: Western Psychological Services Los Angeles.

McClelland, D. C. 1961. *Achieving society*: Simon and Schuster.

Mishkin, F. S. 1999. Financial consolidation: Dangers and opportunities. *Journal of Banking & Finance* 23 (2-4):675-691.
Moffitt, T. E. 2005. The new look of behavioral genetics in developmental psychopathology: gene-environment interplay in antisocial behaviors. *Psychol Bull* 131 (4):533-554.
Morck, R., A. Shleifer, and R. W. Vishny. 1988. Management ownership and market valuation - An empirical-analysis. *Journal of Financial Economics* 20 (1-2):293-315.
Oster, E. 2019. Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business & Economic Statistics* 37 (2):187-204.
Pan, Y., S. Siegel, and T. Y. Wang. 2019. The cultural origin of CEOs' attitudes toward uncertainty: Evidence from corporate acquisitions. *Review of Financial Studies*.
Qouta, S., R. L. Punamaki, T. Miller, and E. El-Sarraj. 2008. Does war beget child aggression? Military violence, gender, age and aggressive behavior in two Palestinian samples. *Aggress Behav* 34 (3):231-244.
Roll, R. 1986. The hubris hypothesis of corporate takeovers. *Journal of Business* 59 (2):197-216.
Sampath, V. S., and N. Rahman. 2018. Bribery in MNEs: The dynamics of corruption culture distance and organizational distance to core values. *Journal of Business Ethics* 159 (3):817-835.
Sarkees, M. R., and F. W. Wayman. 2010. *Resort to war: a data guide to inter-state, extra-state, intra-state, and non-state wars, 1816-2007*: Cq Pr.
Sipes, R. G. 1973. War, sports and aggression: An empirical test of two rival theories. *American Anthropologist* 75 (1):64-86.
Tabellini, G. 2010. Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association* 8 (4):677-716.

TABLE 1
Distribution of M&As Among States

	M&A		
States	0	1	Total
AL	14	13	27
AR	6	5	11
CA	128	45	173
FL	9	10	19
GA	39	28	67
IL	42	21	63
IN	52	27	79
KY	9	4	13
MA	14	5	19
MD	11	9	20
MI	14	8	22
MO	7	7	14
MS	8	7	15
NC	45	19	64
NJ	24	13	37
NY	31	13	44
OH	41	25	66
OR	8	5	13
PA	105	34	139
SC	8	2	10
TN	5	6	11
TX	35	24	59
VA	39	13	52
WA	21	17	38
Total	715	360	1,075

This table reports the distribution of bank-year M&A observations among U.S. states. The sample consists of 1,075 bank-year observations associated with 383 unique bank holding companies. M&A is an indicator variable that equals 1 if a bank holding company makes at least one acquisition in a year, and 0 otherwise. The sample covers 24 states, and there are an average of 41 bank-year observations in each state.

TABLE 2
Summary Statistics of Variables Used in the Baseline Regression

VARIABLE	N	Mean	Std. Dev.	P25	Median	P75
M&A	1,075	0.335	0.472	0.000	0.000	1.000
AGGRESSIVENESS	1,075	0.541	0.292	0.300	0.500	0.800
SIZE	1,075	14.380	1.088	13.555	14.219	15.072
ROA	1,075	0.010	0.004	0.008	0.010	0.013
ROE	1,075	0.109	0.048	0.080	0.110	0.139
EQUITY	1,075	0.096	0.024	0.079	0.093	0.109
INTEREST	1,075	3.551	0.735	3.059	3.464	3.961
COST_TO_INCOME	1,075	0.739	0.090	0.685	0.743	0.795
LOAN_LOSS_PROVISION	1,075	0.393	0.426	0.143	0.294	0.502
CEO_GENDER	1,075	0.989	0.105	1.000	1.000	1.000
CEO_AGE	1,075	4.033	0.128	3.951	4.043	4.111

This table reports the detailed descriptive statistics of variables used in the baseline regressions. All of the variables are winsorized at 1% and 99%. See Appendix A for the variable definitions.

TABLE 3

Panel A. Pairwise Correlation Matrix Among Variables Used in the Baseline Regression

VARIABLE	*M&A*	*AGGRESSIVENESS*	*SIZE*	*ROA*	*ROE*	*EQUITY*	*INTEREST*	*COST_TO_INCOME*	*LOAN_LOSS_PROVISION*	*CEO_GENDER*
AGGRESSIVENESS	0.090***									
SIZE	0.135***	0.075**								
ROA	0.072**	-0.061**	0.077**							
ROE	0.033	-0.042	0.042	0.844***						
EQUITY	0.086***	-0.026	0.125***	0.218***	-0.279***					
INTEREST	0.017	-0.080***	-0.315***	0.349***	0.292***	0.023				
COST_TO_INCOME	-0.033	0.018	-0.357***	-0.528***	-0.364***	-0.301***	-0.132***			
LOAN_LOSS_PROVISION	-0.077**	0.030	-0.040	-0.290***	-0.192***	-0.204***	0.248***	0.087***		
CEO_GENDER	0.019	-0.016	0.037	0.060*	0.056*	0.012	-0.022	0.015	-0.124***	
CEO_AGE	-0.107***	-0.049*	0.115***	-0.015	-0.071**	0.128***	-0.049*	-0.124***	0.014	0.063**

This table reports the pairwise correlation matrix among variables used in the baseline regression. See Appendix A for the variable definitions. *, **, and *** indicate significance at the 10%, 5% and 1% levels, respectively.

Panel B. CEO Changes vs. M&As Changes

			# of CEOs	# of M&As (Mean)	Difference (after - before)
Group 1	Before	Non-aggressive	27	0.481	0.296
	After	Aggressive	27	0.778	
Group 2	Before	Aggressive	18	0.667	-0.055
	After	Non-aggressive	18	0.611	
Group 3	Before	Aggressive (Non-aggressive)	58	0.793	-0.034
	After	Aggressive (Non-aggressive)	58	0.758	

This table reports the analysis on CEOs changes with respect to aggressiveness vs. M&A changes. In particular, we classify CEOs as non-aggressive and aggressive based on the median CEO aggressiveness, and examine three types of changes of CEOs, including the change from non-aggressive to aggressive CEOs (group 1), from aggressive to non-aggressive CEOs (group 2), and from aggressive (non-aggressive) to aggressive (non-aggressive) CEOs (group 3). The mean difference on the number of M&As made by CEOs before and after the change of CEOs is reported in the last column.

TABLE 4
Baseline Regression

VARIABLE	(1) *M&A*	(2) *M&A*	(3) *M&A*	(4) *M&A*
AGGRESSIVENESS	0.138***	0.155***	0.141***	0.149***
	(2.82)	(3.18)	(2.91)	(2.89)
SIZE		0.079***	0.081***	0.096***
		(5.07)	(5.17)	(5.26)
ROA		0.049	-1.944	-7.127
		(0.00)	(-0.14)	(-0.52)
ROE		0.441	0.502	0.605
		(0.39)	(0.44)	(0.51)
EQUITY		1.708	2.024	2.482*
		(1.32)	(1.53)	(1.82)
INTEREST		0.063***	0.061**	0.048*
		(2.70)	(2.58)	(1.86)
COST_TO_INCOME		0.460**	0.378*	0.118
		(2.24)	(1.81)	(0.49)
LOAN_LOSS_PROVISION		-0.084**	-0.079**	-0.110***
		(-2.41)	(-2.18)	(-2.82)
CEO_GENDER			0.047	0.100
			(0.36)	(0.75)
CEO_AGE			-0.437***	-0.485***
			(-3.89)	(-4.30)
Constant	0.260***	-1.626***	0.110	0.284
	(8.88)	(-4.33)	(0.19)	(0.46)
Observations	1,075	1,075	1,075	1,075
R-squared	0.007	0.046	0.060	0.105
State fixed effects	No	No	No	Yes
Year fixed effects	No	No	No	Yes

This table reports the results of the OLS regression. The dependent variable is *M&A*, which is an indicator variable that equals 1 if a bank makes at least one M&A in a year, and 0 otherwise. The key independent variable is *AGGRESSIVENESS*, which is the measure of CEO aggressiveness. See Appendix A for the variable definitions. We control for state and year fixed effects in column 4, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% levels, respectively.

TABLE 5
Robustness Tests

Panel A: Alternative Measures of CEO Aggressiveness		
	(1)	(2)
VARIABLE	M&A	M&A
AGGRESSIVENESS_A1	0.036***	
	(3.15)	
AGGRESSIVENESS_A2		0.151**
		(2.49)
Control Variables	Yes	Yes
Observations	1,075	1,075
R-squared	0.136	0.130
State fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Panel B: Alternative Samples		
	(1)	(2)
VARIABLE	M&A	M&A
AGGRESSIVENESS	0.189***	0.141***
	(3.19)	(2.99)
Control Variables	Yes	Yes
Observations	1,075	1,075
R-squared	0.105	0.114
State fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Panel C: Dominant Country of Origin Only		
	(1)	
VARIABLE	M&A	
AGGRESSIVENESS	0.201***	
	(3.53)	
Control Variables	Yes	
Observations	882	
R-squared	0.137	
State fixed effects	Yes	
Year fixed effects	Yes	

This table presents robustness tests. Panel A shows the results of the OLS regression using alternative measures of CEO aggressiveness. Panel B shows the results using a different sample from the baseline regression. We create an alternate matching sample by allowing 20% (column 1) and 30% (column 2) deviations between the total assets of the M&A firm and those of the matching firm. Panel C shows the results for the OLS regression where CEO aggressiveness is assessed using only the dominant country of origin. The sample in Panel C has only 882 observations because 193 observations do not have a dominant country of origin. See Appendix A for the variable definitions. We control for state and year fixed effects in all of the columns, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

TABLE 6
Omitted Variable Analysis

Panel A: Analysis of the impact of unobservable confounding variables (Frank 2000)

VARIABLE	(1) ITCV	(2) Impact (Partial)	(3) Impact (Raw)
AGGRESSIVENESS	0.030		
SIZE		-0.003	-0.001
ROA		0.001	-0.007
ROE		0.001	-0.002
EQUITY		0.002	-0.002
INTEREST		-0.004	-0.002
COST_TO_INCOME		0.000	-0.002
LOAN_LOSS_PROVISION		-0.001	-0.001
CEO_GENDER		-0.000	-0.000
CEO_AGE		0.009	0.008

Panel B: Robustness of coefficient to unobservable selection bias (Oster 2019)

	(1) Baseline Effect β (Std. Error) [R^2]	(2) Controlled Effect β (Std. Error) [R^2]	(3) $R_{max} = 0.134$ $\delta = 1$ $\tilde{\beta}$	$\beta = 0$ $\tilde{\delta}$
AGGRESSIVENESS	0.138	0.149	0.152	37.514
	(0.049)	(0.051)		
	[0.007]	[0.105]		

In Panel A, we report the Impact Threshold for a Confounding Variable (ITCV) analysis following Frank (2000). The ITCV for *AGGRESSIVENESS* is reported in column 1, and the partial and raw impact scores of the control variables are reported in columns 2 and 3, respectively. In Panel B, we report the coefficient sensitivity analysis following Oster (2019). Column 1 reports the coefficient and standard error of *AGGRESSIVENESS* and R^2 from the baseline regression without control variables and fixed effects. Column 2 reports the coefficient and standard error of *AGGRESSIVENESS* and R^2 from the regression with control variables and fixed effects. The estimated β and δ are reported in column 3, by assuming $R_{max} = 0.134$ ($R_{max} = 1.3 \times R_{controlled}$).

TABLE 7
Moderating Effect of Bank Characteristics

VARIABLE	(1) *M&A*	(2) *M&A*	(3) *M&A*	(4) *M&A*
	Size		*ROA*	
	Big	Small	High	Low
AGGRESSIVENESS	0.133**	0.106	0.222***	0.084
	(1.97)	(1.25)	(3.06)	(1.03)
SIZE	0.086***	0.100	0.131***	0.053
	(2.89)	(1.58)	(5.32)	(1.48)
ROA	-4.868	20.234	-0.299	29.274
	(-0.30)	(0.71)	(-0.01)	(1.08)
ROE	0.151	-0.062	-0.127	-1.430
	(0.10)	(-0.03)	(-0.06)	(-0.72)
EQUITY	1.579	2.194	0.206	2.341
	(0.93)	(0.91)	(0.07)	(1.43)
INTEREST	0.090**	-0.021	0.085**	0.001
	(2.49)	(-0.48)	(2.40)	(0.01)
COST_TO_INCOME	-0.101	1.184***	0.261	0.053
	(-0.37)	(3.06)	(0.90)	(0.10)
LOAN_LOSS_PROVISION	-0.083	-0.103*	-0.110*	-0.095
	(-1.37)	(-1.80)	(-1.93)	(-1.54)
CEO_GENDER	0.279	0.020	0.213	-0.144
	(1.50)	(0.10)	(1.29)	(-0.65)
CEO_AGE	-0.533***	-0.339	-0.515***	-0.514***
	(-3.58)	(-1.64)	(-3.45)	(-2.76)
Constant	0.573	-0.976	-0.255	1.402
	(0.63)	(-0.81)	(-0.31)	(1.25)
Observations	672	403	611	464
R-squared	0.102	0.197	0.154	0.161
State fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes

This table presents how bank size and bank profitability (ROA) affects the impact of CEO aggressiveness on bank mergers and acquisitions. We split the sample into two subsamples according to sample median of bank size (columns 1 and 2) and the sample median of ROA (columns 3 and 4), respectively. *Size* is measured as the natural logarithm of total assets, and *ROA* is measured as net income scaled by total assets. See Appendix A for the other variable definitions. We control for state and year fixed effects in all of the columns, and report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5% and 1% levels, respectively.

TABLE 8
Moderating Effect of CEO Tenure

VARIABLE	(1) *M&A*	(2) *M&A*
	TENURE	
	Long	Short
AGGRESSIVENESS	0.261***	0.081
	(3.43)	(1.08)
SIZE	0.060**	0.118***
	(2.34)	(4.16)
ROA	7.137	-19.857
	(0.35)	(-1.08)
ROE	0.288	1.398
	(0.18)	(0.80)
EQUITY	2.141	2.822
	(1.16)	(1.44)
INTEREST	0.039	0.051
	(0.99)	(1.37)
COST_TO_INCOME	0.318	0.074
	(0.82)	(0.23)
LOAN_LOSS_PROVISION	-0.162***	-0.110*
	(-2.96)	(-1.74)
CEO_GENDER	-0.225	0.297*
	(-0.84)	(1.81)
CEO_AGE	-0.335**	-0.577***
	(-2.18)	(-3.09)
Constant	0.284	0.203
	(0.32)	(0.21)
Observations	550	525
R-squared	0.190	0.152
State fixed effects	Yes	Yes
Year fixed effects	Yes	Yes

This table presents how CEO tenure affects the impact of CEO aggressiveness on bank mergers and acquisitions. We split the sample into two subsamples based on the sample median of *TENURE* (columns 1 and 2), where *TENURE* is measured as the number of years since a CEO took the helm. See Appendix A for the other variable definitions. We control for state and year fixed effects in all of the columns, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

TABLE 9
Moderating Effect of Cultural Maintenance

VARIABLE	(1) *M&A*	(2) *M&A*	(3) *M&A*	(4) *M&A*
	SAME_ORIGIN		*CD*	
	Yes	No	Low	High
AGGRESSIVENESS	0.251***	0.058	0.264**	-0.014
	(2.93)	(0.75)	(2.04)	(-0.16)
SIZE	0.113***	0.102***	0.116***	0.092***
	(4.41)	(3.82)	(4.43)	(3.56)
ROA	-14.214	-14.777	-0.736	-9.961
	(-0.76)	(-0.74)	(-0.04)	(-0.47)
ROE	1.625	0.791	0.267	1.198
	(0.93)	(0.48)	(0.15)	(0.72)
EQUITY	2.206	4.330**	0.803	3.554*
	(1.17)	(2.08)	(0.41)	(1.82)
INTEREST	0.012	0.079*	0.067**	0.065
	(0.33)	(1.85)	(1.98)	(1.51)
COST_TO_INCOME	0.045	0.144	0.489	0.264
	(0.12)	(0.39)	(1.42)	(0.64)
LOAN_LOSS_PROVISION	-0.072	-0.170***	-0.171***	-0.042
	(-1.40)	(-2.82)	(-3.25)	(-0.70)
CEO_GENDER	0.298	0.047	-0.114	0.167
	(1.32)	(0.24)	(-0.50)	(1.11)
CEO_AGE	-0.583***	-0.415***	-0.559***	-0.248
	(-3.31)	(-2.70)	(-3.29)	(-1.54)
Constant	0.353	-0.199	0.279	-0.887
	(0.38)	(-0.22)	(0.33)	(-0.94)
Observations	537	538	464	611
R-squared	0.166	0.173	0.261	0.139
State fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes

This table presents how cultural maintenance affects the impact of CEO aggressiveness on bank mergers and acquisitions. We split the sample into two subsamples based on the sample median of *SAME_ORIGIN* (columns 1 and 2) and *CD* (columns 3 and 4), respectively. *SAME_ORIGIN* is a variable indicating whether a CEO's first name and last name have the same country of origin. *CD* (cultural distance) is measured as the differences in the PDI, IDV, UAI, and MAS scores of the CEO's countries of origin and the U.S. See Appendix A for the other variable definitions. We control for state and year fixed effects in all of the columns, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

TABLE 10
Moderating Effect of CEOs' Need for Achievement

VARIABLE	(1) *M&A*	(2) *M&A*
	MASCULINITY	
	High	Low
AGGRESSIVENESS	0.261***	0.001
	(2.95)	(0.01)
SIZE	0.120***	0.081***
	(4.47)	(3.19)
ROA	-31.230	21.420
	(-1.63)	(1.05)
ROE	2.796	-1.679
	(1.59)	(-1.04)
EQUITY	3.447*	1.125
	(1.68)	(0.60)
INTEREST	0.018	0.077*
	(0.51)	(1.89)
COST_TO_INCOME	0.297	0.277
	(0.96)	(0.71)
LOAN_LOSS_PROVISION	-0.063	-0.117**
	(-1.13)	(-2.04)
CEO_GENDER	-0.033	0.136
	(-0.09)	(0.97)
CEO_AGE	-0.600***	-0.262
	(-3.68)	(-1.54)
Constant	0.359	-0.471
	(0.41)	(-0.48)
Observations	486	589
R-squared	0.153	0.070
State fixed effects	Yes	Yes
Year fixed effects	Yes	Yes

This table presents how CEOs' need for achievement affects the impact of CEO aggressiveness on bank mergers and acquisitions, where CEOs' need for achievement is proxied by *MASCULINITY*. CEO masculinity is measured by the weighted masculinity scores of the CEO's potential countries of origin (Hofstede 1984). We split the sample by the sample median of *MASCULINITY*. See Appendix A for the variable definitions. We control for state and year fixed effects in all of the columns, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

TABLE 11
Post-M&As Performance

VARIABLE	(1) *BHAR3*	(2) *BHAR6*
AGGRESSIVENESS	0.054**	0.071*
	(2.15)	(1.80)
SIZE	0.002	-0.011
	(0.18)	(-0.88)
ROA	2.752	4.123
	(0.35)	(0.33)
ROE	0.078	-0.021
	(0.12)	(-0.02)
EQUITY	0.095	-0.491
	(0.16)	(-0.53)
INTEREST	0.005	0.044**
	(0.31)	(1.97)
COST_TO_INCOME	0.238*	0.383*
	(1.88)	(1.76)
LOAN_LOSS_PROVISION	0.015	-0.012
	(0.60)	(-0.29)
CEO_GENDER	0.028	0.048
	(0.82)	(0.84)
CEO_AGE	-0.032	-0.118
	(-0.52)	(-1.40)
Constant	-0.193	0.142
	(-0.64)	(0.34)
Observations	360	360
R-squared	0.397	0.504
State fixed effects	Yes	Yes
Year fixed effects	Yes	Yes

This table reports the effect of CEO aggressiveness on acquiring banks' post-M&A performance in terms of market reactions. We use buy-and-hold abnormal returns 3 and 6 months after the merger effective dates (*BHAR3* and *BHAR6*) as proxies for post-M&A performance. See Appendix A for the variable definitions. We control for state and year fixed effects in all of the columns, and we report t-statistics that computed using robust standard errors in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Appendix A. Variable Definitions

Variable	Definition
Main Variable	
M&A	An indicator variable that equals 1 if a bank holding company makes at least one acquisition in a year, and 0 otherwise.
AGGRESSIVENESS	CEO aggressiveness, measured in deciles, is the weighted average of the total number of inter-country wars initiated by the CEO's potential countries of origin. Each inter-country war is weighted by the battle deaths scaled by the population of the initiator country, and *AGGRESSIVENESS* is weighted by the percentage of people with the CEO's surname from each potential country of origin.
Control Variable	
AGGRESSIVENESS_A1	An alternative measure of CEO aggressiveness, measured as the weighted average of the number of inter-country wars initiated by the CEO's potential countries of origin. Each inter-country war is weighted by the war's battle deaths scaled by the population of the initiator country, and *AGGRESSIVENESS* is weighted by the percentage of people with the CEO's surname from each potential country of origin.
AGGRESSIVENESS_A2	An alternative measure of CEO aggressiveness, measured in deciles, which is the weighted average of the number of inter-country wars initiated by the CEO's potential countries of origin. Each inter-country war is weighted by the length of the war, and aggressiveness is weighted by the percentage of people with the CEO's surname from each potential country of origin.
BHAR3 (6)	Buy-and-hold abnormal return, measured as the 3-month (6-month) buy-and-hold abnormal return following the merger effective date.
CD	Cultural distance, measured as the differences in the PDI (power distance), IDV (individualism), UAI (uncertainty avoidance), and MAS (masculinity) scores of the CEO's country of origin and the U.S. (Hofstede 1984).
CEO_AGE	CEO age, measured as the natural logarithm of CEO age.
CEO_GENDER	CEO gender, an indicator variable that equals 1 if a CEO is male, and 0 otherwise.
COST_TO_INCOME	Cost to income ratio, measured as total costs scaled by total income.
EQUITY	Equity to asset ratio as a percentage, measured as equity scaled by total assets.
INTEREST	Interest income, measured as net interest income scaled by total assets.
LOAN_LOSS_PROVISION	Loan loss provision, measured as loan loss provision scaled by one-year lagged total loans.
MASCULINITY	CEO masculinity, measured as the weighted masculinity scores of the CEO's potential countries of origin (Hofstede 1984).
ROA	Return on assets, measured as net income scaled by total assets.
ROE	Return on equity, measured as net income scaled by total equity.

SAME_ORIGIN	The origin of CEOs' first names and surnames, measured as the weighted sum of the weight of the surname's countries of origin if the country of origin of a CEO's first name matches one of the countries of origin of his or her surname.
SIZE	Bank size, measured as the natural logarithm of total assets.
TENURE	CEO tenure, measured as the number of years since a CEO took the helm.

Appendix B. Sample Validation Test—Differences in Bank Characteristics by M&As

Year	N	*SIZE*	*ROA*	*ROE*	*EQUITY*	*INTEREST*	*COST_INC*	*LLP*
1993	10	0.609	0.001	-0.005	0.018	-0.518	-0.022	-0.309
1994	20	0.587	0.003*	0.019	0.008	0.052	-0.028	-0.215
1995	28	0.642	0.000	0.003	-0.001	0.031	-0.004	-0.014
1996	22	0.516	0.000	0.004	-0.002	0.039	-0.022	-0.113
1997	35	0.188	0.001	0.009	0.005	-0.047	0.000	-0.338
1998	56	0.321	0.000	-0.005	0.006	0.322	-0.011	0.044
1999	45	0.359	-0.001	-0.009	0.002	-0.104	0.025	0.051
2000	57	0.577	0.001	0.010	0.001	-0.087	-0.017	-0.019
2001	66	0.510	0.001	-0.006	0.011*	-0.236	-0.007	-0.128
2002	57	0.312	0.001	0.000	0.003	0.060	-0.012	-0.150
2003	47	0.446	0.002	0.013	0.004	-0.021	-0.051*	-0.037
2004	65	0.296	0.001	0.016	0.002	0.079	0.006	-0.024
2005	49	0.007	0.001	0.012	0.003	0.122	-0.002	-0.077
2006	81	0.268	-0.001	-0.022	0.002	-0.132	0.017	-0.116
2007	52	0.116	-0.002	-0.014	-0.004	-0.340	0.044	-0.041
2008	23	0.077	0.001	0.001	0.011	0.004	-0.016	-0.168
2009	4	-0.331	0.002	0.048	-0.006	0.108	0.011	0.201
2010	7	0.234	-0.002	-0.041	0.030	-0.200	-0.006	0.530
2011	16	0.431	0.000	0.002	0.016	-0.413	-0.016	-0.245
2012	14	-0.044	0.001	-0.002	0.015	-0.090	0.007	-0.238
2013	52	0.388	0.003*	0.027*	0.007	0.281	-0.081*	-0.134
2014	63	0.200	0.003*	0.024	0.008	0.261	0.002	-0.170
2015	57	0.502	-0.001	-0.009	0.005	0.023	0.008	-0.103
2016	50	0.072	0.002	0.014	0.008	0.132	-0.023	0.022
2017	48	0.225	0.000	-0.003	0.003	0.033	-0.037	0.031
2018	51	0.269	0.000	-0.004	0.005	0.078	0.026	0.047

This table reports the results of the t-tests of the differences in bank characteristics by M&As. The reported value in each cell is the difference between the mean of a specific variable for the acquiring and non-acquiring banks. *indicates *p*-values < 0.05.

Appendix C. Distribution of BHC M&As among U.S. states (1993–2018)

No.	State	Frequency	Percent (%)	Cumulative Percent
1	TX	395	12.02	12.02
2	IL	171	5.21	17.23
3	MN	157	4.78	22.01
4	PA	144	4.38	26.39
5	CA	134	4.08	30.47
6	OH	119	3.62	34.09
7	MO	112	3.41	37.50
8	NC	110	3.35	40.85
9	WI	108	3.29	44.14
10	GA	105	3.20	47.34
11	NY	97	2.95	50.29
12	IA	88	2.68	52.97
13	IN	87	2.65	55.62
14	NJ	84	2.56	58.17
15	AL	80	2.44	60.61
16	NE	75	2.28	62.89
17	OK	72	2.19	65.08
18	DE	70	2.13	67.21
19	AR	69	2.10	69.32
20	FL	69	2.10	71.42
21	KS	69	2.10	73.52
22	LA	69	2.10	75.62
23	KY	67	2.04	77.66
24	MI	67	2.04	79.70
25	TN	65	1.98	81.67
26	MA	60	1.83	83.50
27	MS	54	1.64	85.14
28	WA	52	1.58	86.73
29	VA	48	1.46	88.19
30	CO	45	1.37	89.56
31	ND	43	1.31	90.87
32	MT	38	1.16	92.02
33	WV	37	1.13	93.15
34	MD	34	1.04	94.19
35	SC	32	0.97	95.16
36	OR	25	0.76	95.92
37	ME	20	0.61	96.53
38	UT	20	0.61	97.14
39	SD	17	0.52	97.66
40	CT	13	0.40	98.05
41	RI	12	0.37	98.42
42	NV	10	0.30	98.72
43	NM	9	0.27	99.00
44	NH	8	0.24	99.24
45	VT	6	0.18	99.42
46	WY	6	0.18	99.60
47	AZ	4	0.12	99.73
48	HI	4	0.12	99.85
49	ID	3	0.09	99.94
50	AK	2	0.06	100.00
	Total	3,292	100.00	

Appendix D. Characteristics of the Top 10 Initiators of Inter-Country Wars

No.	Country	Total Number of Inter-country Wars	Percentage of Inter-country Wars (%)	Accumulated Combatant Fatality (%)	Accumulated War Length (years)	Accumulated War Participants
1	Russia	10	9.1743	0.6208	6.9879	23
2	France	8	7.3394	0.4427	9.2103	19
3	Japan	7	6.4220	0.5885	8.5441	14
4	United States of America	7	6.4220	0.0974	9.8778	19
5	United Kingdom	6	5.5046	0.0025	0.8313	11
6	Italy	6	5.5046	0.0436	2.4935	13
7	Germany	5	4.5872	5.0248	6.7977	46
8	China	5	4.5872	0.0018	1.1397	10
9	Pakistan	3	2.7523	0.0219	0.3644	6
10	Israel	3	2.7523	0.0623	0.4384	10

This table presents the top 10 countries initiate the most inter-country wars. The percentage of inter-country wars is computed as the number of inter-country wars initiated by a country divided by the total number of inter-country wars in the data set. Accumulated combatant fatality is the sum of combatant fatalities in of all inter-country wars initiated by a country, where combatant fatality is measured as the number of deaths scaled by the country's total population. Accumulated war length is the sum of the lengths of all inter-country wars initiated by a country, where war length is measured in years. Accumulated war participants is the sum of the number of countries that participated in all of the inter-country wars initiated by the focal country.

Appendix E. Sample Description

We start with the transformations table, which records events that transform entities (e.g., commercial banks and bank holding companies). From the 56,108 observations, we select the 4,815 M&As (transformation type code TRNSFM_CD = 1) made by bank holding companies. Then, we apply the following two exclusion criteria. First, we remove all observations where the acquirer and target bank holding company share the same parent holding company. We identify a parent holding company based on the financial high holder ID (RSSD9364) and the percent of equity it holds in the bank (RSSD9365). Second, we remove all observations where the target's parent holding company is the acquirer. After this procedure, the sample contains 3,444 M&As.

As in our analyses, we match the M&As with CEO information from DEF14A filings from EDGAR, we keep only M&As with public acquirers, which reduces the sample to 1,883 M&A observations. Then, we remove duplicate acquirers in the same year, which reduces the sample to 1,365 bank-year observations.

Then, we identify a matched sample for our M&A sample. Specifically, we find a matching bank holding company for each acquirer in the M&A year using the following three matching criteria. First, a matching bank holding company cannot make an acquisition in the M&A year. Second, a matching bank holding company's total assets must be within ±25% of the acquirer's total assets. Third, a matching bank holding company must be public and have a different parent holding company than the acquirer, if any. Using these criteria, we create a matching sample with 1,198 observations for the 1,097 M&A observations.

Next, we keep only observations for which all of the control variables are available, which leaves 1,793 bank-year observations, including the M&A sample and matched sample. We then collect CEO data (i.e., name, age, and gender) from the DEF14A filings on EDGAR. We remove any observation for which CEO data are not available or if there are too few observations in a state. This leaves 1,590 observations. In addition, we collect the countries of origin of the CEOs' last names from ancestry.com. There are 550 unique CEO surnames, and data on country of origin is available for 500 of these. After eliminating observations with missing data on surnames or inter-country wars, we have 1,382 bank-year observations. Finally, we remove duplicates in the matched sample observations in the same year. That is, we remove a matched bank holding company if it is matched to more than one M&A observation in the same year. This leaves us with a final sample of 1,075 bank-year observations.