

Early-life Experience of Social Violence and CEOs' Risk-taking Attitudes

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Abstract

We examine the impact of early-life experiences of social violence on CEOs' risk-taking attitudes, using the social violent events that CEOs experience as a child during the Chinese Cultural Revolution as a natural experiment. The evidence indicates that these CEOs engage in less acquisition activities, consistent with the notion that early violence experience fosters risk-aversion. We adopt multiple approaches to rule out alternative explanations and potential endogeneity, including using an instrument variable, a stringent set of fixed effects, and falsification tests. Given that our treatment is distinct from the events in prior studies (e.g., natural disaster or economic depression), this study enriches our understanding on the origin of managerial risk-taking incentives.

Keywords: behavioral finance; CEO trait; early-life experience; risk-taking; China;
JEL Codes: G32; G34; G41

"They say that time heals all things, they say you can always forget; but the smiles and the tears across the years they twist my heart strings yet."

— George Orwell, 1984

1. Introduction

Do CEOs' early-life experiences matter in corporate policy-making? Prior studies indicate that CEO's managerial styles explain a significant portion of the variation in corporate decisions such as capital structure, investment, compensation, and disclosure policies (Bertrand and Schoar, 2003; Bamber, Jiang, and Wang, 2010; Graham, Li, and Qiu, 2012). More importantly, this research further shows that the source of such heterogeneity in CEOs' managerial styles is from the variation in individual life and career experiences (Graham and Narasimhan, 2005; Malmendier and Tate, 2005; Malmendier, Tate, and Yan, 2011; Schoar and Zuo, 2011; Benmelech and Frydman, 2014; Lin et al. 2014; Dittmar and Duchin, 2016; Bernile et al. 2017). Unsurprisingly, based on psychology studies on how early-life personal experience affect one's behavioral trait, the majority of the studies focus on the drastic personal experience due to macroeconomic conditions or natural disasters. In this study, we examine the exposure to social instability which is less drastic than famine or economic depression. It is well-known that early-life drastic negative events such as natural disasters cause some traumatic influence on the person according to psychology studies (Hertwig et al. 2004). Our treatment is distinct in two ways. First, we focus on the people that are influenced by social instability or violence due to ideological or political movements *indirectly*. More importantly, the social events do not dampen the local economic conditions in general. It provides an opportunity to filter out the economic impact channel that is confounding with the psychology mechanism in prior studies (e.g., Malmendier and Nagel, 2011). Second, in contrast to the drastic events such as natural disaster or family death, our treatment events focus on the social environment and they are chronic and of much less severity than disastrous incidents. In this regard, social violence has an enduring psychological effect that shapes the person's cognitive development in a very different manner than the direct and extreme type of

early-life experience.

Chinese Cultural Revolution was one of the largest political or ideological upheavals in the last century, featuring national-wide involvement of general population via military control and violence. During the period of 1966 to 1976, mass insurgency was a major form of the movement, involving people with different ideological perspectives engaging in violent fights against each other. However, the military was not involved by the order of the central government. As such, the violences were mainly driven by the local ideological conflicts and the effectiveness of propaganda. The students and factory worker militants engage in beating and torturing certain targets, i.e., government officials, intellectuals, and people from “reactionary” or “anti-revolutionary” households. Another main activity was to fight for territory and control of government offices and factories. The violences result in 256,476 injuries and 273,934 deaths on an average daily basis during the period, with a massive time-series and geographical variations (Walder, 2014). More importantly, the local economic activities and living conditions were not compromised significantly from these movements due to the socialistic economic systems in place. Surprisingly, most of the factories whose employees engage in worker militants go back to work when there are no planned events. Overall, these types of ideological movements, even though violent, are distinct from natural disasters or economic depression that impose significant direct influence on the persons involved. What this period of violent events brings about to the general civilians is exposure of constant ideological propaganda and reports of violent incidents that induce chronic anxiety or depression.

Compared to events that alter the economic condition of one’s early-life such as the Great Depression or famine, our treatment is more of the psychological nature that yields cognitive imprints to the people involved. Arguably, the family tragedy events also impost economic conditions change on the child relative to their counterparts. In our case, the social instability from local violent events impacts the psychological development of the CEOs during their childhood, while their economic

well-being is largely unaffected by those events, compared to the other CEOs. Against this backdrop, our study offers a cleaner venue to examine the early-life experience on CEO's decision-making via the psychological channel.

According to psychology and sociology studies on the effect of cognitive bias induced by the early-life experience, one's risk-taking preference is a major consequence. CEOs' risk-taking attitude is important to corporate development. Managerial risk aversion imposes agency costs upon shareholders if managers forego risky, but value-enhancing, projects (Smith and Stulz, 1985). Prior studies based on extreme experience during early-life time suggest that CEOs are more risk-taking (e.g., Graham and Narasimhan, 2005; Malmendier and Tate, 2005; Schoar and Zuo, 2011; Benmelech and Frydman, 2014; Dittmar and Duchin, 2016). Bernile et al. (2017) suggest that the consequence is contingent upon the nature of the experience. Recently, Bai and Wu (2020) show CEOs experiencing fatal disasters without extremely negative consequences act more aggressively in policy making while CEOs witnessing the extreme downside of disasters behave more conservatively. In contrast to the direct violence experience in these studies, our treatment captures the psychological influence from indirect and chronic anxiety, depression, or disorder. Social psychology studies indicate that anxiety and fear induce higher level of risk aversion (Lerner and Keltner, 2001; Lerner and Tiedens, 2006; Lerner et al. 2015; Raghunathan and Pham, 1999).

We construct a novel panel data that matches the biographical information of 2,392 Chinese mainland-born CEOs of A-share listed companies with Cultural Revolution data provided by Walder (2014) of 2,264 county and city-level jurisdictions. We use the violence intensity in CEOs' birthplace to gauge CEOs' early-life experience of violent events, that is the number of abnormal deaths and injuries normalized by total population. We adopt a difference-in-difference approach to examine the impact of early-life violence experience on CEOs' risk-taking attitudes, following the identification strategy of Bernile et al. (2017), Guo et al. (2018), and Kong et al. (2021). Our independent variable

captures the early-life experience of violent events. Our early-life period for a person is defined as before 25 years old, according to studies on the psychological and cognitive development of a person to incorporate early-life memories into their decision-making (Krosnick and Alwin, 1989; Martinez-Bravo et al. 2022). As such, our main variable is defined as the intensity of violence during the Cultural Revolution in the CEO's birthplace when he/she is 25 years old or younger.¹ We measure the intensity of the local violence events by the ratio of total number of abnormal deaths and injuries scaled by the total population in CEOs' birthplace. We use acquisition activity to capture CEOs' attitudes towards risk-taking. Corporate acquisitions are inherently riskier compared to organic internal growth due to the information asymmetry, typically large commitment of time and resources required. Therefore, frequent acquisition is a classical measurement to gauge risk-taking attitudes (Roussanov and Savor, 2014; Kravet, 2014; Shi et al. 2017; Campbell et al. 2019). We control different levels of covariates to capture as many confounding variables as possible, including firm characteristics, CEO characteristics, and location characteristics. To further mitigate omitted variable concern, we include the company's fixed effects, year fixed effects, the CEO's birthplace fixed effects, and CEO cohort fixed effects. All standard errors are clustered at CEO level. Furthermore, to establish identification, we use the local broadcasting signal strength that is constrained by the local terrain to act as instrument variable for the violence intensity, further ruling out the confounding effect from other locational factors such as economic conditions.

With these different methodological approaches, our results indicate consistently that CEOs with early-life experiences of social instability or violence tend to be more risk-averse, engaging in less frequent acquisition activities and inactive financial policies (lower investment in R&D activities and less likely to be rated as Junk bonds). Moreover, a closer investigation on the acquisition characteristics

¹ In robustness tests, we check whether the effect is more pronounced when the CEO was passing the infant stage during the events. We find supporting evidence.

show that these CEOs also make a smaller share of unrelated acquisitions and unsuccessful acquisitions. Also, the number of acquisitions paid by cash diminished significantly while that paid by stock did not. These results comply with our main results of a risk-averse attitude after violent events. A test of heterogeneous effects based on CEO's age show that the effects is larger for CEOs who are in their 20-25 age range when the Cultural Revolution ends, that is, they are in their 10-15 when the Cultural Revolution begins. Our results are robust to alternative measures of violence intensity and falsification tests.

The exogenous nature of China's Cultural Revolution and our identification strategy offers us a unique advantage to mitigate the sample selection bias in CEO. The CEO selection decisions by the board are related to many factors, including corporate strategy (Quigley et al. 2019), the background and personal preferences of the board members (Tian et al. 2011; Knippen et al. 2018), as well as the corporate financial situation (Abernethy et al. 2019). First, as one of the largest political upheavals of the twentieth century paralyzed a highly centralized party state, the onset and development China's Cultural Revolution is unexpected by CEO who experienced it during their childhood or in utero. The severity of the violent events in a particular area is mainly affected by a product of contingent interactions among rebel groups and military units in light of malfunctioning local governments (Walder and Chu, 2020). Therefore, the exposure to violent attacks of CEOs is exogenous. Second, 1,566 out of 2,392 CEOs in our sample serve in a company whose location is different from CEO's birthplace. Hence the estimated effects of Cultural Revolution intensity in CEOs' birthplace on corporate performance reflect CEOs' preferences.

Our work contributes to several strands of literature. First, our main contribution is enriching the understanding of the long-term impact of CEOs' personal experiences on attitudes and behaviors. Recent literature in finance and accounting finds that executives' personal experiences shape their economic behaviors, such as risk-taking (Kish-Gephart and Campbell, 2015; Campbell et al. 2019),

social responsibility (Xu and Ma, 2021), and management style (Schoar and Zuo, 2017). Prior studies that explore disastrous events such as the Great Depression (Malmendier et al. 2011) or famine (Han et al. 2022) have their findings prone to both economic and psychological channels. Betzer et al. (2021) find managers who experienced the death or divorce of their parents during childhood exhibit a stronger disposition effect, take lower risk, and are more likely to sell their holdings following risk-increasing firm events. Voors et al. (2012) on the other hand find that in Burundi higher share of deaths at the community level induce less risk aversion, but that the severity of the exposure to violence at the household level did not bring any significant effects. We extend this literature by highlighting the role of early-life experiences of social instability that induce anxiety or fear as an important aspect of the CEOs' cognitive development that shapes firm behavior. In that regard, our setting offers us the opportunity to control for the economic influence channel that confounds with the psychological and cognitive mechanism in prior studies.

Second, we contribute to the study of the impacts of traumatic experience. An emerging body of research in management applies insights from the post-traumatic growth literature to an organizational setting (Maitlis, 2020). Chen et al. (2020) find executive officer (CEO) mortality salience - triggered by the death of a director at the same firm, can trigger subsequent increase in firm-level prosocial behavior or corporate social responsibility (CSR). Vogel and Bolino (2020) find that people who have been mistreated can grow and experiences positive outcomes from traumatic experiences. We extend this strand of literature by focusing on a specific type of violent experience and shifting the focus from traumatic events later in the life to events during CEOs' early-life period.

Third, we contribute to the study of the long-term impact of China's Cultural Revolution. Former studies mainly focused on the consequences in social level. For example, Bai and Wu (2020) and Kong et al. (2021) find the destructive effects on social trust after the Cultural Revolution. Han et al. (2019) find the Cultural Revolution substantially increases the schooling levels of cohorts whose

education was interrupted during 1966-1976, as they value the new opportunities to get educated to compensate for the interrupted schooling. This paper is among the first to explore the economic consequences of the Cultural Revolution at the firm level.

The rest of the paper proceeds as follows. Section 2 briefly introduces the backgrounds of the Cultural Revolution. Section 3 maps out our theoretical motivation. Section 4 describes the data and identification strategy. Section 5 presents our empirical results, including main regression results, robustness checks, heterogeneous effects based on CEO's age, ruling out alternative explanations and reports the falsification tests. Concluding remarks are offered in Section 6

2. China's Cultural Revolution (1966-1976)

It is beyond the scope of our analysis to provide an extensive background of all the events during China's Cultural Revolution. Therefore, we will focus mainly on the particular details that are relevant for our study, that is, the militant insurgency and student movements that provoked violent attacks on specific groups of people and fights between different ideological groups.

China's Cultural Revolution (1966-1976) is one of the worst violent events in the modern history which caused extremely severe outcomes in social development. As was officially reported by Jianying Ye in the Political Bureau of the CPC Central Committee Meeting after the 12th First Plenary Session, during the Cultural Revolution, (1) more than 123,700 people were killed in over 4,300 violent attacks; (2) over 2.5 million government officials were denounced politically and over 302,700 were put in prison illegally, and (3) over 113 million people were attacked politically in different levels and over 557,000 people were missing.

China's Cultural Revolution was launched by Mao Zedong in 1966 with a stated aim of preserving the Communism ideology by "cleansing the class ranks" of capitalist elements (Schoenhals and MacFarquhar, 2006; Su, 2011). The violent events of the Cultural Revolution were pervasive and

widespread, both in urban and rural areas (Walder and Su, 2003). The victims were mainly composed of individuals deemed incompatible with the socialist system, named “Five Groups of Enemies”, including intellectuals, senior party officials, rich peasants, teachers and elites. One main group of perpetrators are Red Guards, a revolutionary youth organization composed of ordinary civilians. In the initial phase of the Cultural Revolution, Red Guard activities were supported strongly by the central government and individuals who attempted to intervene in their activities would risk being labeled counterrevolutionaries (Schoenhals and MacFarquhar, 2006).

The nature of violence during this period was primitive, and the violence and political purges during the Cultural Revolution were typically perpetrated by ordinary individuals. Instead of guns and armed weaponry, victims are under shockingly violence both physically and psychologically. The “class enemies” were subject to public denunciations, forced self-criticisms, beaten with blunt objects or even forced to jump off cliffs (Ou and Xiong, 2021; Su, 2011). Oftentimes, the perpetrators and victims knew each other well. Events like friends or even family members backstabbed each other is frequent during China’s Cultural Revolution. People born before 1976 were all more or less experiences Cultural Revolution as it is a movement throughout the whole country. Even though for some of them the violent events didn’t happen in their families, they witnessed other individuals or families experiencing persecution as most of these events like parading through streets (Youjie) and armed fighting (Wudou) happened publicly. Also, for people experiencing Cultural Revolution in their 1-10 years old, they are only onlooker or victims because they are too young to participate in attacking activities. So violent violence forms most of memories the Cultural Revolution left in their mind.

3. Theoretical Motivation

Building on the notion of bounded rationality (Cyert et al. 1963), upper echelons theory suggested that CEOs’ values and prior experiences formed their views on the situation facing their firms

(Hambrick and Mason, 1984; Hambrick, 2007). A wide range of studies focuses on CEOs' strategic decisions and firm performance support upper echelons reasoning (Chatterjee and Hambrick, 2007; Crossland et al. 2014), including those examine executive's early-life experiences (Kish-Gephart and Campbell, 2015; Campbell et al. 2019). This strand of literature confirms the long-term effect of CEOs' childhood imprints on managerial behaviors.

The application of imprinting theory within the management literature galvanized the interest in studying executives' early-life experiences (Marquis and Tilcsik, 2013). According to imprinting theory, childhood is a typical "sensitive period" when people are susceptible to external influences and experiences during these sensitive periods give rise to imprints as 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" (Marquis and Tilcsik, 2013; McEvily et al. 2012). Later studies have found that imprints during these "sensitive periods" persist despite these environmental changes (Bianchi, 2014; McEvily et al. 2012; Jung and Shin, 2019; Marquis and Qiao, 2020; Bai and Wu, 2020).

Studies in psychology highlight that traumatic experiences build more enduring and more pronounced imprints from early-life (Parry and Chesler, 2005; Cryder et al. 2006; Duran, 2013). Different from traditional beliefs that traumatic experiences always lead to suffering and distress, post-traumatic psychological growth theory emphasizes the positive psychological development after traumatic experiences. People adapt to traumatic experiences through the process of ruminating and revisiting their goals and values (Calhoun and Tedeschi, 1999; Tedeschi and Calhoun, 2004). Through this process, people can develop more robust cognitive and emotional self-regulation (Janoff-Bulman, 2004; Zoellner and Maercker, 2006).

Our treatment of early-life experience is of an indirect and environmental nature, rather than direct and personal influence. In addition, the impact is mainly through a psychological channel

relative to economic mechanism. Specifically, exposure to social violent environment has the potential to change an individual's perception of the riskiness of the future environment or the tolerance for incremental risk. Further, the exposure to constant news reports and propaganda of the violent events is likely to provoke heightened anxiety and fear for potential victimization, inducing increased risk aversion (Lerner and Keltner, 2001; Raghunathan and Pham, 1999).

4. Methodology, Data, and Sample

4.1 Sample

The sample of our study begins with all A-share listed companies between 1999 and 2020. A-shares, also known as domestic shares, are shares of companies that are denominated in Renminbi and listed either the Shanghai or Shenzhen stock exchanges. A-shares are generally only open for trading to mainland Chinese citizens. We remove observations of the financial service industry. Financial service companies in China are governed by specific laws and regulations by the government, which may affect their development strategies. Observations with missing data are also excluded.

Our empirical analysis makes use of a number of datasets. We identify the A-share company lists from CSMAR (China Stock Market & Accounting Research Database), which is a comprehensive research-oriented database offering data on the China stock markets and the financial statements of China's listed companies. Overall, we obtain 1,751 A-share listed companies located in 230 different cities in China.

We collected the birthplace of CEOs mainly manually, as CSMAR offers very limited data for this variable by conducting the keyword search terms on the CEOs' position and name using Sina finance, Wind database, companies' annual reports, and Baidu encyclopedia. We exclude CEO samples born outside the mainland of China. We obtain other personal characteristics of CEO and firm-level data from CSMAR. After excluding CEOs born outside mainland China, and those with missing data

in the regression, we are left with a sample of 2,392 Chinese mainland-born CEOs of A-share listed companies from 1999 to 2020, and they are born in 273 different cities in China, covering about 93.2% of 293 cities in China. Figure 1 shows the number of companies located in each city. Figure 2 shows the number of CEO born in every city and Figure 3 shows the number of CEO born in every year.

Our analysis on China's Cultural Revolution uses a dataset digitalized by Walder (2014). This dataset contains background data on 2,264 county and city-level jurisdictions in China, along with information about 14,451 political events during the period from June 1966 to December 1971. Only about 31 county-level jurisdictions lack information in this period of time: 26 of them are in Tibet, 4 in Qinghai, and 1 in Inner Mongolia. To the best of our knowledge, this is the most comprehensive dataset about China's Cultural Revolution, as well as mostly used in literature (e.g., Bai and Wu, 2020; Ou and Xiong, 2021; Kong et al. 2021). Walder's dataset clearly identifies abnormal deaths and injuries caused by the Cultural Revolution from natural deaths and injuries. In the dataset, death is defined as "unnatural deaths" that are attributable to political actions of any kind: suicides of individuals under political persecution, deaths in clashes between factions or with military forces, deaths in struggle sessions or as a result of imprisonment or torture, executions during political campaigns, and similar situations, excluding deaths due to accidents, natural disasters, or epidemic disease. Injury is defined as physical harm that does not result in death, usually as a result of clashes between factions or with military forces, injuries during struggle sessions or as a result of imprisonment or torture, we as well as beatings during political campaigns. We aggregate the county-level dataset into city-level and measure the intensity of Cultural Revolution by the total number of deaths and injuries per 10,000 population. We obtain province-level control variables from China Statistical Yearbooks. Table 1 presents descriptive statistics of main variables. To avoid the influence of outliers, all continuous control variables are winsorized at the upper and lower 1% levels. Our final sample consists of 10,020 observations.

[Table 1: Summary Statistics]

4.2 Variables

Our independent variable that captures CEO's early-life violence intensity is the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. We measure the violence intensity of CEO's birthplace by aggregating the number of deaths and injuries in districts and counties that belong to the city, and then divide it by city's population. We define that if the CEO was born between 1951 and 1976 (include two ends) in a place with violent events during the Cultural Revolution, i.e., when she was 25 or younger when she experiences social violence. The cutting of 25-year-old is based on the insight from several disciplines that social attitudes are predominantly formed before 25 years old (Krosnick and Alwin, 1989; Martinez-Bravo et al. 2022).

The corporate acquisition activity is widely used as a measurement of CEOs' risk-taking behaviors (Shi et al. 2017; Bernile et al. 2017; Pan et al. 2020). We use both the total number of corporate acquisitions conducted each year to capture the information of acquisition activity. Our results are also robust to the measurement of total spending on R&D and the possibility of being rated as Junk bonds.

4.3 Regression Specification

Started in May 1966 and quickly spread to the whole country, the central government almost lost control of the development of Cultural Revolution until the death of Mao in 1976. The China's Cultural Revolution can be seen as an unpredictable political movement, and its intensity in city level can be seen as almost exogenous. Also, not all CEOs have experienced this revolution in early-life because of their different birth years. Therefore, combining the regional and cohort variation in CEOs' experiences in this revolution, we employ the following DID empirical strategy to identify the impact of the early-life violence arising from the revolution on CEOs' risk-taking behaviors.

$$Y_{ijt} = \alpha + \beta_1 \text{Earlylife violence intensity}_j + \beta_2 \text{Controls}_{ijt} + u_i + v_t + \delta_c + \theta_j + \epsilon_{ijt} \quad (1)$$

The dependent variable Y_{ijt} is the acquisition activity for company i with CEO j in year t . The CEO's early-life violence intensity experience is captured by the Cultural Revolution violent events intensity in CEO j 's birth city and when the CEO was 25 or younger. Our benchmark group consists of CEOs who are born out of the Cultural Revolution period or experienced it after 25 years' old, and CEOs that experienced no such violent events during the Cultural Revolution.

In all our empirical models, we include company, year, CEO birth year, CEO city of birth fixed effects. The company-level decision, as the dependent variable, varies with company and fiscal year (in China, fiscal year equals calendar year). We add company fixed effect u_i to capture the company-specific characteristics that do not change over time. Therefore, we capture changes in financial policy within the same company when a new CEO with different early-life experiences is appointed. The year fixed effect v_t captures time-variant shocks common to all companies, such as change in government policies, inflation, economic crisis, and so on. We add birth cohort and birth city fixed effects δ_c and θ_j to eliminate the effect specific to every birth cohort and every birth city. It is important to purge CEO birth city effects as in our story, as CEOs born in different cities may experience Cultural Revolution in different intensity at the same age. Similarly, purging CEO cohort effects is important as CEO born in the same city may experience Cultural Revolution in different way with different ages. In our regression specification, we only capture within-cohort heterogeneity across CEOs. Including these four types of fixed effects enables us to effectively wash out all specific characteristics effects that can bias our estimation. Standard errors are clustered at CEO level.

In addition, we control the time-invariant characteristics at CEO level such as duality and gender. We also control the time-varying characteristics at company level such as ROA, TobinQ, book-to-market ratio, board size, the proportion of female directors, asset tangibility, the proportion of the CEO salary of all managers' salary, and the proportion of directors holding company shares.

Moreover, the time-varying provincial economic characteristics for CEO's birthplace are included, such as the local GDP, fiscal income, and fiscal expenses.

We mainly focus on the coefficient β_1 , as it measures the estimated effects of the CEOs' early-life experience on risk-taking behaviors. A conclusion can be reached that CEOs' early-life experience is conducive to risk-taking behaviors if the estimated result of coefficient β_1 is significantly negative.

4.4 Identification Advantages

There are a number of advantages underlying our identification strategy. First, in the literature of studying risk attitudes, a major challenge is separating selection bias from causal relationship as exposure to drivers that are thought to affect risk attitudes are potentially correlated with pre-existing characteristics. For example, relatively more risk averse people may engage in behaviors that mitigate exposure to uncertainty in the environment, like migrate to safer living places, and thus contaminate the interpretation of the estimation of the causal effects. To a large extent, as one of the largest political upheavals of the twentieth century paralyzed a highly centralized party state, the onset and development of China's Cultural Revolution is unexpected by CEO who experienced it during their early life. The severity of Cultural Revolution in a particular area is mainly affected by contingent interactions among rebel groups and military units after the collapse of local governments (Walder and Chu, 2020), which is highly variable even within the same city during the whole period and is hard to predict even for senior central politicians. Therefore, after we include the fixed effect specific to every birthplace to capture the time-invariant factors in the regression, the exposure of the CEOs to the violent events can be reasonably assumed to be exogenous.

Second, to further rule out the other locational factors of the CEO birthplace that contaminate the cognitive channel, we use the local radio strength as the instrument variable for the violence intensity. More specifically, one major driver for the local violent events is the local propaganda that rely on the radio broadcasts. The radio signal strength depends on two factors, the geographical terrain

and the number of radio stations or speakers. In order to capture the former which is exogenous, we use the radio signal strength that is orthogonal to local economic activity, which determines the number of radio stations or speakers. This instrument variable captures the intensity of propaganda but not influenced by the local economic activity or CEO preference, satisfying the exclusion condition.

Third, 1,566 out of 2,392 CEOs in our sample serve in a company whose region is different from their birthplace. Hence, if we find any impact of Cultural Revolution exposure in their birthplaces on companies' performance, after controlling firm fixed effects, such effect can only reflect CEOs' preferences.

Fourth, we exploit the clear cut-off in the duration of China's Cultural Revolution. Although the intensity across different cities is unexpected, the Cultural Revolution has a clear beginning and ending in the whole mainland. It begins with the issue of May 16 Notification and ends with the death of Mao. This enables us to disentangle the impacts of Cultural Revolution from those of other events.

Last but not least, one difficulty in the literature of how CEO's behaviors are shaped by personal experiences in a specific place is that we do not know exactly where the CEO lives during the event period. Specifically, if CEOs migrate after birth and especially during the Cultural Revolution, our estimation of the effect using CEOs' birthplace will be contaminated. Our study directly addresses this concern. First, it is worth noting that migration before Chinese economic reform begins in 1978 is very scarce and suppressed by the government. In 1958, the first household registration regulation *Regulations on Household Registration of the People's Republic of China* was promulgated, establishing a strict household registration system, which is updated every year. During the planned economic period, personal supplies were controlled by the central government and relied on the household registration management system for ration management. Individuals trying to migrate from rural areas to urban areas for non-agricultural work must apply to the relevant

departments, and the approval limit for such applications is strictly controlled. To work outside the province, you need to have six passes. Second, as we focus on the CEOs' early-life Cultural Revolution experience, we do our best to ensure that it is meaningful to use CEOs' birth city to represent their living city during the Cultural Revolution. The results are robust if we focus on people born during the Cultural Revolution. Third, even if it is true that some risk averse people select to migrate to cities with lower intensity of the Cultural Revolution, our results offer a lower-bound estimation as we still find that CEOs experienced high violent intensity tend to become risk averse.

5. Results

The main outcome variable of interests that we use to measure CEOs' attitudes towards uncertainty is mainly the corporate acquisition behaviors. In section 5.1, we report the impact of CEOs' early-life Cultural Revolution experiences to acquisition activities and acquisition characteristics. In section 5.2, we report the results of the instrumental variable estimation. In section 5.3, we report the results of placebo robustness tests. In section 5.4, we report the heterogeneous effect results based on age. In section 5.5, we conduct some further study to exclude the selection bias between CEO and company and several alternative explanations. In section 5.6 we present the result of falsification tests.

5.1 Main Results

Table 2 reports estimates from DID model where the dependent variables are the natural logarithm of one plus the total number of acquisitions the CEO made in the current year (Columns (1) to (2)) and the inverse hyperbolic sine of the total number of successful acquisitions the CEO made in the current year (Columns (3) to (4)). We report the results of the inverse hyperbolic sine transformation to exclude the problems of using $\log(1 + analysis)$, as is pointed out by Cohn, Liu, and Wardlaw (2022).

Existing studies suggest that CEOs exert significant decision-making power in the context of mergers and acquisitions (Yim, 2013; Kish-Gephart and Campbell, 2015). Corporate acquisitions are

inherently riskier compared to organic internal growth due to the information asymmetry, typically large commitment of time and resources required (Bernile et al. 2017). Therefore, lower frequency of corporate acquisition activities is a good measure of CEOs' risk-averse attitudes. We include fixed effects for the company, year, CEO birth city, and CEO birth year in all models. CEO level covariates include duality and Gender. Firm covariates include ROA, TobinQ, book-to-market ratio, board size, the proportion of female directors, asset tangibility, the proportion of the CEO salary of all managers' salary and the proportion of directors holding company shares. Province covariates include the local GDP, fiscal income and fiscal expenses. Standard errors are clustered at CEO level and t-values are reported in parenthesis. The coefficients of Early-life violence intensity are multiplied by 100 for better presentation.

We focus on CEO's early-life experience, as indicated by the coefficients of *Early-life violence intensity*. The results show that CEOs' early-life violent intensity negatively affects the corporate acquisition activities, which means they become more risk-averse after such experiences. For CEOs who experience the Cultural Revolution before 25 years old and whose birth cities suffered 1 degree higher of Cultural Revolution intensity, or 10,000 more abnormal deaths and injuries, leads to a decrease of 0.57% acquisition activities in companies they served. Alternatively, for those cohorts of CEOs, a one standard deviation increase in violence intensity (20.10) leads to an decrease of 11.57% acquisition activities. Similarly, given the same birth city with an average violence intensity (7.68), those experience the Cultural Revolution in their early-life participate in 4.40% less acquisition behaviors. The results from models focusing on successful acquisitions are consistent. The coefficients are stably significant at 5% level regardless the type of transformation and whether we add control variables.

[Table 2: Impact of Cultural Revolution Experience on Acquisition Activities]

Next, we example whether CEO's early-life social violence experience affects corporate acquisition characteristics. In particular, we focus on three different characteristics of announced

acquisitions: whether the acquisition is related transaction, whether the acquisition is successful, and the proposed method of payment.

We define *AcquisitUnReleShare* as the share of unrelated acquisition in all announced acquisitions. Unrelated acquisitions are usually more risky than related acquisitions as the acquiring firm lacks target-specific expertise and finds it harder to realize synergistic gains due to complementarities or cost savings. We define *AcquisitUnSuccessShare* as the share of unsuccessful acquisition in all announced acquisitions. There are many reasons for acquisition to fail, for example, the acquiring firm did not take the time to learn about the target company's culture, values, and goals. As a result, they were unable to properly integrate the two companies. Also, lacking management plan can also lead to the failure of acquisitions. Higher successful rate of acquisition may signal that the CEO is more cautious of the acquisition decision. We define *LgAcquisitPayStock* as the natural logarithm of acquisition paid by stock and *LgAcquisitPayCash* as the natural logarithm of acquisition paid by cash. Paying for the acquisition with acquirer stock reduces the risk resulting from unforeseen issues with the target's valuation. Thus, all else equal, an all-stock acquisition is less risky than paying for the acquisition with cash. Table 3 reports the results of the impact of Cultural Revolution experience on acquisition characteristics. Coefficients are multiplied by 100 for better presentation. Column (1) reports estimates of regression model where the dependent variable is the share of unrelated acquisitions and Column (2) reports the estimates of regression model where the dependent variable is the share of unsuccessful acquisitions. For CEOs who experience the Cultural Revolution before 25 years old and whose birth cities suffered 1 degree higher of Cultural Revolution intensity, or 10,000 more abnormal deaths and injuries, leads to a decrease of 6.9% share of unrelated acquisition and a decrease of 19.6% share of unsuccessful acquisition. Column (3) and Column (4) reports estimates of acquisition pay methods. When a decrease in acquisition paid by cash is decreased significantly, minor and insignificant results are found in acquisition paid by stock.

[Table 3: Impact of Cultural Revolution Experience on Acquisition Characteristics]

Our identification strategy assumes that the Cultural Revolution represents a kind of violence experience for CEOs as they witnessed the abnormal deaths and injuries from fighting, torturing, and lynching. We conduct a series of tests to lend more supports to this assumption, as is shown in Table 4. In panel A, we separate the experience of CEOs during armed fighting (1966-1968) and the remaining period (1969-1976). The large-scale armed struggles across the country begins in the winter of 1966 with the onset of incidents in Shanghai and Chongqing, and ends in the summer of 1968 with the issue of *July 3 Announcement* and *July 24 Announcement* by the central government, which asked the masses to hand in the arms and dissolve the armed groups. The armed struggle is significantly less frequent after this period. As we can see from panel A, the coefficients are larger and more significant for the early-life violent intensity during the armed fighting, compared with that of post 1968. In panel B, instead of aggregating the total number of deaths and injuries, we separate them and use them to measure the violence intensity respectively. As we can see, the scale of coefficients of deaths is more than five times of that of injuries. The results support our assumption as the intensity of violence resulting in deaths is far more severe than that of injuries. In panel C, we examine the effects of exposure to Cultural Revolution for the CEOs when they are 3 or younger or 25 years or older. We find that such effects disappear if the CEO experienced the Cultural Revolution if they were infants or adults, as is consistent with the finding that memory forms after three years' old (Peterson, 2002; Pillemer and White, 1989; Rubin, 2000) and people's social attitudes forms before 25 years' old (Krosnick and Alwin, 1989; Martinez-Bravo et al. 2022)

[Table 4: Impact on Acquisition Activities, Varied with Exposure Period and Intensity]

5.2 An Instrumental Variable Estimation

Although we have argued about the exogenous nature of the violence intensity of Cultural Revolution across different locations, there could still be some omitted district characteristics

contaminating our estimation of causal preferences. We conduct an instrumental variable estimation to mitigate this kind of bias.

In the few years before the Cultural Revolution, the Communist Party built a sophisticated wired radio infrastructure from which politicized media was regularly broadcast, which was proclaimed by contemporary Western sources as the “most extensive propaganda effort” in history (Dittmer, 1998). The state-sponsored media lead to more killings and counties with a stronger radio signal experienced higher revolutionary intensity (Ou and Xiong, 2021). The high correlation between local signal strength and Cultural Revolution intensity can also be seen from Figure 3 and Figure 4.

[Figure 3: Cultural Revolution Intensity across CEO Birth Cities]

[Figure 4: Signal Strength across CEO Birth Cities]

We use the interaction of local radio signal strength in CEO’s birth city and CEO’s exposure dummy variable as an instrumental variable of the early-life violence intensity. We calculate the local radio signal strength combine the location of 114 radio station in 1964 and the Irregular Terrain Model (Hufford, 2022), following the same strategy of Ou and Xiong (2021). As we include CEO’s birth city fixed effect in our regression, we isolate the exogenous variation in radio exposure attributable only to topographic features in the line-of-sight along the signal transmission path, accounting for the potential endogeneity in the location of radio stations.

Table 5 reports the results of instrumental variable estimation, column (1) reports the results of the first stage estimation and column (2) (3) report the results of the second stage. Coefficients in column (2) and (3) are multiplied by 100 for better presentation. *Local signal strength* is the interaction of city-level signal strength during the Cultural Revolution and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. The definition of *Early-life violence intensity* is consistent with Table 2. The coefficient estimate in column (1) is positive and statistically significant, which means the local signal strength can be a perfect instrumental variable for CEO’s

early-life violence intensity. The Cragg-Donald Wald F-statistic is 99.46, bigger than 10% Stock-Yogo weak ID test critical values, which rejects the hypothesis that the equation is weakly identified. From column (2), we can see for CEOs who experience the Cultural Revolution before 25 years old and whose birth cities suffered 1 degree higher of Cultural Revolution intensity, or 10,000 more abnormal deaths and injuries, leads to a decrease of 7.45% acquisition activities in companies they served, which is much higher than the DID estimation in Table 2.

[Table 5: Impact on Acquisition Activities: An Instrumental Variable Analysis]

5.3 Robustness Tests

We conduct a series of robustness checks for our study in Table 6 and Table 7. In Table 6, we use alternative measurements of CEO's early-life experience of violence intensity. In column (1) and (2), we use the total number of abnormal deaths and injuries instead of that normalized by local population to measure local Cultural Revolution intensity. In column (3) and (4), we use the total number of deaths normalized by the city area (instead of population) to measure local Cultural Revolution intensity. In column (5) and (6), we use the number of years experienced in the Cultural Revolution before 25 years old to measure the strength of exposure, instead of a dummy variable. The coefficients in column (1), (2), (5), and (6) are multiplied by 1,000 for better presentation. The results are robust across different measurements.

Alternatively, we use two alternative dependent variables to capture the risk-taking of the CEO, namely, the natural log of the total spending on R&D and corporate bond rating (Coles et al. 2006; Bernile et al. 2017). We present the results in Table 7. Coefficients are all multiplied by 100 for better presentation. As we can see from Table 7, CEOs experienced early-life violent social events tend to invest less on R&D and the bonds are less likely to be ranked as junk, consistent with our main results.

[Table 6: Impact on Acquisition Activities: Alternative Intensity Index]

[Table 7: Impact of Cultural Revolution Experience on R&D and Junk]

5.4 Further Tests

One big challenge in the study of CEO behaviors is the selection bias between CEO and company. For example, some companies may selectively choose risk-loving CEOs to satisfy their development needs. We conduct several analyses to address this issue. First, in our study, it is hard to imagine that companies will check or investigate CEOs' early-life experience of violence during the Cultural Revolution during their recruiting processes. Second, in Figure 5, we focus on the companies with CEO transition during the data period and show that there is no visible correlation between the characteristics of companies 1 year before the CEO take control and the Cultural Revolution experiences of the CEO. Moreover, we divide the CEO samples into two groups, high CR intensity group or treatment group (the intensity of Cultural Revolution of birth city is higher than the median), and low CR intensity group or control group (the intensity of Cultural Revolution of birth city is lower than the median). We conduct entropy balancing and propensity score matching using firm characteristics. As is shown in Table 8 and Table 9, our results are robust to the using of matching sample.

[Figure 5: CEO's Cultural Revolution Experience and Company Assignment]

[Table 8: Entropy Balancing for High CR Intensity and Low CR Intensity]

[Table 9: Propensity Score Matching for High CR Intensity and Low CR Intensity]

We also rule out several alternative explanations in Table 10. First, one possible explanation is that students' education is negatively affected during the Cultural Revolution and low educated CEOs tend to be risk averse (Kish-Gephart et al. 2015; Lin et al. 2009; Choi et al. 2021). In column (1) and (2) we interact the dummy variable which equals 1 if the CEO hold a bachelor's degree with the early-life violence intensity, and find this interaction does not significantly affect the acquisition behavior, which means the education variable will not affect the causal relationship in our sample. Moreover, in column (3), we show that the CEO's early-life violence intensity does not significantly affect CEO's

education level. Second, another possibility comes from selective death, which means that risk-loving people tend to participate in the armed fighting and are easily to be killed. As most youth participating in armed fighting is young workers and Red Guards (people who support Mao in the secondary schools and universities), and most sample in our dataset are in their primary school or younger during the Cultural Revolution, they are not likely to be killed during the Cultural Revolution. The results can also be seen from Panel B as the results are still significant for pre-secondary school samples (which means CEOs born after 1956, and are less than 12 years old until the end of armed fighting in 1968). Finally, the combination of the fact that the results are still significant for CEOs born during the Cultural Revolution and the difficulty for people to migrate as we discussed before.

[Table 10: Propensity Score Matching for High CR Intensity and Low CR Intensity]

5.5 Falsification Tests

To explore how our results could be influenced by unobservables, we conduct a falsification test where we randomly assign the birthplace to the CEOs and repeat the test as in Column (2) of Table 2 by 1,000 times. Figure 6 presents the distributions of the coefficients. As we can see, estimated coefficients are centered around zero when we randomize the Cultural Revolution experience for the sample CEOs. Specifically we find that only 26 out of 1,000 (percent = 0.026) simulated coefficients have an magnitude greater than our main finding in Table 2 Column (2). The evidence indicates that it is highly unlikely that our results are driven by other unobservables than the Cultural Revolution experiences of CEOs.

[Figure 6: Falsification Test: Shuffling CEO's Birthplaces]

6. Discussion and Concluding Remarks

In this study, we explored the influence of the early-life violence experiences on CEOs' attitudes towards risk-taking. China's Cultural Revolution (1966-1976) provides an excellent natural

experiment for analysis and a difference-in-difference identification strategy is employed. The results indicate that CEOs with early-life violence experiences tend to be more risk-averse, engaging in less frequent acquisition activities. The results are robust after controlling covariates of different levels, using alternative measure of violence intensity. We also exclude some alternative explanations

Our work contributes to several strands of literature. First, we contribute to understanding the long-term impact of CEOs' personal experiences on attitudes and behaviors. We extend this literature by highlighting the role of violent early-life experiences as an important and unstudied aspect of the CEOs' life history that shapes firm behavior. Moreover, we engage the violent experiences with early-life as a sensitive period which giving rise to enduring imprints which reflected their values and behaviors in adulthood. Second, we contribute to the study of post-violence growth. We extend this strand of literature by focusing on a specific type of violence and shifting the focus from violent events later in life to events during CEOs' childhood. Third, we contribute to the study of the long-term impact of China's Cultural Revolution. Former studies mainly focused on the consequences in social level. This paper is among the first to explore the economic consequences of the Cultural Revolution at the firm level.

Our study has limitations that can offer several avenues for future research. First, our findings mainly rely on micro-level dataset to gauge early-life violence experiences. While our findings are consistent with predictions from post-violence growth theory, we cannot say much about the mechanisms through which such violence experiences shape people's mind and affect their attitudes and behaviors. For example, how CEOs reflect on and deal with such violence experiences that lead to psychological growth to make them less confident to face uncertainty and avoid risks. While such mechanism analysis is beyond our scope, it is worth investigating to offer a deeper explanation of CEOs behaviors. Such analysis may not be possible with large-scale archival data while smaller-scale studies based on interview approach or laboratory setting could be helpful to capture CEOs'

reflections on these events.

Second, we have focused on the dependent variables including the number of acquisitions, but we do not examine whether such activities and finance policies benefit the corporate development. Grant and Wade-Benzoni (2009) find that mortality awareness can lead individuals to contemplate their own meaning and purposes in life, and build more analytical and rational psychological systems. we lack information about the quality of acquisitions, but still, such analysis is valuable for the boards to make employment decisions.

Finally, as we know, participants of China's Cultural Revolution can be divided into victims and persecutors. Specifically, families of poor farmers actually benefit from the Cultural Revolution, as it enhanced their social status, improving their economic conditions, and offered the opportunity to revenge on the land owners. Therefore, children born in such families may not take the Cultural Revolution as a violence experience. The unavailability of information about CEOs' family background limits our analyzing in this level of heterogeneity. Future research can study the effects of upward mobility and the moderating effects of family background on CEOs' behaviors taking China's Cultural Revolution as a background.

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Figure 1: Number of CEOs Born in Every City

We plot the distribution of CEO birth place. In this figure, more darkly-shaded regions correspond to areas with a higher number of CEOs born in that city.

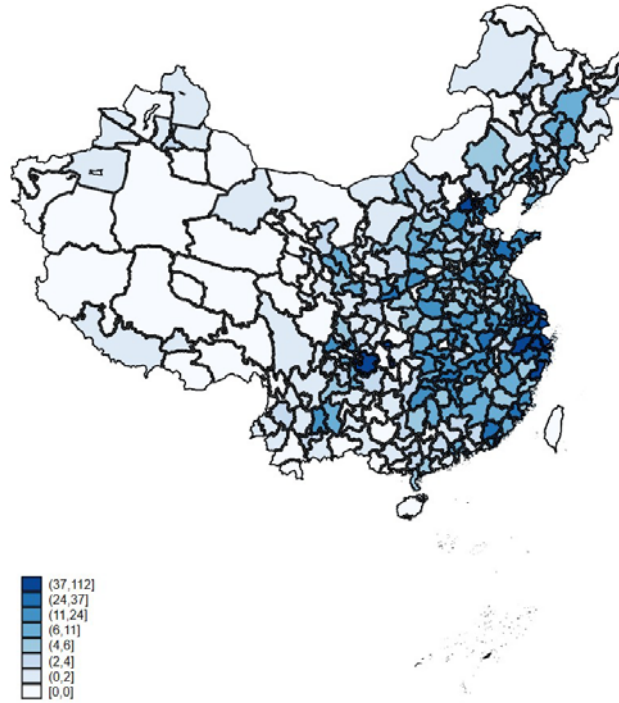


Figure 2: CEO Birth Year Distribution

We plot the distribution of CEO Birth Year. X-axis represents CEO's birth year. Y-axis represents the total number of CEOs born in that year.

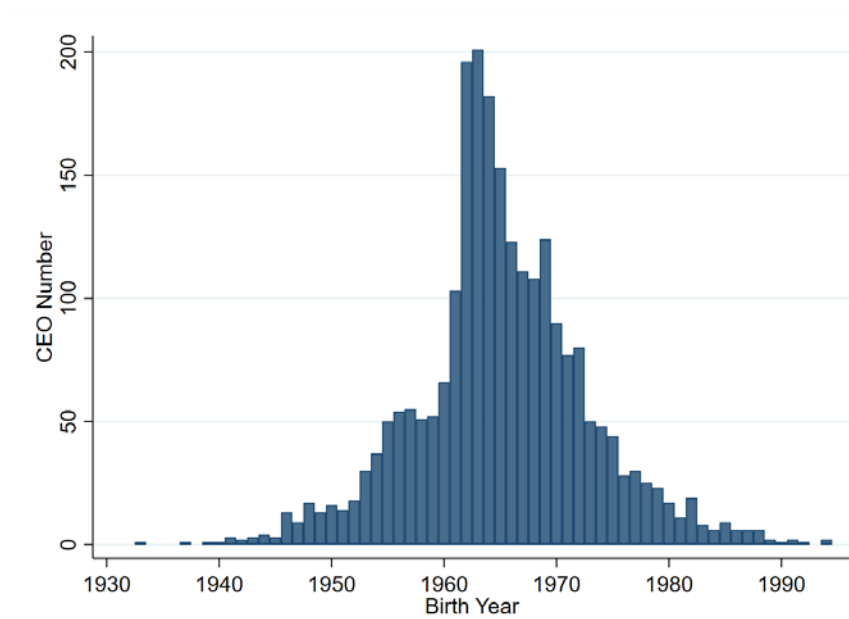


Figure 3: Cultural Revolution Intensity across CEO Birth Cities

We plot the distribution of CEO birth place. In this figure, more darkly-shaded regions correspond to areas with a higher number of fatalities directly attributed to the Cultural Revolution.

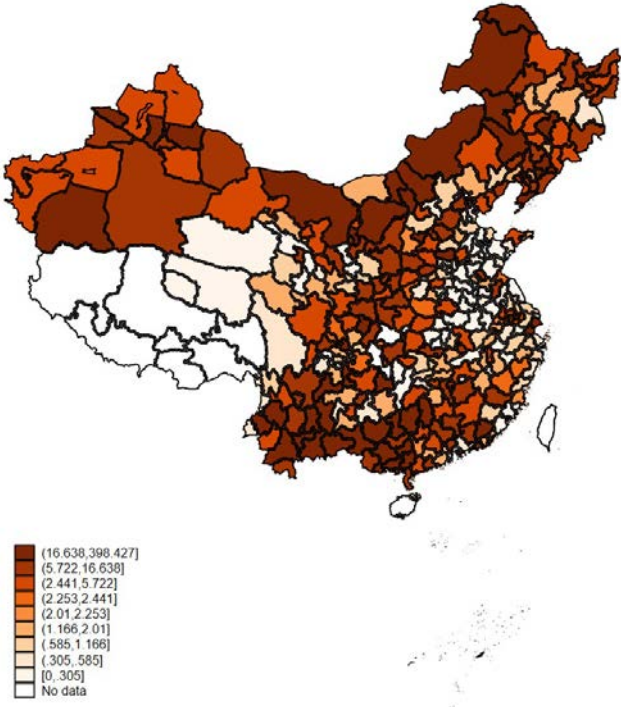


Figure 4: Signal Strength across CEO Birth Cities

We plot the distribution of CEO birth place. In this figure, more darkly-shaded regions correspond to areas with a higher radio signal intensity.

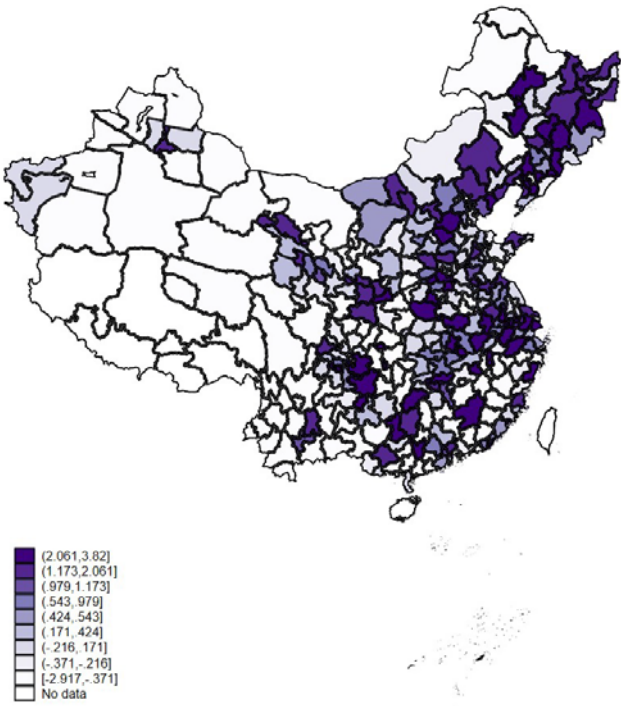


Figure 5: CEO's Cultural Revolution Experience and Company Assignment

We focus on the companies with CEO transition during the data period. We plot the scatter diagram of the characteristics of companies 1 year before the CEO take control and the Cultural Revolution experiences of the CEO. X-axis represents the company characteristics. Y-axis represents the intensity of the Cultural Revolution in her home city. All continuous variables are winsorized at 1%.

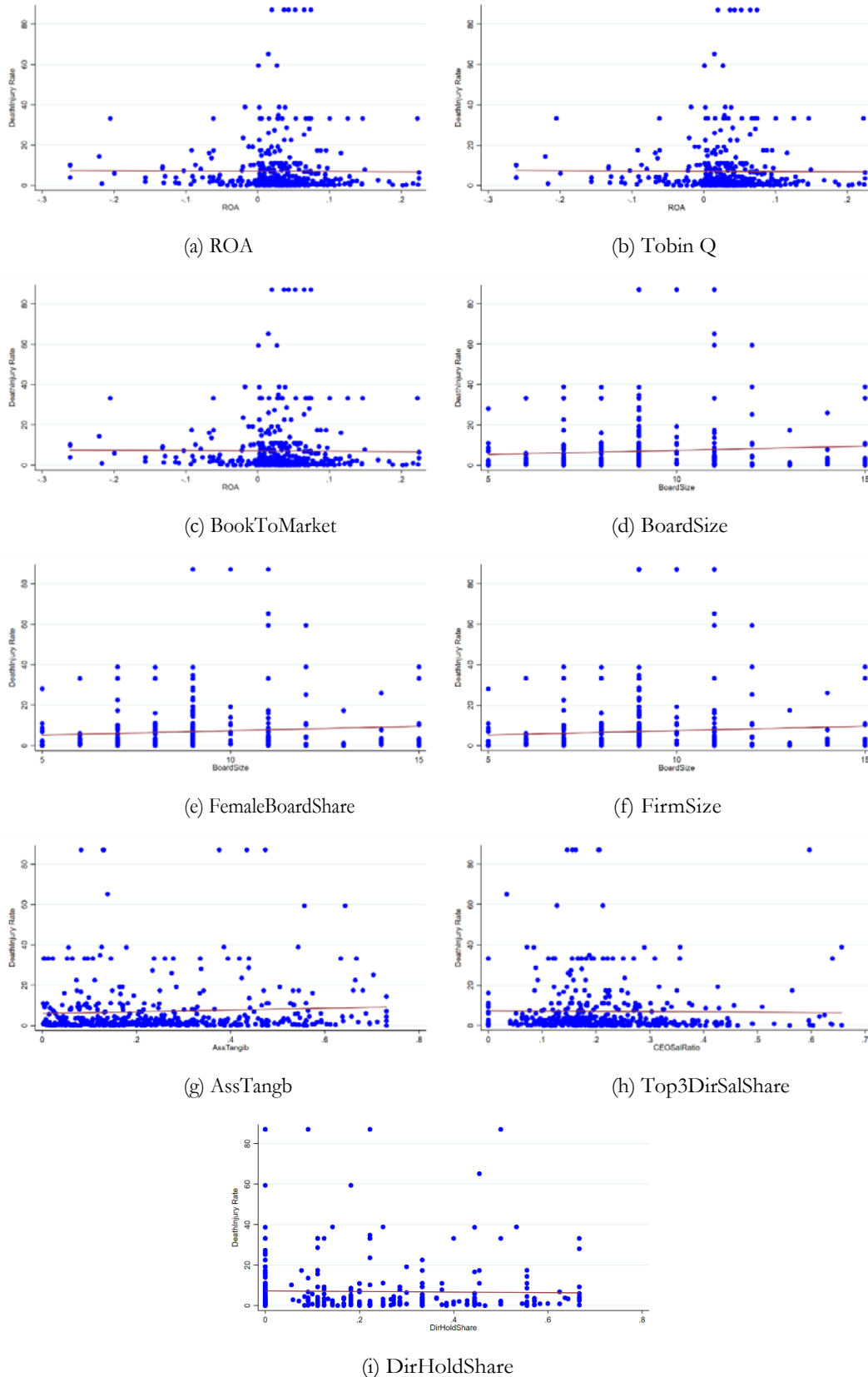


Figure 6: Falsification Test: Shuffling CEO's Birthplaces

We randomly assign each CEO's birth place and rerun the same equation (1) in section 4.3 by 1,000 times. We report the distribution of the fake coefficient of early-life violent intensity and our true coefficient. Only 26 out of 1,000 coefficients from the simulations have an absolute value larger than our true coefficient. All coefficients are multiplied by 100 for better presentation.

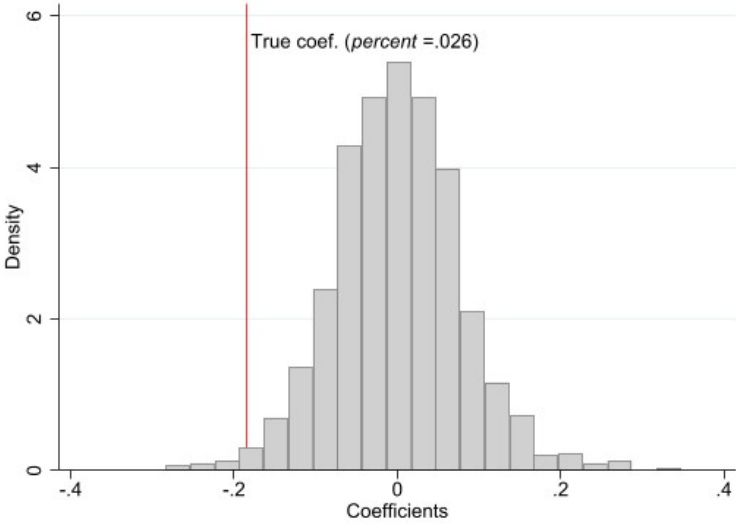


Table 1: Summary Statistics

Panel A: City-level Variables						
Variable	Mean	Std.Dev.	Min	Max	N	Definition
DeathInjury Rate	7.680	20.10	0	398	10020	Total number of abnormal deaths and injuries per 10,000 persons
Death Rate	4	7.590	0	37.30	10020	Total number of abnormal deaths per 10,000 persons
Injury Rate	3.690	17	0	367	10020	Total number of abnormal injuries per 10,000 persons
DeathInjury Num	2192	4020	0	27352	10020	Total number of abnormal deaths and injuries
Death Density	0.162	0.442	0	2.050	9925	Total number of abnormal deaths per square kilometer
LgGDP	8.540	1.190	5.350	10.60	10020	Log(gdp)
LgFiscalIncom	15.40	1.520	11.50	18.10	10020	Log(total fiscal income)
LgFiscalExpen	15.80	1.300	12.40	18.20	10020	Log(total fiscal expenditure)
Panel B: Firm-level Variables						
LgAcquisit	0.328	0.507	0	3.296	10023	Log(announced acquisition + 1)
IHSAcquisit	0.423	0.654	0	3.952	10023	The inverse hyperbolic sine transformation of announced acquisition
AcquisitUnReleShare	0.521	0.471	0	1	3458	Announced unrelated acquisition / announced acquisition
AcquisitUnSuccessShare	0.0477	0.198	0	1	3458	Announced unsuccessful acquisition / announced acquisition
LgAcquisitPayStock	0.0243	0.163	0	3.300	10020	Log(announced acquisition paid by stock + 1)
LgAcquisitPayCash	0.285	0.475	0	2.940	10020	Log(announced acquisition paid by cash + 1)
LgRDSpendSum	8.686	1.728	0.153	15.81	6704	Log(total R&D investment + 1)
Junk	0.0730	0.260	0	1	1576	Dummy variable, 1 = has a credit rating lower than AA- or negative
ROA	0.0415	0.0633	-0.261	0.225	10023	Net income divided by book equity
TobinQ	1.996	1.320	0.868	8.871	10023	TobinQ
BookToMarket	0.634	0.247	0.113	1.151	10023	Market value of equity / book value of equity, at year-end
BoardSize	8.812	1.887	5	15	10023	Number of directors
FemaleBoardShare	0.134	0.124	0	0.500	10023	Proportion of female directors
FirmSize	22.25	1.441	19.47	26.65	10023	Log(book assets)
AssTangib	0.227	0.172	0.00213	0.731	10023	Asset tangibility (fixed assets/book assets)
CEOSalRatio	0.229	0.123	0	0.656	9981	Proportion of the CEO salary of all managers' salary
DirHoldShare	0.239	0.216	0	0.667	10023	Proportion of directors holding company shares
Panel C: CEO-level Variables						
IsDuality	0.422	0.494	0	1	10023	Dummy variable, 1 = CEO duality
Gender	0.941	0.237	0	1	10023	Dummy variable, 1 = male
Education dual	0.871	0.335	0	1	8054	Dummy variable, 1 = hold bachelor degree
IsDuality	0.422	0.494	0	1	10023	Dummy variable, 1 = CEO duality
Gender	0.941	0.237	0	1	10023	Dummy variable, 1 = male
Education dual	0.871	0.335	0	1	8054	Dummy variable, 1 = hold bachelor degree
Exposure	0.918	0.275	0	1	10023	Dummy variable, 1 = experience Cultural Revolution before 15

Table 2: Impact of Cultural Revolution Experience on Acquisition Activities

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. In Columns (1) and (2), the dependent variable is the natural logarithm of the total number of acquisitions the CEO made in the current year. In Columns (3) to (4), the dependent variable is the inverse hyperbolic sine (IHS) transformation of the total number of acquisitions the CEO made in the current year. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity	-0.199** (-2.30)	-0.185** (-2.34)	-0.250** (-2.25)	-0.234** (-2.29)
IsDuality		-0.0107 (-0.40)		-0.0144 (-0.42)
Gender		-0.0273 (-0.50)		-0.0367 (-0.52)
ROA		0.389*** (3.60)		0.501*** (3.59)
TobinQ		0.0166* (1.73)		0.0213* (1.71)
BookToMarket		-0.168*** (-2.72)		-0.215*** (-2.68)
BoardSize		-0.00189 (-0.25)		-0.00249 (-0.25)
FemaleBoardShare		0.0317 (0.38)		0.0428 (0.40)
FirmSize		0.0966*** (5.60)		0.125*** (5.59)
AssTangib		0.0540 (0.67)		0.0679 (0.65)
CEOSalRatio		0.0663 (0.85)		0.0848 (0.840.0)
DirHoldShare		-0.0240 (-0.37)		-0.0311 (-0.37)
LgGDP		-0.0725 (-0.86)		-0.0905 (-0.83)
LgFiscalIncom		0.0333 (0.43)		0.0442 (0.45)
LgFiscalExpen		-0.0173 (-0.21)		-0.0221 (-0.20)
Constant	0.345*** (56.11)	-1.349 (-1.20)	0.445*** (56.12)	-1.788 (-1.24)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.160	0.168	0.160	0.167
Observations20	9766	9735	9766	9735

Table 3: Impact of Cultural Revolution Experience on Acquisition Characteristics

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and acquisition characteristics. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. In Columns (1), the dependent variable is the share of unrelated acquisition in all announced acquisitions. In Column (2), the dependent variable is the share of unsuccessful acquisition in all announced acquisitions. In Column (3), the dependent variable is the natural logarithm of the total number of stock acquisitions. In Column (4), the dependent variable is the natural logarithm of the total number of cash acquisitions. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

	(1)	(2)	(3)	(4)
	AcquisitUnReleShare	AcquisitUnSuccessShare	LgAcquisitPayStock	LgAcquisitPayCash
Early-life violence intensity	-3.594*** (-3.76)	-0.872 (-1.54)	-0.0341 (-0.97)	-0.128* (-1.82)
IsDuality	0.0960* (1.69)	-0.00212 (-0.11)	0.00531 (0.51)	-0.00360 (-0.14)
Gender	-0.170 (-1.36)	0.0534 (1.09)	-0.00761 (-0.39)	-0.0295 (-0.56)
ROA	0.547** (2.04)	-0.273 (-1.51)	0.00974 (0.25)	0.358*** (3.53)
TobinQ	-0.0273 (-1.62)	-0.000156 (-0.02)	0.00489 (1.34)	0.00772 (0.92)
BookToMarket	-0.107 (-0.92)	-0.0106 (-0.19)	-0.0317 (-1.49)	-0.107* (-1.88)
BoardSize	0.0128 (0.96)	-0.00194 (-0.28)	-0.00161 (-0.73)	0.00133 (0.19)
FemaleBoardShare	0.161 (1.08)	-0.105 (-1.43)	-0.0355 (-1.46)	0.0640 (0.84)
FirmSize	0.00427 (0.13)	-0.0340* (-1.81)	-0.00727 (-1.38)	0.0974*** (5.97)
AssTangib	0.0285 (0.18)	-0.126* (-1.73)	0.0269 (1.01)	0.0667 (0.87)
CEOSalRatio	-0.0140 (-0.10)	-0.0176 (-0.25)	0.00893 (0.30)	0.0641 (0.91)
DirHoldShare	0.0370 (0.35)	0.0366 (0.66)	0.0207 (1.03)	-0.0465 (-0.79)
LgGDP	-0.190 (-0.99)	0.0329 (0.36)	0.00692 (0.29)	-0.0752 (-0.94)
LgFiscalIncom	0.0408 (0.24)	-0.0562 (-0.71)	-0.0359 (-1.18)	0.0914 (1.31)
LgFiscalExpen	0.117 (0.71)	-0.0122 (-0.18)	0.0393 (1.32)	-0.0754 (-0.99)
Constant	-0.115 (-0.06)	1.668* (1.95)	0.0828 (0.27)	-1.419 (-1.35)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.521	0.0445	0.0243	0.288
Adjusted R-squared	0.307	0.115	0.0155	0.174
Observations	3000	3000	9735	9735

Table 4: Impact on Acquisition Activities, Varied with Exposure Period and Intensity

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. Panel A presents the results of exposure to armed fighting (1956-1968) and other period of the Cultural Revolution (1969-1976). Panel B presents the different results of using abnormal death normalized by population and abnormal injury normalized by population. Panel C presents the effects of violence intensity after 25 years' old and before 3 years' old. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

<i>Panel A: Exposure to Armed Fighting</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity_pre69	-0.295*** (-2.83)	-0.269*** (-2.64)	-0.376*** (-2.79)	-0.345*** (-2.61)
Early-life violence intensity_post68	-0.156* (-1.93)	-0.150** (-1.97)	-0.195* (-1.87)	-0.187* (-1.92)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.160	0.168	0.160	0.167
Observations	9766	9735	9766	9735
<i>Panel B: Violence Intensity</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity_death	-0.922** (-2.16)		-1.187** (-2.15)	
Early-life violence intensity_injury		-0.160** (-2.06)		-0.200** (-2.00)
Covariates	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.168	0.167	0.167	0.167
Observations	9735	9735	9735	9735
<i>Panel C: Exposure in Adult and Infant</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Adult violence intensity	0.371 (1.23)		0.475 (1.22)	
Early-life violence intensity	-0.162** (-2.16)		-0.204** (-2.11)	
Early-life violence intensity_infant		-0.0752 (-0.92)		-0.0906 (-0.86)
Early-life violence intensity_post infant		-0.329*** (-3.34)		-0.422*** (-3.28)
Covariates	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.167	0.168	0.167	0.167
Observations	9735	9735	9735	9735

Table 5: Impact on Acquisition Activities: An Instrumental Variable Analysis

This table reports the instrumental variable estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. We use local signal strength in CEO's home city during the Cultural Revolution as an instrumental variable of the early-life violence intensity. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients in (2) and (3) are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

	(1) Early-life violence intensity	(2) LgAcquisit	(3) IHSAcquisit
Local signal strength	3.127*** (2.73)		
Early-life violence intensity		-2.465* (-1.80)	-3.172* (-1.80)
Covariates	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes
Mean of Dep. Var.	6.940	0.331	0.427
Adjusted R-squared	0.969	-0.246	-0.246
Observations	9728	9728	9728

Table 6: Impact on Acquisition Activities: Alternative Intensity Index

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. In column (1) and (2), we use the total number of abnormal deaths and injuries instead of that normalized by local population to measure local Cultural Revolution intensity. In column (3) and (4), we use the total number of deaths normalized by the city area to measure local Cultural Revolution intensity. In column (5) and (6), we use the number of years experienced in the Cultural Revolution before 25 years old to measure the strength of exposure, instead of a dummy variable. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients in column (1), (2), (5), (6) are multiplied by 1,000 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	LgAcquisit	IHSAcquisit	LgAcquisit	IHSAcquisit	LgAcquisit	IHSAcquisit
Early-life violence intensity_case	-0.016*	-0.020*				
	(-1.92)	(-1.89)				
Early-life violence intensity_death density			-0.117*	-0.152*		
			(-1.88)	(-1.88)		
Early-life violence intensity_continuous					-0.245**	-0.317**
					(-2.27)	(-2.26)
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.427	0.332	0.427	0.331	0.427
Adjusted R-squared	0.168	0.167	0.170	0.169	0.168	0.167
Observations	9735	9735	9641	9641	9735	9735

Table 7: Impact of Cultural Revolution Experience on R&D and Junk

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. In Columns (1) and (2), the dependent variable is the natural logarithms of the total spending on R&D. In Columns (3) to (4), the dependent variable is the possibility of being rated as Junk bonds. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

	(1)	(2)	(3)	(4)
	LgRDSpendSum	LgRDSpendSum	Junk	Junk
Early-life violence intensity	-0.201 (-1.21)	-0.315** (-2.04)	-34.39*** (-3.70)	-41.71*** (-3.67)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	8.712	8.711	0.0703	0.0705
Adjusted R-squared	0.866	0.884	0.497	0.522
Observations	6447	6436	1436	1433

Table 8: Entropy Balancing for High CR Intensity and Low CR Intensity

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. We divide our samples into two groups, the treatment group means the intensity of Cultural Revolution of birth city is higher than the median, and the control group (the intensity of Cultural Revolution of birth city is lower than the median). Panel A presents the descriptive statistics of firm characteristics of two groups before entropy balancing. Panel B presents the descriptive statistics of firm characteristics of two groups after entropy balancing. Panel C presents the DID regression estimates after entropy balancing using firm characteristics. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients in Panel C are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

<i>Panel A: Descriptive Statistics of Firm Characteristics Before EB</i>					
	Treat		Control		Diff
	Mean	Variance	Mean	Variance	Diff (High-Low)
ROA	.0393	.00413	.0437	.00388	-.0691
TobinQ	1.976	1.679	2.013	1.796	-.0284
BookToMarket	.639	.0615	.63	.0605	.0328
BoardSize	8.941	3.963	8.685	3.134	.129
FemaleBoardShare	.138	.0159	.13	.0151	.0636
FirmSize	22.299	2.119	22.197	2.025	.0705
AssTangib	.227	.0319	.227	.027	.00077
CEOSalRatio	.227	.016	.23	.0142	-.0218
DirHoldShare	.234	.0461	.245	.0471	-.0513

<i>Panel B: Descriptive Statistics of Firm Characteristics After EB</i>					
	Treat		Control		Diff
	Mean	Variance	Mean	Variance	Diff (High-Low)
ROA	.0391	.00413	.0392	.00428	-.000199
TobinQ	1.978	1.684	1.978	1.689	-.0000898
BookToMarket	.638	.0616	.638	.061	.00009
BoardSize	8.941	3.972	8.94	3.503	.000362
FemaleBoardShare	.138	.0159	.138	.0157	.000223
FirmSize	22.299	2.112	22.299	2.158	.000203
AssTangib	.227	.0319	.227	.0278	-.0000127
CEOSalRatio	.227	.016	.227	.0141	-.000052
DirHoldShare	.234	.0461	.234	.0459	-.00019

<i>Panel C: Estimation After EB</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
DeathInjury Rate * Exposure	-0.197** (-2.36)	-0.194** (-2.45)	-0.249** (-2.31)	-0.246** (-2.41)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.163	0.169	0.162	0.169
Observations	9735	9735	9735	9735

Table 9: Propensity Score Matching for High CR Intensity and Low CR Intensity

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. We divide our samples into two groups, the treatment group means the intensity of Cultural Revolution of birth city is higher than the median, and the control group (the intensity of Cultural Revolution of birth city is lower than the median). Panel A presents the descriptive statistics of firm characteristics of two groups after propensity score matching. Panel B presents the DID regression estimates after entropy balancing using firm characteristics. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients in Panel B are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

<i>Panel A: Mean of Firm Characteristics After PSM</i>			
	(1)	(2)	(3)
	Treat	Control	Diff(High-Low)
ROA	.0431	.0385	.00455
TobinQ	2.006	1.982	.0246
BookToMarket	.631	.638	-.00767
BoardSize	8.671	8.928	-.257
FemaleBoardShare	.131	.138	-.00685
FirmSize	22.196	22.299	-.103
AssTangib	.227	.227	-.00037
CEOSalShare	.23	.228	.0028
DirHoldShare	.245	.235	.00975

<i>Panel B: Estimation After PSM</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity	-0.182** (-2.23)	-0.185** (-2.36)	-0.230** (-2.18)	-0.234** (-2.31)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.162	0.169	0.162	0.168
Observations	9733	9733	9733	9733

Table 10: Impact of Cultural Revolution Experience on Acquisition Activities, Alternative Explanations

This table reports the DID regression estimates for the relation between CEO Cultural Revolution experience and the propensity to make acquisitions. The early-life violence intensity is measured by the interaction of the violence intensity of CEO's birthplace and the dummy variable indicating whether the CEO experienced the Cultural Revolution before 25 years old. Panel A presents the affects of education as a possible channel where column (1) and (2) present the mediating effects of education and column (3) presents the affects of Cultural Revolution experience on CEO's education. Panel B presents the affects for CEOs who are pre secondary school age and CEOs who are post primary school age when they experience the armed fighting. Panel C presents the results of CEOs born before the Cultural Revolution and CEOs born after the Cultural Revolution. All models include fixed effects for the company, year, CEO birth year, and CEO birth city. All variables are defined in Table 1. Standard errors are clustered at CEO level and t-statistics are reported in parenthesis. Coefficients are multiplied by 100 for better presentation. ***, **, and * indicate significance at the 1%, 5%, and 10% probability level, respectively.

<i>Panel A: Alternative Channel - Education</i>				
	(1)	(2)	(3)	
	LgAcquisit	IHSAcquisit	Bachelor	
Early-life violence intensity * Bachelor	0.324 (0.71)	0.425 (0.72)		
Early-life violence intensity	-1.029 (-1.41)	-1.321 (-1.40)	-0.609 (-1.34)	
Bachelor	-0.0193 (-0.19)	-0.0224 (-0.17)		
Covariates	Yes	Yes	Yes	
Firm FE	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	
Birth City FE	Yes	Yes	Yes	
Birth Year FE	Yes	Yes	Yes	
Mean of Dep. Var.	0.333	0.429	0.873	
Adjusted R-squared	0.155	0.155	0.849	
Observations	7776	7776	7776	
<i>Panel B: Selective Death</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity_pre secondary school	-0.185** (-2.14)	-0.169** (-2.11)	-0.235** (-2.10)	-0.215** (-2.07)
Early-life violence intensity_post primary school	-0.418 (-1.48)	-0.491* (-1.82)	-0.526 (-1.44)	-0.625* (-1.79)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.160	0.167	0.160	0.167
Observations	9766	9735	9766	9735
<i>Panel C: Selective Migration</i>				
	(1)	(2)	(3)	(4)
	LgAcquisit	LgAcquisit	IHSAcquisit	IHSAcquisit
Early-life violence intensity_after10	-0.307*** (-3.04)	-0.288*** (-2.89)	-0.390*** (-2.99)	-0.367*** (-2.84)
Early-life violence intensity_before10	-0.154* (-1.94)	-0.144* (-1.93)	-0.193* (-1.88)	-0.181* (-1.88)
Covariates	No	Yes	No	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Birth City FE	Yes	Yes	Yes	Yes
Birth Year FE	Yes	Yes	Yes	Yes
Mean of Dep. Var.	0.331	0.331	0.427	0.427
Adjusted R-squared	0.160	0.168	0.160	0.167
Observations	9766	9735	9766	9735