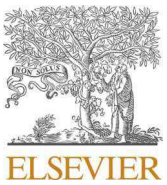
Journal of Development Economics 157 (2022) 102888



Contents lists available at ScienceDirect

Journal of Development Economics

journal homepage: www.elsevier.com/locate/devec

Regular Article

From past lies to current misconduct: The long shadow of China's Great Leap Forward

Shuo Chen [a], Haoyuan Ding [b,c], Shu Lin [d,*], Haichun Ye [e]

[a] School of Economics, Fudan University, 600 Guoquan Road, Shanghai, China
[b] College of Business, Shanghai University of Finance and Economics, 777 Guoding Road, Shanghai, China
[c] Shanghai Institute of International Finance and Economics, Shanghai, China
[d] Department of Economics, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong, China
[e] School of Management and Economics, Shenzhen Finance Institute, The Chinese University of Hong Kong (Shenzhen), 2001, Longxiang Boulevard, Longgang District, Shenzhen, China

ARTICLE INFO

JEL classification:
P37
Z13
G30
D91
N25

Keywords:
Dishonest behavior
Social norms
Corporate financial misconduct
Yield over-reporting
Great leap forward

ABSTRACT

Using hand-collected data on yield over-reporting during China's Great Leap Forward (GLF) period, we find that GLF over-reporting in a chairperson's province of origin strongly predicts corporate financial misconduct today. Evidence from a variety of identification strategies establishes a causal relationship. We also extend our analyses to other aspects of corporate misconduct and local dishonest behaviors. We show that GLF over-reporting has shifted social norms toward a present-day tolerance for dishonesty. Our findings suggest that wrongdoings by local government officials *in the past* can lead to adverse effects on people's *future* behavior in the form of cheating.

1. Introduction

A large body of existing research has shown that significant historical shocks have influenced economic outcomes in long-lasting ways through changes to social norms (e.g., Giuliano, 2007; Nunn, 2008; Nunn and Wantchekon, 2011; Voigtländer and Voth, 2012; Alesina et al., 2013). Moreover, recent studies have documented that leadership can play a crucial role in evolving social norms (e.g., Acemoglu and Jackson, 2015; Ajzenman, 2021). This knowledge begs the following questions: can wrongdoings by political leaders have long-term adverse consequences on people's behavior? Also, what is the role of social norm changes in shaping the long-lasting effect of politicians' mistakes? This paper sets out to answer these questions.

We look to China's Great Leap Forward (GLF) movement in the late 1950s as an opportunity to study these questions. This setting offers a well-known historical shock involving government misconduct. As we will discuss in detail in Section 2.1, the Communist Party of China (CPC) launched the GLF movement, a radical economic and social campaign, to rapidly transform China from an agrarian economy into an industrialized society. During the three-year campaign period, local government officials aggressively boasted about grain yields to meet the unrealistically high targets set by the CPC (Ashton et al., 1984; Bernstein, 1984; Xie, 1990; Liang, 2003; Lu, 2008). The CPC leadership applauded, rather than punished, local governments for their exaggerations. The *People's Daily*, the state news media, coined the term "launching high-yield agricultural satellites" (*fang gaochan weixing*) to trumpet these (fake) achievements of record-breaking grain yields.

We hypothesize that widespread misreporting by local political leaders and the official endorsement by the government for their dishonesty during the GLF period profoundly and persistently affects individuals' behavior in the present day. Previous studies in social learning and the evolution of social norms (e.g., Bandura and Walters, 1977; Acemoglu and Jackson, 2015; Ajzenman, 2021) have highlighted the role of leadership in shaping social norms through the *example effect*. In the case of GLF yield over-reporting, we would expect local political leaders' dishonesty to affect local social norms regarding honesty and

* Corresponding author.
E-mail addresses: cs@fudan.edu.cn (S. Chen), ding.haoyuan@mail.shufe.edu.cn (H. Ding), shulin@cuhk.edu.hk (S. Lin), haichunye@gmail.com (H. Ye).

https://doi.org/10.1016/j.jdeveco.2022.102888
Received 11 October 2021; Received in revised form 1 May 2022; Accepted 6 May 2022
Available online 13 May 2022

integrity.

Meanwhile, according to studies in social psychology (e.g., Cialdini, 1988; Cialdini et al., 1990; Reno et al., 1993; Keizer et al., 2008), the *descriptive* norm (i.e., perceptions about what other people do) and the *injunctive* norm (i.e., perceptions of whether others will approve of a behavior) are primarily responsible for shaping people's behavior. Thus, we posit that GLF over-reporting acts as a significant negative shock to social norms in general, shifting individual morality toward tolerating dishonesty, eventually leading to more cheating in the present day.

Moreover, we can also understand the association between GLF over-reporting and the prevalence of present-day behavior (in the form of cheating) by applying the theoretical framework of the compliance model used in the political economy literature (e.g., Benabou and Tirole, 2011; Besley et al., 2019; Jia and Persson, 2021). Under this framework, people's decision to cheat or not depends on the net material benefits from cheating, the intrinsic cost of cheating, and the social reputational payoff from acting honestly. Having observed that local political leaders who falsely reported grain outputs were not seriously held accountable or even promoted in the GLF era, people would adjust their intrinsic costs of cheating downward and behave dishonestly afterward. Moreover, when assuming that honesty is the modal choice, a higher share of cheaters would yield a more considerable decrease in the stigma of cheating than the increase in the honor of acting honestly, resulting in reduced social reputational payoff from acting honestly. This induced change in social reputational payoff would crowd in individual cheating decisions through a strategic complements effect.

Overall, theoretical studies in social learning and the evolution of social norms, social psychology, and political economy all predict that GLF over-reporting can have a causal effect on cheating behaviors. We would expect regions exposed to more aggressive yield over-reporting in the GLF era to be more dishonest nowadays, other things equal.

The object of this study is to empirically test the long-term effect of GLF over-reporting by government officials on people's behaviors, specifically regarding dishonesty. We mainly focus on corporate financial misconduct, a particularly salient example of cheating in China, in Chinese-listed firms. Nonetheless, at the end of this study, we extend our analysis to examine other types of dishonest behaviors.

To test for the impact of GLF yield over-reporting on today's corporate financial misconduct, we hand-collect GLF over-reporting data for each province and match these data with the chairperson's province of origin for each listed firm. To establish causality, we employ a series of empirical strategies. First, we include the time-varying firm locality province fixed effects to disentangle the impact of the inherited component of social norm from that of the external environmental factors. Second, we control for the confounding effects of an extensive set of chairperson province-of-origin characteristics in the baseline specification. Third, we also control for the firm fixed effects to rule out the possibility that some firm-level characteristics correlated with the selection of chairpersons and the likelihood of committing financial misconduct are driving the results.

Fourth, we conduct additional tests to rule out two potential competing hypotheses for our findings. We test for the "mistreatment" hypothesis by examining the effects of various mistreatment events on current corporate financial misconduct. We also check the robustness of our results to the inclusion of these mistreatment events as additional controls. To rule out the preexisting fraud culture hypothesis, we perform falsification tests investigating the effect of GLF yield over-reporting on individual dishonest behaviors before 1949, when the CPC gained power.

Fifth, and finally, we also employ an instrumental variable (IV) regression approach. Specifically, we instrument GLF over-reporting with three proxies for the career incentives of provincial first party secretaries (FPSs) at that time, including their party ranks in 1958, the change in their party ranks from the Seventh to the Eighth National Congress of the CPC (NC-CPC), and an indicator for their participation in the Chinese Red Army's Long March in 1934 and 1935. The three IVs are motivated by previous findings in the political science literature (e.g., Kung and Chen, 2011) that provincial FPSs with stronger career incentives over-reported grain yield more aggressively during the GLF. Meanwhile, the three IVs only capture individual characteristics specific to the GLF-era provincial FPSs. Given that the vast majority of the FPSs were not local to the provinces they were assigned to govern, we have no good reason to expect that the three IVs will directly affect the current corporate financial misconduct, other than through the over-reporting channel.

Using a sample of Chinese-listed firms over the period 2002–2016, we find robust evidence that firms are significantly more likely to indulge in financial misconduct if their chairperson's province of origin aggressively over-reported yields during the GLF period. Moreover, the estimated effect of GLF over-reporting on current corporate misconduct is also economically sizable. According to our baseline estimate, a one-standard-deviation increase in the GLF over-reporting variable raises the likelihood of financial misconduct by 3.3 percentage points, equivalent to a 25.8% increase relative to the average financial misconduct rate.

Furthermore, we extend our analysis in two ways to shed more light on the general implications of GLF over-reporting for individual's behaviors in regard to cheating in the present day. One extension involves assessing the impact of GLF over-reporting on other aspects of corporate misconduct by listed firms, including the intensity of financial misconduct, earnings management, tax evasion, tunneling, and information transparency. The other is to examine the widespread effects of GLF over-reporting on contemporary social norms and various dishonest behaviors, including individual attitudes toward fare evasion or tax evasion, local gross domestic product (GDP) data manipulation, and public corruption. Overall, our evidence from these extensions strongly supports our hypothesis that yield over-reporting by government officials during the GLF era has had significant and long-lasting effects on individuals' attitudes toward honesty in the present day, making them more likely to cheat or to view cheating as acceptable.

Our study contributes to the relevant literature in the following aspects. First, our paper is closely related to the burgeoning literature on the role of leadership in evolving social norms (e.g., Acemoglu and Jackson, 2015; Ajzenman, 2021). Our finding of the causal effect of yield over-reporting by local government officials in the GLF era on people's behaviors today, such as corporate misconduct, GDP data manipulation, and public corruption, directly supports the notion that social values and morality can be transmitted through the example effect.

Second, our work adds to the broad literature on how historical shocks have significant long-term impacts to social norms or cultural traits (e.g., Giuliano, 2007; Nunn, 2008; Nunn and Leonard, 2011; Voigtländer and Voth, 2012; Alesina et al., 2013; Bursztyn et al., 2020). Our study complements recent studies in this literature that understand the long-run consequences of historical shocks through the lens of the interaction between people's intrinsic incentives and social incentives (e.g., Benabou and Tirole, 2011; Besley et al., 2019; Jia and Persson, 2021).

Finally, our study also provides a new perspective on dishonest behaviors like corporate misconduct. Previous studies have examined a variety of economic and social determinants of corporate fraud (e.g., Agrawal and Chadha, 2005; Burns and Kedia, 2006; Dyck et al., 2010; Liu, 2016; Parsons et al., 2018).[1] We add to this literature by investigating how a significant historical shock can influence social norms, which, in turn, affects people's present-day behavior, in particular in the form of cheating.

The remainder of this paper is organized as follows. Section 2 provides a brief background about the GLF and a conceptual framework. Section 3 describes the data and our identification strategies. Section 4

[1] The accounting literature also tackles firm fraud (e.g., Beasley, 1996; Chaney et al., 2011; Drake et al., 2012; Dyreng et al., 2012; McGuire et al., 2012).

presents our main empirical results. Section 5 provides additional evidence on other aspects of corporate misconduct and a wide range of local dishonest behaviors today. Section 6 offers the concluding remarks.

2. Background and conceptual framework

2.1. Historical background

After the abolishment of private ownership (i.e., the so-called "socialist transformation" of private ownership of the means of production) in 1956, and the completion of the first Five-Year Plan for the development of the national economy in 1957, the CPC leadership decided to speed up socialist construction in China's agricultural and industrial sectors. On November 13, 1957, an editorial in the *People's Daily*, typically considered an authority on official government policy, first put forward the slogan the "Great Leap Forward," calling on the public to achieve "great leaps" in production. The Great Leap Forward, one of the most profound events in China's history (MacFarquhar, 1983), formally kicked off in May 1958 at the Second Plenary Session of the Eighth National Congress of the CPC. After that, the general attitude of "going all out, aiming high and achieving greater, faster, better and more economical results in building socialism" was adopted.

A crucial strategy of the CPC leadership to accelerate socialist industrialization, as well as to catch up with and overtake the United Kingdom (and the United States) in industrial production, over 15 (20–30) years was to squeeze agricultural surpluses. As a result, the CPC leadership decreed the establishment of the People's communes in rural areas. The CPC leadership was so eager for success that increased efforts were called to boost grain yields rapidly. At the time, absurd notions flew around with catchphrases like "the bolder the man is, the higher yields the fields will turn out" (*ren you duo da dan, di you duo da chan*). Government officials at various levels pursued unrealistic agricultural output targets. For example, the initially planned grain production in 1958 was 252 million tons, already a big surge compared to the actual output of 185 million tons in 1957. This target was later revised upward to 300–350 million tons in September 1958, eventually escalating to 375 million tons at the end of 1958, more than double the actual output in 1957.

Under tremendous pressure from political superiors and fierce competition from peers, local cadres exaggerated their grain outputs. Meanwhile, the *People's Daily* enthusiastically proclaimed these wild exaggerations as "launching agricultural satellites" (*fang weixing*), a term inspired by the Soviet Union's Sputnik satellite launch in 1957. Figure A1 in the Online Appendix provides a snapshot of the headline news from the *People's Daily* on August 13, 1958. The front page features two exceptionally high yields. One is that Jianguo No. 1 Commune (*Jianguo Yi She*) in Hubei province reported an early rice yield of 36,900 *jin* per mu (1.23 tons per hectare). The other is that Haixing Commune in Fujian province achieved a peanut yield of over 10,500 *jin* per mu (0.35 ton per hectare). Later, the term "launching satellites" would be used to describe "new records" in agricultural production, and high-yield fields were called "satellite fields" (*weixing tian*). With the CPC leadership and news media trumpeting these inflated achievements, a wave of false output reporting by local governments spread unchecked throughout the country during the GLF period.

2.2. Conceptual framework

How does yield over-reporting by local government officials during the GLF days affect people's behavior regarding dishonesty in the present day? According to social learning theory in sociology (e.g., Bandura and Walters, 1977), and the recently emerged economics literature on the leadership-induced evolution of social norms (e.g., Acemoglu and Jackson, 2015; d'Adda et al., 2017; Bursztyn et al., 2020; Ajzenman, 2021), we know that leaders' behaviors play an important role in shaping social norms via the example effect.

Research in social psychology (e.g., Cialdini, 1988; Cialdini et al., 1990; Reno et al., 1993) suggests that people's behaviors are generally governed by *descriptive* norms (i.e., perceptions of how people typically act) and *injunctive* norms (i.e., evaluative standards for how people *should* behave). People are motivated to follow social norms out of a general awareness that normative behaviors are approved and rewarded, while counternormative behaviors are disapproved of and punished. Further, when people are more exposed to information about the *descriptive* and *injunctive* norms regarding a particular behavior, adherence to those norms increases (e.g., Aarts and Dijksterhuis, 2003; Cialdini et al., 2006; Keizer et al., 2008).

A direct implication from these social psychological studies is that GLF over-reporting by local officials acts as a significant shock to the descriptive and injunctive norms, shifting them dramatically toward tolerating or favoring dishonest behaviors. The prevalence of yield misreporting in the GLF era conveyed the idea that cheating was acceptable. National plaudits for "launching satellites," such as the frenetic media coverage of record-smashing grain yields and the promotions of local cadres who boasted wildly, provided very public social approval and rewards (i.e., the injunctive-norm information) for public officials' dishonesty. Having been immersed in an information environment with falsified reports, people changed their perceptions about the relative costs and benefits of behaving dishonestly and consequently changed how they themselves behave.

Meanwhile, the compliance model in the political economy literature (e.g., Benabou and Tirole, 2011; Besley et al., 2019; Jia and Persson, 2021) provides an alternative perspective on the causal link between GLF over-reporting and the prevalence of subsequent cheating behaviors. Under the framework of the compliance model, people's decision of whether or not to cheat depends on the net material benefits from cheating, the intrinsic cost of cheating, and the social reputational payoff from acting honestly. Having observed that local political leaders who falsely reported grain outputs were not seriously held accountable in the GLF era, people would have adjusted their intrinsic costs of cheating downward and been more open to behaving dishonestly afterward. Moreover, when assuming that honesty is the modal choice, a higher share of cheaters would generate a larger decrease in the stigma of cheating than the increase in the honor of acting honestly, resulting in reduced social reputational payoff from acting honestly. This induced change in social reputational payoff would, in turn, crowd-in an individual's decision to cheat through a strategic complements effect.

In sum, we hypothesize that grain yield over-reporting by local political leaders in the GLF era would change the local social norms via the *bad example* effect, shifting people toward tolerating dishonesty and eventually leading them to cheat in the present day. Our hypothesis thus predicts a positive association between GLF over-reporting and subsequent cheating behaviors. We conjecture that people from regions more exposed to yield over-reporting in the GLF era are more likely to engage in dishonesty today.

3. Empirical design

3.1. Data

The core data set for our empirical analysis comes from combining multiple databases from the China Stock Market and Accounting Research (CSMAR), including the China Securities Regulatory Commission (CSRC) Enforcement Actions Database, the Corporate Directors' Characteristics Database, Corporate Governance Database, the Financial Statements Database, and the Stock Trading Database. Following conventional sample cleaning procedures, we restrict our sample to nonfinancial firms that employ at least 10 workers, have positive assets, liabilities, and sales, and have non-missing biographical information about chairpersons. We also exclude nonfinancial firms marked as "special treatment." Our final estimation sample is an unbalanced panel

of 1452 Chinese-listed firms over the period 2002–2016. For each firm included in our sample, we have relatively complete information about its financial conditions, corporate governance, misconduct behaviors, the chairperson's places of origin, and other relevant individual-level characteristics.

3.1.1. The corporate financial misconduct indicator

To construct our primary measure of corporate financial misconduct, we start with identifying market violations for each firm during the sample period, based on the CSRC's Enforcement Actions Research Database. This database comprehensively covers violations of regulations and rules in Chinese stock markets and provides detailed information about the types of and in which years violations occurred. To allow sufficient time for detection, we search for market violations through 2019 but include violations occurring no later than 2016.

Specifically, we construct a misconduct indicator that equals one if a listed firm commits a *disclosure-related* misconduct activity in a year and zero otherwise. Here, the disclosure-related misconduct behaviors include inflated earnings and assets, financial misrepresentation, delayed disclosure, material omissions, disclosure of other false and/or misleading information, and fraudulent listing.

We also consider two alternative financial misconduct indicators for robustness in the analysis. One is a *narrowly* defined misconduct indicator, and the other is a *broadly* defined misconduct indicator. Compared with our primary misconduct indicator, the narrowly defined one covers all disclosure-related misconduct behaviors, except for delayed disclosure and material omission. In contrast, the broadly defined one further includes *nondisclosure-related* misconduct behaviors, such as false capital contributions, unauthorized changes in capital usage, embezzlement, insider trading, illegal stock trading, stock price manipulation, and illegal guarantees. Under the definition of our primary misconduct indicator, 45.6% of sampled firms have engaged in at least one act of financial misconduct during the sample period. Of the 9129 firm-year observations in our sample, 1165 of the cases represent violations.

3.1.2. GLF over-reporting measure

Another key variable in our empirical analysis is the degree of GLF yield over-reporting in a chairpersons province of origin. To construct this over-reporting variable, we first measure yield over-reporting at the province level using the number of "high-yield agricultural satellites" launched during the GLF period. Following Kung and Chen (2011), we count the number of launched "high-yield agricultural satellites" reported by the *People's Daily* for each province between June 1958 and December 1960. In total, there are 658 such "high-yield agricultural satellites" for 24 provinces in China.[2] Further, the number of "high-yield agricultural satellites" varies considerably across provinces. For example, during the GLF period, 91 "high-yield agricultural satellites" were launched in Henan province, whereas only 4 such "satellites" were reportedly launched in Heilongjiang province.

Next, we extract biographical information from the CSMAR's Corporate Directors' Characteristics Database to identify the province of origin for each chairperson. We then merge the province-level data on the GLF yield over-reporting with the chairperson's province of origin.[3] To facilitate our interpretation, we normalize the over-reporting variable to have a mean of zero and unit standard deviation and use the normalized over-reporting variable in our regressions.

We focus on chairpersons rather than other corporate insiders for two primary reasons. One reason is that the data availability for the province-of-origin information is limited for other corporate insiders. The other reason is that the corporate governance structure in China sharply differs from that in more developed markets. In China, chairpersons typically influence their firm's business decisions significantly more so than do general managers.

3.1.3. Control variables

In our baseline specification, we control for a rich set of individual-, firm-, and province-of-origin-level characteristics. First, we include demographic characteristics for chairpersons, such as age, gender, and educational background. We draw on the individual-level information from the CSMAR's Corporate Directors' Characteristics Database.

Second, we also control for firms' business operation activities, including size, age, return on assets (ROA), leverage, Tobin's q, profit margin, the number of years being listed, and state ownership, and corporate governance, such as board size and the share of independent directors. We collect data on firms' business operation activities from the CSMAR's Financial Statements Database. All financial variables are winsorized at the 1st and 99th percentiles of their respective sample distributions and enter the regression model with a one-year lag. The data on firms' corporate governance come from the CSMAR's Corporate Governance Database.

Last, we also control for extensive province-of-origin characteristics, such as historical and current socioeconomic conditions. Online Appendix B defines the variables in detail and lists the sources too. We also provide summary statistics for the key variables used in our empirical analysis in Appendix Table C1 in the Online Appendix.

3.2. Identification

To examine the impact of GLF yield over-reporting in a chairperson's province of origin on the likelihood of corporate misconduct in the present day, we estimate the following baseline specification:

$$Misconduct_{i,j,k,l,s,t} = \alpha + \beta OverReport_{i,k} + \gamma' X_{i,j,t} + \gamma' Z_k + \mu_j + \omega_{l,t} + \tau_{s,t} + \varepsilon_{i,j,k,l,s,t}, \quad (1)$$

where i denotes a chairperson, j denotes a firm, k denotes the chairperson's province of origin, l denotes the province of firm location, s denotes the industry the firm belongs to, and t denotes the year. The dependent variable is the misconduct indicator, indicating whether the firm j has engaged in any misconduct in year t. X is a vector of controls for the firm-level and individual-level characteristics. Z is a vector of controls for the province-of-origin characteristics. μ_j $\omega_{l,t}$, and $\tau_{s,t}$ are the firm fixed effects, the firm-locality-year fixed effects, and the industry-year fixed effects.

Our primary variable of interest is $OverReport_{i,k}$, the degree of yield over-reporting in chairperson i's province of origin k during the GLF period. A positive and statistically significant coefficient for the over-reporting variable ($\beta > 0$) means that firms are more likely to commit financial misconduct if their chairperson hails from a province with a higher level of yield over-reporting during the GLF days.

To establish causality between GLF over-reporting and the current corporate financial misconduct, we employ various identification strategies. First, since historical shocks like GLF over-reporting can also induce changes in local institutional environments, one may be concerned that our results reflect the change in the local external environment rather than the altered social norms. To address this concern, we include the time-varying firm locality fixed effects ($\omega_{l,t}$) in the baseline specification to disentangle the effect of the inherited component of social norm changes from that of external environmental factors.

[2] Following Kung and Chen (2011), we count those reports that claimed crop yields of over 1000 *jin* per mu (0.03 ton per hectare), figures widely exceeding actual crop yields of around 200 *jin* per mu (0.0067 ton per hectare). Because of data unavailability, we do not include Xinjiang, Tibet, and the three municipalities (Beijing, Shanghai, and Tianjin) in the sample.

[3] For firms with missing information about their chairpersons' provinces of origin in the CSMAR, we identify chairpersons' provinces of origin based on the first three digits of their ID numbers released in firms' financial reports. When a chairperson's ID number is unavailable, we conduct an extensive internet search for his/her province of origin based on both the firm's and his/her names.

Second, to ensure that other attributes of chairpersons' province of origin are not responsible for our results, we include extensive province-of-origin characteristics as controls (Z_k) in our baseline model. Specifically, four variables are included in the vector Z_k. The first two are the number of non-party intellectuals persecuted (*rightists*) per 10,000 persons during the "anti-rightist" campaign and the degree of mess hall participation (*MHPR*) at the end of 1959. We include both variables to control for the confounding effects of regional political radicalism in the late 1950s.[4] The other two are farmland area per capita and the share of agricultural output in total output in 1957. We include them to control for the pre-GLF difference in agricultural production across provinces.[5]

Third, one could be concerned that some unobserved firm-level attributes are driving our results. For example, the corporate culture of fraud within a firm may cause it to select a dishonest person to be its chairperson, on the one hand, and lead to a higher risk of corporate fraud by the firm, on the other hand. To address this concern, and to further establish the causality, we also include firm fixed effects in the regression and rely on within-firm variation across chairpersons for the identification.[6]

Fourth, we conduct a battery of tests to rule out two potential competing hypotheses for the positive relationship between GLF over-reporting and corporate fraud today. One competing hypothesis is the aforementioned "mistreatment" channel, which argues that people's dishonest behaviors nowadays may be resulted from their perceptions of the mistreatment by the state or by nature. To rule out the mistreatment channel, we test how various mistreatment events in the past affect current corporate financial misconduct. Specifically, we consider five types of mistreatment events, including the extreme climate conditions in history, the number of historical revolts, the share of the local population labeled as the "four bad types," the severity of the Great Famine, and casualties of violent conflicts during the Cultural Revolution. If this mistreatment channel is indeed responsible for our findings, we expect a significantly positive association between mistreatment events and current corporate misconduct. As an additional check, we also include these mistreatment events as additional controls in our baseline specification and verify whether the effect of GLF over-reporting on the current corporate misconduct remains unchanged after controlling for various mistreatment events.

Another competing hypothesis is that the positive relation between GLF over-reporting and today's corporate financial misconduct can be explained by historical differences in the local culture of fraud long before the GLF. For example, in provinces where dishonesty was historically more acceptable, we could observe more aggressive yield over-reporting during the GLF period. Meanwhile, a local culture of fraud may persist today, causing chairpersons from these provinces to tolerate or even encourage financial misconduct in their firms as well. If this were the case, the positive relation between GLF over-reporting and current corporate fraud we document would be attributable to a pre-existing local culture of fraud.

To rule out this possibility, we conduct a falsification test assessing the effect of GLF yield over-reporting on people's behaviors related to dishonesty before 1949, when the CPC came into power. If variations in the over-reporting variable merely reflected the deep-rooted historical differences in the social norms across provinces, we would expect a significantly positive association between the GLF over-reporting variable and historical behaviors related to dishonesty. By contrast, if GLF over-reporting indeed caused changes in social norms regarding honesty, we should expect no significant relation between historical behaviors related to dishonesty and GLF over-reporting as the former is predetermined relative to the latter.

Our final identification strategy is to take the instrumental variable (IV) regression approach, which can help address the remaining omitted variables bias and the attenuation bias brought about by the potential presence of measurement errors in our fixed effect model. Conceptually, a valid instrument should be related to yield over-reporting during the GLF period but does not affect current cheating behavior directly via channels other than the over-reporting variable. Here, our choices of IVs for GLF yield over-reporting are motivated by the association between provincial first party secretaries' career incentives and their GLF policies, which has been documented in the political science literature (e.g., Kung and Chen, 2011). Since the CPC took control of China in 1949, provinces are typically governed by the FPSs. As shown in Kung and Chen (2011), provincial FPSs tended to over-report grain yields more aggressively when they had stronger incentives to advance their political careers.[7]

Specifically, we consider three proxies for the career incentives of GLF era provincial FPSs as our IVs.[8] The first IV is the GLF provincial FPS's party rank in 1958, an ordinal variable that takes on values of 0, 1, or 2 for the party rank, from bottom to top, of a nonmember, alternative member of the Central Committee, and full member of the Central Committee, respectively. We expect this party rank variable to be *negatively* associated with GLF over-reporting because provincial leaders with lower party ranks generally had a stronger incentive to move up the career ladder by engaging in dishonest acts like over-reporting grain yields. The second IV is the provincial FPS's party rank change from the First Plenary Session of the Seventh National Congress of the CPC to the First Plenary Session of the Eighth National Congress of the CPC on the eve of the GLF movement. To the extent that the CPC leadership tended to fast track those perceived to be more loyal to the party and supportive to the subsequent GLF movement for a promotion, we expect a *positive* relationship between rank change and GLF over-reporting. The third IV is a binary indicator for the GLF provincial FPSs' participation in the Chinese Red Army's Long March between 1934 and 1935. The Long March experience is commonly considered a pivotal credential to be qualified as a "revolutionary" contribution to the CPC (e.g., Hou, 1957; Yang, 1990). Provincial FPSs without this credential would have had a disadvantage in their career advancement and, consequently, would have been more likely to over-report crop yields to help them climb the career ladder. Hence, we expect a *negative* association between the Long March indicator and GLF over-reporting.

On the other hand, the three IVs are individual-level characteristics reflecting the personal experiences of the GLF-era provincial FPSs. Given that most provincial FPSs in the GLF era were non-local to the provinces they were appointed to govern, the three IVs are unlikely to be correlated with the preexisting local social, economic, and institutional

[4] Data on the number of nonparty intellectuals persecuted during the "anti-rightist" campaign have been extracted from *Guanyu Poupaifenzi Zhaimaozi de Baogao* (*Report on the Work of Revoking the Rightist Conviction*), published by the Organization Department and United Front Work Department of the Central Committee of the CPC in 1959. Data on the mess hall participation rate at the end of 1959 have been obtained from Yang (1996).

[5] Province-of-origin-level data on farmland area per capita, agricultural output, and total output in 1957 have been obtained from the *Comprehensive Statistical Data and Materials of China (1949–1989)*.

[6] Previous studies in the finance literature (e.g., Bennedsen et al., 2020; Fracassi, 2017; Fracassi and Tate, 2012) have tried to use the death-related exits of chairpersons to deal with the potential endogeneity in chairperson selection. However, only one chairperson's death in our sample prevents us from adopting this approach.

[7] Most FPSs assumed positions around 1954, with a few in 1952. The FPSs in Ningxia and Liaoning provinces were appointed in 1958, shortly before the GLF commenced.

[8] Career information has been obtained from *Zhongguogongchandang Lijie Zhongyangweiyuan Dacidian*, 1921–2003 (a Compendium of Central Committee Members of Various Plenums, 1921–2003), published by the Organization Department of the CC-CPC in 2004.

conditions in the provinces they governed.[9] Hence, we have no good reason to expect our IVs to directly affect today's cheating behaviors through channels other than GLF over-reporting.

4. Main results

4.1. Basic results

Before tackling the formal regression analysis, we provide some preliminary evidence for the cross-sectional relationship between GLF over-reporting and corporate financial misconduct today. In Fig. 1, we aggregate chairpersons from the sample province of origin and plot the average of the misconduct indicator at the level of the chairperson's province of origin over the period 2002–2017 against GLF over-reporting in each province of origin, conditional on the baseline province-of-origin controls. The significantly positive relationship between the two variables indicates that firms tend to have a higher risk of corporate fraud today when their chairpersons are from provinces with greater exposure to the grain yield over-reporting during the GLF period.[10]

Table 1 presents our baseline regression results. The dependent variable in column (1) is the primary misconduct indicator, while those in columns (2) and (3) are the narrowly and broadly defined misconduct indicators, respectively. Regardless of the misconduct indicators used, the estimated coefficient for the over-reporting variable is always positive and statistically significant. These results suggest that firms are significantly more likely to engage in financial misconduct today if their chairpersons are from provinces with a higher degree of yield over-reporting in the GLF era. The effect is also economically sizable. Take the estimated coefficient in column (1), for example. A one-standard-deviation increase in GLF yield over-reporting at a chairperson's province of origin raises the likelihood of financial misconduct in his or her firm by 3.3 percentage points, equivalent to a 25.8% increase over the sample mean of the misconduct indicator.

As for the controls for the province-of-origin characteristics, most have statistically insignificant effects on today's corporate misconduct, except for the logarithm of the number of rightists persecuted; the estimated coefficient for this control is significantly positive. Regarding the firm-level controls, we find that leverage and state ownership are significantly and positively related to the probability of financial misconduct, whereas others are largely insignificant. As far as the individual-level controls for the chairperson characteristics, we find that having a female chairperson significantly reduces the likelihood of financial misconduct. In contrast, the chairperson's age and education do not have statistically significant impacts.

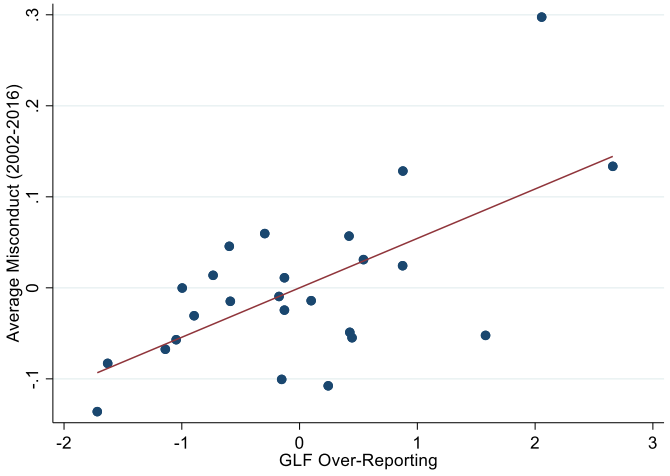


Fig. 1. GLF Over-reporting and Average Misconduct *Notes:* This figure plots the average misconduct at the chairperson's province-of-origin level against GLF over-reporting after we purge the effects of the province-of-origin-level mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, and the pre-GLF agricultural output share. The horizontal axis represents the degree of GLF yield over-reporting at the chairperson's province-of-origin level. For the vertical axis, we aggregate chairpersons from the same province of origin and compute the average of the primary misconduct indicator at the chairperson's province-of-origin level over 2002–2016.

Table 1
Basic results.

Dependent variable:	Primary misconduct indicator	Narrowly defined misconduct	Broadly defined misconduct
	(1)	(2)	(3)
Over-report	0.033**	0.035**	0.027*
	(0.016)	(0.015)	(0.016)
Rightists	0.092**	0.051	0.086*
	(0.044)	(0.034)	(0.045)
MHPR	0.015	0.019*	0.015
	(0.015)	(0.010)	(0.015)
Farmland	−0.007	0.001	−0.006
	(0.011)	(0.007)	(0.011)
Agri. Share	−0.182*	−0.145**	−0.137
	(0.099)	(0.068)	(0.103)
Firm age	−0.075	−0.002	−0.047
	(0.049)	(0.037)	(0.049)
Size	0.019	0.009	0.003
	(0.012)	(0.008)	(0.012)
ROA	0.054	0.042	−0.005
	(0.088)	(0.062)	(0.111)
Leverage	0.117**	0.038	0.135***
	(0.045)	(0.032)	(0.046)
Profit margin	−0.038	−0.062	−0.010
	(0.053)	(0.044)	(0.054)
Tobin's q	0.237	4.855*	−3.322
	(4.312)	(2.865)	(4.479)
Board size	0.052	0.034	0.063
	(0.041)	(0.030)	(0.042)
Independence	0.030	−0.085	0.015
	(0.123)	(0.080)	(0.134)
State-owned	0.030*	0.021*	0.029*
	(0.016)	(0.012)	(0.016)
Female	−0.144***	−0.138***	−0.164***
	(0.052)	(0.039)	(0.059)
Chairperson age	−0.016	0.035	−0.004
	(0.065)	(0.046)	(0.066)
Chairperson edu	−0.011	0.008	−0.012
	(0.023)	(0.016)	(0.024)
N	9129	9129	9129
R^2	0.499	0.520	0.490
Firm FE	Y	Y	Y
FirmProv × Year FE	Y	Y	Y
Industry × Year FE	Y	Y	Y

Notes: This table reports the estimation results from the baseline specification. *Over-report* represents the degree of GLF yield over-reporting in a chairperson's province of origin. All regressions include a constant term, as well as firm, firm-province × year, and industry × year fixed effects. Robust standard errors clustered at the province-of-origin-year level are reported in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

[9] In our data, about 80% of the provincial FPSs during the GLF period did not govern their home provinces. When we re-estimate the IV regression using the subsample of non-local provincial FPSs, we obtain similar results.

[10] We also conduct a cross-sectional analysis by regressing the average misconduct over 2002–2017 for each province of origin on GLF over-reporting, conditional on the baseline province-of-origin controls. The estimated coefficient for GLF over-reporting is 0.054, with a standard deviation of 0.019 and a *p*-value of 0.012.

4.2. Robustness checks

In this subsection, we check the robustness of our results by including additional controls for the firm- and province-of-origin-level characteristics. One potential concern about our results is that some uncontrolled firm-level attributes may drive them. For instance, if firms with poorer business performance, with weaker corporate governance, or facing less effective external monitoring environment are more likely to select dishonest people as their chairpersons, on the one hand, and to commit corporate fraud, on the other hand, then this could potentially bias the estimated effect of GLF over-reporting at the chairperson's province-of-origin level on corporate financial misconduct today.

We address this concern by controlling for additional firm-level attributes and report the regression results in the first three columns of Table 2. In column (1), we include additional controls related to the firm's business operation activities, including sales growth, tax burden, and asset tangibility. Column (2) adds a set of controls reflecting the firm's internal corporate governance, including a duality dummy, a cross-listing dummy, and a foreign auditor dummy, to our baseline specification. The duality dummy equals one if the firm's chairperson is also its CEO and zero otherwise. The cross-listing dummy indicates whether the firm is also listed in overseas stock exchanges. The foreign auditor dummy equals one if foreign accounting firms are employed as auditors and zero otherwise. In column (3), as additional controls for the external market monitoring firms face, we include the logarithm of the stock turnover rate, the logarithm of the number of analysts covering each firm, the logarithm of the stock return volatility, and the logarithm of the share of stocks owned by institutional investors.

In all three columns, the coefficients for the over-reporting variable remain positive and statistically significant. Furthermore, including these additional firm-level controls does not affect the magnitude of the estimated coefficient. As for the newly included firm-level controls, corporate misconduct is significantly more likely to occur when firms experience weaker sales growth or have fewer market analysts covering them. All other firm-level additional controls are not statistically significant.

While we have already controlled for a rich set of province-of-origin-level characteristics in the baseline specification, some concerns over other confounders at the province-of-origin level remain. To this end, in column (4) of Table 2, we further control for three proxies for the historical socioeconomic conditions in chairpersons' province of origin, including the degree of excess grain procurement during the GLF, the logarithm of land tax per person, and the logarithm of the share of the population that held the degree of *Jinshi* (*Presented Scholars*) in the late Qing Dynasty.[11] In column (5), we also control for the current legal environment and educational attainment in each province of origin. The legal environment is proxied for by a strong legal enforcement indicator that equals one if the provincial legal enforcement index (Wang et al., 2018) belongs to the top tercile of the index distribution and zero otherwise. We measure educational attainment at the province-of-origin level by the share of the population enrolled in college each year. We find that controlling for these additional province-of-origin-level characteristics does not affect our results. In both columns, the GLF over-reporting variable has a significantly positive effect on current corporate misconduct.

Table 2
Robustness to additional controls.

Dependent variable:	Primary measure of misconduct				
	A. Firm-level			B. Province of origin	
	Operation	Governance	Monitor	Historical	Current
	(1)	(2)	(3)	(4)	(5)
Over-report	0.041**	0.045**	0.036**	0.045**	0.036**
	(0.018)	(0.019)	(0.017)	(0.023)	(0.016)
Sales growth	−0.034**				
	(0.016)				
Tax burden	−0.262				
	(0.381)				
Tangibility	−0.038				
	(0.054)				
Duality		0.000			
		(0.016)			
Cross-listing		0.064			
		(0.051)			
Foreign auditor		0.002			
		(0.026)			
Stock turnover			0.012		
			(0.009)		
Analysts			−0.014**		
			(0.007)		
Return volatility			−0.001		
			(0.021)		
Institutional ownership			−0.002		
			(0.003)		
Procurement				0.003	
				(0.004)	
Land tax				0.026	
				(0.017)	
Jinshi				−0.082***	
				(0.031)	
Legal environment					0.027
					(0.020)
College enrollment					0.003
					(0.005)
N	7894	8241	8773	9063	9129
R^2	0.518	0.506	0.494	0.501	0.499
Baseline controls	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y
FirmProv × Year FE	Y	Y	Y	Y	Y
Industry × Year FE	Y	Y	Y	Y	Y

Notes: This table checks the robustness of our results to additional controls. Panel A includes additional controls for firm-level characteristics. Panel B includes additional controls for the chairperson's province-of-origin-level characteristics. *Over-report* represents the degree of GLF yield over-reporting in a chairperson's province of origin. All regressions include a constant term; individual-level, firm-level, and province-level controls; and firm, firm-province × year, and industry × year fixed effects. Individual-level controls are chairpersons' age, gender, and education. Firm-level controls are firm age, size, ROA, leverage, profit margin, Tobin's q, board size, independent director share, and a state ownership dummy. Province-of-origin controls are mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, and pre-GLF agricultural output share. Robust standard errors clustered at the province-of-origin-year level are reported in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

Although not reported for brevity, we also conduct three additional sets of robustness checks. First, we use the number of "high-yield agricultural satellites" scaled by the province's land area as an alternative measure of GLF over-reporting. Second, we adopt two strategies to ensure that some influential observations in the data do not drive our results. One is to exclude the top and bottom 1% of the sample distribution of the GLF over-reporting variable from the estimation sample. The other is to exclude the outliers identified following Welsch and

[11] Data on the excess grain procurement to total grain output ratio have been obtained from *Nonye Jingji Ziliao, 1949–1983* (*Materials on the Agricultural Economy, 1949–1983*), published by the Planning Office of the Ministry of Agriculture, Livestock, and Fisheries in 1983. Data on the land tax per person and the number of *Jinshi* holders are hand-collected from the *Jiaqing Chongxiu Yitongzhi* (*National Gazetteer of Qing Dynasty Recompiled during the Reign of Emperor Jiaqing*), a compendium compiled by government officials between 1820 and 1842 that records detailed social and economic data up to 1820. Since the historical variables used in this study are recorded at the historical province-of-origin level, we adjust for changes in administrative boundaries using the GIS polygon map from the China Historical Geographic Information System (CHGIS).

Kuh's (1977) method. Third, to check the robustness of our results to the positive skewness of the over-reporting measure, we apply the Box-Cox power transformation (Box and Cox, 1964) to the GLF over-reporting variable and re-estimate the baseline regression using the zero-skewness measure. The first four columns of the Table C2 in the Online Appendix report the detailed estimation results for these additional robustness checks.

4.3. Ruling out competing hypotheses

4.3.1. The "mistreatment" hypothesis

A potential competing hypothesis for our main findings is that the experience of living through natural versus man-made calamities caused people to disregard honesty and integrity, leading to the positive association between GLF over-reporting and corporate financial misconduct today. For example, as studies on the GLF document (e.g., Ashton et al., 1984; Kung and Chen, 2011; Meng et al., 2015), a severe consequence of grain yield over-reporting was widespread famine in China between the years 1959 and 1961. One may argue that the positive correlation between GLF over-reporting and current corporate misconduct we document may reflect people's behavioral response to their perception of mistreatment by the state, instead of the bad examples of political leaders we emphasized in our hypothesis.

To rule out the "mistreatment" hypothesis, we collect a variety of mistreatment events in Chinese history and examine how past mistreatment in a chairperson's province of origin affects current corporate financial misconduct. Specifically, we consider five proxies for past mistreatment at the province-of-origin level. The first one is local extreme weather conditions in history. We construct an extreme weather indicator using historical information on extreme climate conditions by region.[12]As adverse climate conditions can potentially affect people's behavior and morality (e.g., Giuliano and Nunn, 2021), we include this province-of-origin level extreme weather indicator to control for confounding effects associated with the "mistreatment-by-nature" channel. The remaining four are used as proxies for the mistreatment by the state, including the logarithm number of revolts in the Qing dynasty, the logarithm number of persons convicted as the "four bad types" (i.e., former landlords, formerly rich peasants, counterrevolutionaries, and "bad elements" who had been found guilty of political or social infractions) over 1950–1984, the severity of the Great Famine measured by the excess mortality rate between 1958 and 1966, and the logarithm of casualties of violent conflicts during the Cultural Revolution.[13]

We report the estimated effects of past mistreatment on corporate misconduct today in Table 3. The first five columns report the estimated effects of each historical mistreatment event in a chairperson's province of origin on current financial misconduct. We find that the estimated coefficients for the mistreatment events are generally insignificant. While the estimated coefficient for the extreme weather indicator is statistically significant at the 10% level, it is negative, contradicting the "mistreatment" hypothesis. Furthermore, when we include the five mistreatment variables and the GLF over-reporting variable in column (6), only the estimated coefficient for the GLF over-reporting variable is positive and statistically significant, while those on the mistreatment proxies are all statistically insignificant. These results reinforce that the "mistreatment" hypothesis is less likely to be responsible for the positive relation between GLF over-reporting and the current financial misconduct we document.

4.3.2. The preexisting fraud culture hypothesis

To rule out the hypothesis that some preexisting local cultural characteristics may explain our results, we conduct a falsification test by checking whether GLF yield over-reporting is related to people's behaviors before the CPC came into power in 1949. We resort to two sets of hand-collected provincial data on pre-1949 behaviors related to dishonesty.

One set is the cross-sectional data on fraud-related criminal offences over the period 1945–1947.[14] In column (1) of Table 4, we examine the relationship between GLF over-reporting and the share of fraud-related crimes over the period 1945–1947. In columns (2) to (4), we further decompose the fraud-related crimes into three subcategories, including (a) accounting fraud, (b) counterfeiting and forgery, and (c) fraudulent, breach of trust, taking, and usury. We find that the estimated correlations between GLF over-reporting and pre-1949 fraud-related crimes are statistically insignificant. Next, in columns (5) to (7), we also check the association between the GLF over-reporting variable and the share of the population involved in fraud-related crimes in 1947.[15] Again, the estimated coefficients for GLF over-reporting are statistically insignificant and negative.

The other set is the historical data from the Qing post-designation system. For each province, we compute the proportion of counties classified as "Nan" (*difficult*) by the Qing post-designation system. According to the Qing post-designation system, people in "Nan" counties were typically viewed as cunning, untrustworthy, and crime-prone (Liu, 1993; Hu, 2019).[16] We use this ratio as a proxy for the local culture of fraud in the Qing dynasty and examine its relationship with GLF over-reporting. The estimate in the last column of Table 4 suggests no significant association between the share of "*Nan*" counties in the Qing dynasty and GLF yield over-reporting.

Taken together, our evidence from the above falsification tests makes us more confident that our results on the effect of GLF over-reporting on corporate financial misconduct today are unlikely to be driven by a local culture of fraud preexisting before the GLF.

[12] We construct the extreme weather indicator using the regional dryness versus wetness index over 1470–1979 *Zhongguo Jinwubainian Hanlao Fenbu Tuji* (*Yearly Charts of Droughts/Floods in China for the Last 500-Year Period*), compiled by the State Meteorological Society in 1981. The dryness verus wetness index takes on the value of −2 for extremely wet climate conditions; −1 for wet; 0 for normal; 1 for dry; and 2 for extremely dry. We take the absolute value of this dryness versus wetness index and use its average to proxy for a province's proneness to climate disasters.

[13] Data on the number of revolts in the Qing dynasty have been collected from the *Qing Shi Lu* (*Veritable Records of Successive Reigns of the Qing Dynasty*). Data on the number of the "four bad types" over 1950–1984 have been collected from various issues of county and city annals published since the establishment of the People's Republic of China in 1949. Following the literature (e.g., Ashton et al., 1984; Kung and Chen, 2011), we compute the excess mortality rate as the difference between observed death rates and what would have occurred following the linear trend up to 1957. The relevant data used in computing the excess mortality rate have been hand-collected from *Nongye Jingji Ziliao, 1949–1983* (Materials on the Agricultural Economy, 1949–1983), compiled by the Planning Office of the Ministry of Agriculture, Livestock, and Fisheries. The death toll from violent conflicts during the Cultural Revolution has been collected from the China Political Events Data Set, 1966–1971, compiled by Andrew G. Walder (https://stanford.app.box.com/s/1p228gewy2pjd3817ksq9kd4d6cz3jy8).

[14] Fraud-related criminal offenses have been obtained from statistical yearbooks for the Republic of China.

[15] Since the number of persons who committed accounting fraud in 1947 is not available, we cannot assess the relationship between the over-reporting variable and the population share of accounting fraud criminals in Table 4.

[16] According to the post-designation system in the Qing dynasty, prefectures and counties were labeled by one or several of four tags: *Chong* (places of importance in transportation or communication), *Fan* (places with numerous and complicated official businesses), *Pi* (places with difficulties in collecting taxes), and *Nan* (places whose inhabitants are cunning, untrustworthy, and crime-prone). See Liu (1993) and Hu (2019) for more details on the post-designation system.

Table 3
Effects of historical mistreatment events.

Dependent variable:	Primary measure of misconduct					
	Extreme weather	Historical revolts	Four bad types	Great famine	Cultural revolution	Include all controls
	(1)	(2)	(3)	(4)	(5)	(6)
Over-report						0.159***
						(0.040)
Extreme weather	−0.230*					−0.219
	(0.138)					(0.193)
Historical revolts		0.418				0.469
		(0.391)				(0.528)
Four bad types			0.002			−0.062
			(0.018)			(0.042)
Famine				−0.007		0.002
				(0.005)		(0.011)
Cultural revolution					−0.002	0.058
					(0.012)	(0.041)
N	9129	8284	8964	9129	9129	8185
R^2	0.499	0.509	0.504	0.499	0.499	0.516
Baseline controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
FirmProv × Year FE	Y	Y	Y	Y	Y	Y
Industry × Year FE	Y	Y	Y	Y	Y	Y

Notes: This table examines the effects of historical mistreatment events in the chairperson's province of origin on current corporate misconduct. The dependent variable is the primary misconduct indicator. *Over-report* represents the degree of GLF yield over-reporting in a chairperson's province of origin. Column (1) uses the extreme weather index as a measure of mistreatment by nature. Columns (2) to (5) measure mistreatment by the state using revolt frequency in history, the logarithm share of population classified as "Four Bad Types," famine severity, and the logarithm of the number of fatalities per million during the Cultural Revolution, respectively. Column (6) includes the GFL over-reporting variable, while controlling for past mistreatment events. All regressions include a constant term; individual-, firm-, and province-level controls; and firm, firm-province × year, and industry × year fixed effects. Individual-level controls are chairpersons' age, gender, and education. Firm-level controls are firm age, size, ROA, leverage, profit margin, Tobin's q, board size, independent director share, and a state ownership dummy. Province-of-origin controls are mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, and pre-GLF agricultural output share. Robust standard errors clustered at the province-of-origin-year level are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

Table 4
Effects on historical dishonest behavior.

Dependent variable:	Percentage of total criminal offences (1945–1947)				Criminals per 10,000 population (1947)			Share of "Nan" counties (Qing Dynasty)
	Total Cheating	Acct. Fraud	Forgery	FBTTU	Total Cheaters	Forgery	FBTTU	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Over-report	0.121	−0.471	−0.093	0.685	−0.026	−0.015	−0.011	−0.024
	(1.026)	(0.747)	(0.293)	(0.611)	(0.018)	(0.011)	(0.010)	(0.030)
N	22	22	22	22	22	22	22	21
R^2	0.473	0.448	0.198	0.341	0.566	0.459	0.634	0.318
Controls	Y	Y	Y	Y	Y	Y	Y	Y

Notes: This table examines the effects of GLF over-reporting on historical dishonest behaviors in a cross section of provinces in China. *Over-report* represents the degree of GLF yield over-reporting in each province. The dependent variables in columns (1) to (4) are the share of all cheating offences, the share of accounting fraud (*Acct. fraud*), the share of counterfeiting and forgery (*Forgery*), and the share of fraudulent, breach of trust, taking, and usury (*FBTTU*) among all criminal offences between September 1945 and October 1947, respectively. The dependent variables in columns (5) to (7) are the share of population that committed cheating crimes, the share of population committed counterfeiting and forgery (*Forgery*), and the share of population committed fraudulent, breach of trust, taking, and usury (*FBTTU*) in 1947, respectively. The dependent variable in column (8) is the share of counties that were classified as "*Nan*" within each province in Qing Dynasty. All regressions include a constant term, province-level controls, and regional dummies. Province-level controls are the extreme weather indicator, the logarithm of historical land tax per person, the logarithm of historical population density, and the logarithm of share of presented scholars in local population. Robust standard errors are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

4.4. Instrumental variable regressions

Before the IV estimation, we first test for the validity of our IVs in Table 5. Column (1) performs the relevance test by regressing the yield over-reporting variable on the three IVs, provincial FPSs' party rank, rank change, the Long March indicator, and a set of province-level characteristic controls. We find that the estimated coefficients for all three IVs are statistically significant with the expected signs. Yield over-reporting was more aggressive in provinces where the GLF provincial FPSs had a lower party rank, got a faster promotion on the eve of the GLF movement, or did not participate in the Long March. These results thus confirm that our three IVs are indeed relevant.

To ensure that the three IVs do not affect corporate misconduct nowadays through channels other than social norm changes induced by GLF over-reporting, we conduct a set of exclusion restriction tests in the remaining columns of Table 5. First, we check whether the three IVs are correlated with local economic development today by regressing the logarithm of the real GDP per capita, real GDP growth rate, and a high population density dummy on the three IVs and the set of province-level controls. The estimated coefficients in columns (2) to (4) suggest no significant association between the current local economic conditions and the three IVs. Second, we regress the province-level legal enforcement index on the three IVs in column (5). We find no significant correlation between GLF over-reporting and today's local legal environment. Last, we also check the association between the three IVs and the local educational attainment in the present day in column (6).

Table 5
IV validity tests.

Dependent variable:	Relevance	Exclusion restrictions				
	Over-report	Real GDP per capita	Real GDP growth	High popdensity	Legal environment	College enrollment
	(1)	(2)	(3)	(4)	(5)	(6)
Party rank	−1.597**	−0.123	−0.000	−0.215	−0.113	−3.628
	(0.691)	(0.161)	(0.001)	(0.218)	(0.573)	(3.154)
Rank change	1.901**	0.175	0.001	0.174	0.953	4.328
	(0.708)	(0.173)	(0.001)	(0.188)	(0.639)	(3.280)
Long march	−0.683**	0.104	−0.000	0.054	0.221	−1.741
	(0.310)	(0.155)	(0.001)	(0.099)	(0.459)	(1.048)
N	375	375	375	375	350	375
R^2	0.580	0.550	0.484	0.761	0.463	0.716
Controls	Y	Y	Y	Y	Y	Y
Year FE	N	Y	Y	Y	Y	Y

Notes: This table tests the validity of instrumental variables (IVs) using a panel of provinces over 2002–2016. *Over-report* represents the degree of GLF yield over-reporting in each province. Column (1) examines the relevance of the IVs to the over-reporting variable. Columns (2) to (6) conduct a set of exclusion restriction tests, while controlling for the year fixed effects. All regressions include a constant term and province-level controls. Province-level controls are mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, pre-GLF agricultural output share, and pre-GLF population density. Robust standard errors clustered at the province level are reported in parentheses. $^*p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

None of the estimated coefficients for the three IVs is statistically significant in the educational attainment regression. We admittedly cannot rule out all possible channels. However, we think that the evidence from the above exclusion tests and the relevance test make a plausible case that the three career incentive variables for the GLF era provincial FPSs are reasonable IVs for our study.

We now proceed to estimate the IV regressions and report the estimation results in Table 6. In column (1), we estimate the two-stage least squares (2SLS) regression for the baseline specification, instrumenting the GLF over-reporting variable with the three IVs. In the second-stage regression, the estimated coefficient for the GLF over-reporting variable remains positive and statistically significant at the 5% level. This result thus confirms that more aggressive yield over-reporting in a chairperson's province of origin during the GLF period significantly increases the likelihood of financial misconduct by his or her firm in the present day.

As far as the three IVs are concerned, their coefficients are statistically significant at the 1% level, with the expected signs, in the first-stage regression. Furthermore, the Kleibergen-Paap test statistics and Hansen's J-statistics reported in the bottom panel of Table 6 indicate that the three IVs are not weak instruments and the over-identification restrictions are valid.

In the next two columns of Table 6, we include additional controls for the firm- and province-of-origin-level characteristics. The inclusion of these additional controls does not affect our IV regression results. We continue to find a positive and statistically significant effect of GLF over-reporting on the current financial misconduct in the second-stage regression. Besides, we also estimate the IV regressions for the narrowly defined and broadly defined corporate misconduct, respectively, and report the results in Table C2 in the Online Appendix. The results from these two alternative misconduct measures are similar.

In addition, we also explore potential heterogeneities in the effect of the GLF yield over-reporting on today's corporate misconduct. The last three columns of Table C2 in the Online Appendix report the estimation results from this exercise. We find that the promotion of over-reporting officials afterward significantly amplifies the effect of GLF over-reporting on corporate financial misconduct today. In contrast, the more robust external monitoring faced by firms today, proxied for by either a firm's proximity to the nearest CSRC office or the logarithm of the number of financial analysts covering the firm each year, significantly alleviates the adverse effect of GLF over-reporting on current corporate misconduct.

5. Additional evidence on other dishonest behaviors

Our results so far speak to corporate financial misconduct. In this section, we further extend our analysis and investigate whether the impact of GLF over-reporting can be generalized to other types of dishonesty in the present day. To this end, we conduct two additional sets of exercises: one is to assess the effects of GLF over-reporting on other aspects of corporate misconduct, and the other is to investigate the widespread effects of GLF over-reporting on behaviors other than corporate frauds nowadays.

5.1. Other aspects of corporate misconduct

In this subsection, we provide evidence of the effects of GLF over-reporting at a chairperson's province of origin on five aspects of corporate misconduct, including violation intensity, earnings management, tax evasion, tunneling, and informational transparency.

First, we look at the number of violations in a firm each year and check whether GLF over-reporting also affects the firm's violation intensity. Column (1) of Table 7 estimates the baseline regression for the number of violations using an ordinary least squares (OLS) regression. Column (2) estimates the IV regression for the number of violations. In both regressions, the estimated coefficients for the over-reporting variable are positive and significant at the 5% level, indicating that firms indulge in corporate misconduct behaviors more frequently when their chairpersons are from provinces with more aggressive yield over-reporting during the GLF.

Second, we assess the effect of GLF over-reporting on firms' earnings management nowadays. Although earnings management is not viewed as illegal in general, it involves the manipulation of financial reports to mislead investors about firm performance. We follow Kothari et al. (2005) to compute discretionary accruals at the firm-year level and use it as a proxy for the degree of earnings management. We then regress the discretionary accruals on the GLF over-reporting variable and the set of baseline controls and fixed effects. Columns (3) and (4) of Table 7 present the estimation results from the OLS and IV regressions for the earnings management, respectively. In both regressions, we again find a positive and statistically significant coefficient for the over-reporting variable. These results indicate that firms are more likely to engage in earnings management when their chairperson's province of origin witnessed more radical over-reporting during the GLF.

Third, we investigate whether tax evasions are more prevalent in firms whose chairpersons are from provinces with more aggressive yield over-reporting in the GLF era. Following Manzon and Plesko (2002), we compute the difference between the book and taxable income scaled by

Table 6
IV regression results.

Dependent variable:	Primary measure of misconduct		
	Baseline specification	Additional firm-level controls	Additional province-of-origin-level controls
	(1)	(2)	(34)
Second-stage:			
Over-report	0.066**	0.064*	0.089**
	(0.031)	(0.036)	(0.040)
First-stage:			
Party rank	−2.416***	−2.619***	−2.230***
	(0.247)	(0.294)	(0.168)
Rank change	2.699***	2.792***	2.492***
	(0.245)	(0.287)	(0.154)
Long march	−0.398***	−0.484***	−0.532***
	(0.096)	(0.109)	(0.084)
N	9129	7199	9063
Kleibergen-Paap F-stat	52.70**	45.16**	185.3**
Hansen J-stat	1.892	0.408	0.264
Baseline controls	Y	Y	Y
Firm FE	Y	Y	Y
FirmProv × Year FE	Y	Y	Y
Industry × Year FE	Y	Y	Y

Notes: This table reports estimation results from IV regressions. *Over-report* represents the degree of GLF yield over-reporting in the chairperson's province of origin. Column (1) estimates the baseline model specification. Column (2) controls for additional firm-level characteristics, including sales growth, tax burden, asset tangibility, a duality dummy, a cross-listing dummy, a foreign auditor dummy, the logarithm of stock turnover, the logarithm of the number of analysts covering a firm, the logarithm of stock return volatility, and the logarithm of institutional ownership share. Column (3) controls for additional chairperson province-of-origin-level characteristics, including the logarithm number of *Jinshi*, the logarithm of land tax per person, excess grain procurement ratio during the GLF, current legal environment strength, and current college enrollment. The Kleibergen-Paap F-statistics are used to test for weak instruments. Hansen's J-statistics are used to test whether the overidentification restrictions are valid. All regressions include a constant term; individual-level, firm-level, and province-level controls; and firm, firm-province × year, and industry × year fixed effects. Individual-level controls are chairpersons' age, gender, and education. Firm-level controls are firm age, size, ROA, leverage, profit margin, Tobin's q, board size, independent director share, and a state ownership dummy. Province-of-origin controls are mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, and pre-GLF agricultural output share. Robust standard errors clustered at the province-of-origin-year level are reported in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.

the book income for each firm-year and use it to measure tax evasion. Columns (5) and (6) estimate the effect of GLF over-reporting in a chairperson's province of origin on tax evasion by firms using the OLS and 2SLS, respectively. The positive and significant coefficient for the GLF over-reporting variable confirms that firms presided over by chairpersons from provinces with greater yield over-reporting in the GLF era are more likely to evade taxes.

Fourth, we examine the impact of GLF over-reporting on tunneling nowadays. As well documented in the finance literature (e.g., Johnson et al., 2000; Djankov et al., 2008), tunneling is an unethical and illegal business practice where controlling shareholders divert assets from their companies to other entities for their benefits. If GLF over-reporting causes a change in individual moral values on honesty, we would also expect more tunneling in firms whose chairpersons are from provinces more exposed to GLF yield over-reporting. To test this idea, we follow the literature (e.g., Jiang et al., 2010) to measure tunneling as other receivables scaled by total assets, and we regress the tunneling measure on the over-reporting variable and the set of controls and fixed effects in the baseline specification. Columns (7) and (8) of Table 7 report the results from the OLS and IV regressions, respectively. Consistent with our expectations, the impact of GLF over-reporting on tunneling activities is significantly positive.

Finally, we also look at the effect of GLF over-reporting on firms' information transparency. Presumably, if yield over-reporting during the GLF increases people's tendency to cheat, we would expect less information transparency by firms presided over by chairpersons from provinces with a higher yield over-reporting in the GLF era. Following the corporate finance literature (e.g., Chen et al., 2001; Piotroski et al., 2015), we compute the negative coefficient of skewness in stock returns and use it to measure of informational transparency for each firm in our sample. A larger value of the negative coefficient of skewness represents a higher degree of suppression of negative information on the firm and hence a low level of information transparency. As shown in the last two columns of Table 7, both OLS and IV estimates indicate that over-reporting the grain yield more aggressively in the GLF era is associated with significantly lower information transparency in firms nowadays.

Overall, the above evidence on various aspects of corporate misconduct further confirms that GLF over-reporting by local officials leads to increased dishonesty or unethical acts at the corporate level in the present day.

5.2. Other present-day behaviors

To further support our hypothesis that GLF over-reporting leads to a change in people's moral values on honesty, in this subsection, we provide evidence on a wide range of current behaviors beyond corporate frauds.

First, we examine whether people from provinces with more aggressive yield over-reporting during the GLF period tend to value less on honesty and integrity nowadays. We use the data from the two latest waves of the World Values Survey (WVS) for China conducted by the Research Center for Contemporary China (RCCC) at Peking University in 2007 and 2013. In both waves, respondents were asked to indicate their thoughts on each of the two actions: (a) avoiding a fare on public transportation and (b) cheating on taxes when having a chance can be justified (10), never be justified (1), or something in between.

We pool the data from these two waves of WVS-China and merge them with our province-level data on GLF over-reporting and other related controls based on the residence of survey respondents. Since people's attitudes toward fare evasion and tax evasion are coded as ordinal variables, we first estimate the ordered probit regressions and then IV regressions.[17] We present the estimation results from this exercise in the first four columns of Table 8. In all cases, we find the coefficient for the GLF over-reporting variable to be positive and statistically significant. People in provinces that witnessed severer yield over-reporting during the GLF period are more likely to view fare and tax evasion as acceptable today.

Second, we investigate whether provinces exposed to the GLF yield over-reporting shock historically are associated with a greater degree of GDP data manipulation today. Here we use the discrepancy between the official GDP data and the adjusted GDP data as a proxy for the extent of provincial GDP manipulation. Following the statistical approach developed in Chen et al. (2019), we adjust the province-level GDP data based on the statistical relationship between GDP and a rich set of relatively more reliable economic indicators, including satellite night lights, national tax revenue, exports, imports, electricity consumption, railway cargo volume, and new bank loans. In columns (5) and (6) of Table 8, we estimate the OLS and IV regressions for the provincial GDP manipulation, respectively. The estimated coefficients for the GLF

[17] Given that the dependent variables here are ordinal, we also estimate the IV regression in the conditional mixed-process (CMP) framework for each dishonest behavior that was asked, and we obtain similar results.

Table 7
Other aspects of corporate misbehavior.

Dependent variable:	Number of violations		Earnings management		Tax evasion		Tunneling		Negative skewness	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Over-report	0.163**	0.324**	0.030***	0.037*	0.053*	0.089*	0.005***	0.014***	0.104***	0.131*
	(0.080)	(0.157)	(0.010)	(0.021)	(0.031)	(0.054)	(0.002)	(0.003)	(0.027)	(0.067)
N	9129	9129	8156	8156	9060	9060	9128	9128	8764	8764
R^2	0.507	0.007	0.376	0.014	0.397	0.003	0.678	0.029	0.477	0.005
Baseline controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FirmProv × Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry × Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: This table reports the estimated effects on other aspects of corporate misconduct, including the logarithm of the number of violations, earnings management, tax evasion, tunneling, and negative skewness of stock returns. *Over-report* represents the degree of GLF yield over-reporting in the chairperson's province of origin. All regressions include a constant term; individual-level, firm-level, and province-level controls; and firm, firm-province × year, and industry × year fixed effects. Individual-level controls are chairpersons' age, gender, and education. Firm-level controls are firm age, size, ROA, leverage, profit margin, Tobin's q, board size, independent director share, and a state ownership dummy. Province-of-origin controls are mess hall participation, the logarithm of the rightist share, pre-GLF farmland per capita, and pre-GLF agricultural output share. Robust standard errors clustered at the province-of-origin-year level are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

Table 8
Effects on current dishonest behavior.

Dependent variable:	*A. Avoiding a fare*		*B. Cheating on Taxes*		*C. GDP misreporting*		*D. Corruption cases*	
	Ordered probit	IV	Ordered probit	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Over-report	0.154***	0.150**	0.092**	0.191***	0.250***	0.410***	0.067*	0.083*
	(0.042)	(0.062)	(0.040)	(0.067)	(0.038)	(0.142)	(0.037)	(0.046)
N	2758	2758	2648	2648	144	144	360	360
Individual controls	Y	Y	Y	Y	–	–	–	–
Province controls	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y

Notes: This table examines present-day dishonesty. The first four columns use the individual-level WVS data for China in years 2007 and 2013, and the last four columns use province-of-origin-level data. In panels A and B, *Over-report* represents the degree of GLF yield over-reporting in provinces where survey respondents reside. In panels C and D, *Over-report* represents the degree of GLF yield over-reporting in each province. The dependent variables in columns (1) and (2) are the ordinal variable from 1 to 10, with a higher value indicating that avoiding a fare on a public transportation is more justifiable. The dependent variables in columns (3) and (4) equal an ordinal variable from 1 to 10, with a higher value indicating that cheating on taxes if possible is more justifiable. The dependent variables in columns (4) and (5) are the logarithm difference between the officially published provincial GDP and the predicted GDP following Chen et al. (2019) over the period 2008–2013. The dependent variable in columns (7) and (8) is the logarithm of the number of corruption cases scaled by the total number of public servants. All columns include a constant term, province controls, and year fixed effect. Province-level controls are mess hall dining participation, the logarithm of the rightist share, pre-GFC farmland per capita, legal enforcement, and the logarithm of real GDP per capita. Columns (1) to (4) include individual-level controls, such as the survey respondent's age, their gender, their education, and their household income. Robust standard errors clustered at the province level are reported in parentheses. $^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$.

over-reporting variable are positive and statistically significant in both cases, which is in line with our hypothesis that yield over-reporting in the past is linked to cheating in the present day.

Last, we also look at the effect of the GLF yield over-reporting on contemporary corruption in local governments. If GLF over-reporting results in greater tolerance toward dishonesty, we should expect a greater prevalence of public corruption in provinces with more aggressive yield over-reporting in the GLF era. To test this idea, and to measure the severity of corruption for each province, we use the number of public corruption cases per million civil servants.[18] The last two columns of Table 8 report the OLS and IV estimates for the logarithm corruption cases. We find that GLF over-reporting has a positive and statistically significant effect on local public corruption today.

In sum, our evidence on people's attitude toward fare or tax evasion, local GDP data manipulation, and local public corruption confirms the positive association between GLF over-reporting on various individual behaviors today, specifically regarding dishonesty. Thus, these results lend further support to our hypothesis that past lying and cheating by government officials have a long-lasting effect on the local social norms regarding dishonesty, making people more likely to engage in dishonest and unethical behaviors today.

6. Conclusions

Past government wrongdoings by local political leaders can have long-term consequences on people's behaviors today, specifically regarding dishonesty. We test this hypothesis by investigating the impact of yield over-reporting by local government officials during the GLF period in China on people's behavior in regard to cheating today.

Specifically, we focus on the corporate financial misconduct in the Chinese listed firms nowadays and examine the long-term causal effect of the GLF yield over-reporting by employing various identification strategies. First, we rely on the "moving" chairpersons, whose province of origin differs from their firm locality, to isolate the effect of the inherited internal component of social norms from that of the external environment faced by firms. Second, we include a rich set of individual-, firm-, and province-of-origin-level characteristics as control variables in the baseline specification to partial out potential confounding effects.

[18] Province-level data on the number of public corruption cases have been collected from *Zhongguo Jiancha Nianjian* (*Procuratorial Yearbook of China*). Province-level data on the number of civil servants come from the National Bureau of Statistics of China.

Third, we include the firm fixed effects in the regression to control for the potential endogeneity bias associated with firms' selection of chairpersons. Fourth, we carry out a battery of tests to rule out two alternative hypotheses: the mistreatment effect hypothesis and the preexisting local culture of fraud hypothesis. Last, we employ an IV approach by instrumenting GLF over-reporting with the career incentives of the provincial FPSs in the GLF era. Overall, we find robust evidence that when chairpersons are from provinces exposed to more severe yield over-reporting in the GLF era, their firms are more likely to commit corporate financial misconduct today.

To shed more light on how GLF over-reporting then generally affects people's dishonesty in the present day, we extend our analysis to other aspects of corporate misconduct, such as violation intensity, earnings management, tax evasion, tunneling, and information transparency, as well as a wide range of behaviors, including fare evasion or tax evasion, local GDP manipulation, and public corruption. The evidence from these extensions further supports our hypothesis that GLF over-reporting by local political leaders has shifted social norms toward tolerating dishonesty, a persistent effect making people more prone to cheating today.

Our study contributes to the burgeoning literature on leadership-driven changes to social norms. We provide evidence for the causal effect of local leaders' previous cheating on people's dishonesty today. Our results also complement the broad literature on how historical shocks create long-term effects. Finally, we also provide a new perspective on the role of social norm changes in shaping people's behaviors.

Author statement

All authors made equal contributions to the paper.

Data availability

Data will be made available on request.

Acknowledgements

The authors thank the editor and two anonymous referees for valuable comments. All authors equally contributed to the paper and share in responsibility for any errors. Ding acknowledges financial support from the National Natural Science Foundation of China [No. 72173082 and No. 71703086]. Chen acknowledges financial support from the National Natural Science Foundation of China [No. 72121002 and No. 71933002] and the Legendary Project on Humanities and Social Sciences at Fudan University [XM04221238].

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jdeveco.2022.102888.

References

Aarts, Henk, Dijksterhuis, Ap, 2003. The silence of the library: environment, situational norm, and social behavior. J. Pers. Soc. Psychol. 84 (1), 18–28.
Acemoglu, Daron, Jackson, Matthew O., 2015. History, expectations, and leadership in the evolution of social norms. Rev. Econ. Stud. 82, 423–456.
Agrawal, Anup, Chadha, Sahiba, 2005. Corporate governance and accounting scandals. J. Law Econ. 48 (2), 371–406.
Ajzenman, Nicolás, 2021. The power of example: corruption spurs corruption. Am. Econ. J. Appl. Econ. 13 (2), 230–257.
Alesina, Alberto, Giuliano, Paola, Nunn, Nathan, 2013. On the origins of gender roles: women and the plough. Q. J. Econ. 128 (2), 469–530.
Ashton, Basil, Hill, Kenneth, Piazza, Alan, Zeitz, Robin, 1984. Famine in China, 1958-61. Popul. Dev. Rev. 10 (4), 613–645.
Bandura, Albert, Walters, Richard H., 1977. Social Learning Theory, vol. 1. Prentice-Hall, Englewood Cliffs.
Beasley, Mark S., 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. Account. Rev. 71 (4), 443–465.
Benabou, Roland, Tirole, Jean, 2011. Laws and Norms. NBER Working. Paper No. 17579.
Bennedsen, Morten, Pérez-González, Fransisco, Daniel, Wolfenzon, 2020. Do CEOs matter? Evidence from hospitalization events. J. Finance 75 (4), 1877–1911.
Bernstein, Thomas, P., 1984. Stalinism, famine, and Chinese peasants: grain procurements during the great leap forward. Theor. Soc. 13 (3), 339–377.
Besley, Timothy, Jensen, Anders, Persson, Torsten, 2019. Norms, Enforcement, and Tax Evasion. NBER Working Paper. *No. 25575*.
Box, G.E.P., Cox, D.R., 1964. An analysis of transformation s. J. Roy. Stat. Soc. B 26 (2), 211–252.
Burns, Natasha, Kedia, Simi, 2006. The impact of performance-based compensation on misreporting. J. Financ. Econ. 79 (1), 35–67.
Bursztyn, Leonardo, Egorov, Georgy, Fiorin, Stefano, 2020. From extreme to mainstream: the erosion of social norms. Am. Econ. Rev. 110 (11), 3522–3548.
Chaney, Paul K., Faccio, Mara, Parsley, David, 2011. The quality of accounting information in politically connected firms. J. Account. Econ. 51 (1–2), 58–76.
Chen, Joseph, Harrison, Hong, Stein, Jeremy C., 2001. Forecasting crashes: trading volume, past returns, and conditional skewness in stock prices. J. Financ. Econ. 61 (3), 345–381.
Chen, Wei, Chen, Xilu, Hsieh, Chang-Tai, Zheng, Song, 2019. A forensic examination of China's national accounts. Brookings Pap. Econ. Activ. 2019 (1), 77–141.
Cialdini, Robert B., 1988. Influence: Science and Practice, second ed. Scott, Foresman & Company, Glenview, IL.
Cialdini, Robert B., Demaine, Linda J., Sagarin, Brad J., Barrett, Daniel W., Rhoads, Kelton, Winter, Patricia L., 2006. Managing social norms for persuasive impact. Soc. Influ. 1 (1), 3–15.
Cialdini, Robert B., Reno, Raymond R., Kallgren, Carl A., 1990. A focus theory of normative conduct: recycling the concept of norms to reduce littering in public places. J. Pers. Soc. Psychol. 58 (6), 1015–1026.
d'Adda, Giovanna, Darai, Donja, Pavanini, Nicola, Weber, Roberto A., 2017. Do leaders affect ethical conduct? J. Eur. Econ. Assoc. 15 (6), 1177–1213.
Djankov, Simeon, LaPorta, Rafael, Lopez-de-Silanes, Florencio, Shleifer, Andrei, 2008. The law and economics of self-dealing. J. Financ. Econ. 88 (3), 430–465.
Drake, Michael S., Roulstone, Darren T., Thornock, Jacob R., 2012. Investor information demand: evidence from google searches around earning announcements. J. Account. Res. 50 (4), 1001–1040.
Dyck, Alexander, Morse, Adair, Zingales, Luigi, 2010. Who blows the whistle on corporate fraud? J. Finance 65 (6), 2213–2253.
Dyreng, Scott D., Mayew, William J., Williams, Christopher D., 2012. Religious social norms and corporate financial reporting. J. Bus. Finance Account. 39 (7–8), 845–875.
Fracassi, Cesare, 2017. Corporate finance policies and social networks. Manag. Sci. 63 (8), 2420–2438.
Fracassi, Cesare, Tate, Geoffrey, 2012. External networking and internal firm governance. J. Finance 67 (1), 153–194.
Giuliano, Paola, 2007. Living arrangement in Western Europe: does culture origin matter? J. Eur. Econ. Assoc. 5 (5), 927–952.
Giuliano, Paola, Nunn, Nathan, 2021. Understanding cultural persistence and change. Rev. Econ. Stud. 88 (4), 1541–1581.
Hou, Fu-wu, 1957. A Short History of Chinese Communism. Prentice Hall, Englewood Cliffs, NJ.
Hu, Heng, 2019. Quantitative analysis of qing administrative districts and the allocation of bureaucratic resources. Mod. Chin. Hist. Stud. 3, 4–29.
Jia, Ruixue, Persson, Torsten, 2021. Choosing ethnicity: the interplay between individual and social motives. J. Eur. Econ. Assoc. 19 (2), 1203–1248.
Jiang, Guohua, Lee, Charles M.C., Yue, Heng, 2010. Tunneling through intercorporate loans: the China experience. J. Financ. Econ. 98 (1), 1–20.
Johnson, Simon, LaPorta, Rafael, Lopez-de-Silanes, Florencio, Shleifer, Andrei, 2000. Tunneling. Am. Econ. Rev. Pap. Proc. 90 (2), 22–27.
Keizer, Kees, Lindenberg, Siegwart, Steg, Linda, 2008. The spreading of disorder. Science 322 (5908), 1681–1685.
Kothari, S.P., Leone, Andrew J., Wasley, Charles E., 2005. Performance matched discretionary accrual measures. J. Account. Econ. 39 (1), 163–197.
Kung, James Kai-Sing, Chen, Shuo, 2011. The tragedy of the nomenclature: career incentives and political radicalism during China's Great Leap Famine. Am. Polit. Sci. Rev. 105 (1), 27–45.
Liang, Zhiyuan, 2003. *Boshan nongyeweixing jingyanhuiji guanxiuji* (an official account of the experiences of agricultural high-yield satellites in boshan county). Yanhuang Chunqiu 1, 22–55.
Liu, C., 1993. Chong, fan, Pi, and nan: an exploration of the ranking of qing administrative units. Bull. Inst. Hist. Philol. Acad. Sin. 64 (1), 175–204.
Liu, Xiaoding, 2016. Corruption culture and corporate misconduct. J. Financ. Econ. 122 (2), 307–327.
Lu, Huilin, 2008. *Weixing' Shi ruhe shangtiande? Xiangcun Jicengganbu he dayuejin* (how was the 'satellite' launched? Village grassroots cadres and the great leap forward). Open 5, 116–126.
MacFarquhar, Roderick, 1983. The Origins of the Cultural Revolution. Columbia University Press, New York.
Manzon, Gil B., Plesko, George A., 2002. The relation between financial and tax reporting measures of income. Tax Law Rev. 55, 175–214.
McGuire, Sean T., Omer, Thomas C., Sharp, Nathan Y., 2012. The impact of religion on financial reporting irregularities. Account. Rev. 87 (2), 645–673.
Meng, Xin, Qian, Nancy, Yared, Pierre, 2015. The institutional causes of China's Great Famine, 1959–1961. Rev. Econ. Stud. 82 (4), 1568–1611.

Nunn, Nathan, 2008. The long-term effects of Africa's slave trades. Q. J. Econ. 123 (1), 139–176.
Nunn, Nathan, Leonard, Wantchekon, 2011. The slave trade and the origins of mistrust in Africa. Am. Econ. Rev. 101 (7), 3221–3252.
Parsons, Christopher A., Sulaeman, Johan, Sheridan, Titman, 2018. The geography of financial misconduct. J. Finance 73 (5), 2087–2137.
Piotroski, Joseph D., Wong, T.J., Zhang, Tianyu, 2015. Political incentives to suppress negative information: evidence from Chinese listed firms. J. Account. Res. 53 (2), 405–459.
Reno, Raymond R., Cialdini, Robert B., Kallgren, Carl A., 1993. The trans-situational influence of social norms. J. Pers. Soc. Psychol. 64 (1), 104–112.
Voigtländer, Nico, Voth, Hans-Joachim, 2012. Persecution perpetuated: the medieval origins of anti-semitic violence in Nazi Germany. Q. J. Econ. 127 (3), 1339–1392.
Wang, Xiaolu, Fan, Gang, Hu, Lipeng, 2018. *NERI Index of Marketization of China's Province: 2018 NERI Report* (In Chinese). Economic Science Press, Beijing.
Welsch, Roy E., Kuh, Edwin, 1977. Linear Regression Diagnostics. NBER Working Paper *No. 173*.
Xie, Chuntao, 1990. *Dayuejing Kuanglan* (The Mad Tide of the Great Leap Forward). Henan People's Press, Zhengzhou, China.
Yang, D., 1990. From Revolution to Politics: Chinese Communists on the Long March. Westview Press, Boulder, CO.
Yang, D., 1996. Calamity and Reform in China: State, Rural Society, and Institutional Change since the Great Leap Famine. Stanford University Press, Stanford, CA.