# CAMBRIDGE UNIVERSITY PRESS

#### ARTICLE

# Religious Institutional Environment and Executive Pay Dispersion

Ying Zhang<sup>1</sup>, Hongfei Ruan<sup>2</sup>, and Li Tong<sup>3</sup>

<sup>1</sup>School of Management, Northwestern Polytechnical University, Xi'an, P.R. China, <sup>2</sup>School of Management, Harbin Institute of Technology, Harbin, P.R. China, and <sup>3</sup>Guanghua School of Management, Peking University, Beijing, P.R. China Corresponding author: Hongfei Ruan (hongfeiruan@hit.edu.cn)

(Received 16 September 2020; accepted 15 October 2023)

#### **Abstract**

This study extends the extant literature on executive pay dispersion by exploring the cultural-cognitive social determinants. We investigate how religious institutional environments, including Buddhism- and Confucianism-based institutions, shape vertical executive pay dispersion. We theorize that a Buddhism-based institutional environment is negatively related to vertical executive pay dispersion. In contrast, we propose competing hypotheses regarding how a Confucianism-based institutional environment affects vertical executive pay dispersion. With a sample of Chinese public firms, we find that both Buddhism- and Confucianism-based institutional environments are negatively associated with a firm's vertical executive pay dispersion. Supplementary analyses show that the aforementioned main effects are attenuated when a firm is embedded by a communist party branch and has a younger CEO.

#### 摘要

本文从文化认知角度扩展了现有关于高管薪酬差距的研究文献,聚焦于当地宗教机构存在的普遍程度-如佛教寺庙和儒家孔庙的多少,如何影响高管的纵向薪酬差距。虽然我们认为佛教机构的存在会与高管纵向薪酬差距呈负相关,而儒家机构普遍程度会正面影响与高管纵向薪酬差距但使用中国上市公司的数据分析结果表明,佛教和儒家机构的普遍性都对公司高管纵向薪酬差距起到了负面的影响。但是,结果也表明,上述负面影响会在两种情况下被削弱:(a)公司里有党支部,(b)公司CEO年纪较轻。

Keywords: China; cultural-cognitive; institutional theory; pay dispersion; religion

关键词: 中国; 文化认知; 制度理论; 薪酬差距; 宗教

# Introduction

Executive pay dispersion is of great significance in the field of strategic management, as evidenced by numerous research studies on topics such as managerial incentives, pay distribution, and tournament compensation system design (Becker & Huselid, 1992; Fredrickson, Davis-Blake, & Sanders, 2010; Frydman & Papanikolaou, 2018; Mueller, Ouimet, & Simintzi, 2017; Siegel & Hambrick, 2005). Pay dispersion is shown to affect corporate strategic behaviors, ethical tendencies, and financial performance (e.g., Connelly, Haynes, Tihanyi, Gamache, & Devers, 2016; Kalantari, 1995; Morand & Merriman, 2012; Perel, 2003; Shi, Connelly, & Sanders, 2016; Waluchow, 1988; Wang, Markóczy, Sun, & Peng, 2019). Therefore, it is crucial to comprehend the factors that drive pay dispersion within a firm. The investigation of the determinants of pay dispersion has been explicitly advocated by Connelly, Tihanyi, Crook, and Gangloff (2014), and their call for further research in this area warrants consideration.

The extant literature on pay dispersion has primarily concentrated on economic factors such as technological intensity, firm growth status, and ambulance of investment opportunities related to incentive mechanisms (e.g., Frydman & Papanikolaou, 2018; Henderson & Fredrickson, 2001). Although economic considerations provide valuable insights into pay dispersion, they only provide

® The Author(s), 2024. Published by Cambridge University Press on behalf of International Association for Chinese Management Research

a partial understanding of this phenomenon. The focus on the institutional perspective will be a good extension of this stream of literature. On one hand, pay dispersion is not solely linked to tournament schemes; rather, it is influenced by social structure and interactions among coalition members within organizations, which are salient characteristics of socially constructed systems. On the other hand, our study responds to the call of Connelly et al. (2016: 878), i.e., 'considering other potentially important drivers of pay dispersion' and the focus on cultural factors can 'yield interesting results'.

Although a limited number of studies have initiated an exploration of institutional factors (e.g., He & Fang, 2016; Lu, Saka-Helmhout, & Piekkari, 2019), their primary focus is on regulatory and normative influences such as state-owned nature, cross-listed arrangement across nations, and labor regulations. However, there is a paucity of knowledge regarding the role of cultural-cognitive institutions. This omission is crucial as the institutional environment comprises three fundamental pillars, namely, regulative, normative, and cultural-cognitive elements (Scott, 2014). These pillars vary concerning institutionalization processes, power dynamics, and the basis of compliance, among other factors. Cultural-cognitive institutions can be defined as 'the shared conceptions that constitute the nature of social reality and the frames through which meaning is made' and practices that are 'comprehensible, recognizable, [and] culturally supported' (Scott, 2014: 60 & 67). Cultural-cognitive institutions are regarded as powerful sources of legitimacy (Suchman, 1995) and influence firm decision making (e.g., Alexander, 2012; Krause, Filatotchev, & Bruton, 2016; Muthuri & Gilbert, 2011; Xu, Hitt, Brock, Pisano, & Huang, 2021; Zimmer & Swoboda, 2023).

To address this research gap and extend the literature on executive pay dispersion, our study focuses on how religion, as a significant cultural-cognitive institution (Chan-Serafin, Brief, & George, 2013; Weber, 1988), affects executive pay dispersion. This focus also enriches our understanding of the religion literature. Prior literature on religion mainly underlines the relationship between religion and economic action, such as Protestantism's influence on the pursuit of economic success and accumulation of wealth, and the development of capitalism (Weber, 1930), economic growth (Campante & Yanagizawa-Drott, 2015; Wang & Lin, 2014), corruption (Xu, Li, Liu, & Gan, 2017), attitudes toward innovation (Bénabou, Ticchi, & Vindigni, 2015), and household income (Bryan, Choi, & Karlan, 2021). Our study further expands this scope of inquiry and investigates how religious environment impacts executive pay dispersion.

Specifically, we focus on two types of cultural-cognitive institutions, i.e., Buddhism- and Confucianismbased institutional environments in China that are significantly different from Western societies (Li & Liang, 2015; Pace, 2013) and consider how these two institutional environments affect executive pay dispersion. We argue that Buddhism is characterized by wealth-sharing and egalitarian social norms (McCleary & Barro, 2006; Yao, 2020), and we thus expect that the Buddhism-based institutional environment results in low vertical executive pay dispersion. By contrast, Confucianism's approach to this issue is complex, with competing hypotheses. On the one hand, the Confucianism-based institutional environment favors harmony and middle-way thinking for conflict avoidance (Berthrong, 2014; Ip, 2009; Peng & Nisbett, 1999). We thus hypothesize that the Confucianism-based institutional environment is negatively associated with vertical executive pay dispersion. On the other hand, Confucianism's emphasis on social order (Farh, Hackett, & Liang, 2007; Tsai, Young, & Cheng, 2011) implies that interpersonal differences are the outcome of distinctive authorities and formal positions. We thus propose a competing prediction, i.e., the Confucianism-based institutional environment is positively associated with vertical executive pay dispersion. Our study focuses on vertical executive pay dispersion, given that the tournament contest and collaboration issue are the cornerstones in the research on pay dispersion (Connelly et al., 2014; Shi et al., 2016). Moreover, this allows us to unveil the competing influences of the Confucianism-based institutional environment, as it attaches importance to harmony and organizational hierarchy. Figure 1 illustrates our theoretical framework.

Our study attempts to make several contributions. First, our article contributes to research on executive pay dispersion by emphasizing how cultural-cognitive institutions, i.e., religious environments, affect executive pay dispersion. Existing literature in this area mainly focuses on economic drivers. The focus on religious environment is also an extension of the literature on religious environment, which mainly underlines the relationship between religion and economic actions. We expand this

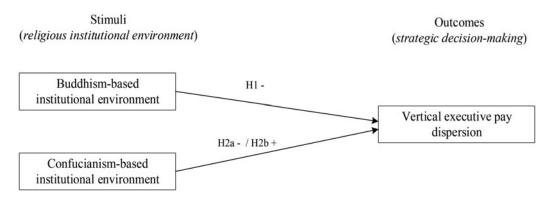


Figure 1. Theoretical Model

scope of inquiry by considering the impact of religion on executive pay distribution. Second, our study highlights the importance of the Chinese institutional context for the association between religious environment and executive pay dispersion. Specifically, we focus on Buddhism- and Confucianism-based institutional environments that play a significant role in affecting society and corporate behaviors in China, whereas they are relatively peripheral ones in Western society.

# Theoretical Background and Hypotheses Development Executive Pay Dispersion

Pay dispersion is closely intertwined with the prize spread, where pay is linked with wage or inter-rank, and dispersion is linked with inequity, disparity, or gaps (Connelly et al., 2014). Prize spread is a significant factor in sequential tournaments as it reflects the prize differential between the current tournament and the subsequent level. Several studies in the organizational context have explored the effects of pay dispersion on various outcomes, including work performance (Trevor, Reilly, & Gerhart, 2012), shirking behaviors (Bloom & Milkovich, 1998), uncooperativeness (Bloom, 1999), and turnover (Bloom & Michel, 2002; Messersmith, Guthrie, Ji, & Lee, 2011). Shi et al. (2016) further found that executive pay dispersion may incur negative efforts and motivation (Milgrom & Roberts, 1988), ultimately resulting in an increasing likelihood of exposure to securities class action lawsuits. Recently, scholars began to acknowledge that the pay dispersion literature 'would benefit from further consideration of its antecedents' (Connelly et al., 2014: 41). Most studies have examined executive pay dispersion from an economic perspective, which emphasizes the incentive mechanism for executives to exert effort (DeVaro, 2006; Knoeber & Thurman, 1994; Rosen, 1986). For instance, Main, O'Reilly, and Wade (1993) and O'Reilly, Main, and Crystal (1988) suggested that strong incentives promote a firm's willingness to widen the pay gap between the CEO and the vice presidents competing for the top job. Henderson and Fredrickson (2001) further proposed that creating tournament-like incentives requires the firm to establish significant pay gaps. Moreover, Frydman and Papanikolaou (2018) found that executive pay dispersion is driven by technological innovation and its impact on the value of investment opportunities.

Recently, scholars have expanded their investigations of pay dispersion beyond the traditional tournament schemes to include the institutional perspective. This approach recognizes that pay dispersion is not only influenced by competitive dynamics but also by the social structure that shapes the interactions among executives. Despite the significance of this perspective, only a few studies have examined pay dispersion from this perspective. For instance, Hu, Pan, and Tian (2013) studied how government ownership and political connections affect CEO pay dispersion incentives. They found that the incentive is weaker when firms are controlled by the government and CEO is politically connected. He and Fang (2016) studied the impact of subnational institutional contingencies on executive pay dispersion and found that executive pay dispersion is lower in state-owned enterprises but higher in cross-listed firms and in firms located in developed regions. Lu et al. (2019) suggested that foreign MNEs'

compensation practices would be adapted to local labor regulations, with a decentralization structure. These institutional factors are mainly related to regulatory and normative pillars, but little attention has been paid to the cultural-cognitive pillar (Scott, 2014).

# Religion, Institutional Environment, and Corporate Practices

Institutions are defined as 'the humanly devised constraints that structure human interaction' (North, 1990: 3), including formal rules and informal norms. Building upon North's seminal work, Scott (2014) further elaborated on the formal and informal dimensions of institutions and classified them into three pillars: regulative, normative, and cultural-cognitive. The regulative pillar pertains to formal rule systems, including laws, regulations, and their corresponding enforcement mechanisms, which are often sanctioned by the state. The normative pillar concerns the legitimate means of pursuing valued needs, while the cultural-cognitive pillar encompasses widely accepted beliefs and values, often reflecting cultural norms within society.

Religions are recognized as prominent cultural-cognitive institutional pillars in China. Religions provide specific ethical guidelines, emphasize the overall importance of ethical behavior, and provide adherents with a language or set of categories for describing and understanding experiences as ethical or unethical (Weaver & Agle, 2002). Local religious norms represent one type of social influence that is likely to affect the attitudes and culture of corporations headquartered in given areas. Following the primary underlying premise of institutional theory, religion as one of the cultural-cognitive social norms, does not require individuals and groups to have dominant or direct associations with them but only needs organizations to be embedded in the local institutional environments (Durand & Thornton, 2018; Marquis & Battilana, 2009; Marquis, Glynn, & Davis, 2007). For instance, Hilary and Hui (2009) found that firms operating in highly religious countries exhibit lower investment rates and less growth but generate a more positive market reaction to new investments. El Ghoul, Guedhami, Ni, Pittman, and Saadi (2012) found that firms with high religious norms have cheaper equity financing costs. McGuire, Omer, and Sharp (2012) suggested that managers in areas with strong religious social norms are less likely to engage in financial reporting irregularities. Scholars also found that minority shareholder expropriation is significantly lower for firms surrounded by a strong Confucianism atmosphere than for firms located in regions with a weak Confucianism atmosphere (Du, 2015).

Similarly, prior research pointed out that local cultural-cognitive institutions affect corporate social actions (e.g., education, civic and public benefit, human welfare) since firms are embedded in the local community environment and comply with the shared frameworks (see the review of Marquis et al., 2007). In our study, we acknowledge that the remuneration committee<sup>1</sup> of the board typically sets the pay of CEOs and other TMT members (Fredrickson et al., 2010). For instance, we check the description of the Remuneration and Nomination committee in the Vanke (2021) annual report. The description is 'the Remuneration and Nomination Committee studies the criteria for the appraisal of directors and the president, conducts the appraisal and makes recommendations to the board of directors; studies and reviews the remuneration policies and programs for directors and senior management and makes recommendations to the board of directors, etc'. Although we cannot directly observe directors' adherence to religion in China due to data limitation, we can reasonably expect that religion, as part of the cultural-cognitive institutional environment, is associated with individuals' religiosity. Thus, organizations embedded in religious institutional environments may be subject to cultural-cognitive norms (Marquis et al., 2007).

# Buddhism and Confucianism-Based Institutional Environments in China

Buddhism- and Confucianism-based institutional environments are recognized as significant factors affecting firms' practices in China. As stated in a 2011 annual official report, China has nearly 185 million adherents to Buddhism. This religion teaches the following tenets: 'suffering (dukkha), interdependence (pratitya-samutpada) and impermanence (anitya), and non-self (anatman)' (Du, 2014; Pace, 2013). Suffering arises from desire; thus, Buddhism encourages people to control their desires and treasure contentment in their daily life. The doctrine of interdependence and impermanence

emphasizes that everything is caused by everything else; thus, each action has a cause and leads to consequences (Pace, 2013). The concept of non-self points to the fact that people can ignore their identity in society to become happy. Moral doctrines play an important role in Buddhist behaviors and are synthesized in the Four Immeasurables, namely, compassion (*karuna*), loving kindness (*metta*), empathetic joy (*mudita*), and equanimity (*upekkha*) (Du, 2014). Compassion (*karuna*) involves treating others' negative feelings and suffering as if they were one's own personal suffering. Loving-kindness (*metta*) involves actively caring for others, feeling a sense of altruistic connection with them, and wishing them happiness. Empathetic joy (*mudita*) involves encouraging others' joy or unselfishly participating in such joy. Finally, equanimity (*upekkha*) dictates fair equidistance from extremes; thus, one should not strive to gain a status superior to that of others. Chinese society encourages individuals to follow Buddhism doctrines to release resentment and seek comfort through Buddhist teachings.

Confucianism has a long history of more than 2,500 years since its creation in the Spring and Autumn Periods. Confucian doctrines such as moral standards, virtues, relationships, and ritual propriety play a vital role in national ideologies (Lin, Ho, & Lin, 2013), especially during the Han Dynasty (Jacobs, Guopei, & Herbig, 1995). Despite encountering criticism during the May Fourth Movement in 1919 and Cultural Revolution (1966–1976), Confucian culture remains the mainstream ideology influencing the psychological traits of Chinese people (Lew, 1979). Confucian ideas are deeply rooted in people's ideologies and guide their daily lives, such as behavioral habits and ways of thinking. The modern advocacy of 'Family harmony is the basis for success in any undertaking' in familial relationships aligns with Confucian doctrine of harmony. The proliferation of Confucian institutes and classrooms both domestically and internationally attests to the continued popularity of Confucianism (Hartig, 2012).

The Confucian tradition encompasses a variety of social, moral, and ethical principles that serve as guidance for individuals' behaviors and corporate practices (Du, 2015; Ip, 2009; Yan & Sorenson, 2006). Central to Confucian virtues are five constants (五常), including benevolence (ren, 仁), appropriateness (yi, 义), propriety (li, 礼), wisdom (zhi, 智), and trustworthiness (xin, 信), and five relations (五伦), namely, parent–child, ruler–subject, husband–wife, elder–younger sibling, and friend–friend relationships (Du, 2015; Yao & Yao, 2000), which are deemed crucial to achieving the ultimate objective of harmony (he, 和).

# Buddhism-Based Institutional Environment and Vertical Executive Pay Dispersion

In our study, the Buddhism-based institutional environment embodies the logic favoring wealthsharing and egalitarianism in the social system and relevant actors' daily lives (McCleary & Barro, 2006; Yao, 2020). As an institutional logic, Buddhism-based institutional environment is widely shared within society and significantly influences the behavior of individuals and firms (Du, 2013, 2014; Singhal, 2014). The institutional environment comprises a set of social norms that provide rationales for organizational goals and actions. Complying with these norms may enhance an organization's legitimacy, whereas deviating from them may result in de-legitimization (Deephouse, Bundy, Tost, & Suchman, 2017; Suddaby, Bitektine, & Haack, 2017). We expect that the Buddhism-based institutional environment might result in less vertical executive pay dispersion, and our arguments are twofold. First, the Buddhism-based institutional environment advocates people's demonstration of selfless love and kindness toward others (Marques, 2010; Shonin, Van Gordon, Compare, Zangeneh, & Griffiths, 2015). Emphasis on consideration for others inspires people to share their wealth instead of accumulating property for their own sake (Gill & Lundsgaarde, 2004; McCleary & Barro, 2006; Scheve & Stasavage, 2006). However, vertical executive pay dispersion embodies the notion of 'winner-loser'-based wealth distribution by initiating tournament competition among executives (e.g., Becker & Huselid, 1992; Henderson & Fredrickson, 2001). The key principles underlying vertical executive pay dispersion contradict the wealth-sharing tenet of Buddhism (Connelly et al., 2016). Therefore, with the influence of the Buddhism-based institutional environment, a firm may adopt a lower level of vertical executive pay dispersion.

Second, Buddhism espouses an egalitarian philosophy that emphasizes the importance of maintaining equidistance from extremes, as noted in previous studies (Pace, 2013; Yao, 2020). This concept implies that individuals should not strive to gain a status superior to that of others (Du, 2014). Buddhism advocates others' needs such as philanthropic engagement (Du, Jian, Du, Feng, & Zeng, 2014a) and environmental responsibility (Du, Jian, Zeng, & Du, 2014b). However, the extant literature on vertical executive pay dispersion regards tournament theory as the cornerstone, positing that tournament competition among executives is the primary driver of firm success (Connelly et al., 2016). It implies that firm resources are limited, and the pay system design is the outcome of a zero-sum principle (Bloom, 1999). Some scholars further documented adverse outcomes due to an inegalitarian pay system design such as increased turnovers (Connelly et al., 2016; Cowherd & Levine, 1992), extreme 'negative efforts' (Becker & Huselid, 2006; Shi et al., 2016), corporate environmental pollution (Zhang, Tong, & Li, 2020), uncooperative behavior (Drago & Garvey, 1998), and strategic shirking (DeVaro & Gürtler, 2016). Thus, a contradiction exists between the Buddhism-based institutional environment and vertical executive pay dispersion. On the bases of the collected arguments, we propose the following hypothesis:

Hypothesis 1 (H1): Ceteris paribus, the Buddhism-based institutional environment is negatively associated with vertical executive pay dispersion.

# Confucianism-Based Institutional Environment and Vertical Executive Pay Dispersion

Confucianism emphasizes the creation of a harmonious environment at different levels from personal, familial, organizational, and communal to national, as the ultimate goal of ritual propriety (Berthrong, 2014; Ip, 2009). The Confucianism-based institutional environment motivates a firm to cultivate a harmonious atmosphere and avoid disharmonious norms (Du, 2016; Wang & Juslin, 2009; Xu, Duan, & Yan, 2019). However, vertical executive pay dispersion emphasizes interpersonal competition, even conflicts. Such emphasis is incompatible with the harmonious philosophy suggested by Confucianism-based institutional environment. Specifically, top executives compete with one another for promotion to a higher position and compensation. Large vertical executive pay dispersion can entail undesirable activities, such as 'attempts at self-promotion through office politics to the out-and-out sabotage of the endeavors of rival fellow workers' (Main et al., 1993: 607). Meanwhile, large pay dispersion may even create perceptions of inequity among executives who are not wellcompensated, which may induce disharmonious outcomes, such as a workplace atmosphere characterized by injustice and jealousy (Finkelstein, Hambrick, & Cannella, 2009), reduced team cohesion and cooperation (Bloom, 1999; Drago & Garvey, 1998; Fredrickson et al., 2010; Pfeffer & Langton, 1993), strategic shirking (Bloom & Milkovich, 1998; DeVaro & Gürtler, 2016), executive turnovers (Bloom & Michel, 2002; Messersmith et al., 2011), and sabotage among team members (Lazear, 1989). Therefore, large vertical executive pay dispersion signifies a disconformity with the Confucianism-based institutional environment.

Furthermore, the Confucianism-based institutional environment is characterized by the cognitive mode of middle-way thinking. This mode underlines the importance of maintaining holistic thinking and avoiding extremes when compromising amid conflicts and maximizing overall value (Ji, Lee, & Guo, 2010; Wu & Lin, 2005). Holistic thinking proposes that various elements are relationally and interdependently connected in general (Ji et al., 2010; Peng & Nisbett, 1999). Middle-way thinking prioritizes overall value maximization but treats conflicts and selfishness as secondary concerns (Cai, Jia, & Li, 2017; Yang & Lee, 2017). Additionally, middle-way thinking emphasizes that an optimal pay incentive system should minimize interpersonal team conflicts and maintain high team collaboration to realize corporate goals and maximize performance. However, vertical executive pay dispersion may motivate executives to adopt opportunistic behaviors to realize personal short-term goals (e.g., prizes, awards, and hierarchy position promotion) at the cost of overall performance (Connelly et al., 2016). In this regard, large vertical executive pay dispersion makes executives believe that their interests are more important than overall organizational performance. Consequently, it may give rise to executives' dissatisfaction and non-commitment; deterring their motivation, effort, and cooperation; and ultimately

harming corporate performance (Fredrickson et al., 2010; Lazear, 1989; Pfeffer & Langton, 1993; Siegel & Hambrick, 2005). We thus hypothesize the following:

Hypothesis 2a (H2a): Ceteris paribus, the Confucianism-based institutional environment is negatively associated with vertical executive pay dispersion.

By contrast, we propose another competing perspective on how the Confucianism-based institutional environment may shape vertical executive pay dispersion. Confucian-based norms highlight the hierarchical order<sup>2</sup> and submission to authority (Farh et al., 2007; Tsai et al., 2011). Specifically, a key principle of Confucianism states that the ruler sets guidelines for the subject and emphasizes 'let rulers be rulers, and let subjects be subjects' (He, 2015: 25). Such principle inadvertently offers justification for 'restrictive social hierarchy' (Hon & Stapleton, 2017: 85). This notion is consistent with Lazear and Rosen's model emphasizing that the person in a higher authority position is obliged to obtain a disproportionate premium (Lazear & Rosen, 1981; Shi et al., 2016). Confucian meritocracy is also relevant to understanding how Confucian-based institutional environment affects vertical executive pay dispersion. Meritocracy suggests that a system should be based on competence (Jiang, 2018). These characteristics align with the features of vertical pay dispersion such as hierarchical and competence-based tournaments (Connelly et al., 2014). We thus arguably predict that the Confucianism-based institutional environment is positively associated with the acceptance and presence of vertical pay dispersion, *ceteris paribus*. Thus, we propose the following hypothesis:

Hypothesis 2b (H2b): Ceteris paribus, the Confucianism-based institutional environment is positively associated with vertical executive pay dispersion.

## Methods

## Data and Sample

We collected samples from Chinese public firms listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange between 2010 and 2018. We constructed our sample based on the following criteria. First, given the different financial structures, disclosure regimes, and methods of measuring performance (Chizema, Liu, Lu, & Gao, 2015), we excluded observations pertaining to the banking, insurance, and other financial industries. Second, we omitted firms with special treatment (ST) or suspension from trading (\*ST) transaction status, because public firms in the Chinese stock markets labeled as ST or \*ST are largely troubled in terms of financial situations (Chin & Semadeni, 2017; Fredrickson et al., 2010). Third, we eliminated observations with missing data and outliers in the dependent, independent, and control variables. Finally, we obtained a sample of 19,958 observations. From the China Stock Market & Accounting Research (CSMAR) database, we collected and calculated data on executive compensation and other control variables. As one of the largest databases in China, the CSMAR database is the primary data source of information on stock markets, financial statements, and the corporate governance of Chinese listed firms (Qian, Wang, Geng, & Yu, 2017). Following prior research, we obtained Buddhism data from the religion database operated by the University of Michigan (Jia, Ruan, & Zhang, 2017; Jia, Xiang, & Zhang, 2019), which includes information on Buddhist temples, such as detailed geographic locations, founding dates, employee sizes, and yearly incomes. In addition, we collected Confucianism data from the official website of the Confucian Temple in China (http://www.chinakongmiao.org/; Du, 2015), which aims to propagate Confucian culture and includes detailed descriptions of Confucian temples across different provinces.

# Dependent Variable

Our dependent variable is *vertical executive pay dispersion*. Given the compensation characteristics of Chinese public firms, executive pay includes salaries and bonuses (Chizema et al., 2015). Following prior studies (Ridge, Aime, & White, 2015; Siegel & Hambrick, 2005), vertical executive pay dispersion measures pay differences between CEO and non-CEO executives. We measure *vertical executive pay* 

dispersion as total CEO compensation divided by the average total compensation of the non-CEO executives (multiplied by 100 for ease of presentation).

# Independent Variables

Prior studies propose that firms are embedded in geographic communities and are affected by local institutional pressures, such as the cultural-cognitive institutional environment (Marquis et al., 2007; Marquis & Battilana, 2009). For instance, the religious institutional environment can affect firm-level decisions, such as corporate philanthropy, agency problems, and accounting restatements (Du et al., 2014a; Dyreng, Mayew, & Williams, 2012; McGuire et al., 2012; Wang, Tong, Takeuchi, & George, 2016). The basis of these findings is that religion can shape social norms urging firms to conform. Therefore, firms are inevitably affected by religious social norms when they are located in a place with a strong religious institutional environment (Du, 2014, 2015; El Ghoul et al., 2012).

Buddhism and Confucianism have been rooted in people's minds for hundreds of years. Hence, the more Buddhist or Confucian temples in a certain location, the stronger the religious institutional environment. Following Du (2014; 2015), we employ the geographic proximity method to measure the independent variables, representing the intensity of the Buddhist and Confucian temples surrounding a focal firm (*Buddhism* and *Confucianism*). Specifically, we calculate the Buddhism- and Confucianism-based institutional environments following the steps below. First, we collect the registered addresses of the corporate headquarters and locations of the Buddhist and Confucian temples. Then, we used the Google Earth geographic information system to obtain the longitude and latitude of each firm and temple. Second, based on the coordinates, we calculated the distance between the firms and temples using Equation (1) below.

$$Distance = 6378 \times a \cos \left[ \sin \left( Lat1 \times \frac{\pi}{180} \right) \times \sin \left( Lat2 \times \frac{\pi}{180} \right) + \cos \left( Lat1 \times \frac{\pi}{180} \right) \right] \times \cos \left( Lat2 \times \frac{\pi}{180} \right) \times \cos \left( Long1 \times \frac{\pi}{180} - Long2 \times \frac{\pi}{180} \right) \right]. \tag{1}$$

where *Lat1* and *Long1* represent the latitude and longitude of a temple, respectively, and *Lat2* and *Long2* represent the latitude and longitude of a focal firm, respectively. The 6,378 value is the radius of the earth, and  $\pi$  is the circumference ratio ( $\pi \approx 3.14$ ).

Finally, we calculated the Buddhism-based institutional environment (*Buddhism*) as the log-transformed value of the Buddhist temples less than 100 km from a focal firm's headquarters (Jia et al., 2017; 2019). We measure the *Confucianism* variable using the same method. Furthermore, we standardize the values of *Buddhism* and *Confucianism* to make them more observable in terms of their asymmetric influences on vertical executive pay dispersion (Fu, Tang, & Chen, 2020). Meanwhile, as robustness, we choose 50 km and 150 km to identify the local religious institutional environment.

To mitigate the concern about whether temple presence indicates local religiosity, we collected additional datasets for further analyses. We obtained a dataset of individual religiosity from the survey of the China Family Panel Studies (CFPS). The CFPS, a biennial survey launched by Peking University, is an ongoing, nearly nationwide, comprehensive, longitudinal social survey that is intended to serve research needs on a large variety of social phenomena (e.g., religiosity) in contemporary China (Xie & Hu, 2014; Xie & Lu, 2015). Specifically, the subsample frame of the CFPS is obtained *via* a three-stage (districts/counties-villages/communities-households) probability of random sampling, and the samples covered 25 provinces of China, except Xinjiang, Xizang, Hainan, Qinghai, Ningxia, and Neimenggu; it also provides information on religious belief since 2012, such as 'What religion do you have'? and 'Do you think religion is important to you'? Thus, we obtained data on religiosity from 2012 to 2018 and calculate the following three indicators: (1) the proportion of religious adherents in respondents of a province (*Religiosity in a province*), (2) the proportion of Buddhist adherents in respondents of a province (*Buddhist religiosity in a province*), and (3) the respondents' perceived importance of religion (*Religion importance*). We then calculated the correlation between number of temples in a province (*Temples in* 

Variables/Years	2012	2014	2016	2018	2012-2018
Temples in a province and Religiosity in a province	0.698	0.674	0.639	0.679	0.702
Temples in a province and Religion importance	0.611	0.585	0.585	N.A.	0.618
Buddhist temples and Buddhist religiosity in a province	0.760	0.797	0.719	0.754	0.798
Buddhist temples in a province and Religion importance	0.585	0.688	0.652	N.A.	0.668

Table 1. The correlations of local temples and local religiosity

a province), number of Buddhist temples in a province (Buddhist temples in a province), and Religiosity in a province, Buddhist religiosity in a province, and Religion importance. By doing so, we can get the insights about the association between the presence of religious temples and individuals' religiosity. As shown in Table 1, we find that the range of correlation is from 0.585 to 0.798, indicating that regional religious atmosphere is high (e.g., the more the religious adherents, the larger perceived importance of religion) if more temples are in the given region. We acknowledge the limitations of this dataset such as no information about pay dispersion and Confucian adherence in the CFPS dataset.

#### **Control Variables**

Following extant studies, we also include a number of other likely determinants of pay dispersion. First, we control for financial variables that may affect executive pay dispersion. We measure *firm size* as the natural logarithm of firm sales, because large firms may pay top executives more than small firms (Chizema et al., 2015). Firm debt, performance, cash, and growth opportunities may also affect the executive pay dispersion design (Chizema et al., 2015; Fredrickson et al., 2010; Siegel & Hambrick, 2005). We measure *debt ratio* as the ratio of total debts to total assets to control for the ability to repay debt. Firm performance and cash may affect top-team-level pay dispersion (Finkelstein & Hambrick, 1989). Therefore, we control for firm performance using *ROA* (Henderson & Fredrickson, 2001) and measure *operation cash ratio* using the ratio of operation net cash to total assets. High-growth firms may pay relatively high compensation to attract talents, and the book-to-market ratio (*B/M*) is defined as a measure of firm growth (Siegel & Hambrick, 2005).

Second, we control for corporate governance variables that may affect executive pay distribution. Board directors and their independence may matter to the compensation design (Fredrickson et al., 2010). Thus, we measure *board size* as the total number of board directors and used the ratio of independent directors on the board (*independent director ratio*) to control for the independence of the board. In China, state-owned and private enterprises have different compensation and incentive systems (Chizema et al., 2015). Therefore, we control for *firm nature*, which we code as 1 if the focal firm is a state-owned enterprise; otherwise, 0. Furthermore, we control for the ownership percentage of the largest shareholder (*largest shareholding*), because a large shareholder may have an impact on managers' pay and rewards and institutional ownership (*institutional shareholding*), which is measured as the percentage of firm shares owned by institutional investors, because it can also affect how executive pay is allocated (David, Kochhar, & Levitas, 1998).

Third, we include characteristics related to CEO, top manager team, and pay characteristics as control variables. We code CEO duality as 1 if the CEO and chair of the board are the same person; otherwise, 0, which may affect how much the CEO is paid and thus what is available to the other members of the top team (Sanders & Carpenter, 1998). Following prior studies (Chizema et al., 2015; Shi et al., 2016), we also control for the average age of the top executives and measure it using the natural logarithm (average TMT age), because young top managers are likely to participate in tournament competition. Moreover, given that the level of top executives' pay in a focal firm and level of executives' pay in one industry may decide the pay dispersion level in one firm, we average and control for the logarithm of the total TMT pay among the top executives and CEOs (average TMT pay). Pay dispersion may be high when a CEO's top team holds other hierarchically differentiated job titles (e.g., executive vice president, vice president, and so on); thus, we control for the number of job titles in the top team

(number of titles; Fredrickson et al., 2010; Lim, 2019). We also control for CEO changes (CEO turnover), because the executive pay dispersion may change following a CEO turnover (Lim, 2019) and code it as 1 if the CEO changes in one focal year; otherwise, 0. Furthermore, we calculate the average vertical executive pay dispersion within firms in the same industry (industry vertical executive pay dispersion).

At the regional level, regional economic development and the local government's attitude toward religion and pay allocation may affect executive pay dispersion. For example, Yue, Wang, and Yang (2019) found that temple commercialization is significantly related to the pressures faced by local government officials in developing the economy. Hence, we control for several economic factors, including the provincial marketization index (*marketization*) to proxy for regional economic development (Fan, Wang, & Yu, 2016), the salary per capita, and GDP per capita of the city where a firm is located (*salary per capita* and *GDP per capita*; Yue et al., 2019), and fiscal deficit (*fiscal deficit*) measured by the logarithmic value of the difference between fiscal expenditure and revenue if the difference is positive; otherwise, 0.

Finally, we control for firm age (*firm age*), measured by the logarithm of the number of years since a firm's establishment, because old firms may pay top executives more than young firms; we also use industry dummies to control for industry effects and year dummies to control for time-varying effects. Table 2 presents the variable definitions.

#### **Estimation Method**

We introduce regression models in Equation (2) to test how the Buddhism- and Confucianism-based institutional environments surrounding one focal firm affected its compensation design (vertical executive pay dispersion). Considering the time series characteristic of the empirical data of this study, the residuals may be correlated across the firms, and the standard errors may be biased. Hence, following a prior study (Petersen, 2009), we use the heteroskedastic-robust standard errors in the regressions, which can improve the preciseness of our study.

Vertical executive pay dispersion = 
$$\beta_0 + \beta_1 Buddhism + \beta_2 Confucianism + \beta_3 Controls + \varepsilon$$
. (2)

We employ the number of Buddhist and Confucian temples surrounding a focal firm as a proxy for the local intensity of the Buddhism- and Confucianism-based institutional environments and relate it to vertical pay arrangements for top executives. The Buddhist and Confucian temples are constructed following the local historical culture, religious adherents, religious associations, or the local government. Therefore, they can be largely regarded as an exogenous variable for public firms. Thus, our empirical setting is less likely to suffer from the endogeneity problem.

# Results

Table 3 shows the descriptive statistics and correlation matrix of the study variables. The mean of *vertical executive pay dispersion* (after multiplying 100) is 154.60, which accords with the Chinese context that a CEO typically receives more compensation than other executives. Some of the variables are significantly correlated, such as *firm size*, *debt ratio*, *B/M*, *GDP per capita*, *marketization* and *firm nature*<sup>3</sup>. We check for potential multicollinearity problems between these variables. Following a prior study (Cohen, Cohen, West, & Aiken, 2003; Zhang, Ruan, Tang, & Tong, 2021), we calculate the variance inflation factor (VIF) of each regression model to determine whether the VIF is substantially less than the rule-of-thumb cutoff of 10. The maximum VIF across the regression models is 2.48 (*firm size*), thereby indicating that multicollinearity rarely affects the results.

Table 4 reports the regression results of the effect of Buddhism- and Confucianism-based institutional environments on vertical executive pay dispersion. Model 1 is the baseline model including only the control variables. Similar to prior studies (Chizema et al., 2015; Fredrickson et al., 2010), some of the control variables are significantly related to *vertical executive pay dispersion*, such as *firm size*, *ROA*,

Table 2. Variable definitions

Variables	Definition
Vertical executive pay dispersion <sup>a</sup>	Total CEO compensation divided by average total compensation of non-CEO executives
Buddhism <sup>b</sup>	The log-transformed value of Buddhist temples at the distance of fewer than 100 km from a firm's headquarter
Confucianism <sup>b</sup>	The log-transformed value of Confucian temples at the distance of fewer than 100 km from a firm's headquarter
Firm size <sup>c</sup>	The natural logarithm of firm sales
Debt ratio	The ratio of total debts to total assets
ROA	Return on total assets
Operation cash ratio	The ratio of operation net cash to total assets
B/M	Stock market value is divided by the focal firm's book value
Board size	The total number of board directors
Independent director ratio	The ratio of independent directors in the board
Firm nature	It equals 1 if the focal firm belongs to state-owned enterprises; otherwise, it equals 0
Largest shareholding	The largest shareholder's ownership percentage
Institutional shareholding	The percentage of firm shares owned by institutional investors
CEO duality	It equals 1 if the CEO and the chair of the board of directors is the same person; otherwise, it equals $\bf 0$
Average TMT age <sup>c</sup>	The natural logarithm of average age of top executives
Average TMT pay <sup>c</sup>	The natural logarithm of total TMT pay among the top executives
Numbers of titles	The number of total job titles in top team (e.g., president, executive vice president, vice president)
CEO turnover	It equals 1 if CEO changes in one focal year; otherwise, it equals 0
Industry vertical executive pay dispersion <sup>a</sup>	The average vertical pay inequities of firms in the same industry
Marketization	Marketization index of a province where a focal firm is located
Salary per capita <sup>c</sup>	Annual salary per capita of a city where a focal firm is located
GDP per capita <sup>c</sup>	GDP per capita of a city where a focal firm is located
Fiscal deficit <sup>c</sup>	The log-transformed value of the difference of fiscal expenditure and revenue of a city where a focal firm is located if the difference is positive, 0 otherwise
Firm age <sup>c</sup>	The natural logarithm of the number of years since its establishment

Notes: aThe value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation. Standardized. clogarithm.

firm nature, and firm age. The independent variables (Buddhism and Confucianism) are separately added to Models 2 and 3, and Model 4 includes the two independent variables in the same model. Hypothesis 1 posits that a negative association exists between the Buddhism-based institutional environment and vertical executive pay dispersion. Model 2 indicates that this relationship is significantly negative ( $\beta_1 = -1.376$ , p < 0.01 in Model 2). Thus, Hypothesis 1 is supported. Furthermore, the results presented in Table 4 reveal that the coefficient of Confucianism is statistically significant and negatively associated with vertical executive pay dispersion ( $\beta_2 = -4.220$ , p < 0.001 in Model 3), thereby suggesting that firms in a high-intensity Confucianism-based institutional environment are likely to implement low vertical executive pay dispersion. Thus, the empirical evidence supports Hypothesis 2a. In addition, Buddhism and Confucianism are negatively and significantly associated with vertical executive

 Table 3. Descriptive statistics and correlation matrix

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1 Vertical executive pay dispersion <sup>a</sup>	154.60	67.25	1											
2 Buddhism <sup>b</sup>	0	1	0.01	1										
3 Confucianism <sup>b</sup>	0	1	-0.06***	0.20***	1									
4 Firm size <sup>c</sup>	21.27	1.44	-0.04***	-0.07***	0.04***	1								
5 Debt ratio	0.42	0.22	-0.04***	-0.07***	-0.05***	0.50***	1							
6 ROA	0.04	0.05	0.06***	0.03***	0.04***	0.02**	-0.41***	1						
7 Operation cash ratio	0.04	0.07	0.02*	0.02*	-0.01	0.10***	-0.15***	0.38***	1					
8 B/M	0.58	0.23	-0.03***	-0.02***	-0.01	0.47***	0.35***	-0.17***	-0.12***	1				
9 Board size	8.73	1.71	-0.07***	-0.07***	-0.03***	0.26***	0.18***	-0.01	0.05***	0.18***	1			
10 Independent director ratio	0.37	0.05	0.00	0.00	0.03***	-0.01	-0.02**	-0.01*	-0.02**	-0.02**	-0.45***	1		
11 Firm nature	0.40	0.49	-0.18***	-0.12***	-0.00	0.34***	0.33***	-0.16***	0.04***	0.19***	0.28***	-0.07***	1	
12 Largest shareholding	35.48	15.03	-0.05***	-0.02***	0.01	0.23***	0.06***	0.10***	0.08***	0.19***	0.01*	0.05***	0.20***	1
13 Institutional shareholding	6.42	7.29	0.02***	-0.05***	0.02***	0.21***	0.05***	0.17***	0.09***	-0.17***	0.05***	-0.01	0.03***	-0.12***
14 CEO duality	0.26	0.44	0.06***	0.05***	0.02*	-0.18***	-0.18***	0.08***	-0.02**	-0.09***	-0.18***	0.10***	-0.31***	-0.04***
15 Average TMT age <sup>c</sup>	3.87	0.07	-0.10***	-0.03***	-0.00	0.27***	0.14***	-0.06***	0.06***	0.12***	0.16***	-0.03***	0.32***	0.08***
16 Average TMT pay <sup>c</sup>	12.87	0.66	-0.08***	0.00	0.07***	0.43***	0.10***	0.21***	0.13***	0.09***	0.12***	0.00	0.08***	0.03***
17 Numbers of titles	4.67	1.10	0.00	-0.04***	0.01	0.14***	0.09***	0.00	0.01*	0.07***	0.11***	-0.02*	0.07***	-0.02***
18 CEO turnover	0.17	0.38	-0.02*	-0.02**	-0.01	0.04***	0.08***	-0.10***	-0.03***	0.02*	0.00	0.01	0.06***	0.00
19 Industry vertical executive pay dispersion <sup>a</sup>	153.70	9.74	0.16***	0.07***	-0.02**	-0.11***	-0.10***	0.06***	-0.04***	-0.14***	-0.12***	0.01	-0.24***	-0.11***
20 Marketization	7.96	1.84	0.02***	0.23***	0.13***	0.02**	-0.13***	0.09***	0.00	-0.06***	-0.13***	0.03***	-0.23***	-0.01
21 Salary per capita <sup>c</sup>	10.64	1.54	-0.01	-0.01	0.11***	0.01	0.01	-0.02*	0.01	0.00	0.03***	-0.01	0.05***	0.04***
22 GDP per capita <sup>c</sup>	10.94	0.46	0.01	0.00	0.19***	0.05***	-0.11***	0.06***	-0.02**	-0.04***	-0.11***	0.04***	-0.15***	0.00
23 Fiscal deflicit <sup>c</sup>	12.52	4.86	-0.03***	-0.21***	0.04***	0.05***	0.02**	-0.02**	0	-0.01	0.04***	0.01	0.14***	-0.01
24 Firm age <sup>c</sup>	2.73	0.39	0.01	0.00	-0.09***	0.13***	0.22***	-0.14***	-0.01	-0.03***	0.03***	-0.03***	0.19***	-0.13***

Variables	Mean	S.D.	13	14	15	16	17	18	19	20	21	22	23	24
13 Institutional shareholding	6.42	7.29	1											
14 CEO duality	0.26	0.44	-0.03***	1										
15 Average TMT age <sup>c</sup>	3.87	0.07	-0.01	-0.08***	1									
16 Average TMT pay <sup>c</sup>	12.87	0.66	0.20***	-0.02**	0.20***	1								
17 Numbers of titles	4.67	1.10	0.05***	-0.04***	0.08***	0.10***	1							
18 CEO turnover	0.17	0.38	-0.01	-0.11***	-0.04***	0.01*	0.00	1						
19 Industry vertical executive pay dispersion <sup>a</sup>	153.70	9.74	0.04***	0.09***	-0.10***	-0.05***	-0.04***	-0.04***	1					
20 Marketization	7.96	1.84	-0.05***	0.14***	0.01	0.28***	-0.05***	-0.03***	0.05***	1				
21 Salary per capita <sup>c</sup>	10.64	1.54	0.02**	-0.02**	0.01	-0.04***	0.01	0.01	-0.02*	-0.08***	1			
22 GDP per capita <sup>c</sup>	10.94	0.46	-0.04***	0.10***	0.07***	0.29***	-0.03***	-0.01*	0.00	0.81***	0.08***	1		
23 Fiscal deflicit <sup>c</sup>	12.52	4.86	0.01	-0.05***	0.07***	0.07***	0.03***	0.03***	-0.06***	-0.07***	-0.07***	-0.01	1	
24 Firm age <sup>c</sup>	2.73	0.39	0.03***	-0.12***	0.21***	0.14***	0.01	0.06***	0.01	0.09***	-0.04***	0.13***	0.09***	1

Notes: N = 19,958; \*p < 0.05, \*\*p < 0.01, and \*\*\*p < 0.001. a The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation. b Standardized. C Logarithm.

Table 4. Results of religious institutional environment and vertical executive pay dispersion

	Model 1	Model 2	Model 3	Model 4	
Variables		Vertical executive	e pay dispersion <sup>a</sup>		
Buddhism <sup>b</sup>		-1.376** (0.523)		-1.264* (0.524)	
Confucianism <sup>b</sup>			-4.220*** (0.479)	-4.189*** (0.479)	
Firm size <sup>c</sup>	4.362*** (0.570)	4.311*** (0.571)	4.578*** (0.570)	4.530*** (0.570)	
Debt ratio	-0.726 (3.149)	-0.725 (3.149)	-1.440 (3.146)	-1.434 (3.146)	
ROA	47.623*** (12.131)	47.774*** (12.121)	47.155*** (12.116)	47.297*** (12.108)	
Operation cash ratio	21.593** (7.167)	21.782** (7.170)	19.898** (7.150)	20.084** (7.153)	
B/M	-1.681 (2.972)	-1.625 (2.972)	-1.959 (2.965)	-1.906 (2.965)	
Board size	-1.285*** (0.315)	-1.310*** (0.315)	-1.344*** (0.315)	-1.367*** (0.315)	
Independent director ratio	-23.767* (10.110)	-23.985* (10.120)	-22.415* (10.094)	-22.625* (10.103)	
Firm nature	-23.001*** (1.215)	-23.074*** (1.214)	-22.694*** (1.211)	-22.764*** (1.210)	
Largest shareholding	-0.115*** (0.035)	-0.115*** (0.035)			
Institutional shareholding	0.135+ (0.071)	0.127+ (0.071)	0.141* (0.071)	0.134+ (0.071)	
CEO duality	2.682* (1.274)	2.649* (1.273)	2.632* (1.271)	2.602* (1.270)	
Average TMT age <sup>c</sup>	-37.167***	-36.765***	-37.271***	-36.902***	
	(7.376)	(7.367)	(7.371)	(7.362)	
Average TMT pay <sup>c</sup>	-11.153*** (1.024)	-11.104*** (1.025)	-11.048*** (1.023)	-11.003*** (1.024)	
Number of titles	1.161** (0.443)	1.154** (0.443)	1.181** (0.441)	1.174** (0.441)	
CEO turnover	-0.660 (1.252)	-0.664 (1.252)	-0.717 (1.249)	-0.720 (1.249)	
Industry vertical executive pay dispersion <sup>a</sup>	0.806*** (0.069)	0.808*** (0.069)	0.812*** (0.069)	0.814*** (0.069)	
Marketization	0.427 (0.301)	0.580+ (0.304)	0.774* (0.303)	0.912** (0.305)	
Salary per capita <sup>c</sup>	-0.093 (0.365)	-0.034 (0.364)	0.159 (0.364)	0.211 (0.364)	
GDP per capita <sup>c</sup>	2.398 (1.852)	0.802 (1.952)	4.293* (1.866)	2.814 (1.971)	
Fiscal deficit <sup>c</sup>	-0.010 (0.102)	-0.055 (0.104)	0.030 (0.102)	-0.013 (0.105)	
Firm age <sup>c</sup>	10.704*** (1.353)	10.822*** (1.355)	9.701*** (1.354)	9.817*** (1.355)	
Constants	221.762*** (31.207)	218.543*** (31.226)	212.298*** (31.178)	209.409*** (31.197)	
Observations	19958	19958	19958	19958	
Firms	3390	3390	3390	3390	
F	32.005***	31.398***	33.031***	32.404***	
Adj-R <sup>2</sup>	0.065	0.065	0.068	0.069	

Notes:  ${}^{+}p < 0.1$ ,  ${}^{+}p < 0.05$ ,  ${}^{*}p < 0.01$ , and  ${}^{***}p < 0.001$ . Robust standard errors are in parentheses; year and industry dummies are controlled in all regression models.  ${}^{a}$ The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation.  ${}^{b}$ Standardized.  ${}^{c}$ Logarithm.

pay dispersion when the two independent variables are included in the Model 4, thereby supporting Hypotheses 1 and 2a.

We also propose competing hypotheses based on the hierarchical order in Confucian teachings. However, we find that H2a is supported rather than H2b. We posit that the possible reason for this outcome lies in the alignment of certain Confucianism-based doctrines such as altruism, five constants, and self-cultivation with contemporary social values. These doctrines have evolved with the development of society and have been preserved to a significant extent. Moreover, they resonate

with long-standing basic social norms that endorse the positive influence of altruism (Kanagaretnam, Xiu, & Zhou, 2019; Li & Liang, 2015; Xiu, Lin, & Yin, 2022; Yu, Zhu, Huang, & Teklay, 2021), thereby contributing to their endurance over time.

However, socialized values may decay over time or due to new environmental stimuli (Akerlof, 1983; Marquis & Qiao, 2020; Parks and Guay, 2009). In our context, the doctrine of social hierarchy may decay due to the evolution of economic development, and subsequent social development. For instance, we can observe such social development from the difference between the young and old generations. Li (2020: 5) posits that the younger generation can earn 'an unprecedentedly equal position in front of older generations, which has significantly weakened the traditional hierarchy'. In a similar vein, the occurrence of market reform and economic development breaks the constraint that the social hierarchy/order is recognized officially and politically (Bian, 2002). Rather, social hierarchy is determined by the market factors such as wage labor in the private sector. Therefore, tenets of Confucianism have been exposed to new economic and social development that may be seen as conflicting with traditional social hierarchy doctrine. This conflicting exposure may explain the support of H2a.

# Supplementary Analyses

# Moderating analyses

We employed moderation tests to mirror our proposed mechanisms. We introduce communist party branch embeddedness and CEO age as moderators, as they are factors that can impact the sensitivity to religious institutional environments. First, it has been established that communist party embeddedness influences firms through ideology injection (Cheng, 2022; Xu, Zhou, & Chen, 2023; Yan & Xu, 2022). Extant research indicates that ideology can impact individuals' behavior through cognitive processes (Du, 2014, 2015). However, the communist party in China supports atheistic views. In this regard, we thus suggest that a firm with communist party branch embeddedness is less likely to be affected by religious factors. The empirical findings in Table 5 show that the interaction term coefficients of *Buddhism/ Confucianism* and *Communist party branch embeddedness* are significantly positive in Model 2 and Model 3, respectively, suggesting that community party branch embeddedness weakens the negative relationship between Buddhism-/Confucianism-based institutional environment and corporate vertical pay dispersion.

Another moderator is the CEO age. In contrast to their older counterparts, younger CEOs are less affected by religious ideology owing to shifting historical environment and culture milieu. For instance, Chan (2005) contends that the younger generation is not very religious after the state-sponsored atheistic education. Likewise, a report by the Pew Research Center indicates that the youth in America exhibit diminished religious affiliation and participation, reflecting the decaying effect of religious institutional environment on them. The empirical findings in Table 6 show that the interaction term coefficients of *Buddhism/ Confucianism* and *CEO age* are significantly negative in Model 2 and Model 3, respectively, suggesting that CEO age strengthens the negative relationship between Buddhism-/Confucianism-based institutional environment and corporate vertical pay dispersion.

# Changing temples' founding year to measure religious institutional environment

With economic development, regional economic marketization and religion commercialization as tourism attractions may affect our empirical results. To mitigate this concern, we also change temples' founding year to measure religious institutional environment, except for controlling several market economic factors (*marketization*, *GDP per captia*, *salary per captia*, *fiscal deficit*). To this end, we measured the religious institutional environment using temples founded before the year of the economic reform and opening up (1978), because China implemented a planned economy system, and no Chinese economy marketization occurred before the reform and opening up. Thus, temples founded before 1978 may be less affected by economic marketization. In addition, Yue et al. (2019) proposed that temples founded before the 1978 economic reform may be less affected by commercialization.

Table 5. Moderating test of communist party branch embeddedness

	Model 1	Model 2	Model 3	Model 4
Variables		Vertical executive	pay dispersion <sup>a</sup>	
Buddhism <sup>b</sup>	-1.210* (0.522)	-2.230** (0.722)	-1.108* (0.523)	-2.134** (0.723)
Confucianism <sup>b</sup>	-4.190*** (0.478)	-4.153*** (0.478)	-6.172*** (0.744)	-6.139*** (0.743)
Buddhism × Communist party branch embeddedness		2.493** (0.922)		2.509** (0.921)
Confucianism × Communist party branch embeddedness			4.205*** (0.927)	4.215*** (0.926)
Communist party branch embeddedness	-11.804*** (2.497)	-12.099*** (2.506)	-11.733*** (2.492)	-12.030*** (2.500)
Firm size <sup>c</sup>	4.648*** (0.571)	4.654*** (0.571)	4.529*** (0.572)	4.535*** (0.572)
Debt ratio	-1.457 (3.144)	-1.382 (3.145)	-1.270 (3.145)	-1.195 (3.146)
ROA	47.861*** (12.076)	47.712*** (12.074)	48.815*** (12.085)	48.667*** (12.082)
Operation cash ratio	19.575** (7.133)	19.991** (7.138)	19.636** (7.132)	20.055** (7.137)
B/M	-2.118 (2.957)	-1.993 (2.956)	-1.771 (2.959)	-1.644 (2.958)
Board size	-1.377*** (0.314)	-1.355*** (0.314)	-1.382*** (0.313)	-1.361*** (0.314)
Independent director ratio	-23.813* (10.085)	-23.599* (10.087)	-23.850* (10.084)	-23.635* (10.086)
Firm nature	-12.182*** (2.624)	-11.752*** (2.635)	-12.126*** (2.620)	-11.693*** (2.631)
Largest shareholding	-0.123*** (0.035)	-0.121*** (0.035)	-0.130*** (0.035)	-0.128*** (0.035)
Institutional shareholding	0.135+ (0.071)	0.144* (0.071)	0.135+ (0.071)	0.143* (0.071)
CEO duality	2.545* (1.267)	2.529* (1.266)	2.593* (1.266)	2.577* (1.266)
Average TMT age <sup>c</sup>	-36.963*** (7.351)	-37.005*** (7.351)	-37.786*** (7.359)	-37.831*** (7.359)
Average TMT pay <sup>c</sup>	-11.041*** (1.021)	-11.069*** (1.021)	-10.911*** (1.021)	-10.939*** (1.021)
Number of titles	1.149** (0.440)	1.151** (0.440)	1.098* (0.441)	1.101* (0.441)
CEO turnover	-0.740 (1.246)	-0.769 (1.245)	-0.807 (1.245)	-0.837 (1.244)
Industry vertical executive pay dispersion <sup>a</sup>	0.810*** (0.069)	0.808*** (0.069)	0.806*** (0.069)	0.805*** (0.069)
Marketization	0.889** (0.305)	0.916** (0.305)	0.766* (0.308)	0.794** (0.307)
Salary per capita <sup>c</sup>	0.206 (0.364)	0.208 (0.364)	0.215 (0.364)	0.216 (0.364)

GDP per capita <sup>c</sup>	2.747 (1.969)	3.061 (1.973)	2.798 (1.968)	3.115 (1.972)	
Fiscal deficit <sup>c</sup>	-0.013 (0.104)	-0.028 (0.105)	-0.036 (0.105)	-0.050 (0.105)	
Firm age <sup>c</sup>	9.851*** (1.354)	9.721*** (1.353)	10.057*** (1.355)	9.926*** (1.354)	
Constants	210.128*** (31.153)	210.461*** (31.147)	215.289*** (31.236)	215.636*** (31.229)	
Observations	19958	19958	19958	19958	
Firms	3390	3390	3390	3390	
F	32.293***	31.651***	31.747***	31.129***	
Adj-R <sup>2</sup>	0.070	0.071	0.071	0.071	

Notes: \*p < 0.1, \*p < 0.05, \*\*p < 0.01, and \*\*\*p < 0.01. Robust standard errors are in parentheses; year and industry dummies are controlled in all regression models. <sup>a</sup>The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation. <sup>b</sup>Standardized. <sup>c</sup>Logarithm.

Table 6. Moderating test of CEO age

	Model 1	Model 2	Model 3	Model 4				
Variables	Vertical executive pay dispersion <sup>a</sup>							
Buddhism <sup>b</sup>	-1.153* (0.520)	35.747** (13.832)	-1.191* (0.519)	35.806** (13.793)				
Confucianism <sup>b</sup>	-4.188*** (0.477)	-4.191*** (0.477)	41.112** (14.104)	41.202** (14.138)				
Buddhism × CEO age		-9.514** (3.570)		-9.540** (3.560)				
Confucianism × CEO age			-11.651** (3.627)	-11.675** (3.635)				
CEO age <sup>c</sup>	53.429*** (4.509)	54.765*** (4.568)	52.558*** (4.506)	53.896*** (4.565)				
Firm size <sup>c</sup>	4.579*** (0.569)	4.583*** (0.569)	4.607*** (0.569)	4.610*** (0.569)				
Debt ratio	-0.993 (3.138)	-0.940 (3.137)	-1.027 (3.138)	-0.974 (3.137)				
ROA	46.407*** (12.089)	46.488*** (12.097)	46.861*** (12.073)	46.943*** (12.080)				
Operation cash ratio	19.216** (7.134)	19.020** (7.129)	18.949** (7.130)	18.752** (7.125)				
В/М	-1.662 (2.957)	-1.832 (2.956)	-1.812 (2.958)	-1.982 (2.957)				
Board size	-1.411*** (0.314)	-1.424*** (0.315)	-1.407*** (0.314)	-1.420*** (0.315)				
Independent director ratio	-24.588*	-25.373*	-24.490*	-25.276 <b>*</b>				
	4.579***	4.583***	4.607***	4.610***				
Firm nature	-22.637*** (1.203)	-22.646*** (1.203)	-22.577*** (1.204)	-22.586*** (1.203)				
Largest shareholding	-0.123*** (0.034)	-0.123*** (0.034)	-0.119*** (0.034)	-0.119*** (0.034)				
Institutional shareholding	0.127+ (0.071)	0.124+ (0.071)	0.123+ (0.071)	0.120+ (0.071)				
CEO duality	0.204 (1.278)	0.272 (1.279)	0.250 (1.278)	0.318 (1.279)				
Average TMT age <sup>c</sup>	-85.911*** (8.443)	-86.881*** (8.463)	-85.878*** (8.440)	-86.850*** (8.460)				
Average TMT pay <sup>c</sup>	-11.266*** (1.020)	-11.300*** (1.021)	-11.309*** (1.021)	-11.343*** (1.021)				
Number of titles	1.127* (0.439)	1.111* (0.439)	1.110* (0.439)	1.094* (0.439)				
CEO turnover	0.205 (1.246)	0.288 (1.246)	0.242 (1.246)	0.325 (1.246)				
Industry vertical executive pay dispersion <sup>a</sup>	0.809*** (0.069)	0.809*** (0.069)	0.811*** (0.069)	0.810*** (0.069)				
Marketization	0.924** (0.304)	0.914** (0.304)	0.955** (0.305)	0.945** (0.305)				

Salary per capita <sup>c</sup>	0.207 (0.362)	0.209 (0.362)	0.220 (0.362)	0.222 (0.362)	
GDP per capita <sup>c</sup>	2.817 (1.962)	2.754 (1.961)	2.690 (1.962)	2.627 (1.961)	
Fiscal deficit <sup>c</sup>	-0.003 (0.104)	-0.008 (0.104)	-0.005 (0.104)	-0.010 (0.104)	
Firm age <sup>c</sup>	9.545*** (1.349)	9.656*** (1.352)	9.545*** (1.348)	9.656*** (1.351)	
Constants	196.303*** (31.087)	195.663*** (31.095)	198.720*** (31.095)	198.084*** (31.104)	
Observations	19958	19958	19958	19958	
Firms	3390	3390	3390	3390	
F	34.618***	34.012***	34.108***	33.535***	
Adj-R <sup>2</sup>	0.077	0.077	0.077	0.078	

Notes:  $^{+}p < 0.1$ ,  $^{+}p < 0.05$ ,  $^{*}p < 0.01$ , and  $^{***}p < 0.01$ . Robust standard errors are in parentheses; year and industry dummies are controlled in all regression models.  $^{a}$ The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation.  $^{b}$ Standardized.  $^{c}$ Logarithm.

In Table 7, the empirical findings are supported, thereby indicating that regional economy marketization and religion commercialization are not serious concerns in our study.

# Changing distance to measure religious institutional environment

To ensure the robustness of our key results, we change the method for calculating the independent variables (*Buddhism* and *Confucianism*). As discussed above, we employ 50 km and 150 km to measure the religious institutional environment. As shown in Table 8, the empirical results are consistent with the main findings, which indicate that Buddhism- and Confucianism-based institutional environments can reduce vertical executive pay dispersion (Hypotheses 1 and 2a are supported).

## Discussion

Given the importance of executive pay dispersion in affecting firm financial performance and social outcomes, scholars and the public raised awareness on the antecedents of executive pay dispersion. To the best of our knowledge, existing research examined executive pay dispersion from the economic perspective (Chin & Semadeni, 2017; Chizema et al., 2015). Moreover, although an increasing number of studies have focused on pay dispersion from the institutional perspective, little is known about how one of the important institutional elements (i.e., cultural-cognitive institutions) exerts influence on pay dispersion. In our study, we examine the influence of two dominant religious institutional environments (i.e., Buddhism- and Confucianism-based institutional environments) on executive pay dispersion. With insights from institutional theory (Scott, 2014), we propose a negative relationship between Buddhism-based institutional environments and the vertical executive pay dispersion. For the effects of Confucianism, combining harmony and hierarchical authority, we propose the competing hypothesis between Confucianism-based institutional environments and the vertical executive pay dispersion. Using a sample of 19,958 observations for 2010-2018, we find that Buddhism- and Confucianism-based institutional environments are negatively related to the vertical executive pay dispersion. In addition, supplementary analyses show that aforementioned main effects are attenuated when a firm is embedded by communist party branch and has a younger CEO.

# Theoretical Contributions

Our study has important implications for the extant literature. First, we contribute to the executive pay dispersion literature by highlighting the important role of cultural-cognitive institutions, i.e., religious institutional environment. Existing studies predominantly investigated executive pay dispersion by focusing on economic factors (Frydman & Papanikolaou, 2018; Henderson & Fredrickson, 2001). However, economic factors merely account for a partial amount of the variance in executive pay dispersion. We argue that this variance can be explained further by examining from the broader social context. Such is the case because pay dispersion is related to not only tournament schemes but also social structure related to social interaction among executives (Cobb, 2016; Siegel & Hambrick, 2005). In this light, we provide an extension to understand executive pay dispersion from the cultural-cognitive institutional perspective, which may be useful for researchers interested in executive pay.

Second, we offer more nuanced analyses to understand the consequences of religious environment. Prior research mainly examines the impact of religion on economic actions. For instance, Weber's (1930) classic work explores the idea that certain religious beliefs and values, especially those associated with Protestantism (e.g., hard work, the pursuit of economic success and the accumulation of wealth), play a significant role in the development of capitalism in Western societies. Following his work, some emerging contemporary literatures have also examined the impact of religious beliefs on economic growth and development (Campante & Yanagizawa-Drott, 2015; Wang & Lin, 2014), official's corruption (Xu, Li, Liu, & Gan, 2017), attitude of innovation (Bénabou, Ticchi, & Vindigni, 2015), the contributions to public goods (Benjamin, Choi, & Fisher, 2016), and household income (Bryan, Choi, &

Table 7. Considering temples founded before 1978

	Model 1	Model 2	Model 3	Model 4			
Variables	Vertical executive pay dispersion <sup>a</sup>						
Buddhism <sup>b</sup>		-1.299** (0.485)		-1.284** (0.484)			
Confucianism <sup>b</sup>			-4.195*** (0.478)	-4.190*** (0.478)			
Firm size <sup>c</sup>	4.362*** (0.570)	4.319*** (0.571)	4.576*** (0.570)	4.533*** (0.571)			
Debt ratio	-0.726 (3.149)	-0.812 (3.148)	-1.375 (3.147)	-1.459 (3.146)			
ROA	47.623*** (12.131)	47.965*** (12.126)	47.012*** (12.116)	47.351*** (12.110)			
Operation cash ratio	21.593** (7.167)	21.820** (7.169)	19.867** (7.152)	20.092** (7.154)			
В/М	-1.681 (2.972)	-1.534 (2.974)	-2.026 (2.965)	-1.880 (2.967)			
Board size	-1.285*** (0.315)	-1.299*** (0.315)	-1.349*** (0.315)	-1.363*** (0.315)			
Independent director ratio	-23.767* (10.110)	-23.970* (10.120)	-22.416* (10.093)	-22.618* (10.103)			
Firm nature	-23.001*** (1.215)	-23.071*** (1.214)	-22.692*** (1.212)	-22.762*** (1.210)			
Largest shareholding	-0.115*** (0.035)	-0.116*** (0.035)	-0.120*** (0.035)	-0.121*** (0.035)			
Institutional shareholding	0.135+ (0.071)	0.133+ (0.071)	0.138+ (0.071)	0.135+ (0.071)			
CEO duality	2.682* (1.274)	2.622* (1.274)	2.653* (1.271)	2.595* (1.271)			
Average TMT age <sup>c</sup>	-37.167*** (7.376)	-36.698*** (7.371)	-37.351*** (7.371)	-36.887*** (7.366)			
Average TMT pay <sup>c</sup>	-11.153*** (1.024)	-11.164*** (1.024)	-11.011*** (1.023)	-11.021*** (1.023)			
Number of titles	1.161** (0.443)	1.158** (0.443)	1.179** (0.441)	1.175** (0.441)			
CEO turnover	-0.660 (1.252)	-0.669 (1.252)	-0.712 (1.249)	-0.721 (1.249)			
Industry vertical executive pay dispersion <sup>a</sup>	0.806*** (0.069)	0.810*** (0.069)	0.811*** (0.069)	0.814*** (0.069)			
Marketization	0.427 (0.301)	0.504+ (0.301)	0.812** (0.303)	0.888** (0.303)			
Salary per capita <sup>c</sup>	-0.093 (0.365)	0.012 (0.366)	0.120 (0.364)	0.224 (0.365)			
GDP per capita <sup>c</sup>	2.398 (1.852)	1.292 (1.891)	4.070* (1.863)	2.976 (1.903)			
Fiscal deficit <sup>c</sup>	-0.010 (0.102)	-0.030 (0.102)	0.015 (0.102)	-0.005 (0.102)			
Firm age <sup>c</sup>	10.704*** (1.353)	10.726*** (1.353)	9.765*** (1.353)	9.787*** (1.353)			

Table 7. (Continued.)

	Model 1	Model 2	Model 3	Model 4
Variables		Vertical executiv	e pay dispersion <sup>a</sup>	
Constants	221.762*** (31.207)	218.872*** (31.218)	212.387*** (31.180)	209.542*** (31.194)
Observations	19958	19958	19958	19958
Firms	3390	3390	3390	3390
F	32.005***	31.383***	33.055***	32.416***
Adj-R <sup>2</sup>	0.065	0.065	0.068	0.069

Notes: \*p < 0.1, \*p < 0.05, \*\*p < 0.01, and \*\*\*p < 0.01, and \*\*\*p < 0.01. Robust standard errors are in parentheses; year and industry dummies are controlled in all regression models. <sup>a</sup>The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation. <sup>b</sup>Standardized. <sup>c</sup>Logarithm.

Table 8. Considering different distance to measure religious environments

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8			
		Distance	= 50 km		Distance = 150 km						
Variables		Vertical executive	pay dispersion <sup>a</sup>		Vertical executive pay dispersion <sup>a</sup>						
Buddhism <sup>b</sup>		-2.244*** (0.514)		-2.114*** (0.514)		-1.395** (0.523)		-1.377** (0.523)			
Confucianism <sup>b</sup>			-3.903*** (0.476)	-3.834*** (0.476)			-4.114*** (0.525)	-4.108*** (0.525)			
Firm size <sup>c</sup>	4.362*** (0.570)	4.301*** (0.570)	4.431*** (0.570)	4.372*** (0.570)	4.362*** (0.570)	4.328*** (0.570)	4.633*** (0.572)	4.599*** (0.572)			
Debt ratio	-0.726 (3.149)	-0.757 (3.148)	-1.113 (3.149)	-1.135 (3.149)	-0.726 (3.149)	-0.698 (3.150)	-1.344 (3.147)	-1.315 (3.148)			
ROA	47.623*** (12.131)	48.444*** (12.117)	47.529*** (12.125)	48.305*** (12.112)	47.623*** (12.131)	47.875*** (12.125)	47.633*** (12.125)	47.882*** (12.119)			
Operation cash ratio	21.593** (7.167)	22.048** (7.170)	19.787** (7.158)	20.247** (7.161)	21.593** (7.167)	21.782** (7.171)	19.704** (7.155)	19.894** (7.159)			
B/M	-1.681 (2.972)	-1.456 (2.971)	-1.420 (2.967)	-1.212 (2.966)	-1.681 (2.972)	-1.694 (2.972)	-2.225 (2.967)	-2.238 (2.967)			
Board size	-1.285*** (0.315)	-1.344*** (0.315)	-1.354*** (0.315)	-1.408*** (0.315)	-1.285*** (0.315)	-1.311*** (0.315)	-1.392*** (0.315)	-1.418*** (0.315)			
Independent director ratio	-23.767* (10.110)	-24.816* (10.124)	-24.477* (10.092)	-25.453* (10.105)	-23.767* (10.110)	-24.020* (10.121)	-24.239* (10.109)	-24.488* (10.119)			
Firm nature	-23.001*** (1.215)	-23.093*** (1.214)	-22.732*** (1.212)	-22.824*** (1.211)	-23.001*** (1.215)	-23.079*** (1.214)	-22.635*** (1.211)	-22.713*** (1.210)			
Largest shareholding	-0.115*** (0.035)	-0.116*** (0.035)	-0.111** (0.035)	-0.111** (0.035)	-0.115*** (0.035)	-0.116*** (0.035)	-0.120*** (0.035)	-0.121*** (0.035)			
Institutional shareholding	0.135+ (0.071)	0.122+ (0.071)	0.155* (0.071)	0.142* (0.071)	0.135+ (0.071)	0.126+ (0.071)	0.138+ (0.071)	0.128+ (0.071)			
CEO duality	2.682* (1.274)	2.518* (1.273)	2.490+ (1.273)	2.339+ (1.272)	2.682* (1.274)	2.662* (1.273)	2.459+ (1.270)	2.440+ (1.270)			
Average TMT age <sup>c</sup>	-37.167*** (7.376)	-36.249*** (7.358)	-37.011*** (7.372)	-36.149*** (7.354)	-37.167*** (7.376)	-36.578*** (7.364)	-36.222*** (7.367)	-35.643*** (7.355)			
Average TMT pay <sup>c</sup>	-11.153*** (1.024)	-11.217*** (1.023)	-11.000*** (1.023)	-11.063*** (1.022)	-11.153*** (1.024)	-11.131*** (1.024)	-11.367*** (1.023)	-11.345*** (1.023)			
Number of titles	1.161** (0.443)	1.160** (0.443)	1.203** (0.441)	1.201** (0.441)	1.161** (0.443)	1.158** (0.443)	1.185** (0.441)	1.182** (0.442)			
CEO turnover	-0.660 (1.252)	-0.637 (1.251)	-0.691 (1.250)	-0.669 (1.250)	-0.660 (1.252)	-0.647 (1.252)	-0.597 (1.249)	-0.584 (1.249)			
Industry vertical pay dispersion <sup>a</sup>	0.806*** (0.069)	0.810*** (0.069)	0.819*** (0.069)	0.822*** (0.069)	0.806*** (0.069)	0.808*** (0.069)	0.806*** (0.069)	0.807*** (0.069)			

Table 8. (Continued.)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	Distance = 50 km				Distance = 150 km			
Variables	Vertical executive pay dispersion <sup>a</sup>				Vertical executive pay dispersion <sup>a</sup>			
Marketization	0.427 (0.301)	0.661* (0.305)	0.744* (0.304)	0.959** (0.306)	0.427 (0.301)	0.595+ (0.306)	1.000** (0.309)	1.165*** (0.312)
Salary per capita <sup>c</sup>	-0.093 (0.365)	0.038 (0.364)	0.057 (0.364)	0.177 (0.364)	-0.093 (0.365)	-0.009 (0.365)	0.154 (0.365)	0.238 (0.365)
GDP per capita <sup>c</sup>	2.398 (1.852)	0.587 (1.901)	5.587** (1.889)	3.825* (1.941)	2.398 (1.852)	0.861 (1.942)	4.649* (1.874)	3.130 (1.968)
Fiscal deficit <sup>c</sup>	-0.010 (0.102)	-0.084 (0.104)	-0.024 (0.102)	-0.094 (0.104)	-0.010 (0.102)	-0.050 (0.104)	0.044 (0.102)	0.003 (0.104)
Firm age <sup>c</sup>	10.704*** (1.353)	10.927*** (1.356)	9.754*** (1.356)	9.980*** (1.359)	10.704*** (1.353)	10.865*** (1.356)	10.175*** (1.351)	10.334*** (1.353)
Constants	221.762*** (31.207)	216.992*** (31.190)	214.813*** (31.177)	210.440*** (31.160)	221.762*** (31.207)	217.395*** (31.239)	209.909*** (31.160)	205.619*** (31.190)
Observations	19958	19958	19958	19958	19958	19958	19958	19958
Firms	3390	3390	3390	3390	3390	3390	3390	3390
F	32.005***	31.611***	32.891***	32.464***	32.005***	31.421***	32.400***	31.835***
Adj-R <sup>2</sup>	0.065	0.066	0.068	0.069	0.065	0.065	0.068	0.068

Notes: \*p < 0.1, \*p < 0.05, \*\*p < 0.01, and \*\*\*p < 0.01. Robust standard errors are in parentheses; year and industry dummies are controlled in all regression models. <sup>a</sup>The value of (industry) vertical executive pay dispersion is multiplied by 100 for better coefficient manifestation. <sup>b</sup>Standardized. <sup>c</sup>Logarithm.

Karlan, 2021). However, the literature has underplayed its social outcomes, such as the pay inequality issues in our context.

Furthermore, we emphasize the importance of the Chinese institutional context for examining the association between religious environment and executive pay dispersion. Specifically, we attempt to examine how Buddhism and Confucianism, as two dominant Chinese religions, could affect corporate pay dispersion. Although these two religions have been deeply ingrained in the Chinese culture, their influence in the Western context has been relatively peripheral. Western societies have historically been shaped by different religious traditions such as Christianity, Judaism, and Islam. Thus, the Chinese context provides a good soil for examining how Buddhism and Confucianism take effect. In particular, we incorporate these two Chinese dominant religions into one framework and investigate the coexistence of commonality and discrepancy between Buddhism and Confucianism.

# **Practical Implications**

Our research has implications for both policy and managerial implications. The findings suggest that a religious environment can foster congruent beliefs that can permeate into corporate practices. We recommend that policymakers recognize the importance of religious norms in general and promote Chinese traditional culture in particular. The notion that religious norms can benefit individuals, corporations, and the nation is inspiring. Furthermore, whether vertical executive pay dispersion is beneficial to firms was subjected to debates (Connelly et al., 2016). This finding provides evidence for managerial practices for pay dispersion design among top executives. In Chinese society, it is crucial for managers to the influence of the religious institutional environment on executive pay dispersion.

#### Limitations and Future Research Directions

This study has several limitations requiring future research to advance its central arguments. First, executive pay dispersion was restricted to short-term compensation disparity among top executives. Previous studies indicated three alternative measures for compensation, namely, short-term, long-term, and total compensation (Hart, David, Shao, Fox, & Westermann-Behaylo, 2015; Yanadori & Marler, 2006). Scholars may consider using long-term compensation or total compensation as an alternative measure for executive pay dispersion. We can also broaden the research to consider the pay dispersion between top executives and employees as suggested in prior research (Bloom & Michel, 2002). However, we currently have limited data to conduct such an analysis. We hope that future studies could focus on a specific industry or obtain additional high-quality datasets to conduct further analyses.

Second, we acknowledge that the decision-makers' religious beliefs in a firm can exert a direct influence on corporate policies and practices, such as corporate pay system design in the article. Our theoretical framework does not incorporate a mediation to build the link between the presence of temples and firm's pay dispersion. Instead, on the one hand, we employ individual religiosity data from the CFPS to examine the relationship between temple presence and individual religious beliefs. Our findings show that the correlation ranges from 0.585 to 0.798, which indicates that the regional religious atmosphere is higher (e.g., the more religious adherents, the larger the perceived importance of religion) if many temples are located in the region. On the other hand, we attempt to employ the data from the Chinese Private Enterprise Survey (CPES) to show the relatedness between CEOs' religious orientation and the religious institutional environment. The results indicate that CEOs' Buddhist orientation increases to 48.71% when one unit is added to the Buddhism-based institutional environment in the focal city. However, CFPS and CPES have several shortcomings to examine our theoretical framework, such as lack of Confucianism data and corporate vertical pay dispersion data. Thus, relying on archival data to test how individual religious beliefs affect executive pay dispersion is difficult. Future studies should go beyond our empirical design and explore possible datasets (through surveys or focusing on specific industries) to further test the potential effects of individual religious orientation.

Third, despite our investigation into the influence of religious institutional environments on corporate vertical pay dispersion, the overall effect size of the model remains relatively small. In accordance

with Lewin's (2014) study, several potential factors may contribute to this observation: (1) The realm of pay dispersion is multifaceted, featuring numerous competing or midrange theories. Notably, tournament theory, equity theory, signaling theory, behavioral theory, and the managerial power model can each offer partial explanations for the observed corporate pay dispersion (Connelly et al., 2014). The coexistence of these diverse theories might result in a relatively low degree of variance being explained in our study; (2) China's corporate landscape is intricately woven with unique economic, political, regulatory, cultural, and technological factors, which may significantly influence the design and structure of corporate pay. These idiosyncrasies necessitate closer examination to better elucidate the specific drivers of pay dispersion in China; (3) As previously noted, the measurement of religious institutional environments is not without its challenges. The potential imperfections in this measurement could contribute to the relatively lower explanatory power observed in our study. In light of these considerations, future research endeavors should seek to integrate a broader array of theoretical perspectives, explore multiple unique and critical antecedents, and refine the precision and accuracy of measurements related to religious institutional environments, which will facilitate a more comprehensive and precise understanding of pay dispersion phenomena within the Chinese corporate context.

Fourth, extending our findings to other cultural and institutional contexts would be equally meaningful. Our results are rooted in Chinese publicly listed firms. A publicly listed firm may behave differently from a private firm in the case of the pay dispersion design. Moreover, other emerging countries such as India and developed countries such as the United States have different religions (e.g., Callen & Fang, 2015; Elnahas, Hassan, & Ismail, 2017). In this case, the role of different types of religions may generate different results as in the Chinese context. Therefore, future research can adopt a cross-cultural and cross-institutional perspective to examine the impact of Buddhism- and Confucianism-based institutional environments on executive pay dispersion in other cultural contexts and in emerging economies.

Acknowledgements. This study was supported by National Natural Science Foundation of China (Grants: 72102003, 72091310, 72091314, 72102184, 72302068, 72102003, 72091310, 72091314), National Social Science Foundation of China (Grant: 21&ZD137), Fundamental Research Funds for the Central Universities (Grant: HIT.HSS.202301), Humanities and Social Science Project, Ministry of Education of China (Grant: 21YJC630128), Soft Science Research Program in Shaanxi Province (Grant: 2023-CX-RKX-057), Shaanxi Social Science Foundation (Grant: 2023R023).

**Data availability statement.** The data and code that support the findings of this study are openly available in the Open Science Framework at https://osf.io/cv5ny/

#### **Notes**

- 1. Specifically, the compensation committee (1) formulates compensation plans or schemes according to the main scope, responsibilities, and importance of directors and managers; (2) evaluates the performance of duties by directors and managers and conducts annual performance appraisal; and (3) supervises corporate compensation system implementation.
- 2. Regarding the difference on hierarchy between the Western- and Confucianism-based views, we posit that the Confucian view of hierarchy is richer as it contains both harmony and social hierarchy. Confucian view is not merely about the authority or command over low-hierarchy persons (as suggested by Western-based view) but is also about greater organizational functioning that in turn benefits low-ranking persons and the whole organizations. Kennedy, Kim, and Strudler (2016) further identified that although Confucian view is largely consistent with Western virtue ethics, they found it distinct from its 'frank acceptance of hierarchy and authority as a necessary and even good aspect of a civilized and harmonious society' (Schwartz, 1985: 68; see also Allan, 2015; Tan, 2010). In addition, the five constant relationships such as those between ruler and subject, are the basic hierarchical structure of the Confucianism-based norms. The Confucian emphasis on hierarchy also explains why the Chinese societies' scores are very high on Hofstede's power distance dimension of culture (Hofstede et al., 1990).
- 3. As shown in Table 3, the correlation of *GDP per capita* and *marketization* is 0.81. For reducing the potential effect of the high correlation to empirical results, we control the residual of *GDP per capita* in our empirical analyses by regressing *GDP per capita* and *marketization*. In addition, the empirical results consistently support H1 and H2a when we don't control GDP per capita or use the original value of GDP per capita.

#### References

Akerlof, G. A. 1983. Loyalty filters. The American Economic Review, 73(1): 54-63.

Alexander, E. A. 2012. The effects of legal, normative, and cultural-cognitive institutions on innovation in technology alliances. Management International Review, 52(6): 791–815.

- **Allan, S.** 2015. Buried ideas: Legends of abdication and ideal government in early Chinese bamboo-slip manuscripts. Albany: State University of New York Press.
- Becker, B. E., & Huselid, M. A. 1992. The incentive effects of tournament compensation systems. Administrative Science Quarterly, 37(2): 336–350.
- Becker, B. E., & Huselid, M. A. 2006. Strategic human resources management: Where do we go from here? *Journal of Management*, 32(6): 898–925.
- Bénabou, R., Ticchi, D., & Vindigni, A. 2015. Religion and innovation. American Economic Review, 105(5): 346-351.
- Benjamin, D. J., Choi, J. J., & Fisher, G. 2016. Religious identity and economic behavior. *Review of Economics and Statistics*, 98(4): 617–637.
- Berthrong, J. H. 2014. Confucian formulas for peace: Harmony利. Society, 51(6): 645-655.
- Bian, Y. 2002. Chinese social stratification and social mobility. Annual Review of Sociology, 28(1): 91-116.
- **Bloom, M.** 1999. The performance effects of pay dispersion on individuals and organizations. *Academy of Management Journal*, **42**(1): 25–40.
- **Bloom, M., & Milkovich, G. T.** 1998. Relationships among risk, incentive pay, and organizational performance. *Academy of Management Journal*, **41**(3): 283–297.
- Bloom, M., & Michel, J. G. 2002. The relationships among organizational context, pay dispersion, and among managerial turnover. *Academy of Management Journal*, 45(1): 33–42.
- Bryan, G., Choi, J. J., & Karlan, D. 2021. Randomizing religion: the impact of Protestant evangelism on economic outcomes. *The Quarterly Journal of Economics*, **136**(1): 293–380.
- Cai, Y., Jia, L., & Li, J. 2017. Dual-level transformational leadership and team information elaboration: The mediating role of relationship conflict and moderating role of middle way thinking. *Asia Pacific Journal of Management*, 34(2): 399–421.
- Callen, J. L., & Fang, X. 2015. Religion and stock price crash risk. Journal of Financial and Quantitative Analysis, 50(1-2): 169-195.
- Campante, F., & Yanagizawa-Drott, D. 2015. Does religion affect economic growth and happiness? Evidence from Ramadan. The Quarterly Journal of Economics, 130(2): 615–65.
- Chan, K. K. 2005. Religion in China in the twenty-first century: Some scenarios. Religion, State and Society, 33(2): 87-119.
- Chan-Serafin, S., Brief, A. P., & George, J. M. 2013. Perspective—How does religion matter and why? Religion and the organizational sciences. Organization Science, 24(5): 1585–1600.
- Cheng, Z. 2022. Communist Party branch and labour rights: Evidence from Chinese entrepreneurs. China Economic Review, 71: 101730.
- Chin, M. K., & Semadeni, M. 2017. CEO political ideologies and pay egalitarianism within top management teams. Strategic Management Journal, 38(8): 1608–1625.
- Chizema, A., Liu, X., Lu, J., & Gao, L. 2015. Politically connected boards and top executive pay in Chinese listed firms. Strategic Management Journal, 36(6): 890–906.
- Cobb, J. A. 2016. How firms shape income inequality: Stakeholder power, executive decision making, and the structuring of employment relationships. Academy of Management Review, 41(2): 324–348.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2003. Applied multiple correlation/regression analysis for the behavioral sciences, 3rd ed. Mawah, NJ: Lawrence Erlbaum.
- Connelly, B. L., Tihanyi, L., Crook, T. R., & Gangloff, K. A. 2014. Tournament theory: Thirty years of contests and competitions. *Journal of Management*, 40(1): 16–47.
- Connelly, B. L., Haynes, K. T., Tihanyi, L., Gamache, D. L., & Devers, C. E. 2016. Minding the gap: Antecedents and consequences of top management-to-worker pay dispersion. *Journal of Management*, 42(4): 862–885.
- Cowherd, D. M., & Levine, D. I. 1992. Product quality and pay equity between lower-level employees and top management: An investigation of distributive justice theory. *Administrative Science Quarterly*, 37(2): 302–320.
- David, P., Kochhar, R., & Levitas, E. 1998. The effect of institutional investors on the level and mix of CEO compensation. Academy of Management Journal, 41(2): 200–208.
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. 2017. Organizational legitimacy: Six key questions. *The SAGE Handbook of Organizational Institutionalism*, 4(2): 27–54.
- DeVaro, J. 2006. Strategic promotion tournaments and worker performance. Strategic Management Journal, 27(8): 721-740.
- DeVaro, J., & Gürtler, O. 2016. Strategic shirking in promotion tournaments. *The Journal of Law, Economics, and Organization*, 32(3): 620–651.
- Drago, R., & Garvey, G. T. 1998. Incentives for helping on the job: Theory and evidence. Journal of Labor Economics, 16(1): 1–25.
- Du, X. 2013. Does religion matter to owner-manager agency costs? Evidence from China. Journal of Business Ethics, 118(2): 319–347.
- Du, X. 2014. Does religion mitigate tunneling? Evidence from Chinese Buddhism. Journal of Business Ethics, 125(2): 299–327.
- Du, X. 2015. Does Confucianism reduce minority shareholder expropriation? Evidence from China. *Journal of Business Ethics*, 132(4): 661–716.
- **Du, X.** 2016. Does Confucianism reduce board gender diversity? Firm-level evidence from China. *Journal of Business Ethics*, **136** (2): 399–436.
- Du, X., Jian, W., Du, Y., Feng, W., & Zeng, Q. 2014a. Religion, the nature of ultimate owner, and corporate philanthropic giving: Evidence from China. *Journal of Business Ethics*, 123(2): 235–256.
- Du, X., Jian, W., Zeng, Q., & Du, Y. 2014b. Corporate environmental responsibility in polluting industries: Does religion matter? *Journal of Business Ethics*, 124(3): 485–507.
- **Durand, R., & Thornton, P. H.** 2018. Categorizing institutional logics, institutionalizing categories: A review of two literatures. *Academy of Management Annals*, **12**(2): 631–658.

- Dyreng, S. D., Mayew, W. J., & Williams, C. D. 2012. Religious social norms and corporate financial reporting. *Journal of Business Finance & Accounting*, 39(7-8): 845–875.
- El Ghoul, S., Guedhami, O., Ni, Y., Pittman, J., & Saadi, S. 2012. Does religion matter to equity pricing? *Journal of Business Ethics*, 111(4): 491–518.
- Elnahas, A. M., Hassan, M. K., & Ismail, G. M. 2017. Religion and mergers and acquisitions contracting: The case of earnout agreements. *Journal of Corporate Finance*, 42: 221–246.
- Fan, G., Wang, W., & Yu, J. 2016. The Report on the Marketization Index of China's Provinces. Beijing: Social Sciences Academy Press. (In Chinese).
- Farh, J. L., Hackett, R. D., & Liang, J. 2007. Individual-level cultural values as moderators of perceived organizational support-employee outcome relationships in China: Comparing the effects of power distance and traditionality. Academy of Management Journal, 50(3): 715–729.
- Finkelstein, S., & Hambrick, D. C. 1989. Chief executive compensation: A study of the intersection of markets and political processes. Strategic Management Journal, 10(2): 121–134.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards. New York: Oxford University Press.
- Fredrickson, J. W., Davis-Blake, A., & Sanders, W. G. 2010. Sharing the wealth: Social comparisons and pay dispersion in the CEO's top team. Strategic Management Journal, 31(10): 1031–1053.
- Frydman, C., & Papanikolaou, D. 2018. In search of ideas: Technological innovation and executive pay inequality. *Journal of Financial Economics*, 130(1): 1–24.
- Fu, R., Tang, Y., & Chen, G. 2020. Chief sustainability officers and corporate social (Ir) responsibility. Strategic Management Journal, 41(4): 656–680.
- Gill, A., & Lundsgaarde, E. 2004. State welfare spending and religiosity: A cross-national analysis. Rationality and Society, 16(4): 399–436.
- Hart, T. A., David, P., Shao, F., Fox, C. J., & Westermann-Behaylo, M. 2015. An examination of the impact of executive compensation disparity on corporate social performance. *Strategic Organization*, 13(3): 200–223.
- Hartig, F. 2012. Confucius Institutes and the rise of China. Journal of Chinese Political Science, 17(1): 53-76.
- He, H. 2015. Social Ethics in a Changing China: Moral Decay or Ethical Awakening? Washington, D.C.: Brookings Institution
  Press
- He, L., & Fang, J. 2016. Subnational institutional contingencies and executive pay dispersion. Asia Pacific Journal of Management, 33(2): 371–410.
- Henderson, A. D., & Fredrickson, J. W. 2001. Top management team coordination needs and the CEO pay gap: A competitive test of economic and behavioral views. Academy of Management Journal, 44(1): 96–117.
- Hilary, G., & Hui, K. W. 2009. Does religion matter in corporate decision making in America? *Journal of Financial Economics*, 93(3): 455–473.
- Hon, T. K., & Stapleton, K. 2017. Confucianism for the contemporaryworld: Global order, political plurality, and social action. New York: SUNY Press.
- Hu, F., Pan, X., & Tian, G. 2013. Does CEO pay dispersion matter in an emerging market? Evidence from China's listed firms. *Pacific-Basin Finance Journal*, 24: 235–255.
- Ip, P. K. 2009. Is Confucianism good for business ethics in China? Journal of Business Ethics, 88(3): 463-476.
- Jacobs, L., Guopei, G., & Herbig, P. 1995. Confucian roots in China: A force for today's business. Management Decision, 33(10): 29–34.
- Ji, L. J., Lee, A., & Guo, T. 2010. The Thinking Style of Chinese People. In M. H. Bond (Ed.), The Oxford Handbook of Chinese Psychology: 155–167. New York: Guilford Press.
- Jia, M., Ruan, H., & Zhang, Z. 2017. How rumors fly. Journal of Business Research, 72(7): 33-45.
- Jia, M., Xiang, Y., & Zhang, Z. 2019. Indirect reciprocity and corporate philanthropic giving: How visiting officials influence investment in privately owned Chinese firms. *Journal of Management Studies*, 56(2): 372–407.
- Jiang, Y. H. 2018. Confucian political theory in contemporary China. Annual Review of Political Science, 21: 155-173.
- Kalantari, B. 1995. Dynamics of job evaluation and the dilemma of wage disparity in the United States. *Journal of Business Ethics*, 14(5): 397–403.
- Kanagaretnam, K., Xiu, Z., & Zhou, Z. 2019. Does culture matter for corporate philanthropic giving? *Emerging Markets Finance and Trade*, 55(10): 2365–2387.
- Kennedy, J. A., Kim, T. W., & Strudler, A. 2016. Hierarchies and dignity: A Confucian communitarian approach. *Business Ethics Quarterly*, 26(4): 479–502.
- Knoeber, C. R., & Thurman, W. N. 1994. Testing the theory of tournaments: An empirical analysis of broiler production. Journal of Labor Economics, 12(2): 155–179.
- Krause, R., Filatotchev, I., & Bruton, G. D. 2016. When in Rome, look like Caesar? Investigating the link between demand-side cultural power distance and CEO power. *Academy of Management Journal*, **59**(4): 1361–1384.
- Lazear, E. P. 1989. Pay equality and industrial politics. Journal of Political Economy, 97(3): 561-580.
- Lazear, E. P., & Rosen, S. 1981. Rank-order tournaments as optimum labor contracts. Journal of Political Economy, 89(5): 841–864.
- Lew, W. J. F. 1979. A Chinese woman intellectual: Family, education, and personality. Educational Journal, 11: 36-46.
- Lewin, A. Y. 2014. The peer-review process: The good, the bad, the ugly, and the extraordinary. *Management and Organization Review*, 10(2): 167–173.

- Li, C. 2020. Children of the reform and opening-up: China's new generation and new era of development. The Journal of Chinese Sociology, 7(1): 1–22.
- Li, X. H., & Liang, X. 2015. A Confucian social model of political appointments among Chinese private-firm entrepreneurs. Academy of Management Journal, 58(2): 592–617.
- Lim, E. 2019. Attainment discrepancy and new geographic market entry: The moderating roles of vertical pay disparity and horizontal pay dispersion. *Journal of Management Studies*, 56(8): 1605–1629.
- Lin, L. H., Ho, Y. L., & Lin, W. H. E. 2013. Confucian and Taoist work values: An exploratory study of the Chinese transformational leadership behavior. *Journal of Business Ethics*, 113(1): 91–103.
- Lu, W., Saka-Helmhout, A., & Piekkari, R. 2019. Adaptation of compensation practice in China: The role of sub-national institutions. *Management and Organization Review*, 15(2): 235–267.
- Main, B. G., O'Reilly III C. A., & Wade, J. 1993. Top executive pay: Tournament or teamwork? *Journal of Labor Economics*, 11(4): 606–628.
- Marques, J. 2010. Toward greater consciousness in the 21st century workplace: How Buddhist practices fit in. *Journal of Business Ethics*, 92(2): 211–225.
- Marquis, C., & Battilana, J. 2009. Acting globally but thinking locally? The enduring influence of local communities on organizations. Research in Organizational Behavior, 29: 283–302.
- Marquis, C., & Qiao, K. 2020. Waking from Mao's dream: Communist ideological imprinting and the internationalization of entrepreneurial ventures in China. Administrative Science Quarterly, 65(3): 795–830.
- Marquis, C., Glynn, M. A., & Davis, G. F. 2007. Community isomorphism and corporate social action. Academy of Management Review, 32(3): 925–945.
- McCleary, R. M., & Barro, R. J. 2006. Religion and economy. Journal of Economic Perspectives, 20(2): 49-72.
- McGuire, S. T., Omer, T. C., & Sharp, N. Y. 2012. The impact of religion on financial reporting irregularities. The Accounting Review, 87(2): 645–673.
- Messersmith, J. G., Guthrie, J. P., Ji, Y. Y., & Lee, J. Y. 2011. Executive turnover: The influence of dispersion and other pay system characteristics. *Journal of Applied Psychology*, 96(3): 457–469.
- Milgrom, P., & Roberts, J. 1988. An economic approach to influence activities in organizations. *American Journal of Sociology*, 94: S154–S179.
- Morand, D. A., & Merriman, K. K. 2012. "Equality theory" as a counterbalance to equity theory in human resource management. *Journal of Business Ethics*, 111(1): 133–144.
- Mueller, H. M., Ouimet, P. P., & Simintzi, E. 2017. Wage inequality and firm growth. American Economic Review, 107(5): 379–383.
  Muthuri, J. N., & Gilbert, V. 2011. An institutional analysis of corporate social responsibility in Kenya. Journal of Business Ethics, 98: 467–483.
- North, D. C. 1990. Institutions, institutional change and economic performance. Cambridge: Cambridge University Press.
- O'Reilly III C. A., Main, B. G., & Crystal, G. S. 1988. CEO compensation as tournament and social comparison: A tale of two theories. *Administrative Science Quarterly*, 33: 257–274.
- Pace, S. 2013. Does religion affect the materialism of consumers? An empirical investigation of Buddhist ethics and the resistance of the self. *Journal of Business Ethics*, 112(1): 25–46.
- Parks, L., & Guay, R. P. 2009. Personality, values, and motivation. Personality and Individual Differences, 47(7): 675-684.
- Peng, K., & Nisbett, R. E. 1999. Culture, dialectics, and reasoning about contradiction. *American Psychologist*, **54**(9): 741–754. Perel, M. 2003. An ethical perspective on CEO compensation. *Journal of Business Ethics*, **48**(4): 381–391.
- Petersen, M. A. 2009. Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies*, 22(1): 435–480.
- Pfeffer, J., & Langton, N. 1993. The effect of wage dispersion on satisfaction, productivity, and working collaboratively: Evidence from college and university faculty. Administrative Science Quarterly, 38(3): 382–407.
- Qian, C., Wang, H., Geng, X., & Yu, Y. 2017. Rent appropriation of knowledge-based assets and firm performance when institutions are weak: A study of Chinese publicly listed firms. *Strategic Management Journal*, 38(4): 892–911.
- Ridge, J. W., Aime, F., & White, M. A. 2015. When much more of a difference makes a difference: Social comparison and tournaments in the CEO's top team. *Strategic Management Journal*, 36(4): 618–636.
- Rosen, S. 1986. The theory of equalizing differences. Handbook of Labor Economics, 1: 641-692.
- Sanders, W. G., & Carpenter, M. A. 1998. Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2): 158–178.
- Scheve, K., & Stasavage, D. 2006. Religion and preferences for social insurance. *Quarterly Journal of Political Science*, 1(3): 255–286. Schwartz, B. I. 1985. *The world of thought in Ancient China*. Cambridge: Harvard University Press.
- Scott, W. R. 2014. Institutions and organizations: Ideas, interests, and identities. Thousand Oaks: Sage publications.
- Shi, W., Connelly, B. L., & Sanders, W. G. 2016. Buying bad behavior: Tournament incentives and securities class action lawsuits. Strategic Management Journal, 37(7): 1354–1378.
- Shonin, E., Van Gordon, W., Compare, A., Zangeneh, M., & Griffiths, M. D. 2015. Buddhist-derived loving-kindness and compassion meditation for the treatment of psychopathology: A systematic review. *Mindfulness*, **6**(5): 1161–1180.
- Siegel, P. A., & Hambrick, D. C. 2005. Pay disparities within top management groups: Evidence of harmful effects on performance of high-technology firms. *Organization Science*, **16**(3): 259–274.
- Singhal, P. V. M. 2014. Buddhism and decision making at individual, group and organizational levels. *Journal of Management Development*, 33(8/9): 763–775.

- Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, 20(3): 571–610.
- Suddaby, R., Bitektine, A., & Haack, P. 2017. Legitimacy. Academy of Management Annals, 11(1): 451-478.
- Tan, S. H. 2010. Authoritative master Kong (Confucius) in an authoritarian age. Dao, 9: 137-149.
- Trevor, C. O., Reilly, G., & Gerhart, B. 2012. Reconsidering pay dispersion's effect on the performance of interdependent work: Reconciling sorting and pay inequality. Academy of Management Journal, 55(3): 585–610.
- Tsai, T., Young, M. N., & Cheng, B. S. 2011. Confucian business practices and firm competitiveness: The case of Sinyi real estate. Frontiers of Business Research in China, 5(3): 317–343.
- Vanke. 2021. Annual report of 2021. Available from URL: https://www1.hkexnews.hk/listedco/listconews/sehk/2022/0421/2022042100475.pdf
- Waluchow, W. 1988. Pay equity: Equal value to whom? Journal of Business Ethics, 7(3): 185-189.
- Wang, H., Tong, L., Takeuchi, R., & George, G. 2016. Corporate social responsibility: An overview and new research directions: Thematic issue on corporate social responsibility. Academy of Management Journal, 59(2): 534–544.
- Wang, J. C., Markóczy, L., Sun, S. L., & Peng, M. W. 2019. She'-EO compensation gap: A role congruity view. Journal of Business Ethics, 159(3): 745–760.
- Wang, L., & Juslin, H. 2009. The impact of Chinese culture on corporate social responsibility: The harmony approach. *Journal of Business Ethics*, 88(3): 433–451.
- Wang, Q., & Lin, X. 2014. Does religious beliefs affect economic growth? Evidence from provincial-level panel data in China. China Economic Review, 31: 277–287.
- Weaver, G. R., & Agle, B. R. 2002. Religiosity and ethical behavior in organizations: A symbolic interactionist perspective. Academy of Management Review, 27(1): 77–97.
- Weber, E. 1988. Religion and superstition in nineteenth-century France. The Historical Journal, 31(2): 399-423.
- Weber, M. 1930. The Protestant ethic and the spirit of capitalism. London: George Allen & Unwin.
- Wu, C. H., & Lin, Y. C. 2005. Development of a Zhong-Yong thinking style scale. Indigenous Psychological Research in Chinese Societies, 24: 247–300.
- Xie, Y., & Hu, J. 2014. An introduction to the China family panel studies (CFPS). Chinese Sociological Review, 47(1): 3-29.
- Xie, Y., & Lu, P. 2015. The sampling design of the China family panel studies (CFPS). Chinese Journal of Sociology, 1(4): 471-484.
- Xiu, Z., Liu, R., & Yin, J. 2022. Confucian merchants culture, social movement and entrepreneurs' political participation: Evidence from China. *International Review of Economics & Finance*, 80: 795–821.
- Xu, D., Zhou, K. Z., & Chen, S. 2023. The impact of communist ideology on the patenting activity of Chinese firms. Academy of Management Journal, 66(1): 102–132.
- Xu, K., Hitt, M. A., Brock, D., Pisano, V., & Huang, L. S. 2021. Country institutional environments and international strategy: A review and analysis of the research. *Journal of International Management*, 27(1): 100811.
- Xu, X., Duan, L., & Yan, Y. 2019. The influence of Confucianism on corporate environmental investment: Evidence from Chinese private firms. Sustainability, 11(21): 5941.
- Xu, X., Li, Y., Liu, X., & Gan, W. 2017. Does religion matter to corruption? Evidence from China. *China Economic Review*, 42: 34–49. Yan, J., & Sorenson, R. 2006. The effect of Confucian values on succession in family business. *Family Business Review*, 19(3): 235–250.
- Yan, Y., & Xu, X. 2022. Does entrepreneur invest more in environmental protection when joining the communist party? Evidence from Chinese private firms. *Emerging Markets Finance and Trade*, **58**(3): 754–775.
- Yanadori, Y., & Marler, J. H. 2006. Compensation strategy: Does business strategy influence compensation in high-technology firms? Strategic Management Journal, 27(6): 559–570.
- Yang, A. Y. P., & Lee, P. H. 2017. Is moderation the highest virtue? A comparative study of a middle way of control transaction regimes. *Delaware Journal of Corporate Law*, **41(2)**: 393–460.
- Yao, F. 2020. The egalitarianism and non-egalitarianism of Buddhist ethics. Asian Philosophy, 30(3): 258-273.
- Yao, H. C., & Yao, X. 2000. An introduction to Confucianism. Cambridge: Cambridge University Press.
- Yu, W., Zhu, K., Huang, H., & Teklay, B. 2021. Does Confucianism influence corporate earnings management? Research in International Business and Finance, 56: 101390.
- Yue, L. Q., Wang, J., & Yang, B. 2019. Contesting commercialization: Political influence, responsive authoritarianism, and cultural resistance. *Administrative Science Quarterly*, 64(2): 435–465.
- Zhang, Y., Ruan, H., Tang, G., & Tong, L. 2021. Power of sustainable development: Does environmental management system certification affect a firm's access to finance? *Business Strategy and the Environment*, 30(8): 3772–3788.
- Zhang, Y., Tong, L., & Li, J. 2020. Minding the gap: Asymmetric effects of pay dispersion on stakeholder engagement in corporate environmental (Ir) responsibility. Corporate Social Responsibility and Environmental Management, 27(5): 2354–2367.
- Zimmer, L., & Swoboda, B. 2023. Perceived corporate social responsibility effects across nations—The role of national institutions. *International Business Review*, 32(3): 102073.
- Ying Zhang (zhangyingmgt@nwpu.edu.cn) is an associate professor of management at the School of Management, Northwestern Polytechnical University, China. Her research interests include corporate social responsibility and corporate internationalization strategy. She has published in Management and Organization Review and International Journal of Human Resource Management.

**Hongfei Ruan** (hongfeiruan@hit.edu.cn) is an assistant professor of management at the School of Management, Harbin Institute of Technology, China. He received his PhD from Northwestern Polytechnical University, China. His research interests include corporate governance and information disclosure. He has published in the *Journal of Business Research* and *Business Strategy and the Environment*.

Li Tong (litong2020@gsm.pku.edu.cn) is an assistant professor of management at the Guanghua School of Management, Peking University, China. His research interests include corporate social responsibility and corporate M&A strategy. He has published in the Academy of Management Journal and Journal of Business Ethics.

Cite this article: Zhang Y, Ruan H, Tong L (2024). Religious Institutional Environment and Executive Pay Dispersion. *Management and Organization Review* 20, 265–295. https://doi.org/10.1017/mor.2024.4