Firms' Rhetorical Nationalism: Theory, Measurement, and Evidence from a Computational Analysis of Chinese Public Firms

Lori Qingyuan Yue

Columbia Business School
qy2103@columbia.edu

Jiexin Zheng
HKUST
jzhengas@connect.ust.hk

Kaixian Mao
Renmin University of China

kmaoaa@connect.ust.hk

Abstract

In this paper, we develop a computational measure of the firm-level rhetorical nationalism. We first review the literature and develop a four-dimensional theoretical framework of nationalism relevant to firms: national pride, anti-foreign, dominant agenda, and corporate role. We then use machine-learning-based text analysis of over 41,000 annual reports of Chinese public firms from 2000 to 2020 and identify a dictionary of words for each dimension. Using a weighted ratio of nationalism-related words, we describe the overall picture of Chinese public firms' rhetorical nationalism and provide the first empirical evidence regarding rising rhetorical nationalism among Chinese firms. Firms' demonstration of rhetorical nationalism is related to both strategic and socialization factors; Firms that are SOEs, older, larger, more profitable, consumer-facing, with more individual investors and less income from overseas demonstrate a higher level of nationalism. Firms that demonstrate more rhetorical nationalism also have a better future financial return through increasing domestic profitability. Our study provides a theoretical framework for organizational study of nationalism and a new measure for firms' rhetorical nationalism, and demonstrates that the rising rhetorical nationalism among Chinese firms is more strongly driven by firms' motivations to appeal to domestic investors and consumers than to obtain government subsidies. The dataset of Chinese public firms' rhetorical nationalism score can be downloaded at https://sites.google.com/view/firms-rhetorical-nationalism/home.

1. INTRODUCTION

Nationalism, which relies on the language of nationhood to mobilize cultural confidence, political self-determination, and economic independence, has been regarded as a defining feature of modern society (Calhoun, 1997; Smith, 2009). In China, nationalism has been called "the most powerful legitimating ideology" in the contemporary era (Bajoria, 2008). Scholars who study Chinese nationalism generally agree that nationalism has profoundly affected the policy-making of the Chinese government (e.g., Weiss, 2016, 2019; Zhao, 2013) as well as the popular opinion of the public (e.g., Gries, 2004; Han, 2019). However, with the rapid development of the Chinese economy in the first two decades of the 21st century, another area where Chinese nationalism has manifested itself is the economic domain. While numerous labor strikes (Tabuchi, 2010), consumer boycotts (Dreyer, 2019), and supply chain disruptions (Subin, 2021) have claimed nationalistic motivations, we still know little about how nationalism may have been manifested by Chinese firms during the past 20 years.

The lack of research can be partially attributed to the underdevelopment of research methodology to measure firms' nationalistic sentiment. Management researchers have usually adopted the *country-level* nationalism to proximate that of a firm (e.g., Click and Weiner, 2010; Ertug, Cuypers, Dow, and Edman, 2023), and they have rarely unpacked heterogeneity of the *firm-level* nationalism within a country. Meanwhile, the research of Chinese nationalism has traditionally relied on surveys (e.g., Johnston, 2016; Neo & Xiang, 2022) and case studies (e.g., Fisman, Hamao, and Wang, 2014; Weiss, 2016; Tian, Tse, Xiang, Li, and Pan, 2021). Although these research methods have provided valuable insights regarding Chinese nationalism, survey results tend to be sporadic and the findings derived from case studies can be bounded by specific contexts. These research methods cannot be readily applied to study firms' behaviors because it is hard to conduct surveys, especially longitudinal ones, of corporate executives, and significant nationalistic events that involve a large number of firms are rare.

In this paper, we address these challenges by developing a computational measurement of *rhetorical nationalism* demonstrated by Chinese public firms. Firms' rhetorical nationalism refers to their adoption of nationalistic language in their public communication to signal their commitment to act in line with the interests of a nation. Rhetoric is a central form of nationalist expression (Calhoun, 2017; Neo & Xiang, 2022). While firms can show off their nationalism through material actions, such actions tend to be triggered by external events and thus are often context-specific. By contrast, linguistic claims are under firms' direct control and can be routinely adopted to indicate their intentions, and can thus be a more accessible measure of

firm-level nationalism. Operating in a domestic environment with growing nationalism, Chinese public firms are likely to adopt nationalistic rhetoric in their public communication, either as a strategy to manage their relationships with external stakeholders or as a result of socialization from being embedded in such an environment. In fact, Chinese public firms have been reported to invoke nationalistic rhetoric and benefit from doing so. Chinese automakers, for example, used the framing of protecting domestic industries and showing off national pride to persuade the government to change its procurement policy to exclude foreign brands (Waldmeir, 2012). However, despite such anecdotal evidence of firms' adoption of nationalistic rhetoric, we still lack a systematic understanding of (1) what Chinese public firms' rhetorical nationalism is composed of, (2) whether Chinese public firms have increased their adoption of nationalistic rhetoric in the last two decades, and (3) what kind of firms are more likely to do so, and the performance consequence of doing so.

To answer these questions, it is important for us to first understand what nationalism implies for firms in modern China. Nationalism is a complex and multidimensional concept, and the meanings attached to the concept vary across populations and over time. In a recent literature review on nationalism, Bonikowski (2016) summarizes the dominant approaches of studying nationalism into a two-by-two table along the dimensions of (1) being political vs. quotidian (i.e., focusing on elite political projects or on social actors' everyday actions), and (2) being an ideology or a practice (i.e., nationalism as a coherent cognitive frame or a heterogeneous set of domains). Our focus in this paper is Chinese firms' rhetorical nationalism, and so we adopt the quotidian perspective of nationalism rather than treat it as elites' political action. However, as firms' motivation for adopting nationalistic rhetoric can be intrinsic or instrumental, rhetorical nationalism can either reflect Chinese firms' ideology of seeking national sovereignty and superiority or act as a practice for them to make sense of their environments and strategies.

From the quotidian perspective, political psychologists have revealed that the micro bases of nationalism are rooted in the dynamics of group-member exchange (Balabanis et al., 2001; Searle-White, 2001). As social actors derive a sense of security, belonging, and prestige from their group affiliations, they tend to favor their ingroup and disfavor other outgroups (Tajfel and Turner, 2004). In addition, group members are expected to reciprocate the collectivity with which they identify by showing off their commitment and loyalty. Therefore, according to Druckman (1994: 47), nationalism is composed of "commitment plus exclusion of others, [and] a readiness to sacrifice bolstered by hostility towards others." In addition, the

action of "individual sacrifice" would invoke both the particular nationalistic agenda at a certain historical moment of a society, and the related actions that social actors (such as individuals and organizations) are expected to take in order to fulfill such an agenda. Extending the group-member exchange perspective from individuals to organizations, we expect four dimensions in firms' rhetorical nationalism: (1) words related to ingroup favoritism that show off *national pride*, (2) words related to outgroup unfavoritism that are *anti-foreign*, (3) words related to the *dominant nationalistic agenda* of a society, and (4) words related to *the role that firms can play* to contribute to the fulfillment of the agenda. We argue that existing research on Chinese nationalism supports the presence of these four dimensions and therefore use them as the components of the rhetorical nationalism manifested by Chinese public firms.

We have applied newly developed neural network word embedding models to analyze the four dimensions of rhetorical nationalism demonstrated by Chinese public firms in over 41,000 annual reports from 2000 to 2020. Word embedding models utilize large collections of digitized text and generate a high-dimensional vector space model in which each unique word is represented as a vector in the space (Mikolov, Yih, & Zweig, 2013). A word's position in this space is determined by its neighboring words in the text, and words sharing many contexts are positioned near one another. Previous work in computational linguistics shows that words frequently sharing contexts are more likely to have similar meanings, and thus word embedding models are effective for capturing the cultural meanings embedded in words' relationships (Kozlowski, Taddy, & Evans, 2019; Li, Mai, Shen, & Yan, 2021). We found evidence that the dimensions of word embedding vector space models closely correspond to those of national pride, anti-foreign, dominant agenda, and corporate role, and generated an extended list of words most related to each of the four dimensions. After empirically validating the word embedding model's ability to capture widely shared cultural associations, we applied this method to reveal the general patterns of Chinese public firms' deployment of nationalistic rhetoric over the past two decades.

Our analysis shows that the nationalistic rhetoric in Chinese public firms' management discussion and analysis (MD&A) sections nearly doubled during the last two decades. The dominant themes of Chinese public firms' rhetorical nationalism are national revival and the firms' role in this process. Moreover, the rise of Chinese firms' nationalistic rhetoric is a nation-wide trend, and public firms from all provinces show a substantial increase in its use. In addition, businesses targeting consumers (B2C) demonstrate a higher level of nationalism than those targeting other businesses (B2B). Older, larger, and more profitable firms, and state-

owned enterprises (SOEs) are more likely to adopt nationalistic rhetoric. Additionally, firms with more individual investors and lower levels of overseas income demonstrate more rhetorical nationalism, though we find no evidence that firms that rely on the government for subsidies are more likely to adopt nationalistic rhetoric. Finally, firms that demonstrate more rhetorical nationalism have a high return on assets (ROA) in the following year, and the increased performance comes mainly from higher domestic market profitability rather than obtaining government subsidies or accessing financial resources. Therefore, Chinese public firms' rhetorical nationalism may be tailored by the genuine nationalistic sentiments of the public rather than the demands of the government.

Our study of Chinese public firms' rhetorical nationalism makes three major contributions to the literature. First, we have developed a computation-based, novel measurement of the *firm-level* rhetorical nationalism. While nationalism has been traditionally studied at the country-level, our paper is the first to adopt word embedding models to measure the firm-level rhetorical nationalism. We demonstrate that firms within the same country can demonstrate substantial heterogeneity in nationalism and develop an extended word list for future studies to measure Chinese public firms' rhetorical nationalism. Second, our paper develops *a four-dimensional theoretical framework for the organizational studies of nationalism* and shows that firms' demonstration of rhetorical nationalism is related to both strategic and socialization factors. Firms also benefit from rhetorically showing off nationalism by increasing their profitability in the domestic market. Third, our study provides systematic evidence regarding the rising trend of nationalistic sentiments among Chinese firms in the past two decades. Our paper shows that computationally analyzing firms' routine communications provides a new way to measure the general trend of Chinese popular nationalism over a long time period.

The remainder of this paper is structured as follows. First, we develop a four-dimensional theoretical framework of organizations' rhetorical nationalism by reviewing the general literature on nationalism and the specific literature on Chinese nationalism, and then analyze the factors that would affect firms' demonstration of rhetorical nationalism. Second, we introduce the data and sample of our study and demonstrate the methodology of word embedding models. We also show the measurement generation process and provide validity tests. Third, we demonstrate the trend of Chinese public firms' rhetorical nationalism and its variance in the past 20 years. Fourth, we demonstrate the correlations between nationalism and important firm characteristics and show the performance consequence of firms' rhetorical

nationalism. Finally, we conclude our paper by summarizing the theoretical implications and providing several future research directions. In this paper, we refer to firms' manifestation of rhetorical nationalism and their adoption of nationalistic rhetoric interchangeably.

2. NATIONALISM AND CHINESE PUBLIC FIRMS' RHETORIC

2.1. Organizational Nationalism from the Group-Member Exchange Perspective

The nation provides an "imagined community" (Anderson, 1991: 7) in which individuals and organizations are perceived as members of the larger national community. Traditional nationalism research is rooted in studying exceptional moments of social transformation, such as the rise of the modern nation-state and historical movements that redefine national boundaries (Calhoun, 1997). In these studies, nationalism is viewed as a political ideology that elites deploy to legitimize their rule over a territorially bounded people (Gellner, 1983). More recent research on nationalism, focusing on the settled times, shifts the focus from elites towards the quotidian and argues that nationalism also manifests in the micro-level dispositions demonstrated by individuals and organizations (Bonikiwski, 2016). For these actors, nationalism is not only a conscious ideology but also a discursive and cognitive frame through which they understand the world and navigate social interactions (Brubaker, 2004). As a quotidian *ideology*, nationalism provides a set of normative frameworks that shapes the perceptions and behaviors of individuals and organizations; as such, nationalism defines the ends of action, and the goal of individuals and organizations is to obtain national sovereignty and even superiority. As a quotidian *practice*, nationalism provides a discursive and cognitive framework through which social actors understand and interact with each other; as such, nationalism is the means rather than the ends, and individuals and organizations invoke nationalism in their sense-making and interactions to achieve other purposes. In this paper, we treat firms' rhetorical nationalism as a form of quotidian nationalism, but we do not distinguish whether firms' adoption of rhetorical nationalism is a reflection of their intrinsic ideology or an instrumental practice through which they strategically interact with their shareholders and stakeholders.

As a nation is a community of people, nationalism can be understood from the group-member exchange perspective. Groups provide members with a feeling of attachment, and members can obtain a sense of self-identity and self-esteem through their group affiliations. Elevating the level of the group to a nation, Druckman (1994: 44) argues that "at the level of nation, the group fulfills economic, sociocultural, and political needs, giving individuals a

sense of security, a feeling of belonging, and prestige." Once a social actor's ingroup is set at the center, outgroups are judged in relation to it (Tajfel & Turner, 2004). When the love of one's nation does not imply the hate of other nations, social actors demonstrate patriotism, and a more cooperative or peaceful approach to the world (Balabanis et al., 2001; Druckman, 1994). By contrast, nationalism differs from patriotism in that it is distinct by "the blind attachment to certain national cultural values, uncritical conformity with the prevailing group ways, and rejection of other nations as outgroups" (Adorno et al., 1950: 107), and therefore is more associated with a competitive or militaristic approach to the world. While the group-member exchange perspective has been developed to explain individuals' behaviors, we expect the organizational level manifestation of nationalism to similarly include a *favorable attitude towards the ingroup (one's own nation)* and an *unfavorable attitude towards outgroups (other nations)*.

Moreover, the relationship between the group and members works in both directions—while the group provides members with security, safety, and prestige, members are expected to return their loyalty and commitment to the group. Nationalism therefore requires country members to prioritize the interest of their nation and be willing to sacrifice for it (Druckman, 1994). The specific actions that country members are expected to take depend on the dominant nationalistic agenda in a specific context. For example, at the time of a foreign invasion, a country's dominant agenda is to fight the foreign military force, and the role that country members can play is to defend their nation by joining or supporting their own military force. In the de-colonial movement, the nationalist agenda in an emerging nation-state is to obtain political and economic self-determination; during the process, firms cut their dependence on the former colonial power and develop alternative ties with neighboring countries and other nations (Lubinski & Wadhwani, 2017). Nationalism is a source of aspiration for individuals and organizations and has a powerful impact on their behaviors; it mobilizes them to forego near-term economic benefits and costs in favor of long-term national wellbeing. Therefore, when measuring firms' rhetorical nationalism as a quotidian ideology and a quotidian practice, we expect the organizational-level manifestation of nationalism to include two other dimensions, the *dominant nationalistic agenda* in a particular historical context and *the role that firms can play* to fulfill the agenda.

2.2. Four Firm-Related Dimensions of Chinese Nationalism

Existent research on Chinese nationalism supports ingroup favoritism, outgroup unfavoritism, the dominant agenda, and firms' role as the four key dimensions of nationalism for Chinese

firms. Modern Chinese nationalism originated in the late 19ᵗʰ century when China experienced a series of humiliations at the hands of foreign powers. Over the years, a negative thesis of resisting Western, imperialist humiliation (i.e., anti-foreign) has persisted as a major facet of Chinese nationalism (Weiss, 2014; Zhao, 2004). Anti-foreign sentiment is particularly sensitive to the eruptions of international conflicts. Events such as the protest against the 2008 Olympic torch relay in Paris and the territory dispute with Japan in 2012 have triggered waves of anti-foreign discourse that emphasized past injustices inflicted on China by foreign countries. Recently, the US–China trade war launched by the Trump administration in 2018 and the high-profile cases of the US government's ban on Chinese telecommunications companies are likely to have led to the rise of anti-foreign sentiments in Chinese public firms.

Besides the anti-foreign thesis, a positive thesis of national pride in the country's history, culture, and collective achievements is another component of modern Chinese nationalism (Zhao, 2004). China has one of the oldest and longest-lasting civilizations in the world, and national pride based on the country's history and cultural heritage supplies a strong sense of national identity. In addition, firms have often leveraged the nation's cultural heritage to market their products and services, and thus we expect Chinese public firms' nationalistic rhetoric to demonstrate national pride. As the country's historical heritage is relatively stable, we expect that national pride derived from this element will not vary significantly across time.

In the current era, the dominant agenda of Chinese nationalism is national revival. This theme is clearly demonstrated by the state-sponsored nationalist campaigns launched by the Chinese government (Neo & Xiang, 2022). The most common messages in these campaigns are that the Chinese Communist Party is leading Chinese people to restore the country's former position at the center of the world (Wang, 2014) and that the country has achieved rapid economic, technological, and infrastructural development under the Party's leadership in recent decades (Steele & Lynch, 2013). Although revival phrases have been used by previous Chinese leaders, slogans such as "the Chinese Dream" (中国梦) or "the great rejuvenation of the Chinese nation" (中华民族伟大复兴) are particularly associated with China's current president, Xi Jinping, who emphasized them in his inaugural policy pronouncement as the leader of China in 2013. Thus we expect revival-themed words to appear in corporations' rhetorical nationalism as a demonstration of the dominant nationalist agenda in today's China. Responding to the dominant agenda, firms are expected to play a critical role in the process. Firms can contribute to the national rejuvenation by strengthening their own economic and technological competitiveness in the international market.

Together, our review of the research on quotidian nationalism and our analysis of Chinese nationalism pertinent to firms reveal anti-foreign, national pride, national revival, and corporate role as four distinct dimensions relevant to Chinese public firms. However, whether Chinese public firms have increased their rhetorical nationalism during the past 20 years, and if so, on which dimensions, are still open empirical questions. In addition, some firms may benefit more from demonstrating rhetorical nationalism than others, and thus there are likely to be firm-level heterogeneities in their deployment of rhetorical nationalism.

2.3. Firm Characteristics and Rhetorical Nationalism

As we study nationalism as both a quotidian practice and a quotidian ideology, we argue that firms' deployment of rhetorical nationalism is related to their *strategic motivations* and *socialization*. Strategic motivations look at firms' adoption of rhetorical nationalism as a practice to manage their relationships with important stakeholders. Past research has shown that firms strategically use language to signal their beliefs, values, and legitimacy to attract employees, consumers, and investors (Certo, 2003; Connelly, Certo, Ireland, & Reutzel, 2011). Firms that signal a commitment to social responsibility and environmental protection can improve employee attraction and distinguish themselves from competitors (Burbano, 2016; Jones, Willness, & Madey, 2014). Firms also adopt patriotic rhetoric to absorb external resource constraints, the effectiveness of which is affected by the societal level sentiments of nationalism and firms' own involvement in overseas markets (Mohr and Schumacher, 2019).

Strategic Factors. As stakeholders control resources essential for a firm's survival and performance, we expect that Chinese firms that are more dependent on stakeholders who care about the interests and identity of China are more likely to demonstrate rhetorical nationalism. First, firms that depend more on the *government* for resources are more likely to demonstrate rhetorical nationalism. As the state claims that it represents the whole nation, it often serves as the center of nationalistic aspirations. Publicly using nationalistic rhetoric helps a firm to communicate its support of the government and its policies, and thus helps it maintain a good relationship with the government. A good relationship with the government in turn helps firms secure government-controlled resources in the future. Thus, firms that receive more government subsidies may adopt a more nationalistic rhetoric.

Second, firms can use nationalistic rhetoric to appeal to *consumers*. Nationalist movements affect individuals' consumption behaviors (Barwich, Li, Wallace, & Weiss, 2019; Chavis & Leslie, 2009). Through publicly expressing nationalistic rhetoric, a firm can draw on

nationalist ideas and values to bolster the meaning of its brands; firms with domestic brands can profit from this market opportunity and therefore are more likely to demonstrate rhetorical nationalism. By contrast, firms that rely more on *overseas markets* are less likely to demonstrate rhetorical nationalism. Endorsing nationalism conveys a message that meeting the expectations of domestic actors is more important to it than meeting the expectations of overseas actors (Mohr and Schumacher, 2019). This perceived incongruence in turn affects the purchasing behavior of overseas consumers (Casadesus-Masanell, Crooke, Reinhardt, & Vasishth, 2009). Therefore, firms that rely more on overseas markets may demonstrate less rhetorical nationalism.

Finally, firms can use nationalistic sentiments to appeal to *individual* or *retail investors*. Individuals have been shown to be more avid supporters of extreme ideologies than institutions. Comparing the political campaign contributions made by individuals versus institutions, Barber (2015) shows that individual donors prefer to support ideologically extreme candidates while institutional donors tend to support more moderate ones. The studies that compare individual investors and institutional investors similarly show that individuals are less rational (Verma & Verma, 2008) and more likely to invest based on ideology (Bonaparte, Kumar, & Page, 2017; Hong & Kostovetsky, 2012). Individual investors tend to be more optimistic toward a firm and deem it to be less risky if they are ideologically identified with the value demonstrated by the firm (Bonaparte et al., 2017; Bhagwat, Warren, Beck, & Watson, 2020). In China, the proportion of individual investors is high, and these investors can be influential in affecting a company's stock price. In addition, individual investors usually lack knowledge and expertise compared to institutional investors, and are more likely to have a psychological identification with nationalism (Wang et al., 2019). Chinese individual investors herd more and are more influenced by public information, and so they trade less selectively than institutional investors (e.g., Li, Rhee, & Wang, 2017). There is plenty of anecdotal evidence that firms benefit in terms of their stock price when showing nationalistic rhetoric. For example, in March 2021, dozens of Chinese apparel and textile companies issued public statements to support Xinjiang cotton. These statements have attracted great attention among Chinese netizens. Following their endorsements, the stock price of Metersbonwe, China's leading casualwear apparel company, reached its daily up maximum, while those of Li-Ning and Anta, China's leading athletic apparel companies, grew by 10.74% and 8.4%, respectively. News reports showed that individual investors were backing domestic brands and betting high on

these companies' stocks (Huang & Ding, 2021; Ng, 2021). Thus, firms with more individual investors may use more nationalistic rhetoric to appeal to these investors.

Socialization Factors. Beyond strategic motivation, firms may also demonstrate rhetorical nationalism for socialization reasons. Socialization refers to an organization's internalization of the norms and ideologies of its environment, and nationalistically socialized firms demonstrate rhetorical nationalism as an intrinsic manifestation of their value. Some firms are particularly formed to carry out national strategic tasks or serve as the government's policy instrument, while others are founded in a particular era that is more or less nationalistic. These founding and operational conditions are likely to affect the mission, culture, and structure of these firms, and hence their rhetorical nationalism.

First, for Chinese public firms, those with a high percentage of *state shares* are likely to demonstrate more rhetorical nationalism. SOEs are under the ownership control of the government, and their goals extend beyond profit maximization. SOEs provide public services, stabilize the economy during periods of volatility, and support the government's industrial policies and other initiatives. In contemporary China, SOEs are at the forefront of the Chinese government's drive to develop key technologies and play a central role in the process of reclaiming China's former national greatness. Therefore, Chinese public firms that are SOEs would demonstrate more rhetorical nationalism than other public firms.

Second, SOEs that are controlled by the central government would demonstrate an even higher level of rhetorical nationalism than those controlled by the local government. Chinese SOEs are distinct by their affiliations with the central government or a local government. Central SOEs are managed by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC-SC) or the Ministry of Finance (MF) (Unirule Institute of Economics, 2011), whereas local SOEs are managed by agencies of local governments. Central SOEs are mostly concerned with national livelihood, defense security, or strategic priorities, and some of them were founded to serve national strategic interests and fulfill important social obligations (Lin, Fu, & Fu, 2021). Thus, we expect that public firms controlled by central SOEs would demonstrate even more rhetorical nationalism.

Third, older firms, especially those established during the communist or economic socialism era, are more likely to be socialized to demonstrate rhetorical nationalism due to their ideological imprinting. Organizational imprinting describes how organizations' early experiences can have a crucial and permanent impact on their behaviors (Stinchcombe, 2000). In the Chinese context, Marquis and Qiao (2020) find that firms demonstrate the ideological

imprinting effect such that there is a negative relationship between Chinese entrepreneurs' communist ideology imprint and their ventures' internationalization. The year 1992 marked a milestone in China's economic history. Only after Deng Xiaoping's inspection in southern China and the Chinese Communist Party's 14th Congress in 1992 was the traditional planning economy formally abandoned, and the policy of developing a market economy was firmly established. For example, in 1992, inspired by Deng's trip, more than 120,000 government officials resigned and started to do business in the private sector, with many of them founding their own enterprises (Dickson, 2007). These entrepreneurial actions led to the coining of a term in Chinese, *XiaHai* (下海, literally translated as "jump into the sea," meaning to join the private business sector) (Dickson, 2007; Huang & Chen, 2016). The economic significance of the year 1992 is evident in the composition of our sample of Chinese public firms—238 firms were founded before 1992 and 4,079 were founded afterward. The founding period is likely to affect firms' rhetorical nationalism. First of all, from the composition perspective, about 52.9% of these 238 firms have been controlled by the state, while this ratio is only 33.1% for firms founded after 1992. Besides, firms founded before 1992 are less reliant on the overseas market—about 3.7% of their income is from the overseas market on average, while for firms founded after 1992, about 4.8% of their income is from the overseas market on average. The pattern of relatively less reliance on overseas markets has not significantly changed over time. Second, in the planned economy era before 1992, the communist ideology depicted foreign capitalism as being evil (Marquis & Qiao, 2020) and foreign capitalists as being greedy and exploitative (Wang, Du, & Marquis, 2018). Therefore, firms imprinted with such an ideology tend to have negative views towards foreign countries, especially Western ones with the capitalist system. The relatively closed economy of the era also emphasized China's economic self-reliance and self-sufficiency, which are important components of nationalism (Kerr, 2007). Thus, firms founded before 1992 are more likely to have the organizational culture, formal structures, or interfirm networks that support the nationalistic ideology, and consequently, demonstrate a high level of rhetorical nationalism.

Finally, according to the same logic of organizational imprinting, firms founded after 2001 should be less likely to demonstrate rhetorical nationalism. China joined World Trade Organization (WTO) in 2001 and has become more integrated into the global economy since then. Domestically, joining WTO has resulted in the rapid growth of Chinese exports and a reduction of import traffic into China. The bourgeoning market and looser investment restrictions have fueled the growth of the Chinese capital market, and the government has also

taken efforts to improve the legal and regulatory environment to foster market competition (Buckley et al., 2007). Together, these forces brought the nation into a period of greater trade liberalization, weakened SOEs, and granted more power to private interests. In addition, China's entry into WTO has boosted native firms to conduct cross-border mergers and acquisitions (Deng et al., 2009). The changed domestic environment and the integration with the world economy should have enabled Chinese firms founded after 2001 to appreciate and embrace globalization and be less nationalistic. In our sample, 2,407 firms were founded before 2001 and 1,910 afterwards.

It is important to note that we argue for a correlation, rather than a causal relationship, between firms' characteristics and their demonstration of rhetorical nationalism. While firms with strategic motivations and strong socialization are more likely to demonstrate rhetorical nationalism, it is also possible that demonstrating rhetorical nationalism better positions them to obtain government subsidies, target domestic consumers, or deal with individual investors. Our goal in this paper is primarily to develop a measurement of Chinese firms' rhetorical nationalism and to describe the longitudinal trend demonstrated by Chinese public firms, and we thus leave the task of teasing out causality between firms' characteristics and their demonstration of rhetorical nationalism to future studies. Meanwhile, a firm's founding year and its nature as an SOE are unlikely to be a result of demonstrating rhetorical nationalism, and we therefore use these variables as markers to validate our empirical measurements.

3. DATA SOURCE: CHINESE PUBLIC FIRMS' ANNUAL REPORTS

3.1. Data Source

We collected the data from the annual reports of all Chinese publicly listed firms. In particular, we analyzed the MD&A section of the annual report where managers discuss and analyze financial information and major events to facilitate investors' understanding of the company's operating results and financial conditions (China Securities Regulatory Commission, 1999). Compared with other sections in financial reports that mainly consist of boilerplate and tables with quantitative data, managers usually disclose relevant information in the MD&A via narrative communication. Narratives in MD&As are not subject to third-party assurance and thus provide discretion for managers to strategically release information in ways that help create a better impression or mitigate a negative impression of the company to investors. Thus, the MD&A serves as an accessible channel through which firms can exhibit rhetorical nationalism. A few existing studies have shown that managers strategically manipulate the

wording in the MD&A to influence audiences' impression of the firms (Caserio, Panaro, & Trucco, 2019; Muslu, Radhakrishnan, Subramanyam & Lim, 2015). Scholars have also evidenced that the qualitative narrative in MD&As can be mined to obtain valuable information about firms' future performance, operational uncertainty, managerial mentality, and corporate culture (e.g., Li, 2008, 2010; Loughran & McDonald, 2016; Muslu et al., 2015).

Appendix 1 provides three examples of Chinese public firms using nationalistic rhetoric in the MD&A section. Example 1 is an excerpt from the MD&A section of the Tonghua Dongbao Pharma Co., a biopharmaceutical company. When discussing the impact of their innovation regarding human insulin in the 2005 annual report, it used the words "Chinese pharmaceutical industry as a leader of the world…and winning honor for our motherland." Example 2 is an excerpt from the MD&A section of the Shanghai Laiyifen Co. Ltd., a snack food company. When elaborating its corporate strategy in the annual report of 2019, it said "its mission is to become a practitioner and disseminator of Chinese culture, enhance public welfare, and serve the motherland with the responsibility of conscience." Example 3 is an excerpt from the MD&A section of the Dandong Xintai Electric Co. Ltd., which is an electric equipment manufacturer. In its 2015 annual report, the company stated that it would "strive for the realization of the Chinese Dream of the great rejuvenation of the Chinese nation, and the prosperity of the enterprise." These nationalistic expressions, which are not directly related to firms' finances, motivate us to investigate the phenomenon of rhetorical nationalism among Chinese public firms.

We obtained the annual reports of all listed companies during the period 2000–2020 from CNINFO, an official disclosure website of all listed companies in China. We started from the year 2000 because there are substantial missing data for public firms' annual reports before 2000, and we ended in 2020, for which the most recent data are available. We obtained 45,713 unique annual reports in PDF format and applied the *Tika* package in Python to extract the text content of those PDF files for further textual analysis. Our sample comprised 43,434 annual reports after dropping 2,279 files that failed on text extraction because of file damage or incompatibility with *Tika*. Because the word embedding model relies on the relationship between the word and its neighboring words within the sentence to learn the representation of semantic meaning, coherent text data are desired for training. However, many sections in annual reports mainly consist of tables with quantitative data and boilerplate. To efficiently train the word embedding model, we included only the MD&A section of the annual reports because this section is mainly composed of narrative text on the company's business and

financial conditions. We applied the regular expression matching operations in Python to extract the MD&A section from 41,285 annual reports and dropped 2,149 annual reports in which the MD&A section could not be detected or contained fewer than 100 valid words. The sample size was further reduced when matching with data about firms' operational performance, because of missing values in the dataset.

3.2. Word Segments

Unlike alphabet-based languages such as English, Chinese is a character-based language. A word might be represented in one or multiple characters and form sentences without clear punctuation. For example, the sentence "今天天气很好" ("The weather is good today") consists of the words ["今天," "天气," "很好"] with no blank spaces between them. To prepare the training data for a word embedding model, we applied the *Jieba*[1] package in Python, a widely used Chinese word segmentation tool, to cut sentences into sequences of words.

We then further applied the named entity recognition (NER) procedure to recognize the named entity of words and replace named entities (locations, times, and number) with a predefined tag. For example, "2019 年 我司 营业 收入 100 万 人民币" ("In 2019, the earnings of our company is 1 million CNY") would be transformed to "【时间】 我司 营业 收入 【数量】 万 人民币" ("[TIME], the earnings of our company is [NUMBER] CNY"). Applying NER to preprocess the text can help reduce the number of tokens that the word embedding model needs to learn. Prior studies have used this technique to train word embedding models and found it helpful to enhance model performance (Li et al., 2021; Sugathadasa et al., 2017).

4. WORD EMBEDDING IMPLEMENTATION

4.1. Intuition of Word Embedding

Word embedding is used to represent the semantic meaning of words using a fixed-dimension numeric vector, where words with similar semantic meanings will have similar numeric values in the vectors. The construction of word embedding is based on the distribution hypothesis (Harris, 1954): words that occur in similar contexts (with similar neighboring words) tend to have similar meanings. One naïve implementation to represent the semantic meaning of a word is to construct a count vector that records the frequency of all words in the corpus that appear

---

[1] Jieba: https://github.com/fxsjy/jieba

near the focal word in the training corpus data. To implement the count vectors, we can first assign a unique ID (from 1 to N, where N is the size of vocabulary) to each word in the vocabulary, and then use the position value (P, V) in a focal word's count vector to represent the frequency of its neighboring words: the value V in position P refers to the number of times that the word whose ID is P appears near the focal word. After the construction of word count vectors, the semantic similarity between words can be represented by the cosine similarity[2] between their count vectors.

However, using count vectors for word embedding is inefficient. Given a corpus with N unique words, we need N count vectors with length N to represent the words in the corpus. Given that N is usually a large number (about 350,000 words in the third edition of *The American Heritage Dictionary of the English Language*), it would be extremely challenging to compute and maintain the resultant $N \times N$ matrix. Furthermore, the number of combinations of co-occurrence of words is enormous when N is large, and it is impossible for a corpus with a limited size to cover all the combinations, leading to sparse vector representations of words (i.e., many values in the count vector are zero).

4.2. Word2vec Model for Generating a Compact Word Embedding Vector

To generate a compact vector representation of words, many word embedding models have been proposed to map each word to a continuous vector space with a much lower dimension compared to the vocabulary size (Deerwester, Dumais, Furnas, Landauer, & Harshman, 1990; Mikolov et al., 2013; Rohde, Gonnerman, & Plaut, 2006). Among these methods, the recently proposed word2vec (Mikolov et al., 2013) achieves a breakthrough performance by training a neural network on the semantic meaning of words. The word2vec model learns to extract a word's semantic meaning from a large training corpus using the skip-gram (SG) scheme:[3] given a specific word in a sentence, the word2vec model first maps the word to a fixed-length numeric vector (used as word embedding after the training), and then uses the numeric vector to predict all the neighboring words around the focal word. The word2vec model is trained via

---

[2] The cosine similarity between two vectors is defined as $\cos(w_1, w_2) = \frac{(w_1 \cdot w_2)}{\|w_1\| \|w_2\|} = \frac{\sum_{i=1}^{n} w_{1_i} w_{2_i}}{\sqrt{\sum_{i=1}^{n} w_{1_i}^2} \sqrt{\sum_{i=1}^{n} w_{2_i}^2}}$, where w_{1_i}, w_{2_i} are components of vector w_1, w_2 respectively.

[3] Mikolov et al. (2013) introduce two training schemes: skip-gram (SG) and continuous bag-of-words. For the sake of simplicity, we only mention SG for its efficiency with infrequent words and common application in the following work.

the SG scheme to capture the co-occurrence relationship between the focal word and its neighboring words. The training objective is to maximize:

$$\mathcal{L}_{SG} = \frac{1}{|W|} \sum_{w_t \in W} \log P(w_{c_1}, \dots, w_{c_k} | w_t),$$

where W is the set of all word tokens in the corpus, w_t is the target (focal) word for a specific prediction, $w_{c_1}, \dots, w_{c_k}$ are context words (neighboring words) of the target word w_t in a certain window, and k is the window size. The conditional probability $P(w_c | w_t)$ is approximated by a multinomial logistic regression of $|C|$ classes, which take the word embedding vector of the focal word V_{w_t} as input:

$$P(w_c | w_t) = \frac{\exp \beta'_{w_c} V_{w_t}}{\sum_{w \in V} \exp \beta'_w V_{w_t}},$$

where β_w are the coefficients associated with the word w, and C is the vocabulary of the corpora. However, calculating the conditional probability in this way is computationally inefficient because we need to go through all unique words in the vocabulary to obtain the denominator: $\sum_{w \in V} \exp \beta'_w V_{w_t}$. To alleviate the burden of computation, Mikolov et al. (2013) apply a negative sampling strategy to reduce the multi-class problem to a binary classification. They first sample some focal word-neighboring word pairs (w_t, w_c) from the training corpus as positive samples and construct some pairs that are unlikely to exist in the training corpus as negative samples. Then, given a focal word-neighboring word pair (w_t, w_c), the word2vec model is asked to determine whether the pair is from positive samples or not. This binary classification problem can be formalized as $P(Y | w_t, w_c)$, where $Y = 1$ if the pair (w_t, w_c) comes from the training corpus, and $Y = 0$ otherwise. Thus, the training objective when applying the negative sampling strategy is to maximize

$$\mathcal{L}_{w2v} = \prod_{(w_t, w_c) \in D} P(Y = 1 | w_t, w_c) \prod_{(w_t, w_c) \in D'} P(Y = 0 | w_t, w_c),$$

where D is the set of positive samples and D' is the set of negative samples. The conditional probability is calculated as $P(Y = 1 | w_t, w_c) = \frac{\exp(\beta'_{w_c} V_{w_t})}{1 + \exp(\beta'_{w_c} V_{w_t})}$.

The gist of this training framework is to capture the co-occurrence relationship between the focal word and its neighboring words. By training the word2vec model on a large corpus

and updating the parameters of the model via backpropagation (a standard algorithm for training neural networks), the model gradually learns to represent the semantic meaning of words as fixed-length numeric vectors and associate the vector representations of focal words with their neighboring words. After the training is finished, the mapped numeric vectors are used as the word embedding for corresponding words.

4.3. Defining Sub-Dimensions and Corresponding Seed Words

We manually defined the seed words for the four dimensions of nationalism related to firms: national pride, national revival, corporate role, and anti-foreign. We first performed a media search of news articles with key words on corporations and nationalism (i.e., "企业," "爱国主义," "民族主义") in the Baidu search engine. From the top 100 search results, we generated 10–15 words for each of the four dimensions of nationalism. We then asked six experts (two corporate executives, two business school professors, and two college students) to individually evaluate the relevance of each word and kept only the words with an approval rate higher than 67%. Nonetheless, defining these word lists manually was subject to noise and error, and thus further cleaning was needed.

We then inspected whether the semantic meanings of the proposed seed words aligned with the key concept of nationalism by applying the trained word2vec model to investigate the properties of their word embedding vectors. For each word of interest, we first determined its word embedding vector and then calculated the vector's cosine similarities to all other words' word embedding vectors. We then ranked the cosine similarities from high to low and obtained the five synonyms of a word based on the cosine similarities in the context of MD&As to the focal word. Table 1 provides the list of manually generated seed words and their top synonyms. The synonyms provided a tool to understand the underlying semantic meaning of the seed words. The synonyms were conceptually similar to the seed words and well related to each dimension of nationalism, thus confirming the validity of the seed words.

INSERT TABLE 1 ABOUT HERE

4.4. Using Seed Words and the Trained Word2vec Model to Generate an Extended Word List

After obtaining the seed words for a specific dimension of nationalism, one straightforward method to measure companies' strength in the focal dimension was to count the frequency of

seed words in their MD&A reports. However, because of the limitation of human knowledge and preference, many words with semantic meanings aligned to the key concepts of the focal dimension were not included in the seed word list. Measuring the strength of the focal dimension based merely on its seed words may have led to bias (caused by human preference when selecting seed words) and imprecision (caused by an incomplete word list for the focal dimension of nationalism).

To mitigate the problems of bias and imprecision, a comprehensive word list for the focal dimension was needed. We utilized the trained word2vec model and the inspected seed words for each dimension to develop an expanded word list for the focal dimension. Given the trained word2vec model can capture the semantic similarities between words in the context of MD&A for each dimension, we could use the trained model to obtain the synonyms of the seed words (with high cosine similarity) and take the synonyms as relevant words that could be used to measure the strength of the focal dimension. The procedure of combining word embedding models and some predefined keywords to obtain a comprehensive word list has been adopted in several previous studies and shown to be capable of generating quality word lists (Li et al., 2021; Theil, Štajner, & Stuckenschmidt, 2020; Tsai & Wang, 2014).

Specifically, we first obtained the representative vector of the focal dimension by taking the average of word embedding vectors of all related seed words. We computed the cosine similarities between the word embedding vector of each word with the representative vector of the focal dimension and then selected words with high cosine similarities as the expanded word list for the focal dimension of nationalism. We further manually inspected the selected words and removed words that were not related to nationalism. For each dimension, we retained 100 words[4] and thus had 400 words related to nationalism in total. We followed the approach of Li et al. (2021) to deal with words that overlapped sub-dimensions of nationalism: if a word appeared in multiple word lists, we included it only in the word list that had the highest cosine similarity between the representative vector of the dimension and the embedding vector of the word. Table 2 shows the word list for each dimension of nationalism, in order of descending similarity to the representative vector for each dimension.

INSERT TABLE 2 ABOUT HERE

---

[4] In the robustness check section, we also varied the number of words to 80 and 90 and found similar results.

5. MEASURING THE NATIONALISM SCORE OF CHINESE PUBLIC FIRMS

5.1. Computational Measurement of Rhetorical Nationalism

After obtaining the extended word list for each dimension of nationalism, we measured the strength of a focal dimension in an MD&A report by the weighted count of words belonging to the extended word list divided by the total number of words in the MD&A. We applied the term frequency–inverse document frequency (TFIDF) weighting scheme to adjust the word importance when calculating the word ratio, such that words with a higher frequency in the document and less coverage in other documents in the corpus were assigned larger weights. The use of the aggregation of the TFIDF weights of selected words to measure the qualitative attributes of text data has been widely applied in text analysis for its simplicity and effectiveness (Li et al., 2021; Loughran & McDonald, 2011). Formally, given an MD&A and a list of selected words reflecting the targeted sub-dimension of nationalism $[word_i, \dots, word_n]$, we have:

$$Score = \frac{\sum_i^n TF_i * IDF_i}{D} * 100,$$

where TF_i is the count of $word_i$ in the MD&A, IDF_i is the natural logarithm of one plus the ratio of the total number of MD&As in the corpus divided by the number of MD&As containing $word_i$: $\log\left(1 + \frac{\text{Number of all MD\&As}}{\text{Number of MD\&As containing } word_i}\right)$, D is the total word count in the MD&A, and the multiplier 100 is used to represent the frequency score as a percentage.

Following the procedure of generating the value of $Score$ for each firm's MD&A report in a year, we applied the word list for each dimension of nationalism to generate the score for "national pride," "corporate role," "national revival," and "anti-foreign." We then obtained the aggregated score of nationalism by summing the scores of "national pride," "corporate role," "national revival," and "anti-foreign."

5.2. Validating the Constructs of Nationalism

It was important to validate our measures of rhetorical nationalism, as applying a word embedding model to extract a nationalism-related word list is a new methodology. We validated the constructed measures via socialization markers: (1) state ownership (Lavelle, 2008), (2) central SOEs, and (3) firm founding year according to imprinting theory (Deng, 2009; Marquis & Qiao, 2020). These socialization markers are backed by well-established

relationships with corporate nationalism and are unlikely to be driven by corporate nationalism (i.e., reverse causality). Following Li et al. (2021), we validated the association between our constructed measures and the aforementioned markers via regression, with industry-, year-, and province-fixed effects. We also included firm size and ROA to control for the basic characteristics of firms.

Following Lin, Fu, and Fu (2021), we define SOEs using an indicator variable that takes the value of one if the biggest shareholder controlling the firm of a year is a state-owned organization and if the biggest shareholder has more than 20% direct or indirect voting rights[5]. We expect that SOEs would be more nationalistic than non-SOEs. Besides general state ownership, we also investigate nationalism under different varieties of state capitalism (Musacchio, Lazzarini, & Aguilera, 2015). We follow Lin, Fu, and Fu (2021) to classify a firm's state ownership as local government ownership or central government ownership. Specifically, central SOEs are those SOEs managed by the SASAC-SC or supervised by the MF, while other SOEs are local SOEs. In our sample, about 30% of the SOEs are central SOEs. As central SOEs usually operate in industries that are concerned with national livelihood, defense security, or strategic priority, we expect that these firms would demonstrate more rhetorical nationalism than local SOEs. Table 3 reports the results and has five panels that include both the aggregation (Panel A) and each of the four sub-dimensions (Panels B–E) of nationalism. Column 1 of Table 3 presents the results using state ownership as the independent variable. Expectedly, we find that SOEs have stronger rhetorical nationalism across all sub-dimensions and their aggregation.

Column 2 of Table 3 presents the results when separating state ownership into that affiliated with the central government and that affiliated with the local government. We find that the association between the central SOE and rhetorical nationalism is larger ($p < 0.01$ in a Wald test) than that between local government and rhetorical nationalism. Specifically, Wald tests show that the central SOE's rhetorical nationalism is higher than that of local SOEs in corporate role ($p < 0.01$) and anti-foreign ($p < 0.01$) but lower in national pride ($p < 0.05$). In addition, the coefficients are not statistically different when it comes to national revival. Compared with local SOEs, central SOEs are expected to serve national strategic interests and fulfill important social obligations, and thus their rhetorical nationalism should demonstrate their important corporate role. Similarly, they are also likely to compete more in the international market and

---

[5] When voting rights data are missing, we use the percentage of holding share instead.

hence have a higher anti-foreign score than local SOEs. The exception of national pride is understandable because local SOEs are usually profit-driven and pursue commercial purposes to serve local economic development objectives (Lin et al., 2021). In our sample, local SOEs are more likely to develop products from regional culture or traditions (e.g., Chinese liquor and traditional Chinese medicine), and thus these firms show a higher level of national pride. The indifference in national revival between central SOEs and local SOEs may be attributed to the fact that both types of firms are subject to the same external environment and thus adopt similar rhetoric related to the dominant societal agenda. Together, the overall higher level of rhetorical nationalism demonstrated by central SOEs than local SOEs suggests the validity of our measurement.

Finally, we leverage two imprinting-effect-related markers to validate our constructed measures: (1) firms founded before 1992 and (2) firms founded after 2001. We code dummy variables to indicate whether a firm was founded before 1992 (after 2001). Columns 3 and 4 of Table 3 show that firms founded before 1992 have significantly higher nationalism while those founded after 2001 have significantly lower nationalism, both in aggregation and in sub-dimensions. In Column 5 of Table 3, we simultaneously test the three markers (state ownership, firms founded before 1992, and firms founded after 2001) and find the patterns of results to be largely consistent. These tests further suggest that the markers are not completely overlapped and that our rhetorical nationalism measurement can be verified by multiple markers.

INSERT TABLE 3 ABOUT HERE

5.3. Convergent Validity and Discriminant Validity

We assess the convergent validity and discriminant validity of our rhetorical nationalism measures. Convergent validity refers to the degree to which a measure that is designed to assess a particular construct correlates with other tests that assess the same construct, while discriminant validity refers to the degree to which a variable that is designed to measure a particular construct does not correlate with variables that measure different constructs. We use data from the Chinese Private Enterprise Survey (CPES)[6] and test correlations between our

---

[6] The CPES is conducted by the United Front Work Department of the CPC Central Committee, All-China Federation of Industry and Commerce, State Administration for Industry and Commerce of the People's Republic of China, and China Society of Private Economy every two years.

measurements and private enterprises' self-reported nationalism. CPES is the most representative survey of private enterprises in China (Chen et al., 2019), and its survey questions vary by year. In particular, the 2014 and 2018 surveys asked leaders of private firms questions related to the four dimensions of private firms' nationalistic values. For example, the 2018 survey asked whether a firm leader would agree that the literature of traditional Chinese culture should be required reading for children's elementary education, and this question can be used to assess a firm leader's value on national pride. Similarly, three 2018 survey items that can be used to measure the anti-foreign value are (1) trade protectionism, (2) conspiracy belief that foreign forces attempt to curb China's development, and (3) the influence of Hollywood on Chinese culture. Two survey items related to the "China Dream" in 2014 can be used to measure the national revival value, and one survey item related to whether a firm leader would put the interest of the firm before that of the national rejuvenation can be used to measure the corporate role value. Together, these CPES items provide the survey-based measurements of private firms' nationalism. Appendix 2 shows the selected questions for each sub-dimension of nationalism and the corresponding rationale.

However, one challenge of using private firms' survey responses is that we do not know the identities of these firms[7] and thus cannot match them to the list of publicly traded firms in our sample. Therefore, we choose to verify the correlation between our constructed measures of rhetorical nationalism and private enterprises' self-reported nationalism at the city level. We aggregate firms' rhetorical nationalism and self-reported nationalism by taking their average at the city level, according to their headquarter cities. We remove those SOE firms in our samples when aggregating their rhetorical nationalism, as CPES surveys only private enterprises. To align with the survey year of the self-reported nationalism, the city-level rhetorical nationalism is calculated using observations in the last three years to the survey year in order to mitigate the problem of meager observations of public firms in some cities. Cities with less than ten valid observations of rhetorical nationalism or self-reported nationalism are omitted. For sub-dimensions with multiple questions, we apply principal component analysis to combine the responses in multiple questions into a one-dimension value.

Table 4 shows the correlations between our computed rhetorical nationalism and the survey-based nationalism at the city level. The sub-dimensions of computational nationalism

---

[7] The CPES survey keeps respondent firms anonymous in order to obtain their genuine responses.

and the corresponding sub-dimensions of self-reported nationalism are all positively correlated, ranging from 0.1609 to 0.2484. That is, cities whose firms' computational nationalism is high are inclined to have high self-reported nationalism in the corresponding dimension. Besides, a sub-dimension in computational nationalism is most correlated to the corresponding sub-dimension in the survey-measured nationalism but less correlated to other sub-dimensions, suggesting our computational measurement of rhetorical nationalism has convergent as well as discriminant validity. These correlations are all nonsignificant, which may be attributed to the indirect test at the city rather than at the firm-level and the small samples after aggregating at the city level. We also report the correlations among the sub-dimensions of computational nationalism in Table 7 and find that the correlations among the sub-dimensions are not too high. The maximum correlation is 0.26 between corporate role and national revival, which is understandable given that firms' role corresponds to the dominant agenda of nationalism. These results suggest that our computational measurement of rhetorical nationalism has convergent as well as discriminant validity.

INSERT TABLE 4 ABOUT HERE

---

6. THE 20-YEAR TREND OF RHETORICAL NATIONALISM OF CHINESE PUBLIC FIRMS

6.1. The Growth of Rhetorical Nationalism

Table 5 presents the average scores of the nationalism measures for all available firm observations across years. The corresponding graphic representation in Figure 1 demonstrates the growing trend of nationalism among Chinese public firms from 2000 to 2020. Overall, the aggregated nationalism score of Chinese public firms based on the MD&A section of their annual reports increases from 0.368 to 0.725 (an absolute increase of 0.357 and a percentage increase of 97%) from 2000 to 2020. Out of the four dimensions of nationalism, national revival and corporate role are the two most significant components of nationalism, accounting for 74% of the nationalistic rhetoric used by Chinese public firms in 2020. National revival has the largest growth (an increase of 0.151 from 2000 to 2020), contributing 42.2% to the growth of the aggregated nationalism score, while corporate role has the second largest growth (0.115 from 2000 to 2020), contributing 32.1% to the growth of the aggregated nationalism score. The

change in these sub-dimensions indicates that national revival has become the most important theme of rhetorical nationalism for Chinese public firms, and that public firms have emphasized their role in this process.

INSERT FIGURE 1 ABOUT HERE

INSERT TABLE 5 ABOUT HERE

Although national pride and anti-foreign rhetoric account for smaller proportions of the aggregate nationalism score (10.3% for national pride and 16.0% for anti-foreign in 2020), they have both experienced substantial growth during the past 20 years (90.1% for national pride and 97.3% for anti-foreign from 2000 to 2020). Therefore, Chinese public firms' rhetorical nationalism has grown in all four dimensions. As national pride is derived from historical heritage, its value, as shown in Figure 1, is the most stable. By contrast, the anti-foreign value shows substantial variation over time and has various peaks corresponding to foreign policy events such as the Beijing Olympics protest, China–Japan territory disputes, and the trade war in 2018.

Despite the overall growth trend, Chinese public firms' rhetorical nationalism experienced a substantial decrease between 2002 and 2004. This may have been caused by China's entry into the WTO in late 2001, and these three years mark the lowest points of Chinese public firms' rhetorical nationalism during the past two decades. However, the low level did not last. We note that the strident increase in Chinese public firms' rhetorical nationalism in 2005 (0.288 increase in the aggregated nationalism score) coincided with massive anti-Japanese demonstrations against Japan's bid to join the United Nations Security Council, Japan's approval of history textbooks that whitewashed Japanese wartime atrocities, and its pledge to help the US defend Taiwan in the event of an attack by Beijing. In that year, all of the sub-dimensions of nationalism experienced a significant increase, suggesting soaring rhetorical nationalism among public firms at that time.

Interestingly, another year with significant growth of rhetorical nationalism is 2008 (0.146 increase) when Beijing hosted the Olympics and the global financial crisis occurred. While the Olympics was supposed to promote the connection between China and the rest of

25

the word, anti-China protests in Paris, London, San Francisco, and New Delhi during that year's Olympic torch relay catalyzed an outpouring of nationalism in China (Blanchard, 2008). *The People's Daily*, the mouthpiece of the government, issued a signed commentary titled, "How can patriotism be more powerful?", calling on people to focus on building up the country's overall strength (NBC News, 2008). Meanwhile, the global financial crisis, although rooted in Western countries, shocked the Chinese economy, and this might have contributed to a feeling of being victimized among Chinese firms. Finally, another important trend is that, during the more recent period from 2013 to 2020, Chinese public firms' rhetorical nationalism has experienced steady growth.

6.2. The Yearly Distribution of Rhetorical Nationalism

To rule out the possibility that the overall growth in rhetorical nationalism was driven by some outlier firms, we further unpacked the yearly distribution of the nationalism score at the beginning, middle, and end of the two decades (2000, 2010, and 2020). Figure 2 shows that, consistent with the findings in Figure 1, the average of the nationalism value increased over time, suggesting that nationalistic rhetoric has become more and more common in Chinese public firms' annual reports. Moreover, the distributions show a steady rightward movement, which suggests that the increasing trend is not driven by outlier firms.

INSERT FIGURE 2 ABOUT HERE

6.3. The Geographical Distribution of Rhetorical Nationalism

To investigate whether the increasing trend of rhetorical nationalism was caused by public firms located in certain geographical areas, we calculated the average rhetorical nationalism of all public firms headquartered in a province. Figure 3 shows the province-level distribution in the years 2000, 2010, and 2020. We observe that the use of nationalistic rhetoric increased in public firms located all over the country and that the trend of increasing nationalism is not driven by firms in specific regions. This finding further confirms that rising nationalism is a nation-wide trend.

INSERT FIGURE 3 ABOUT HERE

6.4. The Industrial Distribution of Rhetorical Nationalism

To shed some light on the industrial distribution of rhetorical nationalism, we calculated the average rhetorical nationalism of all public firms in each industry. We used the criterion provided by the China Securities Regulatory Commission[8] to classify public firms into 19 industries. Panel A of Table 6 shows the industry-level distribution of public firms' rhetorical nationalism in the full sample. To further validate the heterogeneity of public firms' rhetorical nationalism among B2C and B2B industries, we manually identified the industries operating under the B2C model. Specifically, we constructed a dummy variable ToC that takes the value of one if the industry is among "wholesale and retail"[9], "lodging and catering", "resident services, repair and other services", "Education" and "Culture, sports and entertainment" (with the industry codes of F, H, O, P, R), and zero otherwise. We then validated the association between rhetorical nationalism and ToC via OLS regression. Panel B of Table 6 presents the regression results, with year- and province-fixed effects to control for unobserved heterogeneities related to time and region. We also included the markers and control variables identified in Section 5.2 to control for firms' basic characteristics. We found that firms operating in B2C industries have an overall higher nationalism score. These firms were especially active in using phrases related to "national pride" and "national revival," but less likely to express sentiments related to "anti-foreign" and "corporate role." These consumer-facing industries are not usually in a position to lead China in international economic and technological competition, and they may also serve overseas markets, and therefore demonstrate lower scores for "anti-foreign" and "corporate role."

INSERT TABLE 6 ABOUT HERE

7. ASSOCIATION BETWEEN FIRM-LEVEL ATTRIBUTES AND RHETORICAL NATIONALISM

7.1. Strategic Motivation and Rhetorical Nationalism

In this section, we investigate the kinds of public firms that are more likely to exhibit nationalism in their disclosure. Based on our analysis in Section 2.3 regarding the types of

---

[8] http://www.csrc.gov.cn/csrc/c100103/c1452025/content.shtml

[9] We classify the industry of "wholesale and retail" as ToC because "retail" is clearly about individual consumers. The results in Table 6 are qualitatively consistent if we drop the "wholesale and retail" industry from ToC.

firms that are either motivated or socialized to demonstrate nationalistic sentiment, we have already tested the relationship between a firm's nationalism score and three socialization variables, being an SOE, being founded before 1992, and being founded after 2001. We further investigate the relationship between a firm's rhetorical nationalism and the three variables related to their strategic motivation for adopting nationalistic rhetoric: (1) *government subsidies*, measured as the natural logarithm of the number of subsidies that a firm received from the government in the last fiscal year, (2) *overseas income*, measured as the natural logarithm of income from the overseas market in the last fiscal year, and (3) *number of individual investors*, measured as the natural logarithm of the firm's number of individual investors at the end of the last fiscal year.

We used the OLS model to test the association between the firm attributes of interest and the expressed nationalism in firms' MD&A. For each regression, industry-, year-, and province-fixed effects were included to control for unobserved heterogeneities related to industry, time, and region. In addition, we controlled for the three markers that we used to validate the computational rhetorical nationalism. We also controlled for (1) *firm size*, measured as the natural logarithm of the firm's total assets at the end of the fiscal year, (2) *operating performance*, measured as the ROA in the fiscal year, and (3) *market-to-book ratio*, measured as the natural logarithm of market value divided by the book value at the end of the fiscal year. We collected these firm-level characteristics from the CSMAR Database. Table 7 presents the summary statistics and pairwise correlations for firm characteristics and nationalism scores. The correlations among explaining variables are not very high, indicating that multi-collinearity is not a significant concern.

INSERT TABLE 7 ABOUT HERE

Table 8 presents the results of using the rhetorical nationalism scores as the dependent variable. The sample size was smaller than that in the analysis in Section 5, as some variables had missing values. For example, in the CSMAR Database, data about overseas income were available only from 2007, leading to the absence of around 20% of the values for the variable; similarly, about 32% of values for the variable of government subsidies were missing. Column 1 of Table 8 uses the aggregated nationalism score as the dependent variable and shows that firms with higher total assets (firm size), better operating performance (ROA), more investors holding stocks, and less income from overseas are more active in adopting rhetorical nationalism. Overall, our results paint a picture that larger and more profitable firms with more

investors and less income from overseas are those that demonstrate the highest level of rhetorical nationalism. However, government subsidies have no significant impact on firms' adoption of rhetorical nationalism, and the results indicate that the rhetorical nationalism manifested in Chinese public firms' annual reports may be geared toward consumers and investors more than the government. We need to note that the lack of correlation between government subsidies and firms' rhetorical nationalism may also be caused by the substantial missing data in the measurement of government subsidies. Thus, future research should further test the relationship between the two. In addition, all three marker variables are significantly associated with the overall level of rhetorical nationalism expressed by Chinese public firms after controlling for other firm-level characteristics.

Columns 2 to 5 of Table 8 present the results using the sub-dimensions of nationalism as dependent variables. We see that firms that demonstrate a high level of national pride tend to be those that are more profitable, have a larger number of investors, and have less income from overseas. Firms that demonstrate more national-revival-related nationalism are those that are larger and more profitable, and have a lower market-to-book ratio, larger number of investors, less income from overseas, and fewer subsidies from the government. Firms that are more likely to demonstrate corporate-role-related nationalism are those that are larger, more profitable, and with a higher market-to-book ratio, less income from overseas, a larger number of investors, and more subsidies from the government. The positive effect of government subsidies may be explained by the fact that firms that have obtained the government's support are motivated to highlight their contributions to the society. Finally, firms that demonstrate high anti-foreign nationalism are those that are larger, and with a lower market-to-book ratio, a larger number of investors, and fewer subsidies from the government. These patterns of results are largely consistent with the analysis of the aggregate nationalism score in Column 1.

INSERT TABLE 8 ABOUT HERE

7.2. Robustness Checks with Missing Values and Lagged Dependent Variable

Furthermore, to address the concern of the missing data about government subsidies and overseas income, we reran the models without these two variables. Table 9 reports the results and shows that firms with a larger size, a high level of profitability, and a large number of individual investors demonstrate more nationalistic rhetoric in their annual reports. These results are consistent with those reported in Table 8.

To mitigate the concerns of reverse causation between firm characteristics and rhetorical nationalism, we introduced the lag term of the dependent variable as a control variable and reran the regression models. The results are represented in Table 10. We found that the lag term of the dependent variable (last year's rhetorical nationalism) is positively associated with the current year's rhetorical nationalism, suggesting that public firms discourse nationalism in a relatively constant style. Meanwhile, though the statistical power of firm characteristics decays to some extent, the sign coefficients that are statistically significant in Table 9 remain the same in Table 10. These patterns are expected, as many firm characteristics will also not vary significantly across time, and thus adding the lag term of the dependent variable will also absorb some of the explanatory power of other predictors. The slightly reduced sample size is mainly attributed to the imperfect extraction of firms' MD&As, and some firm-year observations do not have extracted text data, leading to missing values in the previous year's rhetorical nationalism.

7.3. Rhetorical Nationalism and Future Economic Performance

Finally, we investigated the associations between a firm's rhetorical nationalism in the current year (t) and the following year's ($t + 1$) economic performance and presented the results in Table 11. We found that firms that demonstrate a high level of rhetorical nationalism tend to have better future economic performance. All sub-dimensions of nationalism are positively associated with future ROA, but only national revival has a statistically significant effect. This may be attributed to the fact that firms with a strong sense of national revival are more inclined to invest in activities that directly benefit the country's progress. By doing so, these firms also contribute to the nation's socioeconomic growth and position themselves favorably for long-term success. However, we would like to caution that establishing causal relationships between sub-dimensions of rhetorical nationalism and firm performance is beyond the scope of our paper. We merely presented the factual findings of correlations between sub-dimensions of

nationalism and firm ROA, and called for future research that can adopt causal identification strategies to further rigorously test the relationships.

We then further tested whether rhetorical nationalism can help firms obtain profit from the domestic market, which in turn contributes to their better performance. We introduced the operating profit from the domestic market in the next year scaled by the total asset ($DProfitability_{t+1}$) as a mediator. We also include the current-year domestic market profit as a control variable ($DProfitability_t$). We validated the mediating effect of $DProfitability_{t+1}$ using Structural Equation Modeling (Ullman & Bentler, 2012). The results are shown in Table 12. The sample size in Table 12 is reduced compared to Table 11 because the data on domestic profit are available only from 2007. Table 12 shows that, with all control variables, rhetorical nationalism is positive in predicting a firm's domestic market profit (β = 0.002; p = 0.087). Further, we found that a firm's domestic market profit is positive and significant (β = 0.946; p = 0.000) in predicting future ROA. And rhetorical nationalism is also significant in predicting future ROA (β = 0.001; p = 0.071). A firm's domestic market profit thus partially mediates the relationship between rhetorical nationalism and firm future ROA. The proportion of the total effect that is mediated is 0.69. In unreported analysis, we also explored the mediating effect of firms' received subsidy from the government in the next year and the firm's amount of long-term loans, but we do not find any significant mediating effect (untabulated). These results reveal that rhetorical nationalism could help firms improve their future ROA, mainly by earning more profit from the domestic market as opposed to obtaining support from the government or better accessing financial resources.

INSERT TABLE 11 and 12 ABOUT HERE

---

8. DISCUSSION AND CONCLUSION

In this paper, we developed a computational measurement of firms' rhetorical nationalism by using word embedding models for the sample of Chinese public firms from 2000 to 2020. We identified national pride, national revival, corporate role, and anti-foreign as the four sub-dimensions of nationalism related to Chinese firms and developed an expanded list of words for each of these dimensions. The sub-dimensions of national revival and corporate role in this process constitute the majority of firms' nationalistic rhetoric with an average ratio of 71.5% of the aggregated nationalism over the 21 years. However, all sub-dimensions experienced

31

substantial growth, and Chinese public firms' use of nationalistic rhetoric nearly doubled between 2000 and 2020. Moreover, the growing trend is not driven by certain outlier firms, certain regions, or certain industries, but reflects an across-the-board pattern of increase, though firms that directly target consumers use more rhetorical nationalism than those targeting other businesses. Our further analyses show that both socialization and strategic motivation can explain the firm-level rhetorical nationalism. In particular, SOEs, central SOEs, and firms founded prior to 1992 demonstrate higher levels of rhetorical nationalism than other firms, while those founded after 2001 demonstrate lower levels of rhetorical nationalism. In addition, firms that have more individual investors and lower overseas sales tend to demonstrate a high level of nationalism while those that receive more government subsidies do not have an overall high level of nationalism except when highlighting their contributions to the country. Firms that show more rhetorical nationalism also tend to have better financial performance by deriving more profits from the domestic market. These results, together with the higher level of rhetorical nationalism demonstrated by B2C firms than B2B firms, indicate that the genuine nationalistic sentiment of the public is an important driving force of Chinese public firms' rhetorical nationalism. Below, we discuss our contributions to the literature as well as the limitations and directions for future research.

While our primary contribution in this paper is to develop a computational measurement of Chinese public firms' rhetorical nationalism, the paper also makes important theoretical contributions to the organizational research on nationalism. While the global surge of nationalism has been depicted as the "most powerful force in the world" (Mounk, 2018; Walt, 2019), organizational scholars have paid relatively scant attention to nationalism. The existent organization and strategy literature has mostly studied nationalism at the country level (e.g., Click and Weiner, 2010; Fisman et al., 2014; Lubinski and Wadhwani, 2020; Ertug et al., 2023) and has not studied how nationalism is manifested in the quotidian domain, especially in organizational activities (Bonikowski, 2016; Bonikowski & DiMaggio, 2016; Takeda, 2021). One related work is Mohr and Christian Schumacher's (2019) study of firms' patriotic rhetoric. However, patriotism is conceptually different from nationalism (Ertug et al., 2023), and the focus of their study is on the contingent impact on firm performance rather than developing the theoretical construct of the firm-level nationalism and its measurement. Our paper fills this literature gap by contributing to the organizational research on nationalism on two fronts. First, we argue that, as a quotidian form of nationalism, firms' manifestation of nationalism can be a result of the organizational goal of pursuing national superiority or a set of strategies that

organizations adopt to interact with their external environment. So organization-level nationalism can be both the ends and means, and we find support for both motivations in our study of rhetorical nationalism of Chinese public firms. Firms that are founded to accomplish the strategic goals of the government or in the era with a strong nationalistic imprinting effect demonstrate a higher level of rhetorical nationalism. In addition, as nationalism fosters a united culture and offers a collective identity for citizens of a nation, domestic investors and consumers cast a more positive view on firms that demonstrate a high level of nationalism. In turn, firms can strategically deploy nationalism in their routine interactions with shareholders and stakeholders and benefit from doing so. We provide supportive evidence regarding firms' strategic motivation and performance consequences in deploying nationalism.

Our second contribution to the organizational studies of nationalism is that we develop a four-dimensional theoretical framework on rhetorical nationalism for organizations (firms). We extended the group-member exchange perspective to study organization-level nationalism and found that ingroup favoritism manifests as national pride in a nation's cultural heritage and recent achievements whereas outgroup unfavoritism manifests as competition with foreign firms and concerns over uncertainties in the international market. In addition, we added the dominant nationalistic agenda and organizations' role in the process as two additional dimensions of organizations' rhetorical nationalism. Although our context is Chinese public firms, the four-dimensional theoretical framework can be applied generally to study organizational-level nationalism in other contexts.

Our third contribution to the organizational research of nationalism is to develop a computational method of analyzing organizations' routine communications. Although researchers have already analyzed firms' patriotic rhetoric using earnings calls and press releases (i.e., Mohr & Schumacher, 2019), the method of measuring a firm's values based merely on its use of seed words may lead to bias due to human preferences on seed word selection and imprecision due to the lack of a comprehensive word list. The word embedding method can effectively overcome these limitations by evaluating a word's relevance through its position in its neighboring context and therefore capturing the cultural meanings embedded in words' relationships (Kozlowski et al., 2019; Li et al., 2021). Word embedding techniques have become increasingly popular in studying firms' values and culture (e.g., Li et al., 2021; Lawson, Martin, Huda, & Matz, 2022), and our study is the first to apply this method to measure firms' rhetorical nationalism. The method that we have developed can be applied to

study organizational-level nationalism in other countries, and the extended word list that we developed can be adopted by future researchers to study the relationship between Chinese public firms' rhetorical nationalism and many other variables. Together, we hope the novel measurement that we have developed in this paper can lay down the methodological foundation for a vibrant school of research about firms' rhetorical nationalism.

Besides the general contribution to the organizational study of nationalism, our paper contributes to the specific research area of Chinese nationalism by advancing the research on firms. Firms are important players in the rising nationalism in China, and they are important forces that influence geopolitical conflicts, the global supply chain, and technology competition. However, the research on Chinese nationalism has traditionally focused on investigating the sentiment of the public (Gries, 2004; Han, 2018; Johnston, 2016; Schneider, 2018) or the policy of the government (Weiss, 2014; Zhao, 2004). As a result, how nationalism can manifest in the corporate domains has been rarely studied (see Fisman et al., 2014 and Tian et al., 2021 for exceptions). Our paper provides the first set of rigorous, quantitative evidence regarding rising rhetorical nationalism in the population of Chinese public firms in the last two decades. We show that the rhetorical nationalism of Chinese public firms has nearly doubled in the past two decades, and the growth is cross-board rather than driven by specific sectors or regions. In addition, while the popular media have often painted the Chinese government as the primary driver of the rising nationalism in China (e.g., Doshi, 2021), we show that firms' attempts to appeal to consumers and investors may have played an even larger role in affecting their adoption of rhetorical nationalism. Chinese firms would have strong incentives to appear nationalistic because they are financially rewarded for doing so. Therefore, the rising nationalism in China is not just a result of a top-down process but also a bottom-up one driven by firms' attempts to manage their shareholders and stakeholders and obtain returns.

It is also important to point out that our paper is not without limitations, and recognition of these limitations can lead to future research opportunities. One limitation is that we study Chinese public firms' rhetorical nationalism demonstrated only in the MD&A section of annual reports. Firms may also demonstrate nationalism in other forms of communication, such as CEO speeches and social media releases to the public. However, it is important to point out that the MD&A section provides the most reliable source to measure Chinese public firms' rhetorical nationalism. Unlike other forms of firm communication, public firms' annual reports are mandated, and the China Securities Regulatory Commission has built the CNINFO system

for the public to freely and easily access firms' annual reports. Chinese public firms, unlike their US counterparts, do not usually have earnings call records. In this regard, the annual report is arguably the most important channel for external stakeholders to obtain information about public firms. The non-extemporaneous nature of the writing and managers' flexibility in choosing what to cover in the MD&A make it a place where firms could strategically release information to external stakeholders, as managers can carefully craft the language and content in MD&As before releasing them to the public (Caserio et al., 2019; Li, 2008). Meanwhile, communications in other forms, such as CEO speeches and social media releases, can be sporadic, subject to communicative interaction with others and external events, and therefore may not be used to systematically measure firms' rhetorical nationalism. Nevertheless, future research should try to gather a more comprehensive set of communications by firms and investigate whether firms' nationalistic rhetoric varies by communication channels. In addition, future research should investigate the relationship between firms' rhetorical nationalism and material actions. From an intrinsic perspective, firms that demonstrate higher rhetorical nationalism should have more material actions. However, from an instrumental perspective, firms that demonstrate higher rhetorical nationalism may actually have fewer material actions if the latter is more costly. Investigating the relationships between different measurements of organizational nationalism is likely to yield fruitful outcomes.

The second limitation of our study is that we are not able to test the convergent and discriminant validity of our measures through firm-level analysis. Firms that were surveyed by the CPES may not necessarily be publicly listed firms. Although the patterns of correlations based on samples that may not even match provide evidence regarding our measurements, future research should look for firm-level survey data to provide more rigorous validation tests. The third limitation of our research is that we establish only correlations between firms' rhetorical nationalism and other characteristics. As we acknowledged in the paper, the relationships between some firm-level variables, such as performance, and rhetorical nationalism adoption can be inverse. As our primary goal in this paper is to develop a computational method to measure Chinese public firms' rhetorical nationalism and to describe the general trend of the past two decades, we did not intend to establish causal relationships between firms' rhetorical nationalism and other firm-level variables. However, future researchers should exploit experiments, policy shocks, and other causal identification schemes to more clearly delineate the factors that contribute to the growing manifestation of nationalism in firms and investigate the consequences of adopting nationalistic rhetoric for firms.

Future research should also investigate how firms' nationalism discourse can interact with state-led nationalistic campaigns and active grassroots nationalistic forces. Our paper shows that national revival and firms' role in this process are the two most important components of nationalistic rhetoric manifested by Chinese public firms. These results indicate that firms are a positive force for achieving nationalism goals and national superiority in the international sphere. Our paper also shows that firms adopt nationalistic rhetoric to cater to the public's rising appetite for nationalism. Therefore, Chinese nationalism in the political, social, and economic spheres may have reinforced each other, and investigating the relationships of nationalism in these three spheres can be another fruitful question for future research.

DATA AVAILABILITY STATEMENT

Data and code for this article are available via Open Science Framework at https://osf.io/jak32

RRFERENCES

Adorno, T.W., Frenkel-Brunswick E., Levinson, D.J. and Sanford, N. S. 1950. *The Authoritarian Personality*. New York: Harper and Row.

Anderson, Benedict. 1991. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. *New York: Verso.*

Bajoria, J. 2008. Council on Foreign Relations: *Nationalism in China*. [Cited 13 June 2022]. Available from URL: https://www.bbc.com/news/world-asia-china-49995985

Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. C. 2001. The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies. *Journal of International Business Studies*, 32(1), 157-175.

Barber, M. J. 2016. Ideological donors, contribution limits, and the polarization of American legislatures. *The Journal of Politics*, 78(1), 296-310.

Barwick, P. J., Li, S., Wallace, J., & Weiss, J. C. 2019. Commercial casualties: Political boycotts and international disputes. *Available at SSRN* 3417194.

Bhagwat, Y., Warren, N. L., Beck, J. T., & Watson IV, G. F. (2020). Corporate sociopolitical activism and firm value. *Journal of Marketing*, 84(5), 1-21.

Blanchard, B. 2008. REUTERS: *Olympics-Torch protests stir strident Chinese nationalism*. [Cited 13 June 2022]. Available from URL: https://www.reuters.com/article/idUSPEK278227

Bonaparte, Y., Kumar, A., & Page, J. K. 2017. Political climate, optimism, and investment decisions. *Journal of Financial Markets*, 34, 69-94.

Bonikowski, B. 2016. Nationalism in settled times. *Annual Review of Sociology*, 42(1), 427-449.

Bonikowski, B., & DiMaggio, P. 2016. Varieties of American popular nationalism. *American Sociological Review*, 81(5), 949-980.

Brubaker, R. 2004. In the name of the nation: Reflections on nationalism and patriotism. *Citizenship Studies*, 8(2), 115-127.

Burbano, V. C. 2016. Social responsibility messages and worker wage requirements: Field experimental evidence from online labor marketplaces. *Organization Science*, 27(4), 1010-1028.

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. 2015. The determinants of Chinese outward foreign direct investment. In *International Business Strategy* (pp. 574-600). Routledge.

Casadesus-Masanell, R., Crooke, M., Reinhardt, F., & Vasishth, V. 2009. Households' willingness to pay for "green" goods: evidence from Patagonia's introduction of organic cotton sportswear. *Journal of Economics & Management Strategy*, 18(1), 203-233.

Caserio, C.; Panaro, D.; Trucco, S. 2019. Management discussion and analysis: A tone analysis on US financial listed companies. *Management Decision*, 58, 510–525.

Calhoun, C. 1997. *Nationalism*. Buckingham: Open University Press.

Certo, S. T. 2003. Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, 28(3), 432-446.

Chavis, L., & Leslie, P. 2009. Consumer boycotts: The impact of the Iraq war on French wine sales in the US. *QME*, 7(1), 37-67.

Chen, G., Lu, P., Lin, Z., & Song, N. 2019. Introducing Chinese private enterprise survey: points and prospects. *Nankai Business Review International*, 10:501-525.

China Securities Regulatory Commission. 1999. *Standards No. 2 for the Contents and Formats of Information Disclosure of Securities Investment Funds—Contents and Formats of Annual Reports (1999 Amendment)*.

Click, R. W. & Weiner, R. J. 2010. Resource nationalism meets the market: Political risk and the value of petroleum reserves. *Journal of International Business Studies,* 41(5):783-803.

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. 2011. Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67.

Deerwester S, Dumais ST, Furnas GW, Landauer TK, Harshman R. 1990. Indexing by latent semantic analysis. *Journal of the American Society for Information Science*, 41(6):391–407.

Deng, P. 2009. Why do Chinese firms tend to acquire strategic assets in international expansion?. *Journal of World Business*, 44(1), 74-84.

Doshi, R. 2021. *The Chinese Communist Party Has Always Been Nationalist. Foreign Policy*. [Cited 9 December 2022]. Available from URL: https://foreignpolicy.com/2021/07/01/chinese-communist-party-nationalist-centennial/

Dickson, B. J. 2007. Integrating wealth and power in China: The Communist Party's embrace of the private sector. *The China Quarterly, 192*, 827-854.

Dreyer, M. 2019. BBC: *China NBA: How one tweet derailed the NBA's China game plan*. [Cited 13 June 2022]. Available from URL: https://www.bbc.com/news/world-asia-china-49995985

Druckman, D. 1994. Nationalism, patriotism, and group loyalty: A social psychological perspective. *Mershon International Studies Review*, 38: 43-68.

Ertug, G., Cuypers I.R.P., Dow D., & Edman J. 2023. The Effect of Nationalism on Governance Choices in Cross-Border Collaborations. *Journal of Management*. Online First, https://doi.org/10.1177/014920632311727

Fisman, R., Hamao Y., & Wang, Y. 2014. Nationalism and Eocnomic Exchange: Evidence from Shocks to Sino-Japanese Relations. *Review of Financial Studies,* 27:2626-2660.

Gellner, E. 1983. *Nations and Nationalism*. Oxford: Blackwell.

Gries, P. H. 2004. *China's New Nationalism: Pride, Politics, and Diplomacy*. Berkeley, CA: University of California Press.

Harris, Z.S. 1954. Distributional structure. *Word*, 10(2–3):146–162.

Hong, H., & Kostovetsky, L. 2012. Red and blue investing: Values and finance. *Journal of Financial Economics*, 103(1), 1-19.

Han, R. 2018. *Contesting cyberspace in China: Online expression and authoritarian resilience*. *Columbia University Press*.

Han, R. 2019. Patriotism without state blessing: Chinese cyber nationalists in a predicament. In **Wright. T. (eds)** *Handbook of Protest and Resistance in China*. Pp. 346–360. Edward Elgar Publishing.

Huang, D., & Chen, C. 2016. Revolving out of the Party-State: The Xiahai entrepreneurs and circumscribing government power in China. *Journal of Contemporary China*, 25(97), 41-58.

Huang, Y., & Ding, Y. 2021. *Shine: Domestic textile shares surge after Xinjiang cotton boycott.* [Cited 25 November 2022]. Available from URL: https://www.shine.cn/biz/economy/2103256508/

Johnston, A. I. 2016. Is Chinese Nationalism Rising? Evidence from Beijing. *International Security*, 41(3), 7-43.

Jones, D. A., Willness, C. R., & Madey, S. 2014. Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383-404.

Kerr, D. 2007. Has China abandoned self-reliance?. *Review of International Political Economy*, 14(1), 77-104.

Kozlowski, A. C., Taddy, M., & Evans, J. A. 2019. The geometry of culture: Analyzing the meanings of class through word embeddings. *American Sociological Review*, 84(5), 905-949.

Lavelle, K. C. 2008. The business of governments: Nationalism in the context of sovereign wealth funds and state-owned enterprises. *Journal of International Affairs*, 131-147.

Lawson, M. A., Martin, A. E., Huda, I., & Matz, S. C. 2022. Hiring women into senior leadership positions is associated with a reduction in gender stereotypes in organizational language. *Proceedings of the National Academy of Sciences, 119*(9), e2026443119.

Li, F. 2008. Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics* 45(2–3):221–247.

Li, F. 2010. The information content of forward-looking statements in corporate filings—A naïve Bayesian machine learning approach. *Journal of Accounting Research 48*(5):1049–1102.

Li, K., Mai, F., Shen, R., Yan, X. 2021. Measuring corporate culture using machine learning. *The Review of Financial Studies* 34(7):3265–3315.

Li, W., Rhee, G., & Wang, S. S. 2017. Differences in herding: Individual vs. institutional investors. *Pacific-Basin Finance Journal*, 45, 174-185.

Lin, Y., Fu, X., & Fu, X. 2021. Varieties in state capitalism and corporate innovation: Evidence from an emerging economy. *Journal of Corporate Finance*, 67, 101919.

Loughran, T., & McDonald, B. 2011. When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of Finance*, 66(1), 35-65.

Loughran, T., & McDonald, B. 2016. Textual analysis in accounting and finance: A survey. *Journal of Accounting Research*, 54(4):1187–1230.

Lubinski, C., & Wadhwani, R. D. (2020). Geopolitical jockeying: Economic nationalism and multinational strategy in historical perspective. *Strategic Management Journal*, 41(3), 400-421.

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.

Mikolov, T., Sutskever, I., Chen, K., Corrado, G.S., Dean, J. 2013. Distributed representations of words and phrases and their compositionality. *Advances in Neural Information Processing Systems*. 3111–3119.

Mikolov, T., Yih, W. T., & Zweig, G. 2013. Linguistic regularities in continuous space word representations. In *Proceedings of the 2013 conference of the north american chapter of the association for computational linguistics: Human language technologies* (pp. 746-751).

Mohr, A., & Schumacher, C. 2019. The contingent effect of patriotic rhetoric on firm performance. *Strategy Science*, 4(2), 94-110.

Mounk, Y. 2018. The people vs. democracy. In *The People vs. Democracy*. Harvard University Press.

Musacchio, A., Lazzarini, S. G., & Aguilera, R. V. 2015. New varieties of state capitalism: Strategic and governance implications. *Academy of Management Perspectives*, 29(1), 115-131.

Muslu, V, Radhakrishnan, S, Subramanyam, KR, Lim, D. 2015. Forward-looking MD&A disclosures and the information environment. *Management Science*, 61(5):931–948.

NBC News. 2008. NBC News: *Torch protests stir Chinese nationalism*. [Cited 13 June 2022]. Available from URL: https://www.nbcnews.com/id/wbna24222938

Neo, R., & Xiang, C. 2022. State rhetoric, nationalism and public opinion in China. *International Affairs*, 98(4), 1327-1346.

Ng, E. 2021. *South China Morning Post: Anta, Li Ning shares surge as Chinese consumers back domestic brands in Xinjiang cotton row.* [Cited 25 November 2022]. Available from URL: https://www.scmp.com/business/companies/article/3127107/anta-li-ning-shares-surge-chinese-consumers-back-domestic-brands

Rohde, D.L.T., Gonnerman, L.M., & Plaut, D.C. 2006. An improved model of semantic similarity based on lexical co-occurrence. *Communications of the ACM*,8(627–633):116.

Schneider, F. 2018. *China's digital nationalism*. Oxford: Oxford University Press.

Searle-White, J. 2001. *The Psychology of Nationalism*. London and New York: Palgrave Macmillan.

Smith, A. D. 2009. *Ethno-symbolism and Nationalism: A cultural Approac**h***. London: Routledge.

Steele, L. G., & Lynch, S. M. 2013. The pursuit of happiness in China: Individualism, collectivism, and subjective well-being during China's economic and social transformation. *Social Indicators Research*, 114(2), 441-451.

Stinchcombe, A. L. 2000. *Social Structure and Organizations*. Emerald Group Publishing Limited.

Subin, S. (2021). CNBC: *The new U.S. plan to rival China and end cornering of market in rare earth mental*. [Cited 13 June 2022]. Available from URL: https://www.cnbc.com/2021/04/17/the-new-us-plan-to-rival-chinas-dominance-in-rare-earth-metals.html

Sugathadasa, K., Ayesha, B., de Silva, N., Perera, AS., Jayawardana, V., Lakmal, D., Perera M. 2017. Synergistic union of word2vec and lexicon for domain specific semantic similarity. *2017 IEEE international conference on industrial and information systems (ICIIS)*. 1–6.

Tabuchi, H. 2010. NY Times: *Chinese Honda Strike a Wake-Up Call for Japan*. [Cited 13 June 2022]. Available from URL: https://www.nytimes.com/2010/06/02/business/global/02honda.html

Takeda, Y. 2021. *Nationalism and Corporate Strategy: From Yamaha Pianos to Motorcycles, 1945-1960.*

Tajfel, H., & Turner, J. C. 2004. The social identity theory of intergroup behavior. In *Political Psychology* (pp. 276-293). Psychology Press.

Theil, CK, Štajner, S, Stuckenschmidt, H. 2020. Explaining financial uncertainty through specialized word embeddings. *ACM Transactions on Data Science* 1(1):1–19.

Tian, L., Tse , C. H., Xiang, X., Li, Y., & Pan, Y. 2021. Social movements and international business activities of firms. *Journal of International Business Studies* 52:1200–1214.

Tsai, MF, Wang, CJ. 2014. Financial keyword expansion via continuous word vector representations. *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. 1453–1458.

Ullman, J.B. and Bentler, P.M., 2012. Structural equation modeling. *Handbook of Psychology*, Second Edition, 2.

Unirule Institute of Economics. 2011. *The Nature, Performance, and Reform of the State-owned Enterprises.* [Cited 9 December 2022]. Available from URL: http://www.unirule.org.cn/xiazai/2011/20110412.pdf.

Verma, R., & Verma, P. 2008. Are survey forecasts of individual and institutional investor sentiments rational?. *International Review of Financial Analysis*, 17(5), 1139-1155.

Waldmeir, P. 2012. Financial Times: *Step away from the metric, minister: China to ban foreign cars for official use*. [Cited 13 June 2022]. Available from URL: https://www.ft.com/content/7153a316-6f22-3391-8b03-baac2101a3ee

Walt, S. 2019. Foreign Policy: *You Can't Defeat Nationalism, So Stop Trying*. [Cited 13 June 2022]. Available from URL: https://foreignpolicy.com/2019/06/04/you-cant-defeat-nationalism-so-stop-trying/

Wang, D., Du, F., & Marquis, C. 2019. Defending Mao's dream: How politicians' ideological imprinting affects firms' political appointment in China. *Academy of Management Journal*, 62(4), 1111-1136.

Wang, Z. 2014. The Chinese dream: Concept and context. *Journal of Chinese Political Science*, 19(1), 1-13.

Wang, H., Yuan, H., Li, X., & Li, H. 2019. The impact of psychological identification with home-name stocks on investor behavior: an empirical and experimental investigation. *Journal of the Academy of Marketing Science*, 47(6), 1109-1130.

Weiss, J. C. 2014. *Powerful patriots: nationalist protest in China's foreign relations*. Oxford University Press.

Weiss, J. C. 2016. Putting concepts into practice: a call for measuring and explaining variation in Chinese nationalism. *Nations and Nationalism*, 22(3), 441-446.

Weiss, J. C. 2019. How hawkish is the Chinese public? Another look at "rising nationalism" and Chinese foreign policy. *Journal of Contemporary China*, 28(119), 679-695.

Zhao, S. 2013. Foreign policy implications of Chinese nationalism revisited: The strident turn. *Journal of Contemporary China*, 22(82), 535-553.

Zhao, S. 2004. *A Nation-state by Construction: Dynamics of Modern Chinese Nationalism*. Stanford University Press.

Tables

Table 1. Seed words and their top synonyms

Dimension	Seed words	Synonyms
National Pride	民族	中华民族, 老字号, 排头兵, 中华文化, 复兴
	祖国	致敬, 中国梦, 纪念, 歌颂, 民俗
	中华民族	瑰宝, 千年大计, 灵魂, 中华民族伟大复兴, 传承
	中华文化	时代精神, 故事, 讲述, 唱响, 自信
	源远流长	瑰宝, 几千年, 伟大复兴, 四百多年, 典籍
National Revival	振兴	十二五, 纲要, 扩大内需, 战略性新兴产业, 十一五
	改革开放	加入 WTO, 加入世贸组织, 深化改革, 四十周年, 医药卫生体制改革
	伟大复兴	源远流长,瑰宝, 中国梦, 传承者, 中华文化
	中国梦	中华民族伟大复兴, 伟大, 梦想, 人生价值, 祖国
	强国	小康社会, 一带一路, 一路一带, 中华民族伟大复兴, 强军
Corporate Role	报效祖国	奉献, 担起, 造福人类, 造福, 勇担
	世界领先	世界一流, 世界级, 一流, 领航者, 顶尖
	实业报国	产业报国, 报国, 不忘初心, 艰苦创业, 厚德载物
	自主	独立自主, 核心技术, 技术创新, 技术, 原创
	国产化	国产, 自主化, 产业化, 自产化, 升级换代
Anti-foreign	垄断	寡头垄断, 垄断市场, 打破, 把持, 寡头
	制裁	双反, 贸易战, 大选, 反倾销, 争端
	争端	摩擦, 保护主义抬头, 贸易战, 紧张局势, 冲突
	单边主义	逆全球化, 思潮, 国际贸易保护主义, 保护主义, 保护主义抬头
	贸易战	主权债务危机, 经贸摩擦, 摩擦, 欧债危机, 争端

Table 2. Extended word list for each dimension

dimension	Extended words
National Pride	中华文化 瑰宝 源远流长 传统美德 老字号 儒学 家国 现代文明 文化底蕴 历史使命 薪火相传 血脉 文化遗产 发扬光大 几千年 民俗文化 边疆 践行者 文化名城 建设成就 国宝 少数民族 悠久 丝绸之路 美满生活 安居乐业 民族特色 自然遗产 华人 时代精神 千年 航天事业 世人 爱国热情 人民日报 典范 自豪感 中华美食 国家队 幸福生活 大旗 两弹一星 献礼 国学 国际形象 建党 富强 马克思主义 抗美援朝 人民大业 国人 文化产业 老百姓 人民群众 主旋律 军旅 支柱产业 风土人情 古籍 中国式 数千年 新长征 本土 老兵 乡村 上千年 民众 各族人民 全民健身 跟党走 红色旅游 同胞 重要讲话 边疆地区 华夏文化 北京奥运 国策 民族风情 群众满意 党和国家 红色 全民 夕阳红 功勋 纪念活动 航空母舰 千家万户 市民 基本国策 党史 绿色奥运 国民经济 奥林匹克运动会 世界反法西斯战争 意识形态 统战 人民满意 纲领性文件 国民素质
National Revival	中国梦 乡村振兴 脱贫攻坚 宏伟目标 动能转换 一带一路 小康社会 强军 纲要 复兴 发展 建成小康社会 一路一带 行动纲领 深化改革 伟大 城镇化 中部崛起 扩大内需 丝绸之路经济带 社会主义现代化 宏伟蓝图 经济带 排头兵 和谐社会 供给侧结构性 国企改革 脱贫攻坚战 一带一路倡议 军民融合 重器 共同富裕 大政方针 百年 跨越 经济区 征程 大众创业万众 污染防治攻坚战 国资国企改革 世纪海上丝绸之路 远大目标 宣示 现代化 转型 走出去 脊梁 革命 海上丝绸之路 对外开放 一百年 伟大胜利 自由贸易港 城市化 航天事业 走向世界 世界名牌 第一个百年奋斗目标 扩大开放 献礼 决心 体制改革 高质量 碳达峰 浴火重生 城市化进程 勇当 崛起 肩负着 攻坚 长治久安 战略部署 战略目标 科技进步 决胜 医药卫生体制改革 工业化 坚强 重生 篇章 攻坚年 中华儿女 圆满收官 战略 接棒 蝶变 各项改革 医疗卫生体制改革 医改 关键时期 新机遇 起航 百年奋斗目标 根本途径 号角 出海 军事力量 新起点 新篇章 硬骨头
Corporate Role	自主 世界领先 国产 独立自主 技术创新 核心部件 研制 尖端 引领 中国芯 国家队 水下 零排放 技术革新 本土化 国产化率 走出国门 科技成果转化 节能减排 科技前沿 燃气轮机 核电 军用 突破口 先导 网络安全 坦克 产业报国 研制开发 本地化 军转民 依法治理 军民结合 嫦娥 军工 航空安全 难关 科研任务 民参军 创一流 武器 民机 主导产业 军民 民用化 重点项目 美好生活 实事 内外兼修 价值导向 航空航天 火箭 带头作用 智造 推动 报国 站位 敢于创新 首责 统领全局 同舟共济 奉献 大局意识 质量第一 高举 军事装备 以质取胜 现役 荣誉感 尊重人才 先锋模范作用 党和国家 战略方针 突围 科学发展观 护航 抢占市场先机 铁腕 我军 无小事 打胜仗 抗疫 海军 高瞻远瞩 扛起 造福 空军 办实事 实际行动 为主攻方向 勇于创新 不忘初心 再创辉煌 指导思想 一体两翼 党和政府 科学发展观统领全局 造福人类 上下团结一心 建功立业
Anti-foreign	贸易战 争端 制裁 保护主义抬头 主权债务危机 保护主义 单边主义 欧债危机 冲突 经贸摩擦 国际贸易保护主义 紧张局势 双反 地缘政治冲突 逆全球化 贸易壁垒 国际贸易保护主义抬头 磨擦 经济衰退 贸易谈判 博弈 关税壁垒 关系紧张 欧债 动荡 次贷危机 中美关系 金融风暴 动荡不安 非关税壁垒 地缘政治 反倾销 垄断 加征关税 担忧 民粹主义 反倾销反补贴 通缩 倾销 纷争 打压 反倾销调查 设限 能源危机 政治局势 价格战 双反调查 关税 黑天鹅 美国政府 高油价 次贷危机引发 产油国 通胀 经济波动 禁运 供需失衡 美国商务部 技术壁垒 反补贴调查 变数 反补贴 破裂 寡头 重创 争夺战 发达国家 经济过热 不稳定性 断供 变幻莫测 萧条 大变局 日系 双边 法案 国际收支 国际竞争 非关税 马太效应 终裁 国际原油 寡头垄断 国家主权 反倾销税 垄断市场 反恐 不明朗 外部环境 市场萎缩 漏油 国际金融 降准降息 经济周期 石油资源 国内安全 离岸 缺货 卡脖子 原油

Table 3. Comparison of the Nationalism Value on Markers

Panel A: Nationalism

	(1) Nationalism	(2) Nationalism	(3) Nationalism	(4) Nationalism	(5) Nationalism
SOE	0.131***				0.128***
	(0.000)				(0.000)
Central SOE		0.193***			
		(0.000)			
Local SOE		0.105***			
		(0.000)			
Founded Before 1992			0.0361***		0.0338***
			(0.000)		(0.000)
Founded After 2001				-0.0431***	-0.0175***
				(0.000)	(0.002)
Firm size	0.0438***	0.0422***	0.0560***	0.0546***	0.0438***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	0.224***	0.225***	0.200***	0.214***	0.234***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	-0.473***	-0.439***	-0.697***	-0.651***	-0.470***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41,205	41,205	41,205	41,205	41,205
adj. R2	0.190	0.192	0.175	0.176	0.190

p-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Panel B: National Pride

	(1) National Pride	(2) National Pride	(3) National Pride	(4) National Pride	(5) National Pride
SOE	0.00442**				0.00412**
	(0.027)				(0.033)
Central SOE		0.00131			
		(0.601)			
Local SOE		0.00570***			
		(0.005)			
Founded Before 1992			0.00581**		0.00545**
			(0.015)		(0.025)
Founded After 2001				-0.00306**	-0.00184
				(0.017)	(0.123)
Firm size	0.00115***	0.00122***	0.00159***	0.00147***	0.00116***
	(0.003)	(0.002)	(0.000)	(0.001)	(0.003)
ROA	0.0356***	0.0355***	0.0353***	0.0359***	0.0369***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Constant	0.0263***	0.0247***	0.0178**	0.0217**	0.0263***
	(0.002)	(0.004)	(0.044)	(0.013)	(0.002)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41,205	41,205	41,205	41,205	41,205
adj. R2	0.166	0.167	0.166	0.166	0.167

p-values in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Panel C: National Revival

	(1) National Revival	(2) National Revival	(3) National Revival	(4) National Revival	(5) National Revival
SOE	0.0654***				0.0628***
	(0.000)				(0.000)
Central SOE		0.0675***			
		(0.000)			
Local SOE		0.0646***			
		(0.000)			
Founded Before 1992			0.0113***		0.00873**
			(0.001)		(0.013)
Founded After 2001				-0.0267***	-0.0149***
				(0.000)	(0.000)
Firm size	0.0176***	0.0176***	0.0237***	0.0229***	0.0175***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	0.0875***	0.0876***	0.0751***	0.0848***	0.0940***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	-0.214***	-0.213***	-0.325***	-0.299***	-0.207***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41,205	41,205	41,205	41,205	41,205
adj. R2	0.208	0.208	0.192	0.195	0.209

p-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Panel D: Corporate Role

	(1) Corporate Role	(2) Corporate Role	(3) Corporate Role	(4) Corporate Role	(5) Corporate Role
SOE	0.0551***				0.0558***
	(0.000)				(0.000)
Central SOE		0.0990***			
		(0.000)			
Local SOE		0.0372***			
		(0.000)			
Founded Before 1992			0.0107***		0.0123***
			(0.004)		(0.001)
Founded After 2001				-0.00711**	0.00383
				(0.021)	(0.167)
Firm size	0.0142***	0.0131***	0.0194***	0.0191***	0.0144***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	0.101***	0.102***	0.0908***	0.0926***	0.101***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	-0.136***	-0.112***	-0.229***	-0.221***	-0.140***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41,205	41,205	41,205	41,205	41,205
adj. R2	0.153	0.157	0.144	0.144	0.153

p-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Panel E: Anti-foreign

	(1)	(2)	(3)	(4)	(5)
	Anti-foreign	Anti-foreign	Anti-foreign	Anti-foreign	Anti-foreign
SOE	0.00562**				0.00483**
	(0.013)				(0.028)
Central SOE		0.0252***			
		(0.000)			
Local SOE		-0.00236			
		(0.185)			
Founded Before 1992			0.00836**		0.00737**
			(0.012)		(0.021)
Founded After 2001				-0.00617***	-0.00466**
				(0.006)	(0.032)
Firm size	0.0108***	0.0103***	0.0113***	0.0111***	0.0108***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	-0.000590	-0.0000611	-0.000883	0.000765	0.00192
	(0.968)	(0.997)	(0.953)	(0.958)	(0.894)
Constant	-0.149***	-0.139***	-0.161***	-0.153***	-0.148***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41,205	41,205	41,205	41,205	41,205
adj. R2	0.120	0.122	0.120	0.120	0.120

p-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 4. Convergent and Discriminant Validity of Computational Measure

Self-reporting / Computational	National Pride	Anti-foreign	Corporate Role	National Revival
National Pride	**0.2484**	-0.3	0.1043	-0.1341
	(0.2025)	(0.1208)	(0.5633)	(0.4905)
Anti-foreign	-0.1738	**0.2149**	0.109	0.0206
	(0.3764)	**(0.2721)**	(0.5461)	(0.8511)
Corporate Role	0.1043	0.109	**0.2669**	-0.0457
	(0.5633)	(0.5461)	**(0.1333)**	(0.136)
National Revival	-0.1341	0.0207	-0.0457	**0.1609**
	(0.4569)	(0.9092)	(0.8005)	**(0.371)**
Nationalism	0.0151	-0.0018	0.0902	0.0342
	(0.9392)	(0.9928)	(0.6175)	(0.8501)

p-values in parentheses; We did not report the correlation between the aggregated nationalism because the self-reported data is from two surveys and cannot be directly added up.

Table 5. Nationalism score for each dimension and the aggregation across years

Year	National Pride	National Revival	Corporate Role	Anti-foreign	Nationalism
2000	0.03898108	0.111284999	0.157999198	0.059317491	0.367582769
2001	0.028485769	0.093520832	0.147474557	0.114455513	0.383936671
2002	0.02475449	0.089814303	0.101689197	0.080623367	0.296881358
2003	0.033267443	0.071306235	0.08636618	0.068290127	0.259229986
2004	0.025873375	0.05620669	0.090528569	0.049742369	0.222351004
2005	0.064184618	0.154848265	0.183836225	0.107978317	0.510847426
2006	0.049114866	0.128875999	0.133538006	0.06336866	0.374897531
2007	0.049090078	0.119685233	0.182676882	0.071608461	0.423060655
2008	0.054547284	0.148459118	0.200245686	0.165343615	0.568595704
2009	0.049079453	0.170294901	0.211026354	0.104822367	0.535223075
2010	0.052657627	0.163309604	0.213179953	0.093867355	0.523014539
2011	0.055806009	0.155819256	0.197299045	0.12255439	0.5314787
2012	0.057256747	0.180994964	0.215076512	0.102498269	0.555826492
2013	0.053256553	0.171928445	0.195757559	0.064466534	0.48540909
2014	0.052605235	0.187592155	0.194362627	0.059552303	0.494112319
2015	0.060950324	0.247314786	0.208845894	0.078301719	0.595412723
2016	0.062310758	0.252164398	0.215723691	0.076400461	0.606599309
2017	0.070796916	0.27651308	0.23258693	0.074622104	0.65451903
2018	0.069841843	0.275474597	0.237966445	0.107042271	0.690325157
2019	0.07066474	0.264528364	0.252514656	0.120516088	0.708223849
2020	0.07441881	0.262179232	0.272646025	0.115852921	0.725096988

Table 6. The Industrial Distribution of Rhetorical Nationalism

Panel A: The Industrial Distribution of Rhetorical Nationalism

Industry	Nationalism	National Pride	National Revival	Corporate Role	Anti-foreign
A. Farming, Forestry, Animal Husbandry & Fishery	0.414945	0.047379	0.166738	0.130573	0.070255
B. Mining	0.622873	0.033885	0.222895	0.200232	0.16586
C. Manufacturing	0.566608	0.045352	0.183336	0.237259	0.100661
D. Electricity, heat, gas and water production and supply	0.530798	0.040455	0.238796	0.194378	0.057169
E. Construction	0.657759	0.085214	0.338523	0.172529	0.061493
F. Wholesale & retail	0.516139	0.077318	0.230356	0.115968	0.092497
G. Transportation, storage and post	0.634493	0.052505	0.285022	0.131895	0.165072
H. Lodging and Catering	0.759184	0.329396	0.199917	0.107721	0.122149
I. Information transmission, software and IT services	0.530127	0.077113	0.177746	0.235295	0.039973
J. Financial	0.521633	0.045043	0.251556	0.10788	0.117155
K. Real estate	0.459421	0.071309	0.222806	0.09799	0.067316
L. Leasing and business services	0.456983	0.118416	0.181724	0.0965	0.060344
M. Scientific research and technical service	0.703602	0.062937	0.32526	0.248188	0.067216
N. Water conservancy, environment and public facilities management	0.532295	0.116585	0.214881	0.165237	0.035592
O. Resident Services, repair and other services	0.388866	0.098912	0.141549	0.096018	0.052386
P. Education	0.471115	0.090614	0.198022	0.142186	0.040293
Q. Health and social work	0.625982	0.133451	0.311449	0.152762	0.02832
R. Culture, sports and entertainment	1.004644	0.454374	0.328967	0.182289	0.039014
S. Conglomerates	0.385689	0.046283	0.144571	0.128679	0.066157

Panel B: Association between nationalism and business mode.

	(1) Nationalism	(2) National Pride	(3) National Revival	(4) Corporate Role	(5) Anti-foreign
ToC	0.0151***	0.0670***	0.0406***	-0.0823***	-0.0101***
	(0.001)	(0.000)	(0.000)	(0.000)	(0.003)
SOE	0.140***	0.00622***	0.0693***	0.0550***	0.00978***
	(0.000)	(0.005)	(0.000)	(0.000)	(0.000)
Founded Before 1992	0.0261***	0.00580**	0.0107***	0.00279	0.00684**
	(0.002)	(0.015)	(0.001)	(0.492)	(0.036)
Founded After 2001	0.000593	-0.000830	-0.0156***	0.0181***	-0.00104
	(0.907)	(0.593)	(0.000)	(0.000)	(0.613)
ROA	0.237***	0.0436**	0.105***	0.0969***	-0.00871
	(0.000)	(0.026)	(0.000)	(0.000)	(0.650)
Firm size	0.0298***	0.000188	0.0177***	0.00191*	0.0100***
	(0.000)	(0.613)	(0.000)	(0.099)	(0.000)
Constant	-0.174***	0.0414***	-0.217***	0.135***	-0.134***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	41205	41205	41205	41205	41205
adj. R2	0.148	0.051	0.173	0.070	0.051

p-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 7. Summary Statistics and Correlation Table

Variables	Obs	Mean	STD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Nationalism	41,285	0.54	0.42	1.00													
(2) National Pride	41,285	0.05	0.10	0.39	1.00												
(3) National Revival	41,285	0.20	0.20	0.72	0.25	1.00											
(4) Corporate Role	41,285	0.20	0.24	0.73	0.06	0.26	1.00										
(5) Anti-foreign	41,285	0.09	0.15	0.44	-0.01	0.09	0.08	1.00									
(6) SOE	41,285	0.36	0.48	0.15	0.03	0.17	0.08	0.03	1.00								
(9) Fou. Bef. 1992	41,229	0.07	0.26	-0.01	0.01	-0.01	-0.02	0.01	-0.01	1.00							
(7) Fou Aft. 2001	41,229	0.28	0.45	0.04	0.01	0.00	0.06	0.00	-0.26	-0.17	1.00						
(8) ROA	41,226	0.03	0.08	0.05	0.03	0.04	0.04	0.00	-0.04	-0.05	0.10	1.00					
(10) Firm size	41,206	21.90	1.45	0.22	0.05	0.26	0.09	0.10	0.27	-0.02	-0.03	0.06	1.00				
(11) Log(market-to-book)	40,523	0.55	0.51	-0.05	0.02	-0.06	0.01	-0.09	-0.20	0.03	0.07	0.06	-0.44	1.00			
(12) Num. of Investor	37,614	10.18	1.45	0.08	0.02	0.11	0.02	0.05	0.17	0.05	-0.15	-0.14	0.44	-0.12	1.00		
(13) Oversea income	32,921	3.89	7.77	-0.02	-0.04	-0.05	0.02	0.02	-0.16	-0.03	0.17	-0.02	0.09	0.02	0.04	1.00	
(14) Gov. subsidies	28,046	15.73	2.12	0.09	-0.01	0.05	0.10	0.03	0.09	-0.04	0.01	0.07	0.41	-0.14	0.16	0.05	1.00

Note: Correlation coefficients with absolute values greater than 0.01 are statistically significant at the $p \leqslant 0.05$ level of confidence.

Table 8. Associations between Firm Characteristics and Nationalism

	(1) Nationalism	(2) National Pride	(3) National Revival	(4) Corporate Role	(5) Anti-foreign
SOE	0.132***	0.00121	0.0634***	0.0639***	0.00360
	(0.000)	(0.120)	(0.000)	(0.000)	(0.160)
Founded before 1992	0.0332***	0.00602	0.00602	0.0120**	0.00918**
	(0.003)	(0.125)	(0.128)	(0.022)	(0.011)
Founded After 2001	-0.0229***	-0.00261*	-0.0117***	-0.000676	-0.00786***
	(0.004)	(0.053)	(0.000)	(0.873)	(0.001)
Log(Market-to-Book)	0.00644	0.00117	-0.00774*	0.0188**	-0.00580*
	(0.615)	(0.501)	(0.061)	(0.010)	(0.055)
ROA	0.240***	0.0457***	0.122***	0.0748***	-0.00281
	(0.000)	(0.010)	(0.000)	(0.002)	(0.896)
Number of Investors	0.0154***	0.00251***	0.00616**	0.00340*	0.00336**
	(0.000)	(0.002)	(0.011)	(0.074)	(0.012)
Firm Size	0.0402***	0.000543	0.0180***	0.0128***	0.00888***
	(0.000)	(0.402)	(0.000)	(0.000)	(0.000)
Income from oversea	-0.00378***	-0.000440***	-0.00244***	-0.00101***	0.000112
	(0.000)	(0.002)	(0.000)	(0.002)	(0.579)
Government subsidies	0.00133	-0.000561	-0.00284***	0.00552***	-0.000780**
	(0.270)	(0.180)	(0.000)	(0.001)	(0.029)
constant	-0.527***	0.0274***	-0.208***	-0.222***	-0.124***
	(0.001)	(0.007)	(0.003)	(0.003)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	25,314	25,314	25,314	25,314	25,314
adj. R2	0.148	0.204	0.187	0.147	0.111

Note: *p*-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 9. Associations between Firm Characteristics and Nationalism (excludes *oversea incomes* and *received subsidies*)

	(1) Nationalism	(2) National Pride	(3) National Revival	(4) Corporate Role	(5) Anti-foreign
SOE	0.126***	0.00468**	0.0622***	0.0553***	0.00427**
	(0.000)	(0.018)	(0.000)	(0.000)	(0.027)
Founded before 1992	0.0380***	0.00569**	0.0100***	0.0128***	0.00956***
	(0.000)	(0.032)	(0.008)	(0.001)	(0.001)
Founded After 2001	-0.0195***	-0.00196*	-0.0140***	0.00155	-0.00510**
	(0.001)	(0.077)	(0.000)	(0.619)	(0.013)
Log(Market-to-Book)	0.00215	0.000715	-0.00767**	0.0130**	-0.00389*
	(0.804)	(0.706)	(0.049)	(0.015)	(0.081)
ROA	0.261***	0.0462***	0.110***	0.0980***	0.00726
	(0.000)	(0.002)	(0.000)	(0.000)	(0.621)
Number of Investors	0.0130***	0.00208***	0.00600***	0.00284**	0.00207*
	(0.000)	(0.001)	(0.003)	(0.047)	(0.087)
Firm Size	0.0385***	0.000397	0.0137***	0.0159***	0.00849***
	(0.000)	(0.484)	(0.000)	(0.000)	(0.000)
constant	-0.482***	0.0224*	-0.180***	-0.206***	-0.118***
	(0.000)	(0.058)	(0.000)	(0.000)	(0.000)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	36,921	36,921	36,921	36,921	36,921
adj. R2	0.183	0.173	0.201	0.156	0.114

Note: *p*-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 10. Associations between Firm Characteristics and Nationalism (excludes *oversea incomes* and *received subsidies* and with lag terms of dependent variables)

	(1) Nationalism	(2) National Pride	(3) National Revival	(4) Corporate Role	(5) Anti-foreign
LagTerm	0.653***	0.506***	0.596***	0.694***	0.491***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
SOE	0.0538***	0.00381**	0.0306***	0.0195***	0.00177
	(0.000)	(0.047)	(0.000)	(0.000)	(0.320)
Founded before 1992	0.0195**	0.00453**	0.00355	0.00743**	0.00655**
	(0.012)	(0.030)	(0.377)	(0.031)	(0.025)
Founded After 2001	-0.00802*	-0.000851	-0.00749***	0.00116	-0.00301*
	(0.088)	(0.469)	(0.000)	(0.689)	(0.074)
Log(Market-to-Book)	-0.00186	0.00158	-0.00380	0.000484	-0.00177
	(0.784)	(0.365)	(0.150)	(0.891)	(0.447)
ROA	0.182***	0.0329***	0.0738***	0.0732***	0.00866
	(0.000)	(0.000)	(0.000)	(0.000)	(0.336)
Number of Investors	0.00501***	0.00111	0.00303***	0.000859	0.000854
	(0.007)	(0.106)	(0.003)	(0.556)	(0.265)
Firm Size	0.0134***	0.0000646	0.00569***	0.00420*	0.00486***
	(0.006)	(0.903)	(0.001)	(0.065)	(0.001)
constant	-0.158	0.0128	-0.0751**	-0.0430	-0.0679**
	(0.119)	(0.136)	(0.042)	(0.416)	(0.016)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	31,811	31,811	31,811	31,811	31,811
adj. R2	0.514	0.383	0.469	0.548	0.327

Note: ***p*-values in parentheses**. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 11. Associations between Nationalism and Firm's Future Performance

	(1) Future ROA	(2) Future ROA	(3) Future ROA	(4) Future ROA	(5) Future ROA
Nationalism	0.00309**				
	(0.044)				
National Pride		0.00519			
		(0.514)			
National Revival			0.00851***		
			(0.002)		
Corporate Role				0.00211	
				(0.372)	
Anti-foreign					0.000958
					(0.862)
SOE	0.00288	0.00323	0.00276	0.00313	0.00324
	(0.284)	(0.250)	(0.308)	(0.250)	(0.243)
Founded before 1992	-0.00471**	-0.00462**	-0.00468**	-0.00462**	-0.00460**
	(0.034)	(0.034)	(0.033)	(0.037)	(0.038)
Founded After 2001	0.00448***	0.00442***	0.00453***	0.00441***	0.00442***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Log(Market-to-Book)	0.0187***	0.0187***	0.0188***	0.0187***	0.0187***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	0.436***	0.437***	0.436***	0.437***	0.437***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Number of Investors	-0.00418***	-0.00415***	-0.00419***	-0.00415***	-0.00415***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm Size	0.00472***	0.00484***	0.00472***	0.00480***	0.00483***
	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)
constant	-0.0598**	-0.0615**	-0.0598**	-0.0609**	-0.0612**
	(0.043)	(0.037)	(0.042)	(0.040)	(0.038)
Industry Fixed Effect	True	True	True	True	True
Province Fixed Effect	True	True	True	True	True
Year Fixed Effect	True	True	True	True	True
N	33,592	33,592	33,592	33,592	33,592
adj. R2	0.225	0.225	0.225	0.225	0.225

Note: *p*-values in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 12. SEM Examining the Mediating Role of Domestic Profitability

	β	SE	p	95% Bias-Corrected CI	
				LL	UL
Domestic market profit					
($DProfitability_{t+1}$) on:					
Nationalism	0.0017501	0.001022	0.087	-0.00025	0.00375
SOE	0.0015954	0.001023	0.119	-0.00040	0.00360
Founded before 1992	-0.0032078	0.0016781	0.056	-0.00649	0.00008
Founded After 2001	0.0028663	0.000953	0.003	0.00099	0.00473
Log(Market-to-Book)	0.0141495	0.0010788	0	0.01203	0.01626
ROA	-0.1727456	0.0159521	0	-0.20401	-0.14147
Number of Investors	-0.0036287	0.000432	0	-0.00447	-0.00278
Firm Size	0.0032838	0.0004848	0	0.00233	0.00423
$DProfitability_t$	0.7070438	0.0151504	0	0.67734	0.73673
constant	-0.1633338	0.0639177	0.011	-0.28861	-0.03805
Included Industry Fixed Effect					
Included Province Fixed Effect					
Included Year Fixed Effect					
Next year's ROA on:					
Nationalism	0.0007591	0.0004197	0.071	-0.00006	0.00158
$DProfitability_{t+1}$	0.9458636	0.0025873	0	0.94079	0.95093
SOE	0.0002005	0.0004201	0.633	-0.0006	0.00102
Founded before 1992	-0.0008404	0.0006892	0.223	-0.00219	0.00051
Founded After 2001	-0.0004621	0.0003914	0.238	-0.00122	0.00030
Log(Market-to-Book)	0.0010518	0.0004445	0.018	0.00018	0.00192
ROA	0.1918622	0.0065661	0	0.17899	0.20473
Number of Investors	-0.0002553	0.0001777	0.151	-0.00060	0.0000
Firm Size	-0.00035	0.0001993	0.079	-0.00074	0.00004
$DProfitability_t$	-0.2345443	0.006485	0	-0.24725	-0.22183
constant	0.02511	0.0262519	0.339	-0.02634	0.07656
Included Industry Fixed Effect					
Included Province Fixed Effect					
Included Year Fixed Effect					
Total R^2	0.8828				
Proportion of total effect that is mediated:	0.686				

58

Figure 1. The trend of rhetorical nationalism across years

The trend of rhetorical nationalism among Chinese Public firms from 2000 to 2020. For each year, we calculate the average percentage scores of sub-dimension and aggregation of all public firms' rhetorical nationalism. The data of Nationalism (aggregation) are shown in the Y-axis on the right.
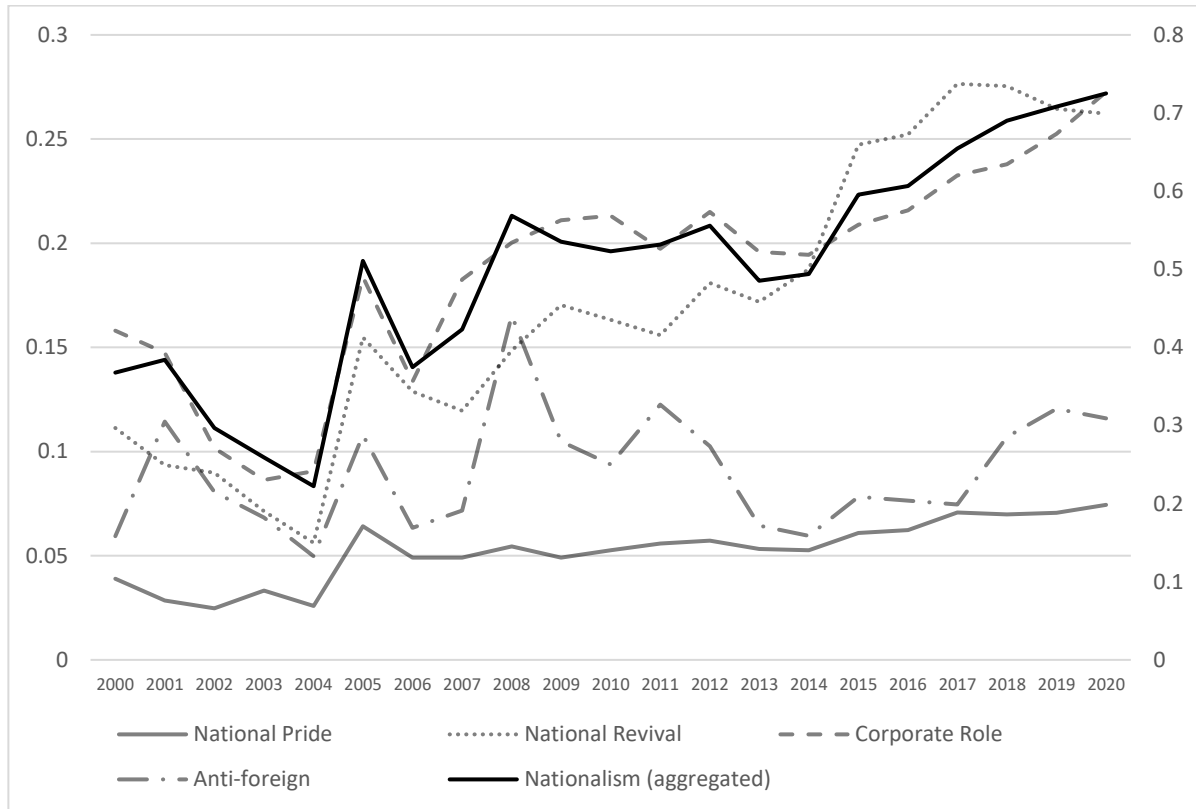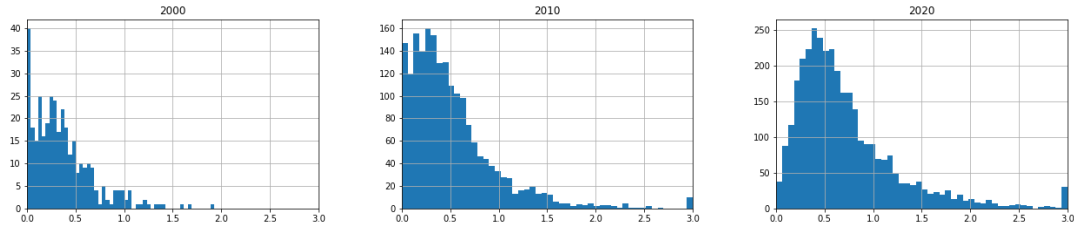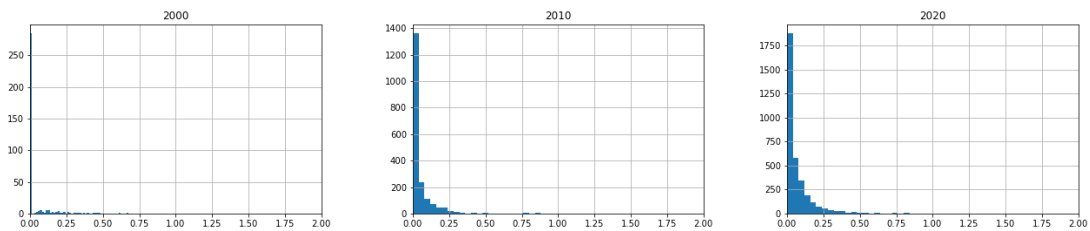
Figure 2. The histogram of rhetorical nationalism

The histogram (density) of scores of the aggregation and sub-dimension of public firms' rhetorical nationalism in year 2000, 2010 and 2020.

Panel A: Nationalism

Panel B: National Pride

**Panel C: National Revival**
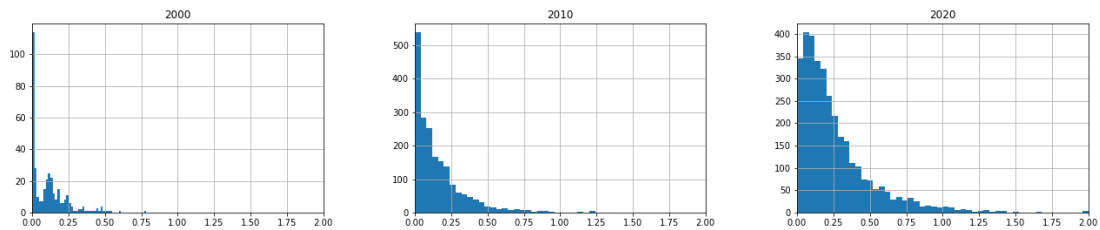
Panel D: Corporate Role
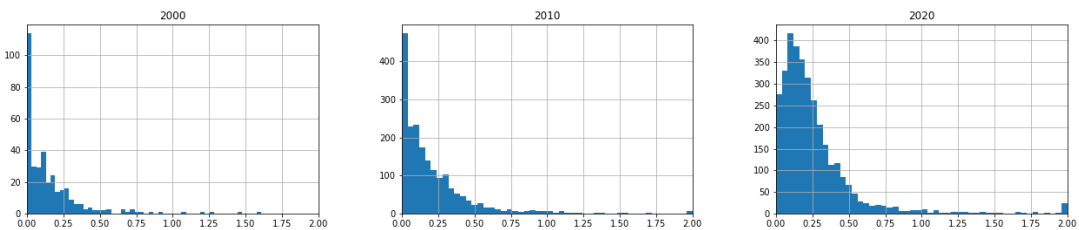
Panel E: Anti-foreign
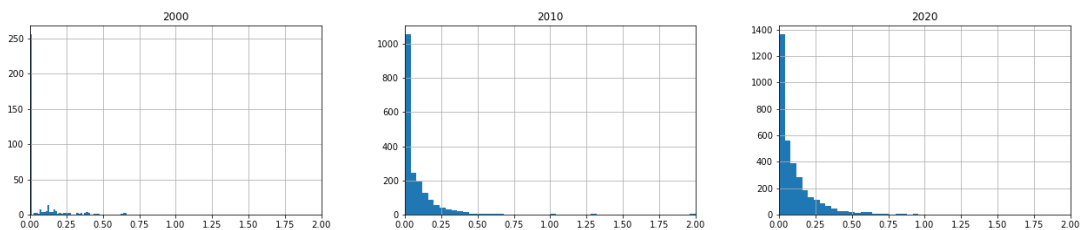
Figure 3. Geographical distribution

Geographical distribution of public firms' rhetorical nationalism in year 2000, 2010 and 2020[10]. For each year, we calculate the geographical average score of rhetorical nationalism, based on all public firms established in the district. Regions without valid data points are set to be grey.
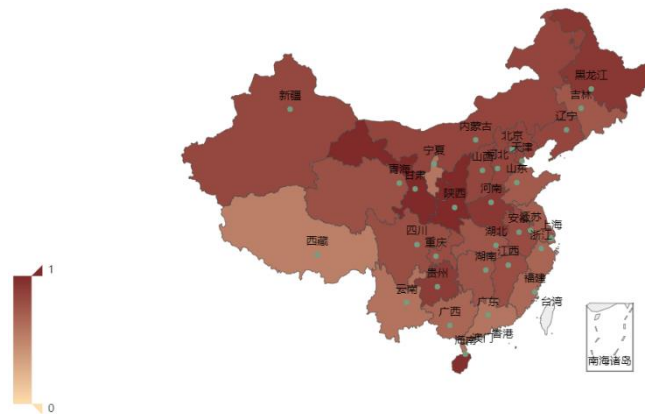
Panel A: 2000
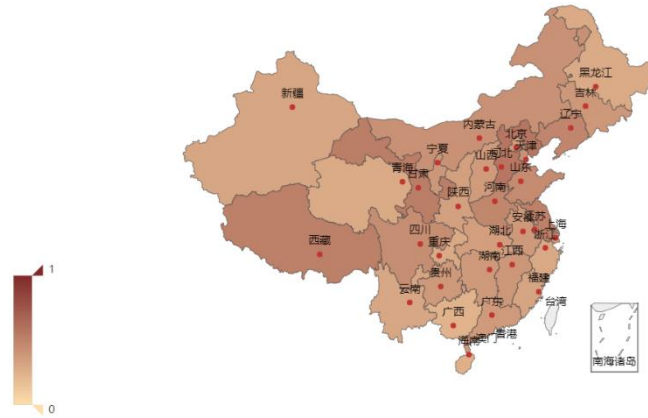
Panel B: 2010
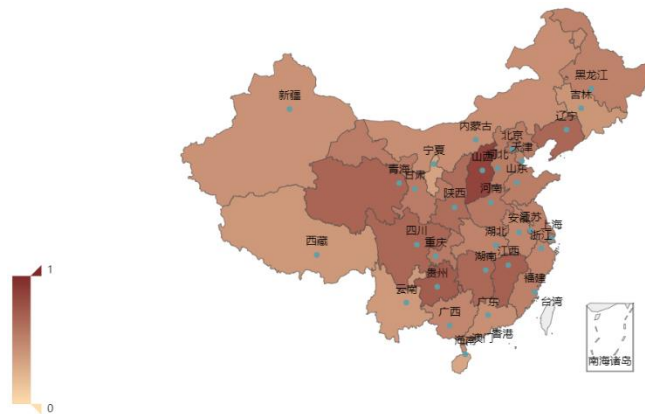
Panel C: 2020

---

[10] The graph of geographical distribution is generated using the *pyecharts* package in Python. For maps with comprehensive details, please refer to http://bzdt.ch.mnr.gov.cn/.

Appendix

Appendix 1. Examples of Chinese Public Firms' Nationalistic Rhetoric

Company Name	Year	Statement	Source
Tonghua Dongbao Pharma Co	2005	——生物制药销售情况。东宝研制出拥有中国自主知识产权的产品基因重组人胰岛素，此项成果荣获 2002 年度"国家科学技术进步二等奖"，并申报了国际专利。它标志着中国生物制药技术跨入了世界先进行列，填补了中国空白，使我国成为世界上第三个能够生产销售人胰岛素原料和制剂的国家，为祖国争得了荣誉。	Annual report 2005: http://www.cninfo.com.cn/new/disclosure/detail?stockCode=600867&announcementId=16891569&orgId=gssh0600867&announcementTime=2006-04-13
Shanghai Laiyifen Co Ltd	2019	企业使命：让爱普照美食者、家庭更幸福。成为中华文化的践行者和传播者，成就万名家人幸福自在，助力亿万民众家庭幸福圆满，用极致匠心服务社会，以良知责任报效祖国。	Annual report 2019: http://www.cninfo.com.cn/new/disclosure/detail?stockCode=603777&announcementId=1207671683&orgId=9900023222&announcementTime=2020-04-29
Dandong Xintai Electric Co., Ltd	2015	2015年公司党委、工会、团委工作互相融合、互相激励、互相促进，形成了资源共享、信息共通、工作共融的良好局面，今后公司党群组织将一如既往秉承"以服务企业发展为使命、以服务职工需求为己任"的工作总方针，不断强化党群组织在企业发展中的地位和作用，不断提升党群组织服务企业职工能力和水平，带领企业广大职工团结拼搏、锐意进取，为实现中华民族伟大复兴中国梦和企业的繁荣、富强梦而努力奋斗。	Annual report 2015: http://www.cninfo.com.cn/new/disclosure/detail?stockCode=300372&announcementId=1202245519&orgId=9900018954&announcementTime=2016-04-26

Appendix 2. Questions in CPES reflecting nationalism

Sub-dimension	Questions	Rationale	Filing year of the survey
National Pride	● 应当将中国传统文化的经典作品作为儿童基础教育读物。	This question captures whether a respondent values the traditional culture in China.	2018
Anti-foreign	● 我们应该限制其他国家的产品进口来保护国内相关薄弱产业。 ● 目前有些国际势力试图阻止中国的发展和崛起。 ● 好莱坞电影对中国文化的影响弊大于利。	These questions capture whether a respondent adopts a hostile attitude towards foreign culture/product/entity.	2018
National Revival	● 私营企业主是实现"中国梦"的重要载体。 ● "中国梦"是政府提出的概念，与我关系不大。	These questions capture whether a respondent recognizes and participates in the national revival. We reversely code the response in the second question.	2014
Corporate Role	● 您是否赞同"我的"中国梦"首先是实现个人理想，然后才是中华民族复兴"？	This question captures whether a respondent regards the national revival as his or her duty. We reversely code the response in the question.	2014