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REMEMBERING LI KEQIANG: FROM
DIVERGENCE TO CONVERGENCE IN
ZHONGNANHAI

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**Remembering Li Keqiang:
From divergence to convergence in *Zhongnanhai***

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Abstract

The unexpected passing of Li Keqiang, the former Chinese Premier, has prompted widespread public mourning, reflecting a profound sense of loss for a time of economic potential and openness. In assessing Li's representation, achievement, and limitation, this study explores his policy orientation concerning state–market relations in comparison to General Secretary Xi Jinping. Employing a semi-supervised machine learning method, our analysis reveals that Li favoured a market-oriented policies, while Xi displayed a preference for state-centric approaches. Notably, the findings show an initial divergence between the two leaders, followed by a substantial narrowing of the gap during Xi's second term. This study also finds that discursive differences between the two leaders were linked to a decline in firm-level investment, suggesting the gap in policy orientation may generate significant political uncertainty. As the first attempt to quantify Li Keqiang's policy position and influence, this study contributes to the literature on the leadership dynamics in economic policy-making and its outcomes.

Keywords

Xi Jinping, Li Keqiang, State–market relation, Policy orientation, Text analysis, Latent semantic scaling

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1. Introduction

On 27 October 2023, Li Keqiang 李克强, the former Chinese Premier, passed away at 68 years old due to heart attack.¹ An official obituary described him as a dedicated official loyal to General Secretary Xi Jinping 习近平, who urged the country to rally around Xi by ‘turning grief into strength’.² Li’s sudden death prompted spontaneous mourning online and offline. Despite the censorship efforts of authorities, which included removing a video in which Li promised that China would remain open to the outside world, memorial comments surfaced on social media, and numerous flowers were laid in his hometown of Hefei, Anhui Province.³ This reaction was considered a reflection of the public’s sense of loss for the beacon that Li represented: a time of great economic possibility and openness to private business. It also displayed dissatisfaction with Xi Jinping, the hard-line Party leader who overshadowed the Premier’s policy-making roles, which made Li ‘possibly the least powerful Premier in contemporary Chinese history’.⁴

To reassess Li’s representation, this study intends to demonstrate how Li Keqiang’s policy orientation diverged from that of Xi during the period between 15 March 2013 and 11 March 2023, the duration of Li Keqiang as Premier of the State Council of the People’s Republic of China (PRC). Despite Xi’s increasing dominance over the policy-making system in the past decade,⁵ no shortage exists of episodic evidence of the existence of preference divergence between Xi and Li Keqiang.⁶ At a press conference after the closing of the National People’s Congress on 28 May 2020⁷, Li Keqiang stated that, ‘There are still 600 million people with monthly incomes of less than 1,000 yuan’. At the time, Xi’s emphasis was on a declaration of total poverty elimination. Another revealing case is the management of the economy during COVID-19.⁸ On 25 May 2022, Premier Li held a video call with

¹ “李克强同志逝世”, *Xinhua News Agency*, October 27 2023, http://www.news.cn/politics/2023-10/27/c_1129942174.htm. Accessed 1 November 2023.

² “中共中央 全国人大常委会 国务院 全国政协讣告 李克强同志逝世”, *Xinhua News Agency*, October 27 2023, http://www.xinhuanet.com/2023-10/27/c_1129943498.htm. Accessed 1 November 2023.

³ “In Li Keqiang’s heartland, a flood of floral tributes for China’s former premier”, *South China Morning Post*, October 29th, 2023, <https://www.scmp.com/news/china/politics/article/3239598/li-keqiangs-heartland-flood-floral-tributes-chinas-former-premier>. Accessed 5th December 2023.

⁴ “Chinese Mourn the Death of a Premier, and the Loss of Economic Hope”, *The New York Times*, <https://www.nytimes.com/2023/10/27/business/li-keqiang-mourning-online.html>. Accessed 5 December 2023.

⁵ Heilman and Stefan ed. 2016; Shirk 2022.

⁶ Wong 2023.

⁷ “李克强总理出席记者会并回答中外记者提问”, State Council of the PRC, 28 May 2020. http://www.gov.cn/gongbao/content/2020/content_5517496.htm. Accessed 3 May 2023.

⁸ “China’s Top Two Leaders Diverge in Messaging on Covid Impact”, *Wall Street Journal*, 25 May 2022. <https://www.wsj.com/articles/chinas-top-two-leaders-diverge-in-messaging-on-covid-impact-11653486508>. Accessed 3 May 2023; “抗疫保经济：习近平与李克强不同调？”, *Deutsche Welle*,

cadres across the nation to warn of a deteriorating economic situation and urged them to balance COVID-19 measures and pre-determined growth targets.⁹ Nevertheless, Xi continued to emphasize the need for officials to push for zero-COVID-19 cases. In addition, core leaders in the administration, including Xi, were negative towards Li Keqiang's attempts to secure sources of income and ease employment pressure through the street vendor economy.¹⁰

A particularly illuminating episode was a national conference held in 4 July 2016; the two leaders exhibited clearly differing stances towards the administration's key policy agenda: state-owned enterprise (SOE) reforms.¹¹ Xi emphasized that SOEs are 'an important force for strengthening the comprehensive strength of the country and safeguarding the common interests of the people' (*guoyou qiye shi zhuangda guojia zonghe shili, baozhang renmin gongtong liyi de zhongyao liliang*, 国有企业是壮大国家综合实力、保障人民共同利益的重要力量) and called for 'stronger, better, and bigger' (*zuoqiang zuoyou zuoda*, 做强做优做大) SOEs. By contrast, Li emphasized 'adhering to and promoting reform of SOEs' (*jianchi buxie tuidong guoyou qiye gaige*, 坚持不懈推动国有企业改革) and stressed the need to 'follow the laws of the market, slim down and improve quality and efficiency, eliminate excess and backward production capacity' (*zunxun shichang guilu, shoushen jianti tizhi zengxiao*, 遵循市场规律, 瘦身健体提质增效, 淘汰过剩落后产能). The case was symbolic, as their views were enumerated at the meeting, yet the content differed. This policy dimension is related to 'the state advances, the private sector retreats' (*guojin mintui*, 国进民退) argument.¹²

Such conflict of opinions between Xi Jinping and Li Keqiang reflects, in part, what internal observers have termed the 'Dispute Between North and South Houses' (*nanbeiyuan zhi zheng*, 南北

27 May 2022.

<https://www.dw.com/zh/%E6%8A%97%E7%96%AB%E4%BF%9D%E7%BB%8F%E6%B5%8E%E4%B9%A0%E8%BF%91%E5%B9%B3%E4%B8%8E%E6%9D%8E%E5%85%8B%E5%BC%BA%E4%B8%8D%E5%90%8C%E8%B0%83/a-61950271>. Accessed 5 May 2023.

⁹ "Premier stresses need to implement policies to stabilize economy", The State Council of the PRC, 25 May 2022,

https://english.www.gov.cn/premier/news/202205/25/content_WS628e364ec6d02e533532b526.html. Accessed 5 December 2023.

¹⁰ "Xi-Li Discord Paralyzes Officials Responsible for Policy", *Bloomberg*, 26 May 2022, <https://www.bloomberg.com/news/articles/2022-05-26/xi-li-discord-paralyzes-officials-responsible-for-china-economy>. Accessed 3 May 2023; "地摊经济：为何中国官媒相继发声降温", *BBC*, 9 June 2020, <https://www.bbc.com/zhongwen/simp/chinese-news-52977268>. Accessed 3 May 2023.

¹¹ "习近平总书记、李克强总理对国有企业改革作出重要指示", *Sina Finance*, 5 July 2016, <http://finance.sina.com.cn/roll/2016-07-05/doc-iftscen3391973.shtml>. Accessed 5 May 2023; "Discord Between China's Top Two Leaders Spills Into the Open", *Wall Street Journal*, 22 July 2016, <https://www.wsj.com/articles/discord-between-chinas-top-two-leaders-spills-into-the-open-1469134110>. Accessed 5 May 2023.

¹² Du, Liu, and Zhou 2014; Johansson and Feng 2016; Lardy 2019.

院之爭).¹³ This phrase describes the conflict between the State Council (north of *Zhongnanhai* 中南海, the centre of Chinese politics) and the Party centre (south of *Zhongnanhai*). Reportedly, the tension between the General Secretary and Premier that persisted throughout the two terms of the Xi administration was alleviated with the appointment of Premier Li Qiang 李強 in March 2023.¹⁴ However, no empirical study has quantitatively measured this conflict of opinion within the *Zhongnanhai*.

This study employs a textual dataset of leadership speeches and activities from 2012 to 2023 to assess the divergence in policy orientation towards state–market relations between Xi Jinping and Li Keqiang. The findings indicate a significant initial divergence between them followed by a substantial narrowing of the gap during Xi’s second term. By estimating Li Qiang’s policy orientation, we further demonstrate the reinforcement of preference convergence between the General Secretary and Premier, as Xi enters the third term. Notably, the complex configuration of power and authority in economic policy making is not simply reducible to the conflict between the two leaders. Instead, this study aims to provide empirical evidence that quantifies and challenges the widely held notion of Xi’s dominance over the policy making of the party-state, by offering novel insights into the evolving leadership dynamics during the Xi era.

2. Contexts: General Secretary Versus Premier and State–Market Orientation

The PRC, despite the authoritarian and hierarchical nature of its political system, is no exception in that a group of top leaders has shared policy-making authority.¹⁵ In economic policy making, China’s distinctive feature is that a tremendous amount of authority is delegated to the government, specifically the Premier. The Party leadership retains ultimate authority over economic affairs in all areas but delegates primary control of the economy to the Premier. This delegation was a relatively stable and consistent pattern since the 1980s.¹⁶ Deng Xiaoping 鄧小平, who sought to separate the Party and government and divide responsibilities among individuals within a collective leadership¹⁷, intentionally devised a new division of responsibility.

¹³ “南北院之爭將成為觀察中國經濟政策的焦點”, *Radio France Internationale*, 13 May 2016.

<https://www.rfi.fr/tw/%E4%B8%AD%E5%9C%8B/20160513-%E5%8D%97%E5%8C%97%E9%99%A2%E4%B9%8B%E7%88%AD%E5%B0%87%E6%88%90%E7%82%BA%E8%A7%80%E5%AF%9F%E4%B8%AD%E5%9C%8B%E7%B6%93%E6%BF%9F%E6%9Z%BF%E7%AD%96%E7%9A%84%E7%84%A6%E9%BB%9E>. Accessed 5 May 2023.

¹⁴ “客座评论：一个平庸的寡头集团出现了”，*德国之声中文网*，15 March 2023，

<https://www.dw.com/zh/%E5%AE%A2%E5%BA%A7%E8%AF%84%E8%AE%BA%E4%B8%80%E4%B8%AA%E5%B9%B3%E5%BA%B8%E7%9A%84%E5%AF%A1%E5%A4%B4%E9%9B%86%E5%9B%A2%E5%87%BA%E7%8E%B0%E4%BA%86/a-64993485>. Accessed 5 May 2023.

¹⁵ Lieberthal and Oksenberg 1988; Shih, Adolph, and Liu 2012; Francois et al. 2023.

¹⁶ Naughton, 2016.

¹⁷ Baum 1996.

However, delegation to the Premier was never absolute and could be revoked, because the Party remains the ultimate authority. After Jiang Zemin 江泽民 assumed office in 1989, successive General Secretaries maintained top positions but with different practices in delegation. Hu Jintao 胡锦涛 was regarded as a hands-off leader who rarely intervened in economic affairs.¹⁸ By contrast, Xi Jinping established a dynamic, hands-on approach to the exercise of power. Although Li Keqiang daily managed the economics portfolio, Xi introduced new central coordinating bodies to oversee economic policy and imposed immediate constraints on the Premier's decision-making than did previous administrations. Scholars concurred that these institutional changes were relatively radical in the context of the decades-long practice of delegation in China.¹⁹

Despite Xi's intervention, as noted above, a discernible conflict of opinions between Xi and Li Keqiang has emerged. This study primarily centres on state–market orientation (SMO) by delineating a spectrum: the state-centric pole advocates increased government and party involvement in economic governance; the market-centric pole emphasizes the role of market mechanisms and minimizes state intervention. Underlying this spectrum is a debate over 'the state advances, the private retreats' argument.²⁰ The crux of the controversy is related to the relative stagnation of the private sector following extensive policy interventions after the global financial crisis, contrasted with the expansion of the state-owned sector. This issue stands as a focal point in China's political and economic governance.

3. Data, Methods and Results

We obtained text data from the Database of Xi Jinping's Important Speech Series (*xijinpings xilie zhongyao jianghua shujuku*, 习近平系列重要讲话数据库) for Xi Jinping,²¹ the official website of the State Council for Li Keqiang,²² and Li Qiang Activity Report Special Page at the Chinese Communist Party News Network for Li Qiang.²³ The Xi Jinping database is a web-based source of related speeches and reports. Coverage begins on 15 November 2012, the day that Xi Jinping took office as the General Secretary of the CCP. Articles include speeches, activity reports and field visits, among others. The State Council website and Li Qiang's Special Page collect the Premiers' political meetings, speeches and other activities, including local and foreign visits.

As the central motivation is measuring economic policy orientation, we use articles that include the following words for baseline estimation: economy (*jingji*, 经济), finance (*jinrong*, 金融), commerce (*shangye*, 商业), firm (*qiye*, 企业), enterprise (*gongsi*, 公司), industry (*chanye*, 产业),

¹⁸ Lampton 2014.

¹⁹ Heilmann and Stefan eds. 2016; Shirk 2022.

²⁰ Du, Liu and Zhou 2014; Johansson and Feng 2016; Lardy 2019.

²¹ <http://jhsjk.people.cn/> (Final access on November 4th 2023).

²² <https://www.gov.cn/> (Final access on March 10th 2023).

²³ <http://cpc.people.com.cn/GB/64192/448521/index.html> (Final access on December 5th 2023).

employment (*jiuye*, 就业) and income (*shouru*, 收入). After screening, we obtained 5,184 articles for Xi Jinping from 15 November 2012, to 31 October 2023; 3,537 articles for Li Keqiang from 15 March 2013 to 11 March 2023; and 95 articles for Li Qiang from 12 March 2023 to 17 October 2023.

Using these datasets, we measure SMO using latent semantic scaling (LSS), a semi-supervised machine learning method.²⁴ In LSS, a small number of seed words are set, and word-level polarity scores are calculated based on the semantic distance between words as measured by cosine similarity. Using the word-level polarity score, the document-level polarity score is obtained by summing the frequency of appearance of all words in an article divided by the number of the words in the article. In recent years, examples of analyses using LSS spread to a wider range of social sciences.²⁵

The advantages of the LSS method are as follows: the method (1) can be implemented in fields without representative dictionaries, (2) does not require document-level training data (a requirement of supervised learning) and (3) does not require posterior interpretation (a challenge for unsupervised learning). The first point is particularly beneficial for the current report, because no existing dictionaries measure SMO.

We follow the standard procedures and set the seed words for the LSS (Table 1).²⁶ This indicator is designed to highlight and accentuate divergent policy orientation, specifically in (1) ownership contrast between SOEs and private enterprises; (2) emphasis on state intervention versus market mechanism with lean government²⁷; and (3) policy objective pursuing a path of scale expansion versus promoting new start-ups and efficiency. The main intention is to assess the evolution of disparities in policy orientations over time, as of July 2016, by employing opposing keywords associated with Xi and Li Keqiang in their remarks on SOEs, as referenced in the Introduction.

We refer to this indicator as SMO; moreover, it can be interpreted as gauging the degrees of *Xi Jinping-ness* (positive score) and *Li Keqiang-ness* (negative score). Appendix Table 1 presents article-level estimation results for the top (most state-oriented) and bottom (most market-oriented) 20 articles. The majority of the state-oriented articles are from Xi (13/20), whereas the most market-oriented articles are predominantly by Li Keqiang (18/20).

[insert Table 1 here]

²⁴ Watanabe 2021, 82.

²⁵ Trubowitz and Watanabe 2021; Brazys, Dukalskis, and Müller 2022; Zollinger 2022. In practice, the R *Quanteda* package is used to implement the analysis. See Benoit et al 2018.

²⁶ Watanabe 2021: 94-95.

²⁷ “Streamline administration and delegate power” (*jianzheng fangquan*, 简政放权) is another important initiative which is initiated since May 2015. “李克强出席国务院推进简政放权放管结合职能转变工作电视电话会议并讲话”, 12 May 2025, Xinhua News Agency, http://www.xinhuanet.com/politics/2015-05/12/c_127793459.htm. Accessed 3 May 2023.

Figure 1 presents the estimated LSS score over time. At the onset of the Xi Jinping administration in 2013, the disparity in policy orientations between Xi and Li Keqiang was relatively small. However, the divergence between the two became most apparent in 2016–2017. While Xi’s stance remained consistent, Li Keqiang’s tone exhibited significant fluctuations, indicating his periodic engagement in a time-limited, campaign-style policy mobilization.²⁸ We found no compelling evidence of a negative correlation between the two tones at the monthly or quarterly level.²⁹ This finding suggests that Li Keqiang’s wave of market-oriented tones is not explicitly intended to counteract Xi’s concurrent state-oriented tone. Post-2018, during Xi’s second term, Li Keqiang’s tone adopted a relatively moderate stance. Beyond 2020, although discernible differences persist in tones, a certain level of convergence appears to exist. Premier Li Qiang, who assumed office in March 2023, exhibited a pronounced state-oriented tone, albeit based on a limited sample size.

[insert Figure 1 here]

Table 2 presents the descriptive statistics for the estimated LSS scores of the leaders. Across this period, the mean LSS scores for Xi Jinping and Li Keqiang are 0.24 and -0.36 , respectively, which indicates a substantial difference.³⁰ In the first period, a large disparity between Xi and Li Keqiang is evident (mean gap: 0.71; $0.27 - (-0.44)$). Although the gap narrows in the second period as their tones converge, it remains substantial at 0.45 ($0.21 - (-0.24)$). Notably, Xi’s average orientation tends towards neutrality, which shifts from 0.27 in the first term to 0.14 in the third term. The *F*-test results, which assesses statistical differences in tone between them, underscore a notable divergence during the first two terms. In the third term, however, after Li Qiang took office, the statistical significance in the difference between the General Secretary and the Premier diminished. We cannot reject the null hypothesis, which suggests that the mean difference in tones between Xi and Li Qiang is zero. This outcome supports the widely held belief that Li Qiang, as one of loyalists of Xi, lacks a distinctive policy orientation in terms of SMO.³¹

[insert Table 2 here]

Li Keqiang’s campaign-style policy mobilization is manifested in his signature project: ‘mass entrepreneurship, mass innovation’ (*dazhong chuangye, wanzhong chuangxin* 大众创业, 万众创新).³² In particular, during 19–23 October 2015, the inaugural ‘mass entrepreneurship, mass

²⁸ Perry 2011.

²⁹ See Appendix Figure 2.

³⁰ Appendix Figure 3 presents distribution of the LSS score by leader.

³¹ Pei 2023.

³² Gao and Mu 2021.

innovation' week witnessed the initiation of market-oriented outreach efforts.³³ The relevant policies led to a notable shift in the overall tone towards the market-oriented side. To assess the impact of the campaign weeks, we conducted weekly-level ordinary least squares estimations (Table 3). The results indicate that during the 'mass entrepreneurship, mass innovation' weeks (from 2015 to 2022), Li Keqiang's tone shifted approximately by 0.45 towards a market-oriented direction, while we found no discernible effect on Xi's tone. Unsurprisingly, Li Keqiang's tone becomes more market-oriented in weeks where he engages in activities to encourage the development and establishment of private enterprises. If Xi and Li Keqiang shared a common policy objective, then the coefficient of the week dummy for both leaders should be negative, because no reason would exist to disregard the Premier's initiative. However, the findings suggest a divergence between two leaders both in terms of policy orientation and activity.

[insert Table 3 here]

Finally, we examine the influence of the divergence between Xi and Li Keqiang on the real economy. It is plausible that the gap in policy orientations of the two most important policy makers implies potentially divergent policy directions, generating a degree of political uncertainty. Previous studies suggest that heightened political uncertainty tends to exert a negative influence on corporate investment behaviour.³⁴ Particularly in the Chinese context, it has been argued that SOEs exhibit pronounced responses to political uncertainty due to their alignment with government policies.³⁵ Table 4 presents the results of analysis on panel data of Chinese listed firms in terms of the impact of the tone difference (*Xi_Li_Gap*) on the investment ratio (*IoverK*) of firms in the subsequent quarter.³⁶ The findings consistently reveal a negative association between tone difference and investment ratio and a statistically significant negative effect on SOEs. This result suggests divergence in policy orientation has negative impact on real economic activities.

[insert Table 4 here]

4. Conclusion

This study has shown through a semi-supervised text model that Li Keqiang clearly favoured

³³ The LSS score reaches -5.12 at the following article: “李克强:坚持创新驱动 扎实推进“双创”不断激发市场活力潜力和社会创造力”, Chinese Government Network, 19 October 2015, https://www.gov.cn/guowuyuan/2015-10/19/content_2950001.htm. Accessed 6th December 2023.

³⁴ Julio and Yook 2012; Gulen and Ion 2016; An et al 2016.

³⁵ An et al 2016: 184-185.

³⁶ See appendix note for detail of data and variables.

market-oriented policies but gradually converged into Xi Jinping's preference for more state-led approaches. In other words, the divergence in preference between the two most important decision-makers diminished as Li Keqiang gradually shifted away from his original stance. Our analysis also indicates that Li's distinct policy orientation, partly stemming from his institutional role as Premier, has not been inherited by his successor in Xi's third administration. To the best of our knowledge, this represents the first attempt to quantitatively measure the differences in policy orientation between Xi Jinping, Li Keqiang, and Li Qiang.

We acknowledge several limitations about the scope of our analysis. First and foremost, the range of Li Keqiang's policy orientation extends well beyond the state–market dimension. Alongside promoting greater marketization in economic management, his policy priorities encompass advocating for openness to the international economy and implementing reforms in broad areas of governance, such as domestic migrants, microenterprises, start-ups and e-commerce.³⁷ Second, we concede that a comprehensive evaluation of Li's preferences, achievements, and limitations will require a deeper and extended examination of Li Keqiang's entire political career.³⁸

Nonetheless, this study carries several implications for the literature. First, it presents empirical evidence contributing to the ongoing discussion over the evolution of Chinese elite politics under Xi, highlighting a significant initial divergence followed by convergence in policy orientations within the leadership.³⁹ Second, and relatedly, this study offers a quantitative measure of the division of responsibility between the General Secretary and Premier in economic policy-making by shedding light on the two leaders' distinct policy positions and the impacts on the real economy.⁴⁰ Finally, this study proposes an empirical approach for the real-time analysis of policy orientations among key policy-makers within the incumbent administration. This approach can serve as an indicator of potential shifts in policy priorities and reform direction.

³⁷ “Li Keqiang's Legacy: A Recommitment to Reformism”, *The Diplomat*, 28 February 2023, <https://thediplomat.com/2023/02/li-keqiangs-legacy-a-recommitment-to-reformism/>; “Former Chinese premier Li Keqiang's legacy in 4 areas deserves attention”, *South China Morning Post*, 31 October 2023, <https://www.scmp.com/comment/letters/article/3239680/former-chinese-premier-li-keqiangs-legacy-four-areas-deserves-attention>. Accessed 5th December 2023.

³⁸ Wong 2016.

³⁹ Wu 2023.

⁴⁰ Francois et al. 2015; Heilmann and Stefan eds. 2016; Heilmann 2017.

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Tables

Table 1. Seed Words for the Latent Semantic Scaling method

Dimension	State-oriented words (+1)	Market-oriented words (-1)
Ownership	‘国有’ (<i>guoyou</i> , state-owned) ‘全民所有’ (<i>quanmin suoyou</i> , owned by the whole people)	‘民营’ (<i>minying</i> , private) ‘私营’ (<i>siying</i> , private)
Mechanism	‘引导’ (<i>yindao</i> , guide) ‘领导’ (<i>lingdao</i> , lead)	‘市场机制’ (<i>shichang jizhi</i> , market mechanism) ‘简政放权’ (<i>jianzheng fangquan</i> , streamline administration and delegate power)
Objective	‘做大’ (<i>zuoda</i> , enlarge) ‘做强’ (<i>zuoqiang</i> , strengthen)	‘创业’ (<i>chuangye</i> , start-up) ‘增效’ (<i>zengxiao</i> , improve efficiency)

Table 2. Summary Statistics of State–Market Orientation

	Xi Jinping			Li Keqiang			Li Qiang			F test
	N	Mean	SD	N	Mean	SD	N	Mean	SD	
Full period	5,184	0.24	0.68	3,537	-0.36	1.3	95	0.2	0.79	F=420.894***
1st period	2,648	0.27	0.69	2,099	-0.44	1.3				F=575.587***
2nd period	2,536	0.21	0.67	1,438	-0.24	1.1				F=247.569***
3rd period	205	0.14	0.58				95	0.2	0.79	F=0.6

Note: Statistical significance markers represent * $p < 0.1$; ** $p < 0.05$; and *** $p < 0.01$.

Table 3. Campaign-Style Policy Promotion by Li Keqiang

	<i>Dependent variable:</i>	
	(1) Xi Jinping	(2) Li Keqiang
Mass innovation week dummy	0.037 (-0.105)	-0.451** (-0.203)
Year Fixed effects	Yes	Yes
Monthly Fixed effects	Yes	Yes
Observations	565	491
R-squared	0.099	0.13
Adjusted R-squared	0.061	0.089
Residual Std. Error	0.383 (df = 541)	0.727 (df = 468)
F Statistic	2.583*** (df = 23; 541)	3.181** (df = 22; 468)

Notes: Standard errors are reported in parentheses. Statistical significance markers represent $p < 0.1$; ** $p < 0.05$; and *** $p < 0.01$. The mass innovation week dummy is a dummy variable that takes the value of 1 for the following periods: October 19-23, 2015; October 12-18, 2016; September 15-21, 2017; October 9-15, 2018; June 5-11, 2019; October 15-21, 2020; October 19-25, 2021; September 13-19, 2022.

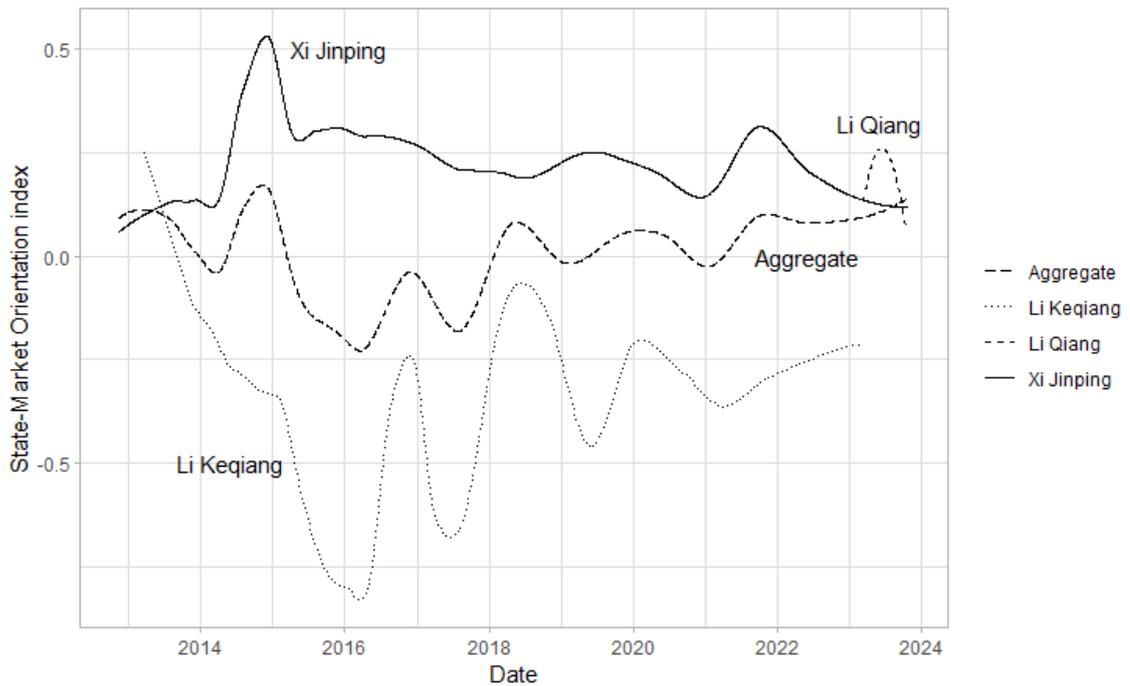
Table 4. Xi and Li Gap and Firm Investment

	<i>Dependent variable:</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
	IoverK	IoverK	IoverK	IoverK	IoverK	IoverK
	Full	SOE	non-SOE	Full	SOE	non-SOE
L.xi_li_gap	-0.0995 (0.0945)	-0.146** (0.0412)	-0.0826 (0.115)	-0.0750 (0.0574)	-0.103* (0.0347)	-0.0653 (0.0661)
L.tobin				0.0313* (0.0106)	0.0132 (0.0256)	0.0315* (0.0124)
cashflow				0.0122* (0.00455)	0.0102 (0.00547)	0.0126* (0.00409)
sales_growth				0.000655* (0.000216)	0.000385 (0.000312)	0.000626 (0.000276)
gdp_growth				0.327*** (0.0351)	0.191** (0.0398)	0.378*** (0.0413)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	41629	11993	29403	34205	8843	25186
R-squared	0.384	0.358	0.376	0.404	0.378	0.400

Notes: The dependent variable (IoverK) is the investment ratio and the independent variable L.xi_li_gap is the logarithm of the difference between Xi and Li Keqiang's index as estimated by LSS. Samples are Chinese listed companies in manufacturing sector. Standard errors are clustered at the firm-quarter level, and reported in parentheses. Statistical significance markers represent * 0.10, ** 0.05, and *** 0.01.

Figure

Figure 1. State–Market Orientation by Leader



Source: Authors' calculations.

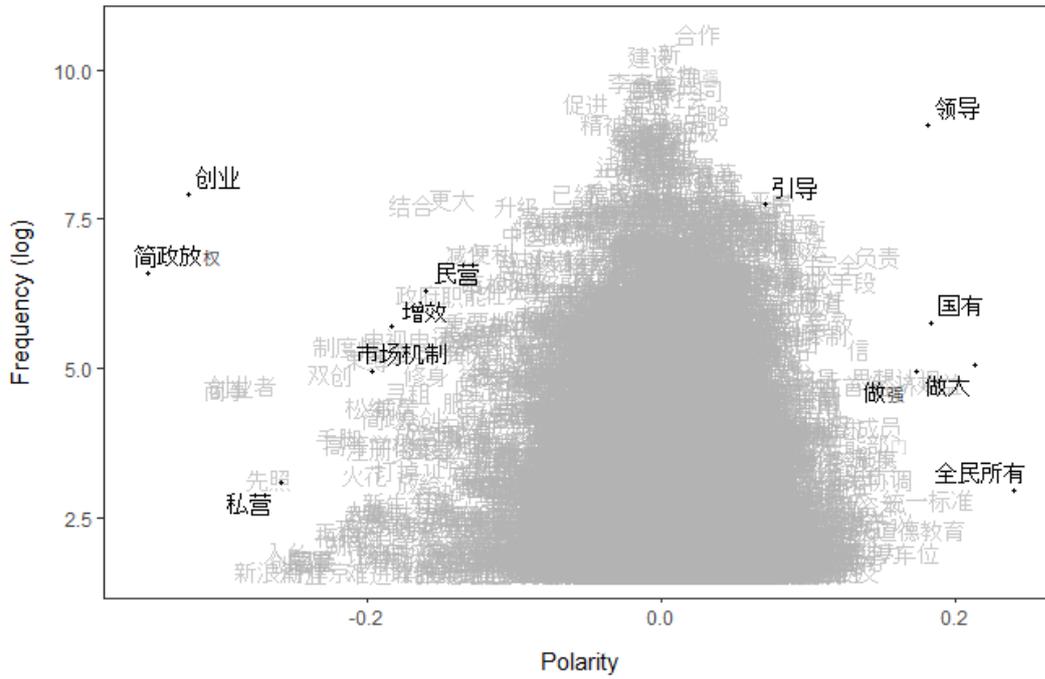
Supplemental materials (Appendix figure, table and note)

Appendix Table 1. Article-level result (top and bottom Latent Semantic Scaling scores)

(A) Highest 20 articles (most state-oriented articles)			
Title	Date	Who	LSS score
习近平文艺不能当市场的奴隶	2014-10-15	Xi Jinping	5.51
习近平1.25谈媒体融合发展十大“金句”	2019-03-05	Xi Jinping	5.43
李克强“现场办公”政府要与企业共享“大数据”	2014-07-25	Li Keqiang	4.54
习近平不应把一己之利凌驾于人类利益之上	2019-11-05	Xi Jinping	4.15
习近平谈媒体融合发展金句用主流价值导向驾驭“算法”	2019-03-15	Xi Jinping	3.85
习近平加快推动媒体融合发展构建全媒体传播格局	2019-03-15	Xi Jinping	3.68
李克强赞环保企业理念“化污泥为资源”	2014-07-24	Li Keqiang	3.59
习近平让发展成果更多更公平惠及全体人民	2022-01-17	Xi Jinping	3.06
习近平两岸文化交流大有文章可做	2015-03-04	Xi Jinping	3.06
英国各界热切期待李克强总理访英	2014-06-16	Li Keqiang	2.80
无人驾驶航空器飞行管理暂行条例	2023-06-29	Xi Jinping	2.78
李克强与默克尔共同发出声音维护多边主义和自由贸易规则	2018-05-24	Li Keqiang	2.77
总理点赞中国移动研发新技术破解共享单车乱停放难题	2017-07-31	Li Keqiang	2.76
习近平主持召开中央网络安全和信息化领导小组第一次会议	2014-02-27	Xi Jinping	2.73
李克强直达资金每一笔钱都要用得其所	2021-04-27	Li Keqiang	2.69
经中央军委主席习近平批准四总部发布新修订的《军队领导干部经济责任审计规定》	2014-10-16	Xi Jinping	2.69
习近平总体布局统筹各方创新发展努力把我国建设成为网络强国	2014-02-28	Xi Jinping	2.68
习近平谈新闻舆论工作治国理政、定国安邦的大事	2016-11-08	Xi Jinping	2.63
英两家顶级智库搭台倾听中国总理声音	2014-06-19	Li Keqiang	2.60
中央军委主席习近平签署命令发布新修订的《军队审计条例》	2016-12-21	Xi Jinping	2.58
(B) Lowest 20 articles (most market-oriented articles)			
Title	Date	Who	LSS score
李克强以创业支撑新型城镇化	2015-09-24	Li Keqiang	-9.64
李克强让创新创业“种苗”长成一望无际“森林”	2015-09-12	Li Keqiang	-8.51
总理鼓励的待业大学生变成了创业领头人	2016-02-02	Li Keqiang	-7.58
李克强推动“有效市场”和“有为政府”更好结合	2021-06-03	Li Keqiang	-7.37
李克强鼓励创业者盖茨和乔布斯都从小公司起步	2013-12-27	Li Keqiang	-7.35
李克强一个大众创业的形态正在形成	2014-09-09	Li Keqiang	-7.35
李克强到访这个雪域高原的“双创”中心深意何在？	2018-07-28	Li Keqiang	-7.02
做好今年放管服改革，总理要求做到这五个“为”	2017-06-13	Li Keqiang	-6.69
李克强出席全国大众创业万众创新活动周	2019-06-13	Li Keqiang	-6.61
李克强简政放权、减税降费都属供给侧结构性改革	2017-04-18	Li Keqiang	-6.57
习近平致2013年全球创业周中国站活动组委会的贺信	2013-11-08	Xi Jinping	-6.45
李克强科技创新要“顶天立地”	2015-07-28	Li Keqiang	-6.37
李克强不是每个创业者都能拿到天使投资，但要让每个创业者都能享受天使服务 李克强 中国政府网	2015-09-12	Li Keqiang	-6.34
李克强主持召开国务院常务会议（2014年6月4日）	2014-06-04	Li Keqiang	-6.15
李克强“实事求是、敢为人先”这8个字很重要	2014-07-03	Li Keqiang	-6.15
李克强简政放权就是以政府让利换取市场红利	2016-05-23	Li Keqiang	-6.13
习近平祝贺2013年全球创业周中国站开幕	2013-11-08	Xi Jinping	-5.74
李克强要用发展“新经济”的思路建设“新芦山”	2016-04-25	Li Keqiang	-5.72
李克强勉励创业创新者这里有荒凉的沙漠，这里却没有荒凉的人生_总理 中国政府网	2018-06-05	Li Keqiang	-5.61
李克强下一步要更大力度简政、减税、减费	2018-09-28	Li Keqiang	-5.57

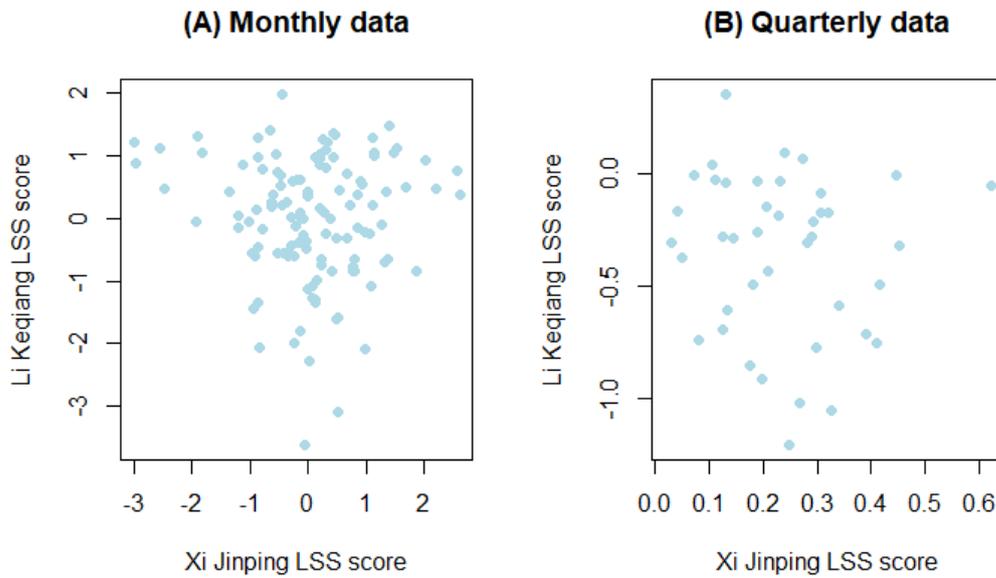
Source: Authors' calculations.

Appendix Figure 1. Word-level polarity



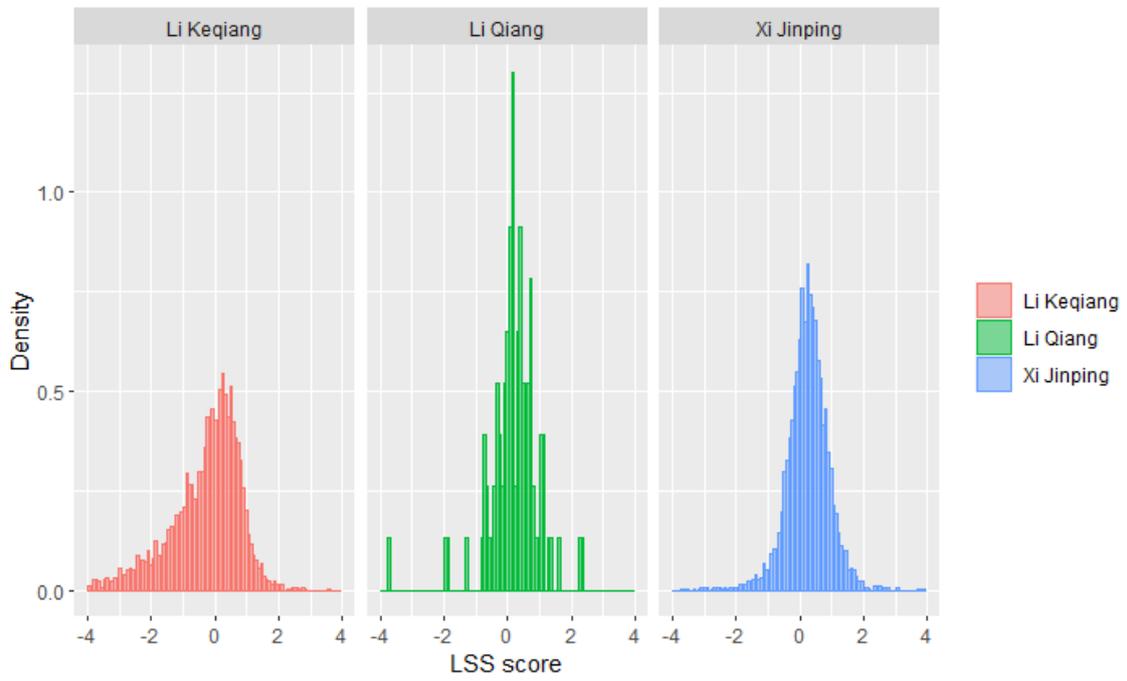
Source: Authors' calculations.

Appendix Figure 2. Latent Semantic Scaling score correlation



Note: The monthly correlation coefficient is -0.05 , and the quarterly correlation coefficient is -0.09 .

Appendix Figure 3. Latent Semantic Scaling score distribution by leader



Source: Authors' calculations.

Appendix Notes on Firm-level Data and Estimation

The firm-level financial data in Table 4 were obtained from the China Stock Market & Accounting Research Database, which covers the first quarter of 2013 to the fourth quarter of 2019 (28 quarters in total). Data include listed firms in manufacturing sectors and exclude the financial, real estate and other non-manufacturing sectors, because the practices of firms significantly differ across sectors. We first exclude listed firms with abnormal financial conditions that received special treatment shares according to the stock listing rules. Furthermore, for inclusion in the estimation, a firm must exhibit missing observations for at least two years (eight quarters). We drop the top and bottom 1 per cent values of continuous variables to reduce the impact of outliers. Following these cleaning procedures, we obtain 2,190 unique firms with more than 40,000 firm-quarter observations for the entire period.

The calculated SMO for Xi and Li Keqiang is used to estimate the impact on firm investment behaviours. As a baseline, we adopt the model used by Gulen and Ion (2016) as follows:

$$\frac{Inv_{i,t}}{TA_{i,t-1}} = \alpha_i + \beta_1 \log(Xi_Li_Gap_{t-1}) + \beta_2 TQ_{i,t-1} + \beta_3 \frac{CF_{i,t}}{TA_{i,t-1}} + \beta_4 SG_{i,t} + \delta GR_t + QRT_t + \varepsilon_{it}$$

where i indexes firms and t indexes calendar quarters. The dependent variable $\frac{Inv_{i,t}}{TA_{i,t-1}}$ is the firm-level capital investment rate, where $Inv_{i,t}$ is firm i 's capital investment during period t normalized by total assets (TA) during the previous period, $t - 1$. Capital investment is a firm's cash payments for acquiring and constructing fixed, intangible and other long-term assets. We exclude interest on debts raised for the acquisition and construction of fixed assets and the rental for fixed assets under a finance lease.

The key variable, $Xi_Li_Gap_{t-1}$ is calculated by Xi's score minus Li's score at time $t - 1$. We controlled for several financial and macroeconomic factors, such as Tobin's Q (TQ), operating cash flow (CF), sales growth (SG) and GDP growth rate (GR). Specifically, TQ is measured as market value of equity + book value of assets - book value of equity + deferred taxes / book value of assets. CF is operating cash flow scaled by TA , while SG is calculated as the year-on-year growth in quarterly sales, controlling for investment opportunities. GR is the year-on-year real GDP growth rate. Additionally, α_i is the firm fixed effects, and QRT contains a set of quarterly dummy variables to control for capital investment seasonality. We cannot control for time fixed effects, because they are collinear with the Xi_Li_Gap index, the key variable. Following Gulen and Ion (2016), standard errors are clustered at the quarter and firm-levels to correct for potential cross-sectional and serial correlations in the error term. The results are robust to standard errors clustered at the year-quarter level and are available upon request.