

COMPARATIVE CORPORATE GOVERNANCE: WHY SINGAPORE'S TEMASEK MODEL IS NOT REPLICABLE IN CHINA

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As China enters into an era of slower growth, the party-state has begun to prioritize the reform of state-owned enterprises. Specifically, it has been frequently suggested that the Chinese state sector should be restructured along the likes of Singapore's Temasek Holdings. This paper seeks to critically investigate the viability of this suggestion. It concludes that the Temasek Model is not replicable in China because of the latter's entrenched institutional particularities. Specifically, the function of state-owned enterprises, the power that they hold, the incidence of corruption, and the absence of a political will are crucial factors that support this conclusion. Ultimately, this conclusion also bears a further theoretical implication insofar as it confirms the path dependence phenomenon that has been often raised in the law and economics literature.

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I. INTRODUCTION

China's rise to economic prominence has been called "one of the most remarkable aspects of the era of capitalist globalization."¹ Since the advent of market reforms in 1978, China has not only delivered a "near 10 percent average growth rate for three decades,"² but has also cemented its place as a global superpower. While this phenomenal development is attributable to various factors, few would dispute that state-owned enterprises (SOEs) played a central role.³ Notwithstanding their importance, it is common knowledge that SOEs remain inefficient.⁴ In 2011, 22% of SOEs were loss-making⁵ and the real rate of return on capital of Chinese SOEs was not only low, but in some cases, negative.⁶ These economic statistics have not gone unnoticed by the Chinese party-state. Consequently, with the advent of the "new normal" of slower growth, the party-state has recently declared SOE reform a priority⁷ in its quest to achieve a "moderately prosperous society."⁸

1. PETER NOLAN, IS CHINA BUYING THE WORLD? 136 (2012).

2. JOE STUDWELL, HOW ASIA WORKS: SUCCESS AND FAILURE IN THE WORLD'S MOST DYNAMIC REGION 184–185 (2013).

3. The importance of these state-owned enterprises can be surmised from how Premier Li Keqiang described them as the "backbone of the national economy." Hu Yongqi, *Central Government Targets to Boost SOEs' Profitability*, CHINA DAILY (Dec. 6, 2016, 7:11 AM), http://www.chinadaily.com.cn/china/2016-12/06/content_27581279.htm. Professor Jiangyu Wang described them as the "most important pillar of the Chinese economy." Jiangyu Wang, *The Political Logic of Corporate Governance in China's State-Owned Enterprises*, 47 CORNELL INT'L L.J. 631, 635 (2014).

4. See Hu Yongqi, *supra* note 3 ("Major economic indicators showed that SOEs are improving the status quo in terms of gross income and net profit this year, but still lag behind private enterprises in profitability and rate of return, said Liu Shengjun, vice-president of CEIBS Lujiazui Institute of International Finance in Shanghai.")

5. SARAH Y. TONG, E. ASIA INST., BACKGROUND BRIEF NO. 1116, CHINA'S NEW ROUND OF STATE-OWNED ENTERPRISE REFORMS ¶ 3.7 (2016). This may be contrasted against the fact that only 5.9% of private enterprises are loss-making. *Id.*

6. *Id.* ¶ 3.9.

7. COMMUNIST PARTY OF CHINA, THE 13TH FIVE-YEAR PLAN FOR ECONOMIC AND SOCIAL DEVELOPMENT OF THE PEOPLE'S REPUBLIC OF CHINA: 2016–2020, pt. III, ch. 11, § 1 (Compilation & Translation Bureau, Cent. Comm. of the Communist Party of China trans., 2016) [hereinafter FIVE YEAR PLAN], <http://en.ndrc.gov.cn/newsrelease/201612/P020161207645765233498.pdf>.

8. *Id.*, pt. I, ch. 2.

Of the various proposals for reform, one prominent suggestion is to model Chinese SOEs after Singapore's Temasek Holdings.⁹ This is unsurprising considering the superficial similarities between China and Singapore—both are effectively one-party states, both are dominated by ethnic Chinese majorities, and both hold allegiance to some form of Confucian value system¹⁰ Indeed, the party-state has been persuaded by this logic. To display its seriousness, the government has expressed its intention to establish 30 “Temaseks” by 2020,¹¹ and has already established 2 experimental “Temaseks.”¹²

The implications of this proposed Temasekization are serious. For businesspersons who will invariably encounter these mega corporations in one way or another,¹³ Temasekization

9. See *id.*, pt. III, ch. 11, § 2 (“We will establish state capital investment and management companies through reorganization, allocate and utilize state capital more efficiently, and create effective platforms for its flow, reorganization, and structural redistribution.”); NAT'L DEV. & REFORM COMM., REPORT ON THE IMPLEMENTATION OF THE 2016 PLAN FOR NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT AND ON THE 2017 DRAFT PLAN FOR NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT 8 (2017) [hereinafter NDRC REPORT ON FIVE YEAR PLAN], http://online.wsj.com/public/resources/documents/NPC2017_NDRC_English.pdf (“we . . . made progress in the trials to establish the first group of state capital investment companies.”). This process will be referred to in this paper as “Temasekization.” The term “Temasekization” was first coined by Professors Li-Wen Lin and Curtis J. Milhaupt. Li-Wen Lin & Curtis J. Milhaupt, *We Are the (National) Champions: Understanding the Mechanisms of State Capitalism in China*, 65 STAN. L. REV. 697, 754 (2013).

10. See Stephan Ortmann & Mark R. Thompson, *China and the “Singapore Model,”* 27 J. DEMOCRACY 39, 39–43 (2016) (recounting Chinese interest in the “Singapore model” but noting “[s]uperficial similarities—that Singapore's population is predominantly ethnic-Chinese and that the ruling PAP has some Leninist features—mask important institutional differences . . .”).

11. See Tan Cheng-Han et al., *State-Owned Enterprises in Singapore: Historical Insights into a Potential Model for Reform*, 28 COLUM. J. ASIAN L. 61, 62–63 (2015) (“[R]ecently, the Chinese government decided that by 2020 the Singapore GLC Model would be replicated in China 30 times over . . .”); Zheng Yu, *China's State-Owned Enterprise Mixed Ownership Reform*, 6 EAST ASIAN POL'Y 39, 40 (2014) (“It is reported that the SASAC, inspired by the model of Temasek Holdings . . . will transform some 30 central SOEs into state capital management companies.”).

12. Zheng Yu, *supra* note 11, at 48.

13. This is so either because the businesspersons find themselves investing in China, or because the global Chinese SOEs are already operating on their shores. This latter phenomenon has been described by Peter Nolan as “China Buying the World.” NOLAN, *supra* note 1, at 132, 136.

entails modifying their business practices. For academics, Temasekization entails novel questions that will impact traditional theories: were law and finance theorists correct when they argued for the superiority of common law traditions like Singapore? Should law and development theorists start looking for a Singapore Consensus? Or will law and economics theorists prevail in predicting that China will be constrained by its path dependency?

Despite these significant implications, the current literature has never comprehensively addressed the issue of the Temasek Model's replicability. Instead, the current literature focuses discussion in three categories. The first category describes the Temasek Model or the Chinese Model or both,¹⁴ without analyzing the relationships between the two.¹⁵ The second category highlights various conditions required for the Temasek Model without analyzing whether they are present or absent in China.¹⁶ The final category normatively discusses why the Temasek Model should be replicated without discussing whether it can be.¹⁷ Although these contributions benefit the academic dialogue surrounding the Temasek Model, they

14. Such literature deals with, for instance, what the Singapore or China Models might generally entail.

15. See, e.g., Tan Cheng-Han, *The Beijing Consensus and Possible Lessons from the "Singapore Model"?*, in *THE BEIJING CONSENSUS?: HOW CHINA HAS CHANGED WESTERN IDEAS OF LAW AND ECONOMIC DEVELOPMENT* 69 (Weitseng Chen ed., 2017) (describing Singapore's path to development and the lessons that China may derive from it, but omitting a deeper analysis of the potential replicability of Singapore's developmental path in China); Deng Feng, *The Transformation of China's SOEs: Approaching a System of Crown Property*, 3 *PEKING U. L.J.* 1 (2015) (describing the Singapore Model and the Chinese Model without analyzing their replicability *inter se.*); Lin & Milhaupt, *supra* note 9, at 701 (describing the Chinese National Champions Model in detail without further analysis into the possible Temasekization of the Model).

16. See, e.g., Tan Cheng-Han et al., *supra* note 11, at 63 (discussing how Singapore's unique history and regulatory culture are closely intertwined with the Temasek model); Christopher Chen, *Solving the Puzzle of Corporate Governance of State-Owned Enterprises: The Path of Temasek Model in Singapore and Lessons for China*, 36 *NW. J. INT'L L. & BUS.* 303, 356–66 (2016) (arguing based on empirical findings that the Temasek model has been effective and could therefore be a promising model for reforms in China).

17. See, e.g., Lay-Hong Tan & Jiangyu Wang, *Modelling an Effective Corporate Governance System for China's Listed State-Owned Enterprises: Issues and Challenges in a Transitional Economy*, 7 *J. CORP. L. STUD.* 143 (2007) (proposing Singapore's Temasek model as an alternative for China to insider/outsider models, without providing a feasibility assessment).

remain insufficient for a question of such contemporary importance. Accordingly, this paper seeks to advance the literature by squarely addressing the question of whether Singapore's Temasek Model of corporate governance is replicable in China.

In order to ensure accurate conceptual insight and avoid over-generalizations, this paper focuses on Temasek's governance of its Government-Linked Corporations (GLCs),¹⁸ and not its other foreign assets. Further, this paper only considers the Temasek Model's replicability in regard to China's governance of the 96 non-financial central SOEs¹⁹ that come under the purview of the central State-owned Assets Supervision and Administration Commission (SASAC). This precludes discussion of the provincial SOEs organized under respective local governments, as well as the financial SOEs organized under the Central Huijin Investment Limited.²⁰

This paper proceeds in the following parts: Part II sets the paper's parameters by defining the key features of China's current National Champions Model and Singapore's Temasek Model. Part III analyzes whether the Temasek Model's key features are replicable in China. This is achieved through an analysis of China's present institutional setting and contextual particularities. Part IV discusses the implications of the preceding analysis on the path dependency theory found in the law and economics literature. Finally, Part V concludes and leaves the

18. Temasek officers consider Singapore companies to be GLCs if Temasek (i) appoints directors, (ii) is the largest shareholder, and (iii) holds at least a 20% share. James S. Ang & David K. Ding, *Government Ownership and the Performance of Government-Linked Companies: The Case of Singapore*, 16 J. MULTINATIONAL FIN. MGMT. 64, 72 (2006).

19. *Directory*, STATE-OWNED ASSETS SUPERVISION & ADMIN. COMM'N OF THE STATE COUNCIL, <http://en.sasac.gov.cn/directorynames.html> (last updated June 29, 2018). It should be noted that this number is likely to continue shrinking. In August 2016, the Chinese State Council announced its intention to regroup the current central SOEs to reach a final number of 80 competitive "national enterprises." *China to Further Regroup Central State Owned-Enterprises*, STATE COUNCIL OF CHINA (Aug. 23, 2016, 7:11 AM), http://english.gov.cn/policies/policy_watch/2016/08/23/content_281475423704259.htm.

20. The discussion relating to central SOEs may be applicable to provincial SOEs, except on a smaller scale. One should be cautious, however, of applying the analysis of this paper to financial SOEs, which require consideration of different factors such as their interaction with shadow banking, and their role in RMB internationalization.

reader with questions for further research. Ultimately, this paper shows that the Temasek Model is not replicable in China due to China's institutional setting. In turn, this conclusion confirms the path dependency theory of developmental economics.

II. THE MODELS: NATIONAL CHAMPIONS & TEMASEK

A. *National Champions Model*

Chinese reliance on SOEs stems from a long historical tradition that dates back to the *guandu shangban* enterprises of the Qing era.²¹ Since that era, many experimental reforms have changed and shaped the roles and operations of the Chinese state.²² The result is a complex machine filled with powerful mega corporations labelled “National Champions.”²³ Given that preexisting academic literature extensively details the National Champions model, this paper does not elaborate on it.²⁴ For present purposes, it suffices to highlight three key

21. See Madeleine Zelin, *The Firm in Early Modern China*, 71 J. ECON. BEHAV. & ORG. 623, 631–632 (2009) (describing the era of *guandu shangban* industry as the “first attempt at state directed industrialization.”).

22. See Curtis J. Milhaupt, *Chinese Corporate Capitalism in Comparative Context*, in THE BEIJING CONSENSUS? HOW CHINA HAS CHANGED WESTERN IDEAS OF LAW AND ECONOMIC DEVELOPMENT 275, 283 (Weitseng Chen ed., 2017) (“The SOE business groups in existence today are the result of a long process of experimentation with collaborative forms of production.”); Dylan Sutherland, *Policies to Build National Champions: China’s ‘National Team’ of Enterprise Groups*, in PETER NOLAN, CHINA AND THE GLOBAL BUSINESS REVOLUTION 67, 69–75 (2001) (recounting policy trials related to China’s largest emerging enterprise groups in the late twentieth century); Lin & Milhaupt, *supra* note 9, at 713–14 (describing the development of corporate groups in post-reform China). Unsurprisingly, the most radical reforms to the Chinese state sector occurred post-1978. For instance, Zhu Rongji’s 抓大放小 campaign in the 1990s led to the collapse of many small SOEs that did not operate in strategic industries. While it is true that this did not lead to a total collapse of the Chinese state sector, this move was still highly radical insofar as it showed that SOEs could fail—something that would probably have been unthinkable prior to that point of time.

23. Sutherland, *supra* note 23, at 68–69; see also Paul Guest & Dylan Sutherland, *The Impact of Business Group Affiliation on Performance: Evidence from China’s “National Champions,”* 34 CAMBRIDGE J. ECON. 617, 620–621 (2010) (describing the national champions groups in the context of a study on the performance of their corporate subsidiaries).

24. For a description of the Chinese state sector through the conceptual lens of corporate capitalism see Milhaupt, *supra* note 22. For a standard

features of the model: a dual track structure, the pervasiveness of state intervention, and the prevalence of state preference.

The first feature is a structural one: central SOEs operate under a dual track control structure. The first track is a standard formal corporate structure. Under this track, SASAC lies at the top of the ownership chain by owning, directly or indirectly, a majority stake in the 96 central SOEs.²⁵ Further down the chain, within each individual central SOE, are subsidiary entities vertically structured with a top holding company.²⁶ While each central SOE primarily operates in this vertical structure within a given industry or sector, they are also horizontally linked with each other through various devices such as contracts and joint venture projects.²⁷

Parallel to this formal corporate structure, the second control track is an informal Chinese Communist Party (CCP) hierarchy.²⁸ At every level of a central SOE's group hierarchy, there exists an equivalent-ranked party organization—a party group (*dangzu*), committee (*dangwei*), or subgroup (*dangzhibu*).²⁹ Within these party organizations, virtually every central SOE manager simultaneously holds a political rank that mirrors his or her corporate rank. For instance, the CEO, Vice CEO, and Chief Accountant could simultaneously hold political positions of party secretary, deputy party secretary, and secretary of the Discipline Inspection Commission within

textbook treatment of Chinese SOEs, see SHEN WEI, *CORPORATE LAW IN CHINA: STRUCTURE, GOVERNANCE AND REGULATION* 2.014–2.048 (2015). See generally Sutherland, *supra* note 23 (A useful, though somewhat dated, descriptive account of China's National Champions Model); Lin & Milhaupt, *supra* note 9 (The authors provide in-depth analysis into the inner workings of the National Champions Model, describing everything from their governance characteristics, organizational structures, links to the state, etc.).

25. Lin & Milhaupt, *supra* note 9, at 735 (“Initially, control shares in the SOEs were held by the ministries from which they had been created, which led to predictably negative results. The State Council experimented with different control structures for national SOEs, eventually leading to the creation of SASAC.”).

26. *Id.* at 711.

27. *Id.*

28. Milhaupt, *supra* note 22, at 287.

29. See Lin & Milhaupt, *supra* note 9, at 728 (“Party organization exists within each level of the business group hierarchy.”); Jiangyu Wang, *supra* note 3, at 655 (“Each SOE has at least one Party organization, known either as Party Group (*dangzu*), Party Committee (*dangwei*), Party Subgroup (*dangzhibu*).”).

their respective party organizations.³⁰ Indeed, the top SOE managers tend to hold other prestigious political offices in the state organs, such as in the National People's Congress (NPC) or the Chinese People's Political Consultative Conference, or in bodies such as the National Congress of the CCP.³¹

The main implication of this dual track control structure leads to the second feature—central SOEs tend to be subject to pervasive party-state intervention, either via formal SASAC intervention, or through informal political influence over managers when formal means are inconvenient. Such intervention is not limited to traditional intervention in governance matters such as board appointments. Rather, the party-state intervenes in all aspects of the central SOEs, including operational matters such as determining the company's internal organizational structure and what business the SOE conducts. A stark example of the latter occurred in 2009 when the party-state, in pursuit of technological advancement, forced China Mobile “to adopt and develop a new Chinese technical standard, leaving its weaker competitors the relatively easy task of selling phones to customers on the incumbent GSM system.”³² An example of the former occurred when the State Council blanket ordered all central SOEs to establish standalone legal counsel departments in June 2016.³³ Indeed, party-state intervention in SOEs is so ingrained that the Constitution of the Communist Party of China directs that, “[m]aintaining the Party's political leadership over SOEs is a principle of fundamental importance that shall never be shaken and undermined.”³⁴

The party-state's influence over central SOEs is not without benefit. Indeed, the third feature of central SOEs is that

30. See TONG, *supra* note 5, ¶ 4.10; Lin & Milhaupt, *supra* note 9, at 737 (“Institutionalizing party penetration of corporate roles is formal policy . . . a corporate manager of a given rank typically holds a position of equivalent rank in the party system.”).

31. See Lin & Milhaupt, *supra* note 9, at 700, 727 (noting that national champion managers simultaneously hold top political roles, forming an “institutional bridge” to the government).

32. STUDWELL, *supra* note 2, at 237.

33. *Government Agencies, SOEs to Hear More from Legal Counsels*, STATE COUNCIL OF CHINA (June 16, 2016, 9:10 PM), http://english.gov.cn/news/top_news/2016/06/16/content_281475373290404.htm.

34. Jiangyu Wang, *supra* note 3, at 652.

they enjoy substantial preferential treatment from the party-state. Such preferential treatment takes a variety of forms. Central SOEs receive massive unfair advantages via official means such as tax breaks and subsidies.³⁵ For instance, one study estimated that from 2001 to 2009, SOEs received land subsidies worth over four trillion Yuan.³⁶ Additionally, central SOEs also receive various benefits via unofficial channels. These commonly take the form of preferential access to financing, with the party-state instructing state banks to extend cheap loans.³⁷ They could also come in the form of “soft budget constraints,” which are, in essence, implicit guarantees that the party-state “stands ready to cover deficits that arise in their operation.”³⁸

B. *Temasek Model*

Founded in 1974,³⁹ Singapore’s Temasek Holdings Private Limited is an investment company⁴⁰ wholly owned by Singapore’s Ministry of Finance.⁴¹ An understanding of Singapore’s history is crucial to appreciating the original function of Temasek Holdings. Singapore first gained independence in 1965. As with any new state, Singapore was initially in a precarious economic position. Industrial infrastructure was weak, unemployment was high, and the country’s per capita GDP was

35. SHEN WEI, *supra* note 24, at 2.034.

36. *Id.*

37. See Li-Wen Lin, *Reforming China’s State-Owned Enterprises: From Structure to People*, 229 CHINA QUARTERLY 107, 112 (2017) (“Another key feature of China’s state capitalism is that most banks are controlled by central or local government and provide cheap financial resources to industrial SOEs.”). For a discussion of how even the shadow banking and informal finance industry favors SOEs, see KELLE S. TSAI, BACK-ALLEY BANKING: PRIVATE ENTREPRENEURS IN CHINA 27–38 (2002).

38. Milhaupt, *supra* note 22, at 291. For a comprehensive overview of the concept of “soft budget constraints,” see János Kornai, *The Soft Budget Constraint*, 39 KYKLOS 3 (1986).

39. *About Us*, TEMASEK, <https://www.temasek.com.sg/en/who-we-are/about-us.html> (last visited Sept. 17, 2018).

40. See S. Dhanabalan, Chairman, Temasek Holdings Private Ltd., Remarks at the 6th Mizuho Global Seminar 2010, ¶ 22 (May 17, 2010) (transcript available at <https://www.temasek.com.sg/en/news-and-views/newsroom/speeches/2010/remarks-by-s-dhanabalan-chairman-at-the-6th-mizuho-global-semina.html>) (describing Temasek’s “emergence as a respected international investment company.”).

41. *Id.* ¶ 13.

under four hundred U.S. dollars.⁴² At that time, the government of Singapore realized that encouraging foreign investment would be one of the quickest ways to resolve the economic crisis. In order to do so, the government had to generate confidence in foreign investors. The Singapore government's solution was simple—whenever there was any capital investment made in Singapore, it would share the risk of the venture by taking a minority stake in the project.⁴³ Under this policy, the government became a shareholder in many businesses. Over time, Singapore's government realized that there was a conflict in its dual role as business-owner and regulator.⁴⁴ Thus, Temasek Holdings was created in 1974 to take over the previously government-held shareholdings of these businesses. More than forty years later, Temasek Holdings has evolved into an international investment company with a net portfolio value of over 275 billion Singapore dollars.⁴⁵

At first glance, the Temasek Model shares the same vertical corporate structure as the National Champions Model. Just like SASAC, Singapore's Temasek Holdings plays the role of top holding company and owns various companies that are in turn the head of their own corporate groups.⁴⁶ The similarities, however, stop there. Underneath the surface of the formal corporate structure, the features of the Temasek Model are vastly different from the National Champions Model. Figure 1 below and the rest of this sub-part detail these features.

42. *Id.* ¶ 14.

43. *Id.*

44. *See id.* ¶ 15 (“As Singapore rapidly industrialized, the Government decided that its role should also change and evolve . . . [It] decided to separate its role as a policy maker, from its role as an owner of businesses.”).

45. TEMASEK HOLDINGS PRIVATE LTD., TEMASEK REVIEW 2017 6 (2017), <https://www.temasek.com.sg/content/dam/temasek-corporate/our-financials/investor-library/annual-review/en-tr-thumbnail-and-pdf/temasek-review-20171.pdf>.

46. Milhaupt, *supra* note 22, at 285. Just to give one example, Temasek Holdings owns a 52% stake in Singapore Telecommunications Ltd (Singtel). SINGAPORE TELECOMM. LTD., ANNUAL REPORT 2018 98 (2018), <https://www.singtel.com/content/dam/singtel/investorRelations/annualReports/2018/singtel-annual-report-2018.pdf>. In turn, Singtel is itself the head of an entire corporate group, which includes over 82 other subsidiaries operating all over the world. *Id.* at 237–44.

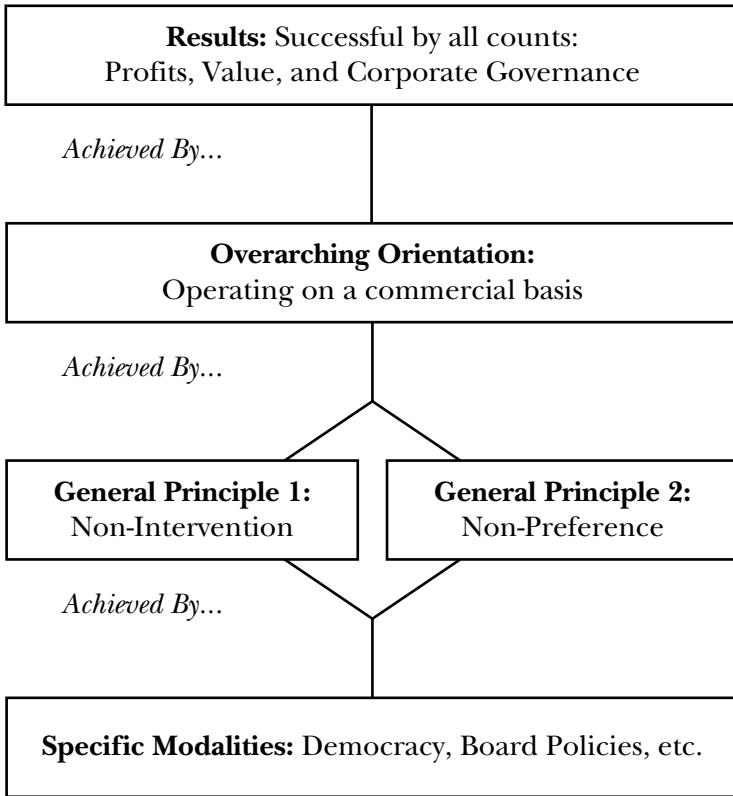


FIGURE 1: THE TEMASEK MODEL

The most apparent and striking feature of the Temasek Model is its success across many measures. In terms of pure market share, Temasek's GLCs account for a remarkable 37% of the value of the Singapore Exchange stock market.⁴⁷ In terms of profitability, empirical data has shown that Temasek's GLCs outperform non-GLCs on their return-on-equity ratio as well as their return-on-assets ratio.⁴⁸ In terms of corporate governance, Temasek's GLCs fare better than non-GLCs in traditional indicators such as board size, ratio of independent di-

47. See ISABEL SIM ET AL., NAT'L UNIV. SING. BUS. SCH., THE STATE AS SHAREHOLDER: THE CASE OF SINGAPORE 22 (June 2014), https://bschool.nus.edu.sg/Portals/0/docs/FinalReport_SOE_1July2014.pdf (averaging market capitalization data for the years 2008–2013).

48. Ang & Ding, *supra* note 18, at 76.

rectors, and separation of CEO and Chairman roles.⁴⁹ Finally, in terms of market valuation relative to book value of assets, the market tends to value Temasek's GLCs as much as 1% higher than non-GLCs on average.⁵⁰ Together, these factors reflect the success of the Temasek Model and indicate reasons why the Chinese Government desires to emulate the Model.⁵¹

It is possible that the success of the Temasek Model in Singapore resulted from fortuitous *external* factors unrelated to the model itself.⁵² However, this is unlikely considering Temasek's sustained performance throughout its forty-three year history, which spanned periods such as the 1997 Asian Financial Crisis and the 2007–2008 Global Financial Crisis.⁵³ If the reason for Temasek's success is *internal*, it naturally derives from the company's core tenets. In this regard, Temasek's core tenet is that it operates on the basis of "commercial principles."⁵⁴ That is, the government expects Temasek's GLCs to compete in the free market like private enterprises.⁵⁵ This commercial orientation is traceable back to the creation of Temasek Holdings in 1974. At that time, the government's original intention was to create Temasek Holdings as an entity

49. See Chen, *supra* note 16, at 325–61. The present author is well aware that these listed indicators are biased towards a Western conception of success. See Lin & Milhaupt, *supra* note 9, at 701 ("[S]cholars often begin and end their analyses by benchmarking the governance attributes of Chinese listed companies against global (which typically means U.S.) corporate governance standards and institutions."). Nevertheless, they remain indicative. Insofar as they are corroborated by the other objective measures such as market valuation and profitability, one can still draw the conclusion that the Temasek Model is successful generally.

50. See Ang & Ding, *supra* note 18, at 80 ("Singaporean GLCs also tend to manifest a higher debt-to-asset (leverage) ratio, at the 1% level, relative to non-GLCs.").

51. See Tan Cheng-Han, *supra* note 15, at 2.

52. One example of such external market factors is the level of market saturation at the time of entry of Temasek's GLCs into their respective sectors.

53. See TEMASEK HOLDINGS PRIVATE LTD., *supra* note 45, at 20 (graphically depicting the growth of Temasek's net portfolio value since its founding in 1974).

54. *Id.* at 4. For a skeptical view suggesting that Temasek operates with non-commercial objectives as well, see Wilson Ng, *The Evolution of Sovereign Wealth Funds: Singapore's Temasek Holdings*, 18 J. FIN. REG. & COMPLIANCE 6 (2010).

55. See Tan Cheng-Han, *supra* note 15, at 13–14; Chen, *supra* note 16, at 318–19 (describing Temasek's stake in firms in a range of industries).

interposed between itself and the GLCs for the very purpose of ensuring that the GLCs could operate on a commercial basis free from political pressures.⁵⁶ Today, this commercial orientation not only continues, but has even been constitutionalized in the Temasek Charter.⁵⁷ It therefore remains a core tenet of Temasek Holdings' operational practice.⁵⁸

This commercial orientation is only achievable because of Temasek's pursuit of two general principles, which appear in this paper as *non-intervention* and *non-preference*. The principle of non-intervention refers to how, beyond appointing Temasek's board, the Singapore Government refrains from intervening in Temasek's operations.⁵⁹ This means that the government not only refrains from intervening in the company's business decisions, but also does not appoint any other manager or personnel within Temasek Holdings.⁶⁰ Similarly, Temasek appoints the GLCs' boards but does not intervene any further.⁶¹ The principle of non-intervention is not mandated by law; nothing stops the government, as the sole shareholder, from intervening in Temasek's operations.⁶² Rather,

56. Chen, *supra* note 16, at 313.

57. TEMASEK HOLDINGS PRIVATE LTD., *supra* note 45, at 4.

58. *Id.*

59. *See id.* ("Neither the President of Singapore nor our shareholder, the Singapore government, is involved in our business decisions."); Chen, *supra* note 16, at 353 ("[T]here is no evidence that Temasek and its GLCs are pressed by the government to meet political objectives or afford other GLCs preferential treatment."); Tan Cheng-Han, *supra* note 15, at 88 ("Importantly, the government makes no attempt to appoint managers or other personnel to manage the companies and normally does not interfere in the management of GLCs.").

60. Tan Cheng-Han et al., *supra* note 11, at 88 ("The government makes no attempt to appoint managers or other personnel to manage the companies and normally does not interfere in the management of GLCs.").

61. *See* Tan Cheng-Han, *supra* note 15, at 88 ("Temasek states that it is an engaged shareholder that promotes sound corporate governance in its portfolio companies. This includes supporting the formation of high caliber, experienced, and diverse boards to guide and complement management leadership. Temasek's policy is not to direct the business operations or decisions of the companies in its portfolio and to leave this to their respective boards and management."); Tan Cheng-Han et al., *supra* note 11, at 89–90 ("Temasek's policy is not to direct the business operations or decisions of the companies in its portfolio, but to leave this to their respective boards and management.").

62. Tan Cheng-Han, *supra* note 15, at 89 ("While the Temasek model is intended to separate the government and the GLCs so as to enhance their

this principle is a result of a strong convention of governmental self-restraint built up over many years.⁶³

The second principle, non-preference, refers to how the government does not preferentially treat Temasek or its GLCs, as compared to other non-Temasek-linked companies.⁶⁴ The best evidence of this is the phenomenon of GLCs maintaining a significantly higher cash asset ratio than non-GLCs.⁶⁵ This is generally regarded as an unprofitable move because the more hard cash a company holds, the less they have to invest. This approach by GLCs cannot be explained unless GLCs are expected “to provide their own cash reserves against distress and are not expected to be financially dependent on the government.”⁶⁶ Furthermore, the principle of non-preference was exemplified in 2014 when Singtel, a prominent Singapore GLC in the telecommunications sector, was negligent in allowing a fire to break out in its Bukit Panjang Internet Exchange, which in turn caused service disruptions to end-users across Singapore. In response, the government did not show any favoritism by allowing Singtel off the hook, but instead levied a record fine of six million Singapore dollars against the company.⁶⁷

Various institutional means existing at both the national government level as well as the Temasek Holdings level maintain these two general principles. While the list of institutional means cannot be stated exhaustively, some representative measures may be mentioned. On the governmental level, oft-cited institutional features include Singapore’s strong culture against corruption,⁶⁸ as well as the presence of democratic

ability to be managed on a commercial basis without undue governmental interference, and to ensure that there are checks and balances within Temasek and each GLC, there is nothing to stop the Singapore government from interfering if it wishes to do so. However, there exists a strong convention built up over many years against such interference.”)

63. *Id.*

64. *See* Chen, *supra* note 16, at 351–53 (The author describes various instances in which the Singapore government exhibited its non-preference. He then goes on to conclude that “[i]n sum, there is no evidence that Temasek and its GLCs are pressed by the government to meet political objectives or afford other GLCs preferential treatment.”).

65. Ang & Ding, *supra* note 18, at 76.

66. *Id.* at 80.

67. Chen, *supra* note 16, at 351.

68. *See id.* at 362–63 (“Singapore is known for its strong law enforcement against graft and corruption.”); Tan Cheng-Han, *supra* note 15, at 86–87

checks in Singapore.⁶⁹ At the Temasek Holdings level, one institutional feature is the culture of accountability—Temasek not only voluntarily publishes an annual report to remain accountable to the public,⁷⁰ but has also established three layers of boards that provide added oversight.⁷¹

(The author details the development and application of Singapore's anti-corruption laws. Interestingly, he observes that "Singapore provides an example of how an economy that is prepared to adopt a zero-tolerance approach toward corruption can significantly eliminate it."). This culture of anti-corruption is due at least in part to the existence of strict black letter anti-corruption laws. *See* Prevention of Corruption Act 1993, c. 241 (Sing.) (One of the strictest aspects of Singapore's anti-corruption law is found in § 8. Through this section, the statute establishes a presumption of corruption whenever any government employee or public servant receives any form of gratification. This places the burden on the said government employee or public servant to prove a negative—that is, to prove that the gratification was obtained without any corrupt intent).

69. *See* Tan Cheng-Han et al., *supra* note 11, at 93–94 ("[T]he existence in the 1950s and 1960s of a contested democratic political environment appeared to play a significant role in fostering good political governance in Singapore which was in turn transposed to her GLCs."); Ortmann & Thompson, *supra* note 10, at 43 ("Although falling far short of the principles of liberal democracy, [the electoral system] makes Singapore's authoritarianism much more competitive than China's.").

70. Under Singapore laws, Temasek Holdings does not have to publish an annual report because it is officially incorporated as a private company. Companies Act 2006, c. 50, § 18 (Sing.) (The definition of a "private company" is found in § 18(1)). Nevertheless, since 2004, it has continued to voluntarily publish an annual report that it calls the Temasek Review. *Temasek Review*, TEMASEK, <https://www.temasek.com.sg/en/our-financials/library/temasek-review.html> (last visited Sept. 17, 2018). Officially, Temasek Holdings has claimed that the release of this voluntary annual report was for the company to obtain a favorable credit rating to institutionalize its role as a long-term shareholder; however, at least one author has suggested that the true reason lies in external pressures for transparency. Choon-Yin Sam, *Partial Privatization, Corporate Governance, and the Role of State-Owned Holding Companies*, 13 J. ASIA PAC. ECON. 63, 71 (2007) ("Officially, [Temasek Holdings] has claimed that the release of the Review was to allow the company to obtain a credit rating of Temasek so as to institutionalize its role as a long-term shareholder and an active investor. This may be only one of the reasons. The release of the Review could very well be attributed to pressures for greater transparency on the government's ownership and control of the GLCs.").

71. Chen, *supra* note 16, at 323. The three layers of boards are the board of directors, the Temasek International Panel, and the Temasek Regional Advisory Panels, which are sub-divided into the Americas and European Advisory Panels. The International Panel is composed of members from prominent international businesses and political positions. TEMASEK HOLDINGS PRIVATE LTD., *supra* note 45, at 80–81. Current members include Dr. Jacob A.

Nevertheless, the crucial point to note is that these specific institutional *means* are not necessary preconditions for the *end* of establishing the Temasek Model. Functional substitutes could very well replace these specific institutional features. Instead, the indispensable part of the Temasek Model lies in the twin principles of non-intervention and non-preference. These principles form the core of the Temasek Model. Without these principles, it would be impossible for GLCs to operate like private enterprises and compete on an even basis with the market. Without such competition, the positive results such as profitability and efficiency are scarcely achievable. Accordingly, the existence of these two general principles is the key to replicating the Temasek Model.

China's existing National Champions Model is the antithesis of these two principles insofar as the National Champions Model is ingrained with pervasive governmental intervention and is rife with state preference. Despite these foundational differences, the question remains whether China can move away from this current state of affairs towards the two general principles described above and thereby replicate the Temasek Model. This paper now turns to address this question.

III. ARE THE TEMASEK MODEL'S KEY FEATURES REPLICABLE?

This paper concludes that China cannot replicate the Temasek Model's key features. This section demonstrates the conclusion by analyzing four Chinese institutional characteristics that will impede any potential replication of the principles of non-intervention and non-preference: (A) the function of central SOEs, (B) the power of central SOEs, (C) corruption, and (D) the absence of the requisite political will. Thereafter, two counter-considerations are addressed: (E) discipline by foreign capital markets, and (F) mixed-ownership reforms. Fi-

Frenkel—the former governor of the Bank of Israel and the current chairman of JPMorgan Chase International, and Hon. John Howard OM AC—the former prime minister of Australia. *Id.* The Advisory Panel is composed of top regional businessmen. Current members include Indra K. Nooyi, who is the chairman and CEO of PepsiCo, Inc, Ian Davis, the former managing director of McKinsey & Company, Inc. and current chairman of Rolls-Royce Holdings, and Michael Diekmann—the former chairman and CEO of Allianz SE. *Id.*

nally, this part will briefly review several additional contextual particularities that merit consideration.

A. *The Function of Central SOEs*

While the *danwei* system⁷² of Maoist China no longer formally exists,⁷³ the Chinese government still expects modern central SOEs to not just serve commercial functions, but also play the crucial role of executing the party-state's economic, social, and foreign policies.⁷⁴ In a polity where other institutions are ill-equipped to fulfil these government policies, central SOEs are treated as vital extensions of the government apparatus for whom "the unit of maximization is not the individual firm, but state interests as a whole."⁷⁵ Hence, in 2013, SASAC unequivocally stated that SOEs must undertake "significant special tasks"⁷⁶ (*zhongda de teshu renwu*) such as aiding in major events like the Beijing Olympics, the Shanghai World Expo, and natural disaster situations.⁷⁷ An example of one

72. For a comprehensive exposition on the *danwei* system, see DANWEI: THE CHANGING CHINESE WORKPLACE IN HISTORICAL AND COMPARATIVE PERSPECTIVE (Xiaobo Lü & Elizabeth J. Perry eds., 1997).

73. See Jiangyu Wang, *supra* note 3, at 644–45 (The author starts by explaining what the *danwei* system is before moving on to explain that this has since changed after China's 1978 market reforms.).

74. See SHEN WEI, *supra* note 24, at 2.014; *Guidelines to the State-Owned Enterprises Directly Under the Central Government*, STATE-OWNED ASSETS SUPERVISION & ADMIN. COMM'N. OF THE STATE COUNCIL (Dec. 6, 2011), http://en.sasac.gov.cn/2011/12/06/c_313.htm ("These Guidelines are proposed to comprehensively implement the spirit of the 17th CPC National Congress and the Scientific Outlook on Development, and give the impetus to state-owned enterprises (SOEs) directly under the central government (referred to as CSOEs hereafter) to earnestly fulfill corporate social responsibilities (CSR), so as to realize coordinated and sustainable development of enterprises, society and environment in all respects."); Lin & Milhaupt, *supra* note 9, at 706 ("business groups fostered by the political regime and deeply entwined with Chinese Communist Party leadership may be central to the developmental success of the regime."). A stark example of how ingrained the non-commercial function of central SOEs is may be found in the Articles of Grouping of Chinalco. There, it is stated that "a major purpose of CNNG is to undertake important functions requested by the state, including implementing national economic development policies and advising the government in enacting industrial policies and in implementing corporate, industrial, and national standards." *Id.* at 730.

75. Milhaupt, *supra* note 22, at 293.

76. Jiangyu Wang, *supra* note 3, at 662.

77. *Id.* at 662–63.

such natural disaster situation is the 2008 Wenchuan Earthquake. In the immediate aftermath of the earthquake, the State Council ordered 20 SOEs near the disaster zone to provide specialist rescue equipment, including 936 forklifts, cranes, and other engineering and construction equipment.⁷⁸ If not for these SOEs, these vast resources would likely not have been available to the Chinese party-state at such short notice. As demonstrated, SOEs play crucial non-commercial functions in China.

Significantly, this focus on non-commercial tasks inhibits non-intervention and non-preference. On non-intervention, assuming that the central SOEs are willing to perform such non-commercial functions,⁷⁹ intervention is still required to marshal them in a uniform direction towards fulfilling the party-state's policies effectively. On non-preference, most of these non-commercial functions "run contrary to profit maximization."⁸⁰ Accordingly, in order to keep these central SOEs as going concerns and have them survive to continue serving vital government policies, the state must grant preferential support. Furthermore, central SOEs that serve the party-state's objectives could also be treated as so-called favorites that receive informal preferential treatment.⁸¹ Thus, the non-commercial functions that central SOEs are expected to serve inhibit the two key principles of the Temasek Model.

Here, one might counter by noting that the state has since categorized central SOEs as either commercial SOEs or public benefit SOEs.⁸² Officially, the latter class of SOEs is intended to serve society and ensure the people's wellbeing, while the former class is aimed at "improv[ing] the efficacy of state capital."⁸³ Accordingly, this division might suggest that at minimum, Temasekization would be possible for commercial SOEs, which are free to operate without intervention and preference.

Nevertheless, such a conclusion is presumptuous due to the presence of patent ambiguities. First, much ambiguity sur-

78. *Id.* at 663.

79. *See supra* Section II.B (discussing the question of why central SOEs might be willing to perform these non-commercial functions).

80. Jiangyu Wang, *supra* note 3, at 664.

81. *Id.* at 662.

82. *See* TONG, *supra* note 5, ¶ 1.13.

83. FIVE YEAR PLAN, *supra* note 7, pt. III, ch. 11, § 1.

rounds these categorizations. It is unclear “how and by whom these categorisations of SOEs are determined.”⁸⁴ Indeed, academics suggest that these categories merely refer to whether the central SOEs are responsible for providing public goods or private goods.⁸⁵ If so, then construction companies, such as those activated in the Wenchuan earthquake, would be ordinarily providers of private goods, hence their classification as commercial SOEs. However, as explained earlier, these construction companies are still expected to serve non-commercial functions. Second, even within the category of commercial SOEs, the party-state has pledged to retain control over those in “special areas.”⁸⁶

Taken together, these twin ambiguities suggest that, at best, the party-state has well-meaning intentions, but has yet to fully determine which central SOEs would be allowed to pursue pure commercial functions free of intervention and preference. At worst, they suggest that the party-state is retaining the option of legitimizing any future interventions or preferential treatment by subsequently defining the categories in a way that suits its purposes. To illustrate this, imagine a hypothetical earthquake arises tomorrow and the Chinese party-state repeats its 2008 decision to activate SOEs in the construction sector. In such a situation, should there be criticism about how the party-state is impeding the commercial function of the SOEs, the party-state could easily justify its actions by claiming *ex post facto* that SOEs in the construction sector were always intended to fall under the public benefit category. In such a situation, no one could contradict such a claim due to the initial and continuing ambiguity of the categories. In any case, regardless of whether the party-state has well-meaning intentions or otherwise, the present ambiguity of these categorizations show that the suggestion of potential Temasekization are premature.

84. TONG, *supra* note 5, ¶ 5.4.

85. Deng Feng, *Indigenous Evolution of SOE Regulation*, in REGULATING THE VISIBLE HAND?: THE INSTITUTIONAL IMPLICATIONS OF CHINESE STATE CAPITALISM 3, 25 (Benjamin L. Liebman & Curtis J. Milhaupt eds., 2015).

86. TONG, *supra* note 5, ¶ 5.4.

B. *The Power of Central SOEs*

In China, central SOEs wield significant power and this power impedes Temasekization. This power stems from at least three sources. First, central SOEs are integrated with the political system and given high political rankings. Out of the 96 central SOEs, 53 are ranked as vice-ministerial, and 2 are ranked as ministerial.⁸⁷ Notably, SASAC, which is tasked with controlling and reforming the central SOEs, is itself only a vice-ministerial organization.⁸⁸ This has led to at least one commentator observing that SASAC “often must yield to . . . the prerogatives of the most politically well-connected SOEs themselves.”⁸⁹ Second, SOE managers typically possess considerable political influence. Many central SOE heads are “offspring of political leaders,”⁹⁰ with even more holding high political offices in the NPC and the National Congress of the CCP.⁹¹ In practical terms, this political clout naturally translates to power and influence within the state sector. Third, the state’s regulatory policies are such that virtually all dividends paid by central SOEs are eventually recycled back to the central SOEs through the form of subsidies or tax breaks.⁹² Consequently, these SOEs have abundant amounts of free cash for “empire building” in sectors that might not be part of their original business focus.⁹³ As these empires grow, the central SOEs naturally become increasingly influential.

It might be suggested that the central SOEs do not possess real power because the party-state regularly undertakes measures to suppress their influence. To support this assertion, one might point to how the party-state routinely rotates top managers between central SOEs as part of its human resource policy, referred to as *renshi tiaozheng*.⁹⁴ For instance, in the first

87. Jiangyu Wang, *supra* note 3, at 659.

88. TONG, *supra* note 5, ¶ 3.3.

89. Milhaupt, *supra* note 22, at 284.

90. Miao Yinzhi, *The Interplay of the State and the Firms: Overseas Listing as a Governance Institution for Chinese SOEs*, 10 FRONTIERS L. CHINA 46, 50 (2015).

91. See Lin & Milhaupt, *supra* note 9, at 727 (describing the “institutional bridge” created between the national champions and the government by reserving such positions).

92. Curtis J. Milhaupt & Wentong Zheng, *Beyond Ownership: State Capitalism and the Chinese Firm*, 103 GEO. L.J. 665, 679 (2015).

93. *Id.* at 680.

94. Lin & Milhaupt, *supra* note 9, at 740–41.

week of April 2011, the government reshuffled top executives of the three big oil companies—China National Offshore Oil Corporation, China National Petroleum Corporation, and China Petrochemical Corporation.⁹⁵

Nevertheless, use of these rotations is better interpreted as a sign of the strength and influence of central SOE managers.⁹⁶ The strategy is likely to have been a last resort since significant rotations would necessarily disrupt the business of the central SOEs as rotated managers take time to adapt to their new company's operational model. Disrupted business translates to less profits and lower production outputs. Both of these results would have been undesirable to the Chinese government. The use of these personnel rotations is only explicable if the party-state had no other effective means of keeping central SOEs in check.⁹⁷ Accordingly, they reflect the power of the central SOEs.

Such extensive power is problematic because the more powerful corporations are, the more likely it is that they are “not simply passive takers of rules and norms.”⁹⁸ Rather, they become increasingly able to shape the design of their legal, economic, and political institutional settings.⁹⁹ This is achieved via a spectrum of techniques that range from direct lobbying to indirect influencing.¹⁰⁰ With such influence over

95. Erica Downs & Michal Meidan, *Business and Politics in China: The Oil Executive Reshuffle of 2011*, 19 CHINA SECURITY 3, 3 (2011).

96. See Milhaupt & Wentong Zheng, *supra* note 92, at 677 (“The frequent rotations of senior SOE executives may be a reflection of the weakness, rather than the strength, of top-down political control, because they suggest that the state lacks other effective means of keeping SOE executives in check.”).

97. *Id.*

98. Milhaupt, *supra* note 22, at 296.

99. See SHEN WEI, *supra* note 24, at 2.035; Lin & Milhaupt, *supra* note 9, at 752 (“The national champions themselves are now forceful players in the Chinese political economy. We need look no further than the U.S. historical experience to see that large corporations—even ones not linked to the state—can exert tremendous influence on the design of national institutions and the nature of social relations.”).

100. See SHEN WEI, *supra* note 24, at 2.035; Milhaupt, *supra* note 22, at 296 (“Corporations are not simply passive takers of rules and norms; they actively shape the institutional setting in which they operate.”). The ability of large corporations to shape their institutional setting through a vast range of techniques is not only present in China, but is generally true around the world. As Professor Joshua Barkan notes, “Once constituted, corporations

their institutional setting, it is likely that powerful central SOEs will resist any imposition of a principle of non-preference. Preferential treatment in the form of state funding, subsidies, and tax incentives directly benefits the bottom-line of the central SOEs. Increased funding also enables the central SOEs to grow increasingly larger through expansion projects. SOE managers favor such an outcome since they obtain prestige and influence from the size of their corporation.¹⁰¹ Indeed, it was this thinking that led to the National Development and Reform Commission (NDRC) observing that “[f]labby state conglomerates have thwarted attempts to whip them into commercial shape.”¹⁰²

In response to this, one might argue that even if the power of central SOEs inhibits imposition of the principle of non-preference, it nonetheless promotes the principle of non-intervention. After all, powerful central SOEs have even defied state orders on occasion. For instance, in 2009, after SASAC ordered the withdrawal of seventy-eight central SOEs from the real estate sector, many directly ignored SASAC and continued expanding their real estate business.¹⁰³ However, such incidents do not represent the norm.

As a general matter, central SOEs are likely to actually prefer intervention for two primary reasons. First, state preference typically accompanies state intervention. For example, a Yunnan SOE general manager who aided in the aforementioned Wenchuan earthquake went so far as to say that “[o]f course we will not ask them to pay for this but the Party and the state will remember and appreciate our contribution.”¹⁰⁴ Second, central SOE managers have invested significant efforts in learning how to navigate and thrive in a system that involves

and states share a range of techniques—from the consensual to the coercive—for establishing order within their institutional structures and across the places and territories in which they operate.” JOSHUA BARKAN, *CORPORATE SOVEREIGNTY: LAW AND GOVERNMENT UNDER CAPITALISM* 5 (2013) (ebook).

101. See Chris Buckley, *Still Waiting for Reforms*, N.Y. TIMES, Mar. 28, 2017, at B1 (“The news report, a 217-page study titled ‘The Reform Obstruction Phenomenon,’ was written by researchers from the Economic System and Management Institute of China’s National Development and Reform Commission, which steers policy on industry, energy and many other sectors.”).

102. *Id.*

103. Milhaupt & Wentong Zheng, *supra* note 92, at 681.

104. Jiangyu Wang, *supra* note 3, at 663.

heavy party-state involvement. To change the system now would effectively “entail a depreciation of their existing human capital and require investments in new human capital.”¹⁰⁵ It is improbable that central SOE managers would want their comparative advantages eroded by a new policy of non-intervention.

Accordingly, the fact that central SOEs possess significant power places high pressure on the continued provision of state preferential treatment. At the same time, it does not significantly promote, if at all, the principle of non-intervention. Considered together, this institutional feature impedes Temasekization.

C. *Corruption*

Academics commonly observe that state enterprises around the world are highly susceptible to corruption.¹⁰⁶ In this regard, Chinese central SOEs are archetypal. Chinese SOEs have “a notorious reputation for being corrupt,”¹⁰⁷

105. Mariana Prado & Michael Trebilcock, *Path Dependence, Development, and the Dynamics of Institutional Reform*, 59 U. TORONTO L.J. 341, 361 (2009) (The authors were observing how this phenomenon happens to trained lawyers, law professors and judges when laws are changed. However, this observation is also applicable in this context as well.).

106. See, e.g., Kilkon Ko & Cuifen Weng, *Structural Changes in Chinese Corruption*, 211 CHINA Q. 718, 721 (2012) (“The legacies of the planned economy and control over state-owned enterprises (SOEs) are counted as another cause of corruption in the literature.”); Vito Tanzi, *Corruption Around the World: Causes, Consequences, Scope, and Cures*, 45 IMF STAFF PAPERS 559, 563 (1998) (discussing public or state enterprises are a major source of corruption in the political process); cf. Tan Cheng-Han et al., *supra* note 11, at 88 (explaining the Singaporean government’s aversion to corruption as a factor in the success of Singaporean SOEs, differentiating them from SOEs elsewhere). A recent OECD report identified the following four risk factors that contribute to this phenomenon: “SOEs are often prevalent in sectors with high risk corruption incidence . . . Proximity to the government increases risk of political capture . . . Weak disclosure allows corruption to go unnoticed . . . SOEs and their employees are not uniformly held liable for corruption offenses.” ORG. FOR ECON. CO-OPERATION & DEV., *COMBATTING CORRUPTION AND PROMOTING BUSINESS INTEGRITY IN STATE-OWNED ENTERPRISES: ISSUES AND TRENDS IN NATIONAL PRACTICES 9–10* (June 2016), www.oecd.org/daf/ca/2016-SOEs-issues-paper-anti%20corruption-and-business-integrity.pdf.

107. Jiangyu Wang, *supra* note 3, at 641. As Professor Fu Hualing succinctly puts it, China is a “high-corruption country.” Fu Hualing, *China’s Striking Anticorruption Adventure: A Political Journey Toward the Rule of Law?*, in

There are two reasons why this issue is particularly acute in China. First, legal institutions “have traditionally been weak, compliant and marginal under China’s one-party rule.”¹⁰⁸ Not only are they plagued by insufficient personnel, they often lack independence from the very politicians and bureaucrats they are expected to monitor.¹⁰⁹ Second, China’s state sector is massive. To illustrate its size, Temasek’s entire portfolio value in 2017 was 275 billion Singapore dollars.¹¹⁰ This, however, falls far short of the combined market value of just two out of ninety-six Chinese central SOEs—PetroChina at \$220.2 billion and Sinopec at \$138.6 billion.¹¹¹ The implications of having such a large state economy is significant. Not only do higher number of transactions translate to increased opportunities for rent-seeking, but authorities also find it extremely difficult to comprehensively regulate the entire state sector.¹¹² Naturally, this leads to increased corruption. Considering the weak legal institutions and massive size of the Chinese state sector, it is thus unsurprising that according to a 2011 report, “the total value in terms of corruption of the cases of 36 SOE bosses who were arrested and committed for corruption was as high as 338 million *yuan*.”¹¹³

With this susceptibility to corruption, the principle of non-preference is hard to achieve. SOE managers may directly bribe relevant party-state officials in order to obtain preferential treatment for their business projects when necessary. Corruption also inhibits the principle of non-intervention. As ex-

THE BEIJING CONSENSUS? HOW CHINA HAS CHANGED WESTERN IDEAS OF LAW AND ECONOMIC DEVELOPMENT 249, 249 (Weitseng Chen ed., 2017).

108. Fu Hualing, *The Upward and Downward Spirals in China’s Anti-Corruption Enforcement*, in *COMPARATIVE PERSPECTIVES ON CRIMINAL JUSTICE IN CHINA* 390, 393 (Mike McConville & Eva Pils eds., 2013).

109. Weitseng Chen, *Introduction: Debating the Consensuses*, in *THE BEIJING CONSENSUS? HOW CHINA HAS CHANGED WESTERN IDEAS OF LAW AND ECONOMIC DEVELOPMENT* 1, 7 (Weitseng Chen ed., 2017).

110. TEMASEK HOLDINGS PRIVATE LTD., *supra* note 45, at 6.

111. *The World’s Largest Public Companies: #30 PetroChina*, FORBES, <https://forbes.com/companies/petrochina/> (last updated June 6, 2018); *The World’s Largest Public Companies: #27 Sinopec*, FORBES, www.forbes.com/companies/china-petroleum-chemical/ (last updated June 6, 2018).

112. See Milhaupt & Wentong Zheng, *supra* note 92, at 689 (“China’s huge economy and massive state interventions therein increase the opportunities for and payoffs from capture.”).

113. Hong Yu, *The Ascendancy of State-Owned Enterprises in China: Development, Controversy and Problems*, 23 J. CONTEMP. CHINA 161, 181 (2014).

plained above, this principle is premised upon the government's self-restraint.¹¹⁴ With the power to exercise rights of sole or majority ownership through SASAC, party-state officials are free to intervene in central SOE affairs when the personal benefits of corruption outweigh the benefits of self-restraint. For instance, party-state officials may order a central SOE out of a particular business if a competitor company and that official had a corrupt relationship. As a whole, such potential corruption is inconsistent with Temasekization.

At this point, it is important to acknowledge the impressive impact of Xi Jinping's anti-corruption initiative.¹¹⁵ On a general country-wide level, official statistics as of 2017 show that "the party has punished 270,000 of its cadres for corrupt activities, and at least 80 officials at the provincial (or higher) level have resigned after being charged with corruption."¹¹⁶ On the specific level of SOEs, between November 2012 to April 2015 alone, 124 top-level officials working for SOEs have been detained on investigations for corruption.¹¹⁷ From this data it is undeniable that China is directly tackling its corruption problem.

Nevertheless, as successful as Xi's campaign might be in weeding out the culture of corruption, this effort alone will not aid Temasekization. In fact, it may actually hinder Temasekization for three reasons. First, Xi's campaign is achieved through party discipline, not law. Since the party committees within each individual SOE facilitate the party discipline initiative,¹¹⁸ the campaign actually promotes more party-state involvement in SOEs. Second, Xi's campaign can

114. See *infra* Section I.B.

115. For a comprehensive discussion of Xi's anti-corruption drive, see generally Fu Hualing, *supra* note 107; James Leung, *Xi's Corruption Crackdown: How Bribery and Graft Threaten the Chinese Dream*, 94 FOREIGN AFF. 32 (2015).

116. Dongmin Kong et al., *Effects of Anti-Corruption on Firm Performance: Evidence from a Quasi-Natural Experiment in China*, 23 FIN. RES. LETTERS 190, 190–91 (2017).

117. Angela Meng, *A Quarter of Chinese SOE Executives Investigated for Corruption Work in Energy Sector*, SOUTH CHINA MORNING POST (Apr. 28, 2015, 5:55 PM), <https://www.scmp.com/print/news/china/policies-politics/article/1778702/quarter-chinese-soe-executives-investigated-corruption>.

118. See FIVE YEAR PLAN, *supra* note 7, pt. XVIII, ch. 76 (discussing responsibilities of committees in strengthening party discipline and opposing corruption); TONG, *supra* note 5, ¶ 1.11; Milhaupt, *supra* note 22, at 287 (explaining the concept of party centrality within the Chinese system).

never be comprehensive. Being carried out wholly by the party apparatus without an independent judiciary, there is no mechanism in place to ensure that the anti-corruption agents themselves are not corrupt.¹¹⁹ In short, no one “guards the guardians.”¹²⁰ Third, Xi’s campaign paralyzes reform.¹²¹ Unlike black-letter laws, party disciplinary rules are soft ethical norms that the party openly concedes to be “characterized by wide gaps and a large degree of flexibility and uncertainties.”¹²² These vague rules are in turn enforced by a harsh and opaque process whereby party disciplinary inspection committees have unconstrained extralegal powers to detain suspects without any notice to family members, “without any contact with the outside world, and without any legal representation.”¹²³ Taken together, the vagueness, opacity, and harshness of the anti-corruption drive creates bureaucratic inaction as officials become risk-averse for fear of falling afoul of the blurred line.¹²⁴ In this context a radical and risk-filled reform like Temasekization would be difficult.

In sum, whichever way the matter is viewed, Temasekization in China is challenging. On one hand, the existence of corruption impedes the principles of non-intervention and non-preference. On the other hand, the existence of Xi’s anti-corruption initiative also obstructs Temasekization.

119. See Francis Fukuyama, *Reflections on Chinese Governance*, 1 J. CHINESE GOVERNANCE 379, 386 (2016) (“China does not have true rule of law because there is no independent judicial system that can constrain the Communist party itself.”).

120. *Id.*

121. See TONG, *supra* note 5, ¶ 6.2; Buckley, *supra* note 101 (“[A] bigger reason why reforms in some of our country’s key sectors have had difficulty moving forward may lie in the thinking behind the top-level design of these reforms.”).

122. Fu Hualing, *supra* note 107, at 396.

123. *Id.* at 398–99. This power is called *shuanggui*.

124. See Fukuyama, *supra* note 119, at 389 (“[E]xecutives no longer know what kinds of decisions will get them into trouble, and as a result have become very risk-averse.”). As Professor Ang Yuen Yuen succinctly puts it, “the campaign has forced local officials to become risk averse and unwilling to attempt policy innovations on the ground.” *Issues at Stake*, STRAITS TIMES (Oct. 9, 2017), <https://www.straitstimes.com/asia/east-asia/issues-at-stake>.

D. *Absence of the Requisite Political Will*

Notwithstanding the foregoing, the Temasek Model might still be replicable if the Chinese leaders possess the political will to undergo Temasekization. After all, while institutions matter, political will potentially matters more. “[F]ormal institutions which seem less than optimal can often be made to work with the right leadership, judgment and political will.”¹²⁵ Strong leaders that truly desire Temasekization could conceivably overcome the obstacles detailed above.

Professor Tan Cheng Han, former Dean of the National University of Singapore, argues that Chinese leaders lack such a will. Specifically, Professor Tan argues that political self-restraint, which the principle of non-intervention requires, can only be achieved with two conjunctive conditions. First, the government’s rule must be based on economic performance legitimacy.¹²⁶ Second, there must be a genuine democracy that allows voters to discipline the government whenever such performance is lacking.¹²⁷ Tan explains that while China fulfils the first condition, it lacks the second.¹²⁸ Therefore, his argument goes, Temasekization is unlikely.

Tan’s argument, while attractive, is questionable on two counts. First, a democracy is merely one means by which to foster the political self-restraint principle that non-intervention requires. As explained above,¹²⁹ specific means are not necessary preconditions to the Temasek Model as long as the relevant principles can be attained by functional substitutes. In this case, a disciplining agent in the form of the ballot box would be unnecessary if there is a substantial reward system

125. Francis Fukuyama, *Development and the Limits of Institutional Design*, in *POLITICAL INSTITUTIONS AND DEVELOPMENT: FAILED EXPECTATIONS AND RENEWED HOPES* 21, 39 (Natalia Dinello & Vladimir Popov eds., 2007)

126. See Tan Cheng Han, *supra* note 15, at 84 (“Singapore today is still essentially a commercial city and her survival is premised on her ability to be commercially relevant . . . [W]hile economic growth is important to all countries, it has an almost existential condition in Singapore.”). Economic performance legitimacy refers to the notion that a ruling government’s worth is primarily measured by economic performance, and not by under indicia such as social measures or constitutionality.

127. See *id.* at 85 (“It is suggested that the perceived need to retain political legitimacy is unlikely to be as consistently effective as the need to submit periodically to the will of the people.”).

128. *Id.* at 84–85.

129. See *supra* Section I.B.

capable of fostering the same political will. Examples of such reward systems include the international praise that the Chinese party-state would receive if they were indeed able to achieve greater economic success through Temasekization. In other words, a stick might not be needed to promote political self-restraint if there is a sufficient carrot to entice the Chinese government.

Second, China has a functional substitute for the discipline of democracy. This comes in the form of the NPC. The NPC is “the only central-level constitutional institution whose members are not selected” by the CCP.¹³⁰ Instead, regional groups are allowed to send their chosen representatives to the NPC, with over half the Standing Committee seats assigned to special interest groups such as the All-China Women’s Federation and the All-China Labor Federation.¹³¹ As China’s top legislative body, the NPC is in charge of approving work reports and policies of government ministries.¹³² While the NPC has never disapproved a work report before, an approval rating below 75% is sufficient to create “a disciplining effect on other political actors”¹³³ because it is regarded as a significant humiliation to the relevant organization.¹³⁴ For instance, in 1997, 44% of the NPC failed to vote for the Supreme People’s Procurate’s (SPP) work report because of discontent that judicial corruption was not sufficiently addressed.¹³⁵ As a result of this humiliation, the SPP took immediate action and established a special investigation commission for the sole purpose of addressing the NPC’s concerns.¹³⁶

It may be argued that the NPC does not provide the same disciplining effect as a democracy and hence is unlikely to foster the political will required for Temasekization. This argument is debatable. First, such a proposition is unquantifiable. Second, and more importantly, Singapore is hardly a para-

130. Michael W. Dowdle, *The Constitutional Development and Operations of the National People’s Congress*, 11 COLUM. J. ASIAN L. 1, 18 (1997).

131. *Id.* at 18–19.

132. *Id.* at 94.

133. *Id.* at 33.

134. T.P., *The National People’s Congress: What Makes a Rubber Stamp?*, ECONOMIST (Mar. 5, 2012, 6:52 AM), www.economist.com/blogs/analects/2012/03/national-peoples-congress.

135. Dowdle, *supra* note 130, at 9.

136. *Id.*

digm of a robust democracy itself. Not only does Singapore's democracy fail the traditional "two-turnover" test,¹³⁷ the ruling People's Action Party (PAP) has been in continual power since 1959.¹³⁸ While Tan rightly alludes to the 2011 election as a manifestation of "a more independent citizenry" and "maturing civil society,"¹³⁹ one must remember that Temasek was established in 1974. From the 1960s to the early 2000s, many elections occurred with a significant number of walkovers in electoral seats.¹⁴⁰ In fact, the PAP won the majority of the legislature without any contest in 1968, 1980, and 2001 because there were simply too few opposition members.¹⁴¹ Despite such weak democratic checks, Temasekization was nevertheless possible in Singapore. Accordingly, there is no empirical reason why the absence of democratic checks in China would present a significant hurdle to the same. Accordingly, Tan's suggestion that the lack of democratic discipline would impede Temasekization in China is overpitched.

However, Chinese leaders demonstrably lack the requisite political will on two levels. First, at the level of the top leadership, there is visible political gridlock, with contradictory statements of policy issued by Xi Jinping and Li Keqiang. In China's latest Five-Year Plan, promulgated in 2016, a statement

137. For an explanation of the two-turnover test, see SAMUEL P. HUNTINGTON, *THE THIRD WAVE: DEMOCRATIZATION IN THE LATE TWENTIETH CENTURY* 266–267 (1993). To be clear, this paper does not go so far as to suggest that Singapore is in actuality an authoritarian regime exercising "a faux version of democracy." Lee Morgenbesser, *The Autocratic Mandate: Elections, Legitimacy and Regime Stability in Singapore*, 30 *PAC. REV.* 205, 207 (2017). Rather, it is the present author's view that Singapore fails the two-turnover test because it is a young democracy that has not had the opportunity to go through two cycles of power change yet.

138. DIANE K. MAUZY & R.S. MILNE, *SINGAPORE POLITICS UNDER THE PEOPLE'S ACTION PARTY* 38 (2002).

139. Tan Cheng-Han, *supra* note 15, at 91. As Professor Tan rightly points out, the 2011 elections was "the PAP's worst showing since the 1963 elections and the opposition had six elected members compared to the two in the previous parliament. The PAP also lost two cabinet ministers including the highly respected Foreign Minister. Its share of the popular vote went down by slightly more than 6 percent . . ." *Id.* at 90–91.

140. For full statistics from elections dating back to 1955, see *Parliamentary General Elections Results*, ELECTIONS DEP'T SING., www.eld.gov.sg/elections_past_parliamentary.html (last updated Aug. 27, 2018).

141. *Id.*

attributed to Xi Jinping¹⁴² declared that SOEs should “grow stronger, better, and bigger.”¹⁴³ To the contrary, in Li Keqiang’s 2017 Work Report before the NPC, he declared a contradictory desire to make central SOEs “leaner and healthier.”¹⁴⁴ Considering these statements in light of the earlier discussions,¹⁴⁵ it is apparent that Xi’s statement resonates with the National Champions Model, whilst Li’s statement alludes to the more competitive market-oriented Temasek Model. With China’s top two leaders in political gridlock, lower level officials are naturally left confused and unable to act. As one SASAC official aptly puts it, “everybody is waiting to see what others might do.”¹⁴⁶

Second, there is also political gridlock at the ministerial level. Due to the size of the Chinese state sector, many bureaucratic agencies have vested interests in it. When the state announced its September 2015 Guideline to Deepen Reforms of State-Owned Enterprises, five separate ministries simultaneously announced it.¹⁴⁷ Involvement of so many interest groups leads to bureaucratic infighting and coordination problems,¹⁴⁸ hindering policy formation and execution. This is exemplified in how leading up to the 2015 Guideline’s release, notwithstanding contrary calls, SASAC officials adamantly resisted Temasekization for fear that it would diminish their roles.¹⁴⁹ There was a resulting two-year delay on the Guideline’s re-

142. Lingling Wei & Jeremy Page, *Discord Between China’s Top Two Leaders Spills into the Open*, WALL ST. J. (Jul. 22, 2016, 8:47 AM), www.wsj.com/articles/discord-between-chinas-top-two-leaders-spills-into-the-open-1469134110.

143. FIVE YEAR PLAN, *supra* note 7, pt. III, ch. 11, § 1.

144. Li Keqiang, Premier of the State Council, China, Report on the Work of the Government, Address at the Fifth Session of the 12th National People’s Congress of the People’s Republic of China 22 (Mar. 5, 2017) [hereinafter Li Keqiang’s Address to the NPC], http://online.wsj.com/public/resources/documents/NPC2017_WorkReport_English.pdf.

145. *Supra* Section I.A.

146. Lingling Wei & Page, *supra* note 142.

147. TONG, *supra* note 5, ¶ 1.2. The ministries were: SASAC, NDRC, Ministry of Finance, Ministry of Industry and Information Technology, Ministry of Human Resources and Social Security.

148. *Id.* ¶ 1.15.

149. Lingling Wei, *China Unveils Overhaul of Bloated State Sector: Beijing to Allow State-Owned Enterprises to Add Private Investors*, WALL ST. J. (Sept. 13, 2015, 7:23 PM), <https://www.wsj.com/articles/china-to-allow-state-owned-enterprises-to-sell-shares-to-public-1442138335>.

lease,¹⁵⁰ and the final document is still internally contradictory.¹⁵¹

Accordingly, while it is true that China lacks a democratic disciplining mechanism, this is not a convincing explanation for the absence of a political will for Temasekization. Rather, fragmented policies and gridlock amongst the political elites are the chief reasons for the absence of a strong unified political will. Consequently, in the absence of such a political will, prospects of Temasekization remain bleak.

E. *Counter-Consideration: Foreign Capital Markets Discipline*

One might argue that central SOEs are actually being forced to Temasekize because of their increasing integration into international capital markets through devices such as red chip listings and issuance of dim sum bonds. The argument would be that such integration subjects central SOEs to foreign rules of law.¹⁵² While these rules cannot ensure the principle of non-preference, they can minimally guarantee non-intervention on the party-state's part. For instance, both the Singapore and Hong Kong listing rules require at least one-third of an issuer's board consist of independent directors.¹⁵³ This mirrors Temasek's own practice and might ostensibly generate a degree of non-intervention provided by the interposition of such directors between the party-state and the central SOE.

However, such optimism is misguided as the nature of black-letter rules is such that they can never fully provide for soft qualities like the self-restraint that non-intervention re-

150. TONG, *supra* note 5, ¶ 1.3.

151. *Id.* ¶ 1.8–1.11.

152. See Miao Yinzhi, *supra* note 90, at 63 (“An overseas listing in a more renowned exchange normally subjects firms to a more robust legal regime. This includes more stringent listing and disclosure standard, reduced informational asymmetry, stricter regulation and other enhanced scrutiny. The listing may be a form of bonding or signal that assures investors that agency costs will be lowered, behaviors of managers and controllers will be constrained by the conformity requirements. The advantages for corporate governance in the sense of investor protection are apparent.”).

153. Code of Corporate Governance 2012, Board Matters, Guideline 2.1 (Sing.); *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited: 3.10A*, H.K. EXCHANGE, http://www.hkex.com.hk/Listing/Rules-and-Guidance/Listing-Rules-Contingency/Main-Board-Listing-Rules/General?sc_lang=EN.

quires.¹⁵⁴ Functional methods can always be created to circumvent such rules. For instance, although the Singapore and Hong Kong bourses stipulate requirements for independent directors, the Chinese party-state is still able to assert full control over the central SOE through its *nomenklatura* system of human resource management.¹⁵⁵ Under this system, the party-state exercises complete control over the careers of central SOE managers. They appoint everyone but the lowest SOE employee, select who should be promoted, determine where SOE managers should be trained,¹⁵⁶ and decide the compensation of the SOE managers.¹⁵⁷ With such comprehensive control over the careers of managers, it is unlikely that managers would defy the orders of the party-state. In turn, with control over the managers, it is unlikely that the party-state lacks ability to intervene in the operations of the central SOE if it chooses to do so. Should international listing rules eventually prohibit these employment practices, it is conceivable that other functional substitutes may be invented to circumvent those new rules. Ultimately, if the political desire to refrain from intervening is lacking, it is unlikely that the mere existence of black-letter listing rules can comprehensively proscribe all methods of intervention.¹⁵⁸

F. *Counter-Consideration: Mixed Ownership Reforms*

In 2013, the Chinese party-state promulgated a plan to allow private investors to hold equity stakes in central SOEs through “‘mixed ownership’ reform[s].”¹⁵⁹ The Chinese State Council reported that as of February 2017, 68% of SOE subsid-

154. See Chen, *supra* note 16, at 365 (asserting that because the Temasek model rests on that government’s “respect, tolerance, and self-restraint,” it could not be transplanted to another country with black-letter rules alone).

155. For an in-depth account of China’s *nomenklatura* system, see generally KJELD ERIK BRØDSGAARD, E. ASIA INST., BACKGROUND BRIEF NO. 858, STATE-OWNED ENTERPRISES AND ELITE CIRCULATION IN CHINA (2013).

156. For an overview of the party school system that trains SOE managers, see generally David Shambaugh, *Training China’s Political Elite: The Party School System*, 196 CHINA Q. 827 (2008).

157. See Jianguy Wang, *supra* note 3, at 651; see also Lin & Milhaupt, *supra* note 9, at 738, 742 (describing the genesis of the current system for determining SOE manager compensation).

158. Chen, *supra* note 16, at 365.

159. Jianguy Wang, *supra* note 3, at 667. This idea is present in many recent official state documents. See, e.g., FIVE YEAR PLAN, *supra* note 7, pt. III,

aries are under mixed ownership.¹⁶⁰ Based on this new trend, one might argue that the principle of non-intervention is now achievable, as under a mixed ownership structure the party-state is “subject to monitoring and pressures from private market participants.”¹⁶¹ These private market participants will invariably demand non-intervention in their quest for maximum central SOE profitability.¹⁶²

However, this argument is problematic insofar as it is a manifestation of ownership bias. Ownership bias refers to the misconception that equity ownership is commensurate with control rights. In truth, “equity ownership alone reveals very little” about control powers.¹⁶³ This is particularly true in relation to the Chinese party-state’s control powers.¹⁶⁴ Even with the new influx of private owners, the party-state retains near absolute control for two reasons. First, the private investors who possess ownership stakes in central SOEs are not institutionally guaranteed any concomitant control rights as a result of weak shareholder protection laws.¹⁶⁵ Hence, scholars assert that suggestions that these private investors can monitor the party-state are illusory.¹⁶⁶ Second, even if private investors had such legal rights, the all-pervasive party-state remains able to intervene in central SOE affairs through extralegal means.

ch. 11, § 3; Li Keqiang’s Address to the NPC, *supra* note 144, at 21; NDRC REPORT ON FIVE YEAR PLAN, *supra* note 9, at 36.

160. *SOE Reform Beats Expectations in 2016*, STATE COUNCIL OF CHINA (Feb. 16, 2017, 1:44 PM), http://english.gov.cn/policies/policy_watch/2017/02/16/content_281475569196476.htm.

161. Mariana Pargendler, *State Ownership and Corporate Governance*, 80 FORDHAM L. REV. 2917, 2961 (2012).

162. It is for this very reason that the OECD has recommended mixed ownership reforms as a desirable reform measure for SOEs in transitional economies. Org. for Econ. Co-operation & Dev. [OECD], *SOEs Operating Abroad: An Application of the OECD Guidelines on Corporate Governance of State-Owned Enterprises to the Cross-Border Operations of SOEs*, ¶ 23 (2009), <https://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/44215438.pdf>.

163. Milhaupt & Wentong Zheng, *supra* note 92, at 676.

164. *Id.*

165. Zheng Yu, *supra* note 11, at 49.

166. See Milhaupt & Wentong Zheng, *supra* note 92, at 688 (“[W]here a government routinely chooses to enforce its policies by extralegal means, the added degree of autonomy from government influence that ordinarily follows from private, as compared to government, ownership of enterprise may be illusory.”).

One such method is through the aforementioned human resource management.¹⁶⁷ Another potential technique is through the use of soft coercion methods—euphemistically called “interviews.”¹⁶⁸ For instance, in 2010, China’s main cooking oil producers, private firms, planned to increase prices because of certain cost pressures they were facing.¹⁶⁹ Upon learning of this plan, the NDRC interviewed these firms behind closed doors and directly ordered a freeze on prices.¹⁷⁰ The producers complied.¹⁷¹ If such interviews are effective against wholly private firms, *a fortiori* they will be effective against mixed owned firms.

In sum, while mixed ownership reform has created a market for equity stakes in SOEs, it has not created a market for corporate control.¹⁷² The fact remains that the party-state is firmly in control. Thus, the principle of non-intervention and the goal of Temasekization are not furthered in any way.

G. Other Considerations

Despite having analyzed six key features of China’s institutional setting, the list of potentially relevant contextual particularities remains long. While it is impossible to elaborate on all of them, the following considerations merit some mention. They serve to support the conclusion that the Temasek Model is not replicable in China.

First, since the demise of Marxism, the Chinese party-state has based its ideological legitimacy not on democracy, but on nationalism.¹⁷³ Intuitively, the Temasek Model’s principle of

167. See *supra* Section II.E.

168. Milhaupt & Wentong Zheng, *supra* note 92, at 687.

169. *Id.* at 687.

170. *Id.*

171. *Id.*

172. See Milhaupt, *supra* note 22, at 292 (“Until recently, China maintained a share classification system that rendered shares of SOEs effectively nontransferable to nonstate organs. Today, while all shares are transferable as a formal matter and despite ‘mixed ownership’ reforms to encourage more private investment in SOEs, the Chinese government shows no signs of relinquishing control over SOEs in sectors of the economy deemed to be critical. There is effectively no market for corporate control in China.”).

173. See Jiangyu Wang, *supra* note 3, at 640 (“With the gradual demise of support for Marxism, nationalism became the new favored ideology.”); Ortman & Thompson, *supra* note 10, at 46 (“Instead of seeking popular sup-

non-preference seems ill-suited to a nationalism-based polity as such structure implies that SOEs would be required to lean down and become more efficient with the withdrawal of party-state funding. In contrast, the National Champions Model is suited to an ideology of nationalism since this allows China to boast of global conglomerates that dominate industries as a source of nationalistic pride.

Second, the party-state now fills the void left by the lack of robust legal institutions.¹⁷⁴ For instance, instead of a robust legal regime of director duties, the directors in central SOEs are subject to party discipline. Consequently, the party-state's continued intervention in central SOEs remains necessary until legal institutions are sufficiently built up. Such build-up will not only take time and effort, but will also require intelligent design and an elaborate sequencing of reforms in a polity as large as China.

Third, China is currently in a capacity building reform phase. As with other spheres of the Chinese economy—tax, *Renminbi* internationalization, and property rights¹⁷⁵—capacity building within central SOEs will likely entail high levels of state intervention. Indeed, the State Council itself has recently stated that “a ‘visible hand’ will . . . be a rational choice because without government intervention, the streamlining of steel and coal industries will be costly and time-consuming simply through market mechanisms.”¹⁷⁶

H. Summary

Considered individually, all the contextual particularities discussed in this section suggest that replicating the Temasek Model in China is challenging. In totality, they suggest that replicability is near impossible in China's present institutional setting. Although it is true that none of these factors are immutable, they are deep-seated institutional features that are unlikely to be reversed in the near term. Any prediction of change in the long term is necessarily speculative. Accord-

port through elections, the CCP is increasingly relying on nationalist appeals.”).

174. See Lin & Milhaupt, *supra* note 9, at 705–06; Weitseng Chen, *supra* note 109, at 8.

175. Weitseng Chen, *supra* note 109, at 8–9.

176. STATE COUNCIL OF CHINA, *supra* note 19.

ingly, the implication for China is apparent—it would be difficult to replicate Singapore’s Temasek Model in China’s governance of its central SOEs.

On that note, the sole question that remains is what the larger implications of this conclusion are beyond China. This paper now turns to briefly address this question by situating the current analysis in the larger law and economics literature.

IV. THEORETICAL IMPLICATION: A PATH DEPENDENCE PHENOMENON

The foregoing analysis in Part III confirms the law and economics theory of path dependency. This theory posits that a fleeting lead, which could be caused by nothing more than an historical accident, for some product or standard can have “important and irreversible influences on the ultimate market allocation of resources.”¹⁷⁷ In the developmental economics context, this means that pre-existing institutional conditions within a polity have a heavy influence on the viability of any proposed reform efforts.¹⁷⁸ Thus, if the pre-existing institutional conditions prohibit the most efficient outcome, then the polity is stuck in an irreversibly sub-optimal state.¹⁷⁹ This is the exact situation that China now faces with regards to the Temasek Model. While reformers have proposed the Temasek Model as a more optimal solution as compared to the pre-existing National Champions Model, such reform is hindered by the pre-existing institutional conditions. The analysis above illustrates an archetypal form of path dependence.

It is perhaps apposite to elaborate upon this phenomenon by an analogy to another oft-cited example of path dependency. The QWERTY keyboard has long been recognized as sub-optimal in comparison to other models, such as the Dvorak Simplified Keyboard, which allows for increased typing speeds of 20–40%.¹⁸⁰ Notwithstanding this empirical fact, the QWERTY keyboard has attained universal market dominance. In his seminal paper, Professor Paul David attributed this to

177. S. J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-in, and History*, 11 J.L. ECON. & ORG. 205, 205 (1995).

178. Prado & Trebilcock, *supra* note 105, at 349–50.

179. *Id.* at 351.

180. Paul A. David, *Clio and The Economics of QWERTY*, 75 AM. ECON. REV. 332, 332 (1985).

three path dependent factors.¹⁸¹ First, *interrelatedness between hardware and software*:¹⁸² keyboard configurations are intrinsically linked to typewriters, and the very first touch-typing typewriters happened to feature the QWERTY keyboard. Once in the market, the QWERTY keyboard immediately obtained a first-mover advantage that was hard to subsequently reverse. Second, *scale economies*:¹⁸³ after capturing the first market share, QWERTY keyboard production could scale up and became cheaper to produce and sell as opposed to the Dvorak Simplified Keyboard. Third, *quasi-irreversibility*:¹⁸⁴ because typewriting skills were difficult to unlearn, it was difficult for Dvorak Simplified Keyboard suppliers to convince users to switch from the QWERTY keyboard after they have been conditioned to the latter. In totality, these three factors contributed to high switching costs that entrenched the QWERTY keyboard's position as the dominant, though sub-optimal, design.

The current National Champions Model can be likened to the QWERTY keyboard and the Temasek Model can be likened to the Dvorak Simplified Keyboard. While the current National Champions Model is “[s]atisficing, not optimizing,”¹⁸⁵ this paper has shown that it will remain dominant for four institutional reasons: the function of central SOEs, the power of central SOEs, corruption, and the absence of the requisite political will.¹⁸⁶ Notably, these reasons parallel the three path dependent characteristics that explained the continued dominance of the QWERTY keyboard.

First, *interrelatedness between state sector and ideology*: the Chinese state sector is intrinsically linked to Chinese political ideology. By sheer accident, historical Maoist socialism mandated that *the function of central SOEs* extend beyond commercial objectives to include state objectives. Fast forward to the present day, with this legacy established, it is now difficult for central SOEs to switch to serve purely commercial functions be-

181. Professor Paul David is Professor Emeritus of Economics and Economic History in the University of Oxford. He was the first person who drew the link between the QWERTY keyboard and the theory of path dependency.

182. David, *supra* note 180, at 334.

183. *Id.* at 335.

184. *Id.* at 336.

185. Milhaupt, *supra* note 22, at 298.

186. *See supra* Sections II.A–D.

cause other institutions are ill-equipped to fulfil the state objectives. Second, *scale economies*: the *corruption* factor exhibits a quasi scale economies character. While the CCP's Disciplinary Inspection Committees can theoretically relinquish control of anti-corruption efforts and leave it to legal institutions, they have already accumulated much expertise and experience. Conversely, the legal institutions remain weak in this regard, and to that extent, will produce more net cost per unit of anti-corruption benefit gained. This renders switching systems difficult. In turn, as discussed above,¹⁸⁷ an anti-corruption drive run by the party-state apparatus is an impediment to Temasekization. Third, *quasi-irreversibility*: like typewriting skills that are difficult to unlearn, it is difficult to reverse *the power that central SOEs* have consolidated. After all, the powerful central SOEs themselves have significant control over their institutional context and can thus heavily influence any reform efforts that might seek to undermine their power. Similarly, insofar as *the absence of the requisite political will* for Temasekization is due to Xi Jinping's continued belief in the National Champions Model, the current structure is likely to be quasi irreversible as long as Xi remains in power. This is because Xi's view is not fleeting, but built upon his years of past experience as a provincial official.¹⁸⁸ In totality, like the QWERTY keyboard's continued dominance, the continued dominance of the National Champions Model, and the non-replicability of the Temasek Model, may be traced to the path dependent nature of China's institutional particularities.

V. CONCLUSION

Unlike the National Champions Model, the Temasek Model is predicated on the two core principles of non-intervention and non-preference. While there have been repeated calls to replicate the Temasek Model in China, reform presents an extreme challenge as the two core principles are unlikely to be replicable in light of China's entrenched institutional setting. This analysis is an archetypal illustration of the

187. See *supra* Section II.C.

188. Lingling Wei, *supra* note 149 (explaining how Xi Jinping was influenced by his experience in Shanghai when big Shanghainese SOEs managed to become some of the most profitable companies in the country).

path dependence phenomenon that has been oft cited in law and economics literature.

Notwithstanding these conclusions, the fact remains that the Chinese state sector is a highly elusive machine. Accordingly, it is impossible for this paper to provide all the right answers. It can be only hoped that by demonstrating the Temasek Model's non-replicability, the right questions can be asked moving forward. To this end, there are at least three open questions. First, this paper has only focused on what the Chinese state sector *will not become*. This paper has made no conclusions on what the Chinese state sector *will become*. This point remains open for further investigation. Second, this paper has adopted a largely conceptual approach in its attempt to make informed guesses about the future. The conceptual propositions in this paper should be tested against empirical results upon further investigation and passage of time. Third, as alluded to throughout this paper, the presence and absence of the requisite political will is likely a paramount factor in determining whether Temasekization is possible. Future studies should continue tracking movements in the top CCP leadership, as such movement could signify a change in political orientation refuting the conclusion reached here. Until such time, it is apposite to remember that the Chinese state sector is "all rather messy and complicated, which is why the average China watcher swings between periods of optimism and pessimism about the economy on a daily basis."¹⁸⁹ Regardless of the future, this paper presents some certainty as to what the Chinese state sector will not become—it will not become Singapore's Temasek Model.

189. STUDWELL, *supra* note 2, at 209.

