

Unpacking the State-Private Nexus in China's AI Development Path

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September 2025

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Abstract

The Chinese AI regulatory model has been described as state-driven, where the Chinese government seeks technological supremacy by deploying AI to entrench power through surveillance, control, and cooptation of public and private sectors. It is portrayed as a comprehensive, top-down approach with little room for agency, where autocracy and AI innovation mutually reinforce each other. However, this paper provides a more nuanced picture of China's AI governance. We argue that the Chinese government, at both central and local levels, has adopted a subtle and collaborative approach that integrates state action with private capabilities in dynamic ways that are not necessarily autocratic in nature. We demonstrate this through a framework analyzing the Chinese state's role as investor, regulator, and procurer in relation to private AI companies. First, as an investor, instead of being a controlling shareholder, we find that the Chinese government (or its entities) is a non-controlling shareholder who exerts indirect influence through overlooked mechanisms, while preserving governance powers for corporate boards. Second, as a regulator, contrary to assumptions that regulation is enforced through coercive command-and-control methods, we find that local governments rely on financial support to incentivize AI firms to align with the central government's objectives. Finally, as a procurer, contrary to the notion that autocracy reinforces innovation through unrestricted data sharing, we show that legal and institutional restrictions apply, and AI firms often have incentives to use non-government data. These findings complexify conventional narratives of Chinese AI governance and offer insights into the evolving state-private relationship, with implications for global AI governance debates.

Keywords: Artificial intelligence, AI governance, corporate governance, China, investor, procurer, regulator

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Abstract: The Chinese AI regulatory model has been described as state-driven, where the Chinese government seeks technological supremacy by deploying AI to entrench power through surveillance, control, and cooptation of public and private sectors. It is portrayed as a comprehensive, top-down approach with little room for agency, where autocracy and AI innovation mutually reinforce each other. However, this paper provides a more nuanced picture of China's AI governance. We argue that the Chinese government, at both central and local levels, has adopted a subtle and collaborative approach that integrates state action with private capabilities in dynamic ways that are not necessarily autocratic in nature. We demonstrate this through a framework analyzing the Chinese state's role as investor, regulator, and procurer in relation to private AI companies. First, as an investor, instead of being a controlling shareholder, we find that the Chinese government (or its entities) is a non-controlling shareholder who exerts indirect influence through overlooked mechanisms, while preserving governance powers for corporate boards. Second, as a regulator, contrary to assumptions that regulation is enforced through coercive command-and-control methods, we find that local governments rely on financial support to incentivize AI firms to align with the central government's objectives. Finally, as a procurer, contrary to the notion that autocracy reinforces innovation through unrestricted data sharing, we show that legal and institutional restrictions apply, and AI firms often have incentives to use non-government data. These findings complexify conventional narratives of Chinese AI governance and offer insights into the evolving state-private relationship, with implications for global AI governance debates.

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INTRODUCTION

The global impact of Artificial Intelligence (AI) is undeniable, with nations and corporations competing to lead in this transformative field. Among these, China has emerged as a key global player, leveraging its strategic focus and substantial investments.¹ The *New Generation AI Development Plan*, launched in 2017, set ambitious goals to position China at the forefront of AI innovation by 2030.² In response, numerous regulations and policies were introduced to enhance AI competitiveness in areas such as facial recognition, smart cities, and autonomous driving.³

This state-led development relies on domestic AI companies, which serve as crucial drivers of innovation and implementation.⁴ Designated as the “AI National Champions” by

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¹ Guowuyuan Guanyu Yinfā Xinyidai Rengong Zhineng Fazhan Guihua de Tongzhi (国务院关于印发新一代人工智能发展规划的通知) [Notice of the State Council on Issuing the Development Plan on the New Generation of Artificial Intelligence] (promulgated by the St. Council, July 8, 2017, effective July 8, 2017) [hereinafter *The New Generation AI Development Plan*], https://www.gov.cn/zhengce/content/2017-07/20/content_5211996.htm (China).

² *Id.*

³ See, e.g., Kejibu Guanyu Yinfā ‘Guojia Xinyidai Rengong Zhineng Kaifang Chuangxin Pingtai Jianshe Gongzuo Zhiyin’ de Tongzhi (科技部关于印发《国家新一代人工智能开放创新平台建设工作指引》的通知) [Notice of the Ministry of Science and Technology on Issuing the Work Guidelines for the Construction of National Open Innovation Platforms for the New Generation Artificial Intelligence] (promulgated by the MST, Aug. 1, 2019, effective Aug. 1, 2019), https://www.gov.cn/xinwen/2019-08/04/content_5418542.htm (China); Kejibu Guanyu Yinfā ‘Guojia Xinyidai Rengong Zhineng Chuangxin Fazhan Shiyanqu Jianshe Gongzuo Zhiyin’ de Tongzhi (科技部关于印发《国家新一代人工智能创新发展实验区建设工作指引》的通知) [Notice by the Ministry of Science and Technology of Issuing the Guidelines for Work to Construct National Pilot Zones for Innovative Development of New-Generation Artificial Intelligence] (promulgated by the MST, Aug. 29, 2019, effective Aug. 29, 2019, rev’d by the MST Sept. 29, 2020), https://www.most.gov.cn/xxgk/xinxifenlei/fdzdgknr/fgzc/gfxwj/gfxwj2020/202012/t20201224_171987.html (China); Hulianwang Xinxī Fuwu Suanfa Tuijian Guanli Guiding (互联网信息服务算法推荐管理规定) [Provisions on the Administration of Algorithm-generated Recommendations for Internet Information Services] (promulgated by the Cyberspace Admin. of China, Ministry of Industry & Info. Tech., Ministry of Public Security, and State Admin. for Market Reg., Dec. 31, 2021, effective Mar. 1, 2022) [hereinafter *Algorithmic Regulation*], https://www.gov.cn/zhengce/zhengceku/2022-01/04/content_5666429.htm (China); Shengchengshi Rengongzhineng Fuwu Guanli Zanzing Banfa (生成式人工智能服务管理暂行办法) [Interim Measures for the Administration of Generative Artificial Intelligence Services] (promulgated by the the Cyberspace Administration of China, the National Development and Reform Commission, the Ministry of Education, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, the Ministry of Public Security, and the National Radio and Television Administration, July 10, 2023, effective Aug. 15, 2023) [hereinafter *Interim Measures for Generative AI*], https://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm (China).

⁴ Arcesati Rebecca, *China’s AI Development Model in an Era of Technological Deglobalization*, MERICS.ORG (May 2, 2024),

the Ministry of Science and Technology (MST), these firms are primarily private rather than state-owned enterprises.⁵ Recognizing that private firms are more agile and better positioned to drive technological advancements,⁶ the government increasingly relies on them to implement its AI agenda.⁷

This shift raises important questions about the evolving relationship between the Chinese government and private firms in AI governance. China's AI approach is often portrayed as a centralized model⁸—characterized by surveillance, propaganda, and top-down policies⁹—assuming that both state-owned enterprises and private-owned enterprises function merely as instruments of the state, and that autocracy and AI innovation are mutually reinforcing.¹⁰ While there is a grain of truth to this view, it oversimplifies the more dynamic and negotiated nature of the state's relationship with private AI firms. Although the influence of autocratic regimes on state-owned enterprises has been widely examined, much less attention has been paid to how the state engages with private companies in the context of AI development.

<https://merics.org/en/report/chinas-ai-development-model-era-technological-deglobalization>; Karman Lucero, *Artificial Intelligence Regulation and China's Future*, 33 COLUM. J. ASIAN L. 97, 109 (2019).

⁵ WILLIAM C HANNAS & HUEY-MEEI CHANG, CHINESE POWER AND ARTIFICIAL INTELLIGENCE: PERSPECTIVES AND CHALLENGES 19-35 (2022); Meng Jing & Sarah Dai, *China Recruits Baidu, Alibaba and Tencent to AI 'National Team'*, SOUTH CHINA MORNING POST (Nov. 21, 2017), <https://www.scmp.com/tech/china-tech/article/2120913/china-recruits-baidu-alibaba-and-tencent-ai-national-team>.

⁶ Angela Huyue Zhang, *Agility Over Stability: China's Great Reversal in Regulating the Platform Economy*, 63 HARV. INT'L L.J. 457 (2022).

⁷ *Id.*; Barry Naughton, *Chinese Industrial Policy and the Digital Silk Road*, 15 ASIA POLICY 23, 25 (2020). According to a McKinsey report, the private sector in China, including internet giants Alibaba, Baidu, and Tencent, is actively driving AI advancements in the country. See, Jacques Bughin et al., *Notes from the AI frontier Modeling the Impact of AI on the World Economy*, MCKINSEY GLOBAL INSTITUTE (Sept. 2018), <https://www.mckinsey.com/~media/mckinsey/featured%20insights/artificial%20intelligence/notes%20from%20the%20frontier%20modeling%20the%20impact%20of%20ai%20on%20the%20world%20economy/mgi-notes-from-the-ai-frontier-modeling-the-impact-of-ai-on-the-world-economy-september-2018.ashx>.

⁸ See, e.g., ANU BRADFORD, DIGITAL EMPIRES: THE GLOBAL BATTLE TO REGULATE TECHNOLOGY 69-104 (2023); Huw Roberts, et al., *The Chinese approach to artificial intelligence: an analysis of policy, ethics, and regulation*, 36 AI & SOCIETY 59 (2021); Angela Huyue Zhang, *The Promise and Perils of China's Regulation of Artificial Intelligence*, 63 COLUM. J. TRANSNAT'L L. 1 (2025).

⁹ *Id.*

¹⁰ *Id.*; See also Martin Beraja, et al., *AI-Tocracy*, 138 Q. J. ECON. 1349 (2023); David Karpa, et al., *Artificial intelligence, surveillance, and big data*, in DIGINOMICS RESEARCH PERSPECTIVES: THE ROLE OF DIGITALIZATION IN BUSINESS AND SOCIETY (Lars Hornuf ed., 2022); Paul Mozur et al., *'An Invisible Cage': How China Is Policing the Future*, N. Y. TIMES (June 25, 2022), <https://www.nytimes.com/2022/06/25/technology/china-surveillance-police.html>.

Thus, this paper seeks to provide a more nuanced picture of China’s approach towards AI governance. It has two main objectives.¹¹ First, it critically examines the common assumption that Chinese AI governance is inherently autocratic and relies on a command-and-control model. Second, it addresses a gap in the literature: the limited attention given to the role of private AI firms within China’s state-led strategy.

This research draws on primary sources—including corporate constitutions, procurement contracts, and regulatory and policy documents—which provide first-hand insight into how these relationships are structured, as well as on secondary sources such as academic articles and reports from newspapers and periodicals. Case studies of firms such as Baidu, Alibaba Cloud, Tencent, JD.com, Yitu, Huawei, iFlytek, and Ping An, further illustrate how governance mechanisms operate in practice. While the analysis is grounded in multiple sources, the paper acknowledges the limits of publicly available information and does not claim to capture all channels of state influence. Its aim is not to quantify outcomes, but to clarify the structure and logic of state–private interactions in China’s AI sector.

To guide this analysis, the paper develops a tripartite framework that conceptualizes the Chinese state as an investor, regulator, and procurer in its relationship with private AI firms. This framework enables a systematic analysis of state–private dynamics by organizing evidence into three functional roles. It provides a coherent basis for comparing different governance mechanisms and brings diverse forms of state influence—ranging from equity participation to regulatory oversight and procurement—into a single analytical structure. On

¹¹ To clarify, the purpose of this paper is not to provide a doctrinal analysis of PRC AI laws and regulations as this endeavor has been undertaken elsewhere (*see, e.g.*, Roberts, et al., *supra* note 8; Matt Sheehan, *China’s AI Regulations and How They Get Made*, 24 HORIZONS: J. INT’L REL. & SUSTAINABLE DEV. 108 (2023); Esther Franks, et al., *Report: China’s New AI Regulations*, 1 GLOBAL PRIVACY L. REV. 43 (2024)). AI regulations will be analyzed only insofar as these are relevant to advancing the dual-aim of this paper.

this basis, the paper argues that China's AI governance reflects a subtle and collaborative approach, integrating state authority with private capabilities in ways that are not necessarily autocratic.

Specifically, we make three key arguments. First, as an investor, the state typically holds minority stakes in AI firms. It influences strategic decisions through mechanisms such as board seats and preferred shares, while day-to-day operations remain with private management, often led by the firms' founders. Second, as a regulator, the central government sets overall goals, but local governments retain flexibility in implementation. Instead of rigid enforcement, they use financial incentives and selective oversight to encourage alignment with national priorities. AI firms also participate in shaping these rules and are not merely passive recipients of regulation. Third, as a procurer, the state restricts firms' access to government data. Contracts and regulations tightly control how such data can be used, and firms often rely instead on synthetic, public, or proprietary datasets to develop their products.

This article proceeds as follows: Part I provides an overview of state-private interaction in China's AI development. Parts II through IV analyze the state's role as investor, regulator, and procurer, respectively. Part V explores the broader implications of this framework for corporate governance, state capitalism, and innovation policy. The conclusion situates the Chinese case within global models of AI governance.

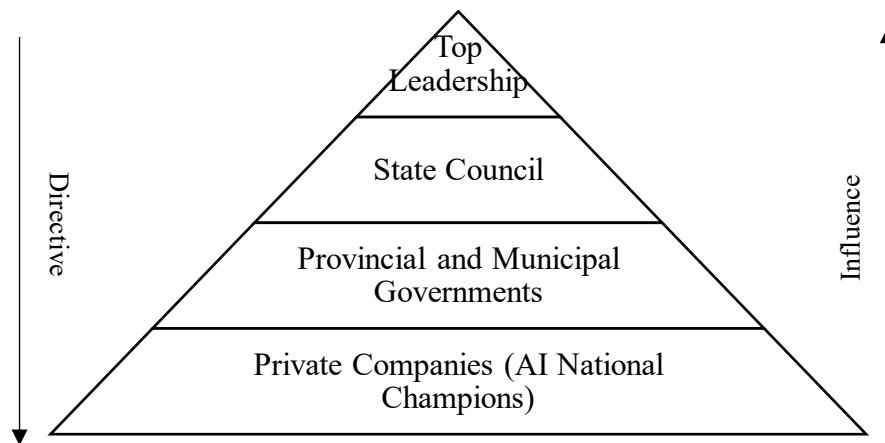
I. INSTITUTIONAL CONTEXT: MAPPING CHINA'S AI GOVERNANCE LANDSCAPE

This section outlines the institutional architecture that shapes China's AI development strategy. While China's approach is often viewed through the lens of centralized state control,¹²

¹² Barry Naughton, *Is China Socialist?*, 31 J. ECON. PERSP. 3, 10-13 (2017); Roberts, et al., *supra* note 8; BRADFORD, *supra* note 8.

the governance of AI involves a layered interaction between national leadership, policy coordination bodies, subnational governments, and private firms. Figure 1 illustrates this multi-level structure: directives flow downward from the top leadership to the State Council and local governments, while influence and innovation flow upward from a broad range of private AI companies, with the AI National Champions serving as their most prominent representatives.¹³ Understanding this dynamic structure provides a critical context for analyzing the Chinese state’s evolving role as an investor, regulator, and procurer in the AI sector.

Figure 1. China’s AI ecosystem



A. Top Leadership

As depicted at the top of Figure 1, China’s top leadership provides the overarching strategic direction for AI governance. Strategies ambitions and national priorities are shaped by the Communist Party’s senior leadership, particularly the Politburo and its Standing Committee, with President Xi Jinping at its core. Under Xi’s leadership, AI has been framed as a cornerstone of China’s future competitiveness.¹⁴ Since 2016, Xi has consistently emphasized

¹³ Scholars have proposed frameworks for understanding interaction dynamics among multiple actors in China’s regulatory system, *see e.g.*, ANGELA HUYUE ZHANG, *HIGH WIRE: HOW CHINA REGULATES BIG TECH AND GOVERNS ITS ECONOMY* 8-17 (2024). The AI ecosystem framework advanced here focuses specifically on the state–firm nexus in AI development: how top leadership directives cascade through the State Council and local governments, and how private firms exert upward influence through their multifaceted relationships with the state—investor–investee, regulator–regulatee, and procurer–procuree.

¹⁴ *See, Xi Jinping Tan Rengong Zhineng: Yingde Quanqiu Keji Jingzheng Zhudongquan de Zhongyao Zhanlue Zhuashou* (习

AI's transformative potential for economic growth and national development.¹⁵ For China's top leadership, AI is not only a key tool for industrial upgrading but also a strategic asset in the global competition for technological leadership.¹⁶

B. State Council

Building on these strategic ambitions set by the top leadership, the State Council translates national objectives into actionable policies and measurable targets. It coordinates AI initiatives across ministries and local governments to ensure alignment with national priorities. The Council has issued directives to promote AI integration across key sectors such as manufacturing, healthcare, and urban planning.¹⁷ It has also established an expert committee to develop ethical norms for AI governance,¹⁸ emphasizing safety, human oversight, and ethical responsibility to guide responsible development.¹⁹

C. Provincial and Municipal Governments

At the local level, provincial and municipal governments play a key role in implementing China's AI strategy, translating the national objectives into regional-specific initiatives.

习近平谈人工智能：赢得全球科技竞争主动权的重要战略抓手 [Xi Jinping on Artificial Intelligence: An Important Strategic Grasp to Win the Initiative of Global Science and Technology Competition], CPCNEWS (Nov. 1, 2018), <http://cpc.people.com.cn/xuexi/n1/2018/1101/c385476-30376558.html>.

¹⁵ *Id.*

¹⁶ Jin Liwang, *What to know about China's high-quality development*, SCIO.Gov (Mar. 18, 2024), http://english.scio.gov.cn/in-depth/2024-03/18/content_117066836.htm.

¹⁷ Gongye he Xinxihuabu Guanyu Yinfu "Cujin Xinyidai Rengong Zhineng Chanye Fazhan Sannian Xingdong Jihua (2018-2020)" de Tongzhi (工业和信息化部关于印发《促进新一代人工智能产业发展三年行动计划（2018-2020年）》的通知) [Notice from the Ministry of Industry and Information Technology on Issuing the "Three-Year Action Plan (2018–2020) for Promoting the Development of the New Generation Artificial Intelligence Industry"] (promulgated by the Ministry of Industry & Informational Tech., Dec. 13, 2017, effective Dec. 13, 2017), https://www.cac.gov.cn/2017-12/15/c_1122114520.htm (China).

¹⁸ Guojia Xinyidai Rengong Zhineng Zhuanye Weiyuanhui Zhaokai Diyici Huiyi, Kejibu Fubuzhang Limeng Chuxi (国家新一代人工智能治理专业委员会召开第一次会议，科技部副部长李萌出席) [The National New Generation Artificial Intelligence Governance Expert Committee held its first meeting, attended by Vice Minister of Science and Technology Li Meng], MOST. Gov (Mar. 28, 2019), <http://www.ircip.cn/web/1044764-1044764.html?id=26645&newsid=1118169>; "Xinyidai Rengong Zhineng Lunli Guifan" Fabu (《新一代人工智能伦理规范》发布) [Lunch of Ethical Norms for New Generation AI], MINISTRY OF SCIENCE AND TECHNOLOGY OF THE PRC (Sept. 26, 2021), https://www.most.gov.cn/kjbgz/202109/t20210926_177063.html.

¹⁹ *Id.* art. 3.

Following the release of the State Council’s development plans, major cities like Beijing,²⁰ Shanghai,²¹ and Shenzhen,²² along with various provinces, introduced AI policies that support innovation and attract investment while aligning with national goals.²³ Rather than imposing restrictions, local governments offer financial incentives—including subsidies, tax breaks, and grants—to support AI research and development.²⁴ Many have also established innovation zones and technology parks to promote collaboration between firms, universities, and research institutions, reinforcing the central government’s vision through localized action.²⁵

D. Private Sector—AI National Champions

A defining feature of China’s AI strategy is its reliance on private sector innovation, which differs from China’s approach in other economic and industrial areas where it channels state policy through state-owned enterprises. The government has designated leading firms—such

²⁰ See, e.g., Beijingshi Renmin Zhengfu Bangongting Guanyu Yinfā “Beijingshi Cujin Tongyong Rengong Zhineng Fazhan de Ruogan Cuoshi” de Tongzhi (北京市人民政府办公厅关于印发《北京市促进通用人工智能创新发展的若干措施》的通知) [Notice from the General Office of the Beijing Municipal People’s Government on Issuing the “Measures for Promoting the Innovation and Development of General Artificial Intelligence in Beijing”] (promulgated by the Beijing Municipal People’s Gov., May 23, 2023, effective May 23, 2023), https://www.beijing.gov.cn/zhengce/zhengcefagui/202305/t20230530_3116869.html (China); Beijingshi Jingji he Xinxihuaaju, Beijingshi Tongxin Guanliju Guanyu Yinfā “Beijingshi Suanli Jichu Sheshi Jianshe Shishi Fangan (2024-2027)” de Tongzhi (北京市经济和信息化局, 北京市通信管理局关于印发《北京市算力基础设施建设实施方案 (2024—2027 年)》的通知) [Notice from the Beijing Municipal Bureau of Economy and Information Technology and the Beijing Communications Administration on Issuing the “Implementation Plan for Computing Power Infrastructure Development in Beijing (2024–2027)”] (promulgated by the Beijing Municipal People’s Gov., Apr. 24, 2024, effective Apr. 24, 2024), https://www.beijing.gov.cn/zhengce/zhengcefagui/202404/t20240426_3639351.html (China).

²¹ Shanghaishi Cujin Zhineng Chanye Fazhan Tiaoli (上海市促进人工智能产业发展条例) [Regulation of the Shanghai Municipality on Promoting the Development of the Artificial Intelligence Industry] (promulgated by the Shanghai Municipality People’s Cong., Sept. 22, 2022, effective Oct. 1, 2022), <https://www.shanghai.gov.cn/hqcyfz/20230627/3a1fcfeff9234e8e9e6623eb12b49522.html> (China); Guanyu Yinfā “Shanghaishi Tuidong Rengong Zhineng Damoxing Chuangxin Fazhan Ruogan Cuoshi (2023-2025)” de Tongzhi (关于印发《上海市推动人工智能大模型创新发展若干措施 (2023-2025 年)》的通知) [Notice on Issuing the “Measures for Promoting the Innovative Development of Artificial Intelligence Large Models in Shanghai (2023–2025)”] (promulgated by the Shanghai Municipal Econ. & Info. Comm., Oct. 20, 2023, effective Oct. 20, 2023), <https://www.sheitc.sh.gov.cn/jsjb/20231107/eb13ebcc74154857a6d42e48c6340917.html> (China).

²² Shenzhen Jingji Tequ Rengong Zhineng Chanye Cujin Tiaoli (深圳经济特区人工智能产业促进条例) [Regulation of the Shenzhen Special Economic Zone on the Promotion of Artificial Intelligence Industries] (promulgated by the Shenzhen City People’s Cong., Sept. 5, 2022, effective Nov. 1, 2022), https://www.sz.gov.cn/zfgb/2022/gb1258/content/post_10166373.html (China); Shenzhenshi Jiakuai Dazao Rengong Zhineng Xianfeng Chengshi Xingdong Fangan (深圳市加快打造人工智能先锋城市行动方案) [Action Plan for Accelerating the Creation of Shenzhen as a Pioneer AI City] (promulgated by the Shenzhen Municipal Bureau of Indus. & Info. Tech., July 30, 2024, effective July 30, 2024), https://gxj.sz.gov.cn/gkmlpt/content/11/11474/post_11474465.html#3129 (China).

²³ Zhang, *supra* note 6.

²⁴ See *supra* note 20-22.

²⁵ *Id.*

as Baidu, Alibaba, Tencent, and iFlytek—as AI National Champions, assigning them leadership roles in key domains like autonomous driving, smart cities, healthcare, and voice recognition.²⁶ These firms receive state support in the form of investment, regulatory facilitation, and strategic partnerships, which strengthen their capacity to deliver technological breakthroughs aligned with national priorities.²⁷

Far from acting as passive instruments, these companies play an active role in shaping China’s AI ecosystem. Their inclusion in the national strategy reflects a collaborative approach, with the state leveraging market actors to advance public goals.²⁸ The dynamic between state guidance and private innovation is central to understanding China’s AI governance model. The evolving relationship between these firms and the state forms the focus of the next sections, which introduce a framework conceptualizing the Chinese state as an investor, regulator, and procurer in its engagement with private AI companies.

II. INVESTOR-INVESTEES RELATIONSHIP

This section begins our analytical framework by examining the Chinese state’s role as an investor in private AI firms. While the state plays a guiding role in China’s AI development, it rarely holds controlling equity stakes in the firms designated as AI National Champions. Instead, it relies on indirect mechanisms to exert influence, maintaining a balance between political oversight and firm-level autonomy.

As shown in the table below, average state ownership across 15 AI National Champions

²⁶ 15 个部委合力首批 4 家国家创新平台确立——聚焦我国新一代人工智能发展规划 [15 Ministries Jointly Establish the First Batch of 4 National Innovation Platforms—Focusing on Our Country’s New Generation Artificial Intelligence Development Plan], XINHUA (Nov. 23, 2017), https://www.gov.cn/guowuyuan/2017-11/23/content_5241718.htm.

²⁷ *Id.*

²⁸ Lin Zhang & Tu Lan, *The New Whole State System: Reinventing the Chinese State to Promote Innovation*, 55 ENV’T & PLAN. A: ECON. & SPACE 201 (2023); ZHANG, *supra* note 13, at 271.

is just 6.17%. Only three of these firms are controlled by state-backed shareholders,²⁹ and the majority have little or no state equity.

Table 1. China's AI National Champions³⁰

Year	Company	Location	Industry	Required Focus Area	State-Owned Equity
2017	Alibaba Cloud (阿里云)	Hangzhou	Cloud Computing	Smart City Brain	0
2017	Baidu (百度)	Beijing	Technology	Autonomous Vehicles	0
2017	Tencent (腾讯)	Shenzhen	Technology	Medical Imaging	0
2017	iFlytek (科大讯飞)	Hefei	Information Technology	Intelligent Voice	13.25%
2018	SenseTime (商汤)	Beijing and Hong Kong	AI and Facial Recognition	Intelligent Vision	0
2019	Yitu (依图科技)	Shanghai	AI and Facial Recognition	Visual Computing	23.72%
2019	Mininglamp Technology (明略科技)	Beijing	Cognitive Intelligence Technology	Intelligent Marketing	0
2019	Huawei (华为)	Shenzhen	Digital Communications Technology	Basic Software and Hardware	0
2019	Ping An (中国平安)	Shenzhen	Financial Services	Financial Inclusion	13.43%
2019	Hikvision (海康威视)	Hangzhou	Video Surveillance	Video Perception	41.6%
2019	JD.com (京东)	Beijing	E-commerce	Intelligent Supply Chain	0
2019	Megvii (旷视科技)	Beijing	Image Recognition	Visual Perception	0
2019	Qihoo 360 (奇虎360)	Beijing	Internet Security	Security and Intelligent Brain	0.56%
2019	TAL Education Group (好未来)	Beijing	Education	Smart Education	0
2019	Xiaomi (小米)	Beijing	Consumer Electronics and Smart Manufacturing	Home Automation	0

²⁹ iFlytek, Ping An, Hikivision are controlled by the state-backed shareholders.

³⁰ This table was created based on hand-collected information, as of Dec. 16, 2024, from AI National Champions' official websites, annual reports and disclosed documents of companies, and government announcements regarding AI National Champions. As these companies generally operate as corporate groups with multiple subsidiaries, all data reported here refers to the listed parent company, or, where no listed parent exists, to the major operating entity, which offers the most consistent and comprehensive source of disclosure.

Despite limited equity stakes, the state influences these companies through a range of governance mechanisms, including board membership, golden shares, and institutional ties with corporate leadership. These mechanisms embed state presence in firm governance, enabling alignment with national objectives without compromising operational agility. This section analyzes how each of these mechanisms translates into tangible influence, supporting a model of non-controlling but strategic shareholding—a model that departs from conventional notions of state ownership and challenges the state-owned enterprise–private-owned enterprise binary.

A. Non-Controlling but Strategic Shareholding

Board representation by state-affiliated investors is one mechanism through which the Chinese state maintains strategic visibility in leading AI firms without exerting operational control. Among the 15 AI National Champions, the state owns equity in only three: iFlytek, Ping An, and Hikvision, with only Hikvision being majority state-owned.

In both iFlytek and Ping An—where the state is a non-controlling shareholder—state-affiliated directors hold board seats, embedding institutional influence at the strategic level. In the case of iFlytek, China Mobile Communication Co., Ltd. (CMC)—a wholly owned subsidiary of the state-owned China Mobile—signed a share subscription agreement to acquire a 15% stake in 2014, later adjusted to approximately 12% by 2021.³¹ This investment was accompanied by a strategic cooperation agreement covering areas such as smart voice technology, content services, customer support, and telecom industry informatization, which was renewed in 2015 to expand collaboration.³² Although CMC is not a controlling

³¹ *China Mobile Limited 2020 Annual Report*, China Mobile, 39 (2021), https://www.chinamobileltd.com/en/ir/reports/ar2020/2020_20f.pdf?utm.

³² *Anhui Keda Xunfei Xinx Keji Gufen Youxian Gongsu Guanyu Yu Zhongguo Yidong Tongxin Youxian Gongsu Qianshu Gufen Rengou Xieyi de Gonggao* (安徽科大讯飞信息科技股份有限公司关于与中国移动通信有限公司签署股份认购协议的公告) [Announcement by Iflytek Information Technology Co., Ltd. of Anhui Regarding the Signing of a Share Subscription

shareholder and has formally agreed not to increase its stake without the consent of iFlytek's controlling shareholders, its governance role is formalized through board representation.³³ As part of the subscription agreement, iFlytek established a Strategic Committee under its board of directors, which includes at least one non-independent director nominated by CMC.³⁴ The committee is tasked with advising on long-term development strategies, major investments, and R&D priorities.³⁵ In addition, CMC-designated representatives serve as a non-independent director on the board and a non-employee supervisor on the supervisory board.³⁶

Ping An exhibits a similar pattern of state-linked strategic influence. Although it has no controlling shareholder, two key state-owned entities—Shenzhen Investment Holdings Co., Ltd. (5.29%) and Central Huijin Asset Management Ltd. (2.58%)—hold significant minority stakes.³⁷ Importantly, Mr. He Jianfeng, Party Committee Secretary and Chairman of Shenzhen Investment Holdings, serves as a non-executive director on Ping An's board and sits on its Strategy and Investment Committee.³⁸ This committee is formally responsible for advising the board on the company's long-term strategic direction, major investments, and core operational projects.³⁹ According to Ping An's 2024 corporate disclosures, "all of the members' opinions and suggestions were adopted by the company," indicating that the committee's recommendations carry substantial weight in corporate decision-making.⁴⁰ In this context, Mr.

Agreement with China Mobile Communications Corporation] (2012), https://pdf.dfcfw.com/pdf/H2_AN201208230005456739_1.pdf; see also *Keda Xunfei Gufen Youxian Gongsi 2023 Niandu Baogao* (科大讯飞股份有限公司 2023 年度报告) [iFlytek Co., Ltd. 2023 Annual Report] (2024), <https://static.cninfo.com.cn/finalpage/2024-04-23/1219744478.PDF>.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Ping An Insurance (Group) Company of China, Ltd. Announcement of Audited Results for the Year Ended December 31, 2024*, Ping An, 131 (2025), <https://group.pingan.com/resource/pingan/IR-Docs/2025/pingan-ar24-report.pdf>.

³⁸ *Id.* at 123, 139.

³⁹ *Id.* at 123.

⁴⁰ *Id.* at 120.

He's position enables the state to participate in shaping strategic priorities without needing controlling equity.

Alongside board representation, another mechanism the state increasingly uses to embed influence is the so-called “golden share.” Often amounting to just a 1% equity stake, golden shares are held by state-affiliated entities and confer special governance rights—most notably, veto power over critical decisions such as investment direction and executive appointments.⁴¹ While these holdings are minor in size, their political and institutional weight is substantial. The concept of golden shares was first introduced in China in 2013, when the Chinese Communist Party proposed the use of “special management shares” in restructured state-owned media firms.⁴² In recent years, however, this mechanism has been extended to private AI and platform companies. For instance, China's Internet Investment Fund—controlled by the Cyberspace Administration of China—has acquired small equity stakes in data-rich firms, including subsidiaries of Tencent and Alibaba.⁴³ Public disclosures suggest that these arrangements often grant the state formal board access, enabling strategic oversight at the governance level without direct involvement in daily operations.⁴⁴

Taken together, these mechanisms—while not granting the state full control—enable it to shape how firms make strategic choices. This influence operates not through routine intervention, but by embedding state presence in strategic decision-making processes. When state-affiliated directors sit on corporate boards or politically significant investors hold equity

⁴¹ Rebecca Parry & Qingxiu Bu, *The Future of China's U.S.-Listed Firms: Legal and Political Perspectives on Possible Decoupling*, 14 WILLIAM & MARY BUSINESS LAW REVIEW 641, 679 (2022).

⁴² Sun Yulin, *Golden Shares Reimagined: Decoding China's Special Management Shares*, SSRN (March 20, 2024), <https://ssrn.com/abstract=4765649> or <http://dx.doi.org/10.2139/ssrn.4765649>.

⁴³ Wei Lingling, *China's New Way to Control Its Biggest Companies: Golden Shares*, WALL ST. J. (Mar. 8, 2023), <https://www.wsj.com/articles/xi-jinpings-subtle-strategy-to-control-chinas-biggest-companies-ad001a63>.

⁴⁴ *Id.*; Parry & Bu, *supra* note 41.

stakes, firms often become more responsive to policy cues and adjust their priorities accordingly. This influence can manifest in tangible outcomes, such as the direction of R&D investments, market expansion decisions, or data management practices.

The effect is often subtle but material: firms align with state priorities not through formal instruction, but through internalized awareness of political expectations. Board representation and golden shares reinforce this by providing the state with a formal voice in high-level matters—particularly in areas like long-term planning, major investments, and technology development. In practice, this fosters a governance environment where private firms retain operational autonomy, yet remain attuned to evolving political and regulatory signals.

B. Party-State Ties in Non-State-Owned AI National Champions

For AI National Champions in which the state owns no shares, influence is often exercised through close ties between company founders and party-state institutions.⁴⁵ Research on state capitalism shows that the Chinese government maintains leverage through a web of personal and institutional connections linking corporate leaders to party-affiliated organizations.⁴⁶ For instance, while the annual reports of companies like Alibaba Cloud,⁴⁷ Baidu,⁴⁸ and Tencent⁴⁹ reveal no significant direct state ownership, control often resides with individuals who maintain strong affiliations with party institutions.⁵⁰ One study of China's top 100 private companies found that only five founders or de facto controllers had no formal ties to the party-state.⁵¹

⁴⁵ Curtis J Milhaupt & Wentong Zheng, *Beyond Ownership: State capitalism and the Chinese Firm*, 103 GEO. L.J. 665 (2014).

⁴⁶ *Id.*

⁴⁷ *Alibaba Group Holding Limited Fiscal Year 2023 Annual Report*, Alibaba Group (2024), <https://static.alibabagroup.com/reports/fy2023/ar/ebook/en/index.html>.

⁴⁸ *Baidu, Inc. Fiscal Year 2023 Annual Report*, Baidu, Inc. (2024), <https://ir.baidu.com/static-files/5692fb22-e554-4760-9a3c-00619f34e120>.

⁴⁹ *Tencent Holdings Limited Fiscal Year 2023 Annual Report*, Tencent Holdings Limited (2024), <https://static.www.tencent.com/uploads/2024/04/08/e95c902973fc282be3b3e285c6245281.pdf>.

⁵⁰ Milhaupt & Zheng, *supra* note 45.

⁵¹ *Id.*

This pattern is mirrored among the leadership of major AI National Champions: figures like Pony Ma (Tencent), Robin Li (Baidu), and Liu Qiangdong (JD.com) hold positions in national-level political bodies, including the Chinese People’s Political Consultative Conference (CPPCC) and the National People’s Congress (NPC).⁵² Through these platforms, the state maintains political visibility and exercises soft influence over firm strategies, reinforcing its presence even in the absence of direct ownership.⁵³

C. Rationales for Non-Controlling Shareholding by the Chinese Government

The Chinese government’s decision to limit or avoid equity control in leading AI firms reflects a strategic effort to balance two key priorities: maintaining influence over critical technologies while preserving the agility of private firms. Rather than signaling a retreat from control, non-controlling shareholding is a deliberate approach that allows the state to steer innovation without constraining firms’ operational flexibility.

One rationale lies in international positioning. By maintaining low or no formal state ownership, AI companies project autonomy, helping them avoid heightened scrutiny or sanctions from foreign regulators, particularly in the United States (US).⁵⁴ This “arm’s-length” structure also facilitates global expansion, especially in sensitive sectors like data infrastructure, where visible state control could trigger concerns over cybersecurity or political interference.⁵⁵

A second rationale is domestic. The rapid pace of AI development demands speed and flexibility—traits often compromised under traditional state control.⁵⁶ A non-controlling

⁵² *Id.*

⁵³ *Id.*

⁵⁴ See e.g., *Treasury Identifies Eight Chinese Tech Firms as Part of The Chinese Military-Industrial Complex*, US DEPARTMENT OF THE TREASURY (Dec. 16, 2021), <https://home.treasury.gov/news/press-releases/jy0538>.

⁵⁵ See e.g., Sapna Waheshwari & Amanda Holpuch, *Why the U.S. Is Forcing TikTok to Be Sold or Banned*, N.Y. TIMES (June 20, 2024), <https://www.nytimes.com/article/tiktok-ban.html>.

⁵⁶ For the relationship between innovation behavior and bureaucratic structure, see YASHENG HUANG, *CAPITALISM WITH CHINESE CHARACTERISTICS: ENTREPRENEURSHIP AND THE STATE* (2008).

structure enables firms to make quick strategic decisions, attract private capital, and retain entrepreneurial leadership, while still remaining responsive to policy signals through embedded governance mechanisms such as board representation, golden shares, or informal Party ties.

Finally, this approach reflects broader trends in China's economic governance. As part of its evolving model of state capitalism, Beijing increasingly favors indirect steering over formal ownership.⁵⁷ Influence is exercised not through majority control, but through a mix of regulatory channels, political incentives, and institutional integration. This allows the state to guide private innovation in line with national goals—such as AI leadership and data sovereignty—while preserving the efficiency and global competitiveness of private firms.

III. REGULATOR-REGULATEE RELATIONSHIP

In China's regulatory system, financial support serves as a powerful regulatory tool through which local governments incentivize AI firms to comply with national objectives while allowing for regional adaptation. This inducement-based approach operates through three main mechanisms. First, local authorities deploy targeted subsidies and financial incentives to steer firms toward central policy objectives. Second, enforcement of certain regulations is relaxed in strategic or emerging domains to allow room for experimentation. Third, AI firms engage with regulators to shape emerging rules, both through formal consultation and informal negotiation. Together, these mechanisms enable the state to govern not only through constraint, but through incentives and strategic flexibility.

A. Financial Support as a Regulatory Toolkit

⁵⁷ Milhaupt & Zheng, *supra* note 45.

AI regulation is often conceived as a set of constraints—rules that govern where and how technologies may be deployed, and under what conditions. The European Union (EU)’s AI Act exemplifies this approach, emphasizing precaution, transparency, and the minimization of societal risk.⁵⁸ In contrast, China’s regulatory model is not solely restrictive but also facilitative. Rather than focusing exclusively on limiting risks, regulation is also used to steer the trajectory of technological development. Under this dual-function model, the state seeks both to curb specific risks and to promote innovation in strategically important sectors such as AI.

To this end, China has developed a multi-layered regulatory architecture that combines national frameworks with locally differentiated implementation. At the national level, sector-specific regulations govern domains such as algorithmic recommendation systems,⁵⁹ generative AI applications,⁶⁰ connected vehicles,⁶¹ deep synthesis technologies,⁶² and health-related big data.⁶³ These are complemented by foundational laws—such as the Personal Information Protection Law, Cybersecurity Law, and Data Security Law—that define

⁵⁸ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending certain Union legislative acts (Artificial Intelligence Act), 2024 O.J. (L 1689) 1 (EU).

⁵⁹ Algorithmic Regulation, *supra* note 3.

⁶⁰ Interim Measures for Generative AI, *supra* note 3.

⁶¹ Wuren Jiashi Hangkongqi Feixing Guanli Zhanxing Tiaoli (无人驾驶航空器飞行管理暂行条例) [Interim Regulation on the Administration of the Flight of Unmanned Aircraft] (promulgated by the St. Council, Central Military Comm., May 31, 2023, effective Jan. 1, 2024), https://www.gov.cn/zhengce/content/202306/content_6888799.htm (China); Minyong Wuren Jiashi Hangkongqi Shengchan Guanli Ruogan Guiding (民用无人驾驶航空器生产管理若干规定) [Several Provisions on the Administration of the Manufacture of Unmanned Civil Aircraft] (promulgated by the Ministry of Industry & Info. Tech., Dec. 18, 2023, effective Jan. 1, 2024), https://www.moj.gov.cn/pub/sfbgw/flfggz/flfggzbmzg/202409/t20240918_506145.html (China).

⁶² Hulianwang Xinxu Fuwu Shendu Hecheng Guanli Guiding (互联网信息服务深度合成管理规定) [Provisions on the Administration of Deep Synthesis of Internet-Based Information Services] (promulgated by the Cyberspace of Admin. China, Ministry of Industry & Info. Tech., and Ministry of Public Security, Nov. 25, 2022, effective Jan. 10, 2023), https://www.gov.cn/zhengce/zhengceku/2022-12/12/content_5731431.htm (China).

⁶³ Guowuyuan Bangongting Guanyu Cujin he Guifan Jiankang Yiliao Dashuju Yingyong Fazhan de Zhidao Yijian (国务院办公厅关于促进和规范健康医疗大数据应用发展的指导意见) [Guiding Opinions of the General Office of the State Council on Promoting and Regulating the Application and Development of Health and Medical Big Data] (promulgated by the General Office of the St. Council, June 21, 2016, effective June 21, 2016), https://www.gov.cn/zhengce/content/2016-06/24/content_5085091.htm (China).

overarching principles for data governance and digital security. Together, these instruments form a legal infrastructure aimed at enabling ethically and strategically aligned AI development.

Yet realizing the ambitions embedded in national strategies like *Made in China 2025* and the *New Generation Artificial Intelligence Development Plan* presents a structural challenge. AI innovation is fast-moving, capital-intensive, and driven primarily by private firms that are not under direct state ownership. In this context, conventional top-down administrative tools offer limited traction. As a result, the Chinese state increasingly relies on financial instruments to steer firm behavior, guide technological priorities, and coordinate decentralized efforts toward central goals. This model—what may be termed incentive-based regulation—uses subsidies, tax relief, land-use rights, and investment funds as tools not only of economic support, but of strategic governance.⁶⁴

Local governments are the primary agents of this incentive-based regulatory approach.⁶⁵ They are responsible for designing and administering financial support schemes tailored to regional industrial conditions and economic objectives. These schemes target various aspects of AI development—ranging from foundational research to application-specific technologies—and often reflect local sectoral strengths.⁶⁶ Rather than adhering to a centrally

⁶⁴ Jeffrey Ding, *Deciphering China's AI Dream: The context, components, capabilities, and consequences of China's strategy to lead the world in AI*, University of Oxford, 4 (Mar. 2018), https://cdn.governance.ai/Deciphering_Chinas_AI-Dream.pdf.

⁶⁵ Roberts, et al., *supra* note 8.

⁶⁶ See, e.g., Guanyu Yinfa “Shandongsheng Cujin Renxing Jiqiren Chanye Chuangxin Fazhan Shishi Fangan (2024-2027)” de Tongzhi (关于印发《山东省促进人形机器人产业创新发展实施方案（2024—2027年）》的通知) [Notice on Issuing the “Implementation Plan for Promoting the Innovative Development of the Humanoid Robot Industry in Shandong Province (2024–2027)”] (promulgated by the Department of Industry & Info. Tech of Shandong Province, Apr. 30, effective Apr. 30, 2024) [hereinafter *Plan for Promoting the Humanoid Robot Industry in Shandong*], http://gxt.shandong.gov.cn/art/2024/5/6/art_103863_10343088.html (China); Hubeisheng Jiakuai Fazhan Suanli yu Dashuju Chanye Sannian Xingdong Fangan (湖北省加快发展算力与大数据产业三年行动方案) [Hubei Province Releases a Three-Year Action Plan for Computing Power and Big Data Industry] (promulgated by the Hubei Provincial Dev. & Reform Comm., July 1, 2024, effective July 1, 2024), https://fgw.hubei.gov.cn/fbjd/xxgkml/jgzn/nsjg/cxfzc/gzdt/202407/t20240701_5256120.shtml (China); Chaoyangqu Cujin Tongyong Rengong Zhineng Chuangxin Yingyong Fazhan Sannian Xingdong Jihua (朝阳区促进通用人工智能创新应用发展三年行动计划(2024-2026年)) [Chaoyang AI Innovation Application Development Action Plan (2024-2026)] (promulgated by the Chaoyang District People's Gov't of Beijing Municipality, May 29, 2024, effective May 29, 2024),

imposed blueprint, localities are encouraged to develop policies suited to their comparative advantages. This results in a partially decentralized model of AI regulation, where subnational authorities are granted significant discretion in how they interpret and operationalize national strategies.

Empirical variation across provinces illustrates this point. Guizhou Province has positioned itself as a national data infrastructure hub by leveraging its cool climate and stable hydropower resources to reduce operational costs for large-scale data centers.⁶⁷ Under the *Eastern Data, Western Computing* policy, Guizhou's government has actively supported infrastructure development through low-cost electricity and land-use incentives, helping to attract firms such as Tencent and Alibaba Cloud to the Gui'an Big Data Industrial Park.⁶⁸ In contrast, Shenzhen has focused its financial incentives on application-layer technologies like smart mobility and algorithmic services. Local authorities have introduced targeted R&D subsidies and streamlined approval procedures⁶⁹ to support its established ecosystem of firms like Huawei, Tencent, and DJI.⁷⁰ Meanwhile, Shandong Province, drawing on its legacy of

<http://www.bjchy.gov.cn/ztl/cyzchb/jjz/4028805a8fb85191018fdbf25af4117b.html> (China).

⁶⁷ Andrew Stokols, *Energy and AI Coordination in the 'Eastern Data Western Computing' Plan*, 25 CHINA BRIEF 6 (2025).

⁶⁸ *Id.*; Guizhou Suanliquan Guanli Banfa (贵州算力券管理办法) [Guizhou Measures for the Administration of Computing Power Vouchers] (promulgated by the Guizhou Provincial Big Data Development Administration, Feb. 21, 2024, effective Feb. 21, 2024), <https://www.ciiabd.org.cn/articles/Dk44Bk.html> (China); Guizhousheng Tuidong Rengong Zhineng Gaozhiliang Fazhan Xingdong Fangan (2025-2027) (贵州省推动人工智能高质量发展行动方案(2025-2027)) [Action Plan for Promoting High-Quality Development of AI in Guizhou Province] (promulgated by the "General Office of the People's Government of Guizhou Province, Dec. 28, 2024, effective Dec. 28, 2024), https://www.guizhou.gov.cn/zwgk/zfgb/gzsfzfgb/202502/t20250217_86906716.html (China).

⁶⁹ See Kejibu Guanyu Zhichi Shenzhen Jianshe Guojia Xinyidai Rengong Zhineng Chuangxin Fazhan Shiyanqu de Han (科技部关于支持深圳建设国家新一代人工智能创新发展试验区的函) [Letter from the Ministry of Science and Technology on Supporting Shenzhen in Establishing a National New Generation Artificial Intelligence Innovation Development Pilot Zone] (promulgated by the Ministry of Science & Tech, Oct. 17, 2019, effective Oct. 18, 2019), https://www.most.gov.cn/xxgk/xinxifenlei/fdzdgknr/qttwj/qttwj2019/201910/t20191018_149418.html (China); Shenzhenshi Nanshanqu Renmin Zhengfu Guanyu Yinfa "Nanshanqu Cujin Chanye Gaozhiliang Fazhan Zhuanxiang Zijin Guanli Banfa" Deng Chanye Fuchi Zhengce de Tongzhi (深圳市南山区人民政府关于印发《南山区促进产业高质量发展专项资金管理办法》等产业扶持政策的通知) [Notice from the People's Government of Nanshan District, Shenzhen, on Issuing "the Administrative Measures for Special Funds to Promote High-Quality Industrial Development in Nanshan District" and Other Industrial Support Policies] (promulgated by the Shenzhen Nanshan District Gov't, Nov. 18, 2022, effective Nov. 29, 2022), https://sf.sz.gov.cn/gfxwjcx/qjgfwj/nsq/qzfgfwj/qzf/content/post_10369791.html (China).

⁷⁰ According to the Shenzhen Municipal Industry and Information Technology Bureau, the city has allocated up to 500 million yuan (approximately US\$68.6 million) annually to support R&D and training of AI models. Additionally, up to 100

industrial manufacturing, has concentrated resources on intelligent robotics.⁷¹ Its *Humanoid Robot Industry Innovation Development Implementation Plan (2024–2027)* provides financial support for upstream robotics suppliers and aims to position the province as a node for AI-enabled automation in manufacturing.⁷²

This regulatory diversity reflects more than just differences in local industrial base or technical capacity. It is shaped by a combination of administrative incentives, economic priorities, and institutional practices unique to China’s multi-level governance system. Scholars have long observed that Chinese localities operate within what has been termed a system of “adaptive authoritarianism” or “Darwinian bureaucratic competition,” in which local officials are not passive executors of policy but proactive actors seeking to distinguish their jurisdictions.⁷³ Financial support schemes, in this context, are used not only to promote local innovation but also to signal competence, responsiveness, and alignment with national development goals.

One central mechanism driving this behavior is the performance-based cadre evaluation system. As argued by Pierre F. Landry, local officials are assessed not only on compliance with central directives but also on their ability to generate measurable developmental outcomes⁷⁴—

million yuan per year is designated to finance the use of AI models, and another 100 million yuan is directed towards applying AI in key sectors such as advanced manufacturing, modern services, and scientific research. See *City Unveils New Incentives to Lead in AI Industry*, SZ.GOV. (Dec. 19, 2024), https://www.sz.gov.cn/en_szgov/news/infocus/aisz/news/content/post_11907804.html; Yi Luo, *Shenzhen Showers AI Companies, Workers with Cash to Boost Local Industry*, SOUTH CHINA MORNING POST (Dec. 20, 2024), <https://www.scmp.com/tech/big-tech/article/3291602/shenzhen-showers-ai-companies-workers-cash-boost-local-industry>; Iris Deng, *China’s Tech Hub Shenzhen, Home to Huawei and Tencent, Wants to Become A ‘Unicorn’ Paradise*, SOUTH CHINA MORNING POST (Oct. 29, 2021), <https://www.scmp.com/tech/policy/article/3153880/chinas-tech-hub-shenzhen-home-huawei-and-tencent-wants-become-unicorn>.

⁷¹ *Shandong Releases the Development Roadmap for the Humanoid Robot Industry*, DEPARTMENT OF COMMERCE OF SHANGDONG (Nov. 6, 2024), <https://en.selectshandong.com/syzx/ywxx/557235868618821.shtml>.

⁷² *Id.*

⁷³ RICHARD MCGREGOR, *THE PARTY: THE SECRET WORLD OF CHINA’S COMMUNIST RULERS* 175-176 (2010); Sebastian Heilmann, *From Local Experiments to National Policy: The Origins of China’s Distinctive Policy Process*, 59 CHINA JOURNAL 1 (2008).

⁷⁴ PIERRE F. LANDRY, *DECENTRALIZED AUTHORITARIANISM IN CHINA: THE COMMUNIST PARTY’S CONTROL OF LOCAL ELITES IN THE POST-MAO ERA* (2009).

including GDP growth, technological upgrading, and alignment with national priorities such as AI. Under Xi Jinping, this system has become more explicitly linked to strategic sectors. Policies that successfully integrate AI into local economies not only yield economic benefits but also enhance officials' visibility in central evaluations. Financial incentives thus serve a dual function: fostering local industrial development and signaling political alignment with the center.

At the same time, policy diversity reflects underlying forms of symbolic and strategic competition between jurisdictions. Although central designations—such as AI pilot zones or national computing hubs—are not always awarded through formal competitive processes, the selection mechanisms effectively create a *de facto* contest among cities and provinces. Jurisdictions that demonstrate proactive policy design, regulatory capacity, or technological excellence are more likely to be chosen for these initiatives.⁷⁵ The associated rewards—including central pilot designation, enhanced regulatory discretion, and in some cases access to additional funding—create strong incentives for local governments to deploy financial and policy tools that distinguish their jurisdictions from others.⁷⁶ While most direct financial support originates at the local level, successful alignment with national goals may attract follow-on resources or political recognition from the top leadership.⁷⁷ This dynamic is consistent with the literature on experimental governance and performance-based

⁷⁵ For example, Guizhou province began developing cloud computing in 2011, establishing Gui'an New Area to attract tech investment. After aligning with national plans in 2013, it became China's first "Big Data Comprehensive Pilot Zone" in 2014. By 2021, Guizhou was incorporated into the national "Eastern Data, Western Computing" strategy as a major data hub. *See* Stokols, *supra* note 67.

⁷⁶ These incentives are well-documented in the literature on experimental governance and performance-based decentralization in China. *See* Heilmann, *supra* note 73; XUEGUANG ZHOU, *THE LOGIC OF GOVERNANCE IN CHINA: AN ORGANIZATIONAL APPROACH* (2022).

⁷⁷ LANDRY, *supra* note 74; YUEN YUEN ANG, *HOW CHINA ESCAPED THE POVERTY TRAP* (2016); Andrew Mertha, "Fragmented authoritarianism 2.0": *Political pluralization in the Chinese policy process*, 200 *THE CHINA QUARTERLY* 995 (2009).

decentralization in China, in which local innovation is not only tolerated but actively incorporated into the national policy learning process.⁷⁸

In sum, financial incentives in China serve not only economic purposes but regulatory ones. It enables local governments to advance national goals while managing regional differentiation within a unified strategic framework.

B. Regulator's Selective Oversight

Selective regulatory enforcement has become another feature of China's decentralized approach to AI governance. While national authorities establish broad policy frameworks, local governments retain discretion over how, when, and to what extent regulations are applied. This discretion is especially visible in localities competing to attract strategically important AI firms. In these jurisdictions, officials—driven by performance incentives and often constrained by limited technical capacity—may defer, relax, or selectively interpret compliance requirements.⁷⁹ Rather than enforcing incomplete or ambiguous national standards, they authorize early-stage projects through pilot zones and innovation districts.⁸⁰ These mechanisms enable firms to test and deploy novel technologies while formal oversight is temporarily suspended.

Baidu's Robotaxi operations in Wuhan exemplify this logic. In 2022, the city became one of the first jurisdictions in China to authorize fully driverless commercial services on public roads, despite the absence of national-level legislation on autonomous vehicle liability,

⁷⁸ ZHOU, *supra* note 76.

⁷⁹ Xueguang Zhou, *The Institutional Logic of Collusion among Local Governments in China*, 36 MODERN CHINA 47 (2010).

⁸⁰ Guojia Xinyidai Rengong Zhineng Chuangxin Fazhan Shiyanqu Yida 17 Ge (国家新一代人工智能创新发展试验区已达 17 个) [The Number of National New-Generation AI Innovation and Development Pilot Zones Has Reached 17], GOV.CN (Dec. 6, 2021), https://www.gov.cn/xinwen/2021-12/06/content_5657953.htm.

algorithmic accountability, or data security.⁸¹ The municipal government not only issued operational permits but also expanded testing zones and pledged to support fleet scaling—enabling Baidu to deploy over 400 autonomous taxis by 2024.⁸² This permissiveness accelerated Baidu’s market positioning, but it also exposed gaps in oversight: in 2024, a Robotaxi in Wuhan collided with a pedestrian, triggering renewed scrutiny over safety protocols and insurance frameworks.⁸³

Firms may also adopt strategies that exploit regulatory ambiguity to expand their operational space while remaining formally within legal boundaries. Meituan’s drone delivery program in Shenzhen illustrates this approach. Beginning in 2021, Meituan launched commercial drone trials under the city’s pilot framework for low-altitude airspace reform.⁸⁴ At the time, national regulations on unmanned aerial vehicles were underdeveloped,⁸⁵ and Shenzhen’s local guidelines for commercial drone operations remained vague.⁸⁶ This allowed Meituan to deploy and refine its drone delivery services in practice, despite not receiving formal approval from the Civil Aviation Administration of China (CAAC) until 2023.⁸⁷ By operating under the legal cover of an experimental zone, Meituan gained a crucial first-mover

⁸¹ *Baidu Bags China’s First Fully Driverless Robotaxi Licenses*, REUTERS (Aug. 8, 2022), <https://www.reuters.com/business/autos-transportation/baidu-bags-chinas-first-fully-driverless-robotaxi-licenses-2022-08-08/>.

⁸² *Baidu’s Apollo Autonomous Vehicles Granted Licence to Test in Hong Kong*, REUTERS (Nov. 30, 2024), <https://www.reuters.com/business/autos-transportation/baidus-apollo-autonomous-vehicles-granted-licence-test-hong-kong-2024-11-30/>.

⁸³ Fan Feifei, *Self-Driving Taxi Sparks Discussions on Challenges, Limitations*, CHINA DAILY (July 12, 2024), <https://www.chinadaily.com.cn/a/202407/12/WS669065cfa31095c51c50dab8.html>.

⁸⁴ Iris Deng, *Meituan Wants Its Drones to Officially Deliver Meals to Customers in Shenzhen by 2022*, SOUTH CHINA MORNING POST (Dec. 17, 2021), <https://www.scmp.com/tech/tech-trends/article/3160177/meituan-wants-its-drones-officially-deliver-meals-customers>.

⁸⁵ In 2021, when Meituan launched its drone delivery operations, China had not yet established specific national guidelines (the *Interim Regulation on the Administration of the Flight of Unmanned Aircraft*, issued on May 31, 2023, and set to take effective on Jan. 1, 2024). See *Interim Regulation on the Administration of the Flight of Unmanned Aircraft*, *supra* note 61.

⁸⁶ *Shenzhen Minyong Weiqingxing Wurenji Guanli Zanzing Banfa* (深圳市民用微轻型无人机管理暂行办法) [Interim Administrative Measures of the Shenzhen Municipality on Civil Micro and Light UAVs] (promulgated by the People’s Gov’t of Shenzhen City, Jan. 29, 2019, effective Mar. 1, 2019), https://sf.sz.gov.cn/ztl/zflf/gzsd/content/post_2957951.html (China).

⁸⁷ *Meituan Wurenji Huopi zai Shenzhen Song Waimai, Pingjun Shichang yue 12 Fenzhong* (美团无人机获批在深圳送外卖, 平均时长约 12 分钟) [Meituan’s Drones Have Been Approved to Deliver Food in Shenzhen, With an Average Delivery Time of about 12 Minutes], MEITUAN (Feb. 24, 2023), <https://www.meituan.com/news/NN230322000053453>.

advantage while navigating the legal gray zone between national regulatory lag and local permissiveness.

Additionally, JD.com's expansion into drone-based logistics also illustrates how firms can leverage provincial support and regulatory discretion to gain early-mover advantages. In 2015, JD.com signed a strategic cooperation agreement with the Shaanxi provincial government, laying the groundwork for long-term collaboration.⁸⁸ In 2017, provincial governments authorized the company to begin testing drone delivery operations throughout the province, well ahead of formal national approval.⁸⁹ In 2018, the CAAC officially designated JD.com as the lead entity in a "UAV Air Logistics Multimodal Transport Innovation Pilot" in Shaanxi—effectively nationalizing what had already been established through provincial backing.⁹⁰ Throughout this period, high-level political engagement—such as meetings between JD.com founder Liu Qiangdong and Shaanxi's governor—helped reinforce mutual commitments to making the province a logistics innovation hub.⁹¹ Enabled by local protection and political support, JD.com was able to deploy drone technologies at scale without being constrained by the more cautious national regulatory regime.

Drawing from the cases above, local governments appear to selectively enforce or reinterpret regulations to attract high-profile firms, while companies often reciprocate through investment, symbolic compliance, and visible alignment with state priorities. By operating in

⁸⁸ Shaanxi Provincial Government, *Shanxi Shengzhengfu yǔ Jingdong Jituan Qianshu Zhanlǜe Hezuo Xieyi* (陕西省政府与京东集团签署战略合作协议) [*The Shaanxi Provincial Government and JD.com Group Have Signed a Strategic Cooperation Agreement*], GOV.CN (Dec. 8, 2015), https://www.gov.cn/xinwen/2015-12/08/content_5021056.htm.

⁸⁹ Yang Xinjie (杨鑫健), *Jingdong zai Shanxi Quansheng Shidian Wurenji Peisong, Jiangzai Quanguo Jian Shangwan ge Wurenji Jichang* (京东在陕西全省试点无人机配送, 将在全国建上万个无人机机场) [*JD.com is Piloting Drone Delivery Across Shaanxi Province and Plans to Establish Over 10,000 Drone Airports Nationwide*], THEPAPER (Feb. 5, 2018), https://m.thepaper.cn/newsDetail_forward_1983574.

⁹⁰ *Id.*

⁹¹ Shaanxi Provincial Government, *supra* note 88.

environments where enforcement is delayed or selectively applied, firms gain early market access with minimal regulatory friction—accelerating growth and shaping technical standards before national rules are formalized. This pattern of mutual accommodation—characterized by informal coordination, selective incentives, and reciprocal signaling—mirrors broader dynamics within China’s political economy, where *guanxi*, or personalized ties between business actors and state officials, serves as a key mechanism of influence and coordination.⁹²

In addition, many firms actively cultivate informal relationships with local officials to sustain these permissive conditions. Rather than relying on overt bribery, these exchanges often take more institutionalized or reputational forms: recruiting retired government officials to facilitate access to procurement channels,⁹³ or sponsoring events that enhance an official’s visibility and performance image.⁹⁴ Empirical research suggests that politically connected firms are more likely to receive regulatory forbearance and preferential treatment. Drawing on a sample of 6,541 firm-year observations between 2007 and 2018, one study finds that Chinese firms systematically increase entertainment and donation expenditures during local leadership transitions, suggesting strategic efforts to build rapport with new officials.⁹⁵ These relationships function as a form of implicit risk insurance: firms benefit from regulatory tolerance, while local officials gain performance-enhancing outcomes and reputational rewards under China’s cadre evaluation system.

⁹² David Wank, *Business-State Clientelism in China: Decline or Evolution*, in *Social Connections*, in CHINA: INSTITUTIONS, CULTURE, AND THE CHANGING NATURE OF GUANXI (Thomas Gold, Doug Guthrie & David Wank eds., 2002); KELLE S. TSAI, CAPITALISM WITHOUT DEMOCRACY: THE PRIVATE SECTOR IN CONTEMPORARY CHINA (2007).

⁹³ Shenghua Lu & Hui Wang, *How political connections exploit loopholes in procurement institutions for government contracts: Evidence from China*, 36 GOVERNANCE 1205 (2022).

⁹⁴ Han Yu et al, *Guanxi, Political Connections and Resource Acquisition in Chinese Publicly Listed Private Sector Firms*, 23 ASIA PACIFIC BUS. REV. 336 (2017).

⁹⁵ Hanming Fang et al., *Firms and Local Governments: Relationship Building during Political Turnovers*, 27 REVIEW OF FINANCE 739 (2023).

C. Regulatees' Involvement in Rule-Making

As discussed in the investor–investee relationship section, many tech entrepreneurs in China maintain close ties to the party-state. By holding positions in institutions such as the CPPCC—the top advisory body—and the NPC, China’s highest legislative organ, they gain access to elite political channels through which they can shape regulatory priorities.⁹⁶ Participation in these forums enables tech executives to propose legal frameworks and advocate for policy agendas that align with their commercial and technological interests.

For instance, Robin Li, CEO of Baidu, has used his position in the CPPCC to advocate for policies supporting autonomous driving, an emerging field in which Baidu is heavily invested.⁹⁷ Li has actively lobbied for regulatory frameworks that promote the development of self-driving vehicles, offering specific legislative recommendations to the central government.⁹⁸ In 2022, he proposed policies to accelerate the commercialization of autonomous vehicles and enhance intelligent transportation systems to improve traffic flow and reduce emissions.⁹⁹ Li emphasized the need for innovative policies to support large-scale commercial operations in this sector, pointing out that China’s leadership position in self-driving technology could be bolstered by regulatory support.¹⁰⁰ This active involvement allows Baidu and other AI companies to shape the regulatory environment to foster their technological advancements while ensuring that these innovations have legal and governmental backing.

⁹⁶ ZHANG, *supra* note 13, at 102.

⁹⁷ Fan Feifei, *Baidu Head Stresses Innovation in Autonomous Driving Policies*, CHINA DAILY (Mar. 8, 2022), <https://www.chinadaily.com.cn/a/202203/08/WS6226af88a310cdd39bc8b163.html>.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

Similarly, Pony Ma, CEO and founder of Tencent, has leveraged his position as a member of the NPC to submit over 50 proposals covering topics central to China's digital economy and technology sectors,¹⁰¹ including the "Internet Plus" initiative, the development of the digital economy, and the Guangdong-Hong Kong-Macao Greater Bay Area.¹⁰² Through these proposals, Ma highlights critical areas of digital transformation, calling for stable policy frameworks and regulatory frameworks that would support a predictable environment for the internet economy and fintech sectors.¹⁰³ In doing so, Ma has lobbied for regulatory conditions that support Tencent's growth within a favorable and stable framework, aligning national policy with Tencent's strategic objectives.

Beyond their involvement in national technological development strategies through major party-state events, Chinese tech companies participate in the early stages of industry standards formulation, leveraging their expertise to influence regulatory frameworks. For instance, SenseTime, a leader in facial recognition technology, has been selected to represent computational vision companies in establishing national standards for the AI sector.¹⁰⁴ The company has reported extensive participation in numerous AI-related domestic and international standard organizations, contributing to the development of standards in areas such as computer vision, facial recognition, big data, and smart cities.¹⁰⁵ Similarly, other leading AI companies like iFlytek, Alibaba Cloud, and Huawei have been invited to serve as committee

¹⁰¹ Rita Liao, *What China's Big Tech Ceos Propose at the Annual Parliament Meeting*, TECHCRUNCH (Mar. 4, 2021), <https://techcrunch.com/2021/03/04/two-sessions-2021-china-tech/>.

¹⁰² *Ma Huateng Lianghui Ti Qifen Jianyi, Guanzhu Chanye Hulanwang, Xiangcun Zhenxing deng* (马化腾两会提七份建议, 关注产业互联网、乡村振兴等) [Pony Ma Proposes Seven Suggestions at the Two Sessions, Focusing on Industrial Internet, Rural Revitalization, etc.], CAC.GOV. (May 18, 2020), https://www.cac.gov.cn/2020-05/20/c_1591523912185114.htm.

¹⁰³ *Id.*

¹⁰⁴ *Shangtang Keji Zuowei Jisuanji Shijue Qiye Daibiao Ruxuan Shoujie AI Guojia Biaozhunhua Zuzhi* (商汤科技作为计算机视觉企业代表入选首届AI国家标准化组织) [SenseTime, As a Representative Computer Vision Company, Was Selected to Join the Inaugural National AI Standardization Organization], SENSETIME (Aug. 13, 2020), <https://www.sensetime.com/cn/news-detail/54645?categoryId=72>.

¹⁰⁵ *Id.*

members responsible for formulating national standards in the field of AI.¹⁰⁶ By actively participating in the establishment of industry standards, tech firms may create opportunities to influence regulatory frameworks in ways that support their innovation and potentially enhance their market position.

Despite the regulatory flexibility and AI companies' active role in shaping the regulatory landscape, they are still subject to data protection and cybersecurity laws. Many AI companies recognize these challenges in their annual reports, noting the need to comply with stringent national laws.¹⁰⁷ In recent years, the Chinese government has tightened these regulations, requiring AI companies to ensure the ethical use of their technologies in line with national laws and regulations.¹⁰⁸ This creates a more complex regulatory landscape—while AI National Champions collaborate with the government to shape the rules they will follow, they also need to navigate the balance between local regulatory flexibility and stricter national oversight.¹⁰⁹

In sum, the regulator-regulatee relationship within China's AI sector is shaped by the competitive dynamics among local governments and the career ambitions of government officials, who seek to demonstrate success in fostering AI innovation. In this context, AI companies possess greater leverage as they can strategically choose where to establish operations, often forming close ties with government officials through personal networks. This environment allows companies to influence the regulatory landscape to their advantage. Consequently, the relationship between regulators and AI companies is not strictly top-down,

¹⁰⁶ *Id.*

¹⁰⁷ See, e.g., *supra* note 47-49.

¹⁰⁸ Hayley Wong, *China Steps up Crackdown on 'Misleading' AI-Generated Content, 'Troubling Phenomena'*, SOUTH CHINA MORNING POST (Mar. 15, 2024), <https://www.scmp.com/news/china/politics/article/3255578/china-steps-crackdown-misleading-ai-generated-content-troubling-phenomena>.

¹⁰⁹ This issue will be examined in greater detail in the 'Procurer-Procuree Relationship' section.

but rather dynamic, opportunistic, and at times collaborative, as both parties align their interests in pursuit of regional development and technological advancement.

IV. PROCURER-PROCUREE RELATIONSHIP

In addition to acting as an investor and regulator, the Chinese government also serves as a major procurer, functioning as a key customer for AI companies, particularly in sectors such as smart cities, public security, and digital transformation.¹¹⁰ Existing analyses suggest that procurement relationships between the government and these firms often extend beyond simple commercial transactions, evolving into strategic collaborations aligned with national objectives.¹¹¹ Through these partnerships, AI companies contribute to national development goals while simultaneously securing valuable business opportunities.

Studies further argue that there is a mutually reinforcing relationship between AI innovation and autocratic governance: AI technologies, particularly predictive analytics, enhance the regime's ability to exercise social and political control.¹¹² Moreover, because government data plays a critical role in AI development—serving as crucial input for training algorithms used in politically sensitive applications—procurement contracts may indirectly stimulate innovation in the commercial sector, as companies refine their technologies for broader market use.¹¹³

A. Governmental Exchange of Data with Private AI Firms?

Existing studies suggest that politically motivated public security contracts procured by

¹¹⁰ H. M. K. K. M. B. Herath & Mamta Mittal, *Adoption of Artificial Intelligence in Smart Cities: A Comprehensive Review*, 22 INT'L J. INFO. MGMT DATA INSIGHTS 100076 (2022).

¹¹¹ See, e.g., Beraja, et al., *supra* note 10; Martin Beraja, et al., *Data-Intensive Innovation and the State: Evidence from AI Firms in China*, 90 REV. ECON. STUD. 1701 (2023); and Jean Tirole, *Digital Dystopia*, 111 AM. ECON. REV. 2007 (2021).

¹¹² *Id.*

¹¹³ *Id.*

the government not only achieve political objectives but also stimulate innovation within the AI companies providing these services.¹¹⁴ Firms securing such contracts tend to demonstrate higher levels of innovation in both government and commercial AI products compared to those working in non-public security sectors.¹¹⁵ Researchers argue that this effect arises largely from AI companies gaining access to government surveillance data, which enables them to refine their algorithms and drive technological advancement.¹¹⁶ Furthermore, algorithms initially developed for public security applications are often adapted for broader commercial uses, such as facial recognition systems deployed in retail environments. In this way, procurement relationships are seen as simultaneously serving government needs and providing AI firms with valuable resources that fuel innovation beyond the public sector.

B. Procurement Contracts Between Government and AI Firms

However, procurement contracts between AI companies and government agencies call into question the narrative of free access to government data. Take the case of Yitu, one of China's designated AI National Champions, which has supplied facial recognition systems to various public security bureaus. At first glance, one might assume that such contracts provide firms with broader opportunities to access government-held data. Yet, a closer examination of procurement contracts—such as those signed between Yitu and the Shanghai Railway Public Security Bureau¹¹⁷—reveals a different reality. These contracts require that all custom-

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ Zhongguo Zhengfu Caigou Wang (中国政府采购网) [China Government Procurement website], *Shanghai Tielu Gong'anju Nanjing Gong'an chu Renlian Shibie Xitong Caigou Xiangmu Zhengfu Caigou Hetong (HXJC2018FG/096)* (上海铁路公安局南京公安处人脸识别系统采购项目政府采购合同(HXJC2018FG/096)) [Government Procurement Contract for the Facial Recognition System Project of the Nanjing Public Security Department, Shanghai Railway Public Security Bureau (HXJC2018FG/096)] (2019), <http://htgs.ccg.gov.cn/GS8/contractpublish/detail/2c8382a96a10c01b016a25268eab0eba?contractSign=0>.

developed materials related to the facial recognition systems, including source code, technical documentation, and development tools, be transferred to the government, with no copies retained by Yitu.¹¹⁸ Additionally, Yitu is obligated to return all data during the contract period and delete any such data from its own systems.¹¹⁹ Confidentiality obligations also remain in effect until the government unilaterally decides to release the information publicly.¹²⁰

Our findings from the procurement contracts underscore a critical point: AI companies like Yitu are prohibited from using government data for purposes beyond those explicitly authorized within the contract. The assumption that firms can freely leverage government surveillance data to enhance their commercial products is not supported by the legal agreements governing these collaborations. Any unauthorized use would constitute a breach of contract and a violation of data protection and privacy laws.

Another illustrative case is the procurement contract between Huawei and the Sichuan Provincial Government's Information Technology Service Center, under which Huawei was engaged to provide provincial administrative cloud services.¹²¹ As in the Yitu example, the contract explicitly prohibits Huawei from exploiting its role as a service provider to access or use government data unlawfully.¹²² Huawei is contractually bound to process all data in accordance with relevant laws and national standards,¹²³ and is subject to strict accountability provisions: it is held fully responsible for any data breaches or third-party damages arising

¹¹⁸ *Id.*, art. 10.

¹¹⁹ *Id.*, art. 11.

¹²⁰ *Id.*

¹²¹ Zhongguo Zhengfu Caigou Wang (中国政府采购网) [China Government Procurement website], *Sichuansheng Renmin Zhengfu Bangongting Xinxi Jishu Fuwu Zhongxin Shengji Zhengwuyun Fuwu Hetong (N5100012024002043-5)* (四川省人民政府办公厅信息技术服务中心省级政务云服务合同 (N5100012024002043-5)) [Service Contract for Provincial-Level Government Cloud Services between the Information Technology Service Center of the General Office of the Sichuan Provincial People's Government (N5100012024002043-5)] (2024), <http://htgs.ccg.gov.cn/GS8/contractpublish/detail/5642ecd4-ede9-4ec2-9bb7-725837b30527?contractSign=0>.

¹²² *Id.*, art. 8(6), at 8.

¹²³ *Id.*, art. 8(8), at 8.

during the contract execution.¹²⁴ In cases of non-compliance, Huawei is obligated to pay a penalty equivalent to 20% of the total contract value.¹²⁵

As the procuree, Huawei must ensure comprehensive data security throughout the provision of its cloud services.¹²⁶ All data processed during the project are designated as government's information assets, and Huawei is required to sign a *Network Data Security and Confidentiality Agreement* with the government.¹²⁷ Upon project completion, Huawei must return all related information and destroy all copies, with no retention permitted in any form.¹²⁸ Failure to comply with these obligations triggers a penalty of 30% of the contract value.¹²⁹ Notably, confidentiality commitments extend beyond the termination of the contract and remain in effect indefinitely from the date of signing.¹³⁰

The contract also outlines severe consequences for breaches involving major cybersecurity incidents, such as leaks of critical national information, large-scale personal data breaches, or substantial economic losses. If Huawei fails to promptly report such incidents or refuses to cooperate with government investigations, this constitutes a fundamental breach of contract.¹³¹ In such cases, Huawei must refund all payments received under the contract, pay an additional penalty amounting to 20% of the contract value, and provide further compensation if necessary to cover the government's losses.¹³² For especially serious breaches, Huawei is subject to investigation by cybersecurity, public security, and state security agencies,

¹²⁴ *Id.*

¹²⁵ *Id.*; see also art. 10(4), at 10.

¹²⁶ *Id.*, art. 9.

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*, art. 10, at 9-11.

¹³² *Id.*

and may bear corresponding legal liabilities.¹³³

These stringent provisions—including the requirement to return and destroy all data upon contract completion—ensure that the government retains exclusive control over its information assets. They challenge the prevailing narrative that Chinese AI companies are freely granted access to, or permitted to use, government data for their own purposes. Instead, the contractual framework imposes strict safeguards that actively prevent unauthorized use, retention, or transfer of such data.

C. AI Firms' Sources of Data

This raises important questions about the sources of data used by AI companies to develop their products. If access to government data is restricted, how can we explain the observed increase in AI-related patents filed by companies following government procurement contracts?¹³⁴ How do these companies continue to innovate and remain competitive in the AI market without access to sensitive government data?

One possible explanation lies in the principles outlined in *China's AI System Government Procurement White Paper*. The document emphasizes that “public institutions should comply with national laws and administrative regulations to avoid conflicts between data applications and existing legal rules on data usage, processing, and transmission,” and encourages government agencies to “define the problems they face while leveraging the expertise of technology partners to develop suitable solutions”.¹³⁵ In practice, this means that AI

¹³³ *Id.*

¹³⁴ See Beraja, et al., *supra* note 10.

¹³⁵ Bawo Hao Rengong Zhineng Zhengfu Caigou 10 Xiang Zhunze 'Rengong Zhineng Xitong Zhengfu Caigou Baipishu' (《把握好人工智能政府采购10项准则》) [Implementing the Ten Principles of Government Procurement of AI: White Paper on Artificial Intelligence System Procurement by Public Institutions], CGPNEWS.CN (February 3, 2020), <http://cgpnews.cn/articles/51116>.

companies are often required to customize their products to meet specific government needs. For instance, surveillance technologies might be adapted for real-time monitoring by public security bureaus. This process of product customization compels companies to revise their algorithms and technical architectures, leading to the creation of new solutions. In this light, the increase in patent filings may not result from data transactions between government and firms, but rather from the dual effect of functional customization and government funding driving innovation.¹³⁶

This perspective is further illustrated by the case of Alibaba Cloud, an AI National Champion that has been engaged by the Chinese government for its “smart city” initiatives.¹³⁷ According to its vice president, AI firms act as “merely a technical participant,” with all collected data being strictly handled “under government leadership, management, oversight, and usage.”¹³⁸ In practice, this means that companies do not have direct access to the data generated during government projects, nor are they permitted to store or transfer such data through their own systems.

Moreover, it is important to recognize that government data is not the only resource available for training AI algorithms. Companies can also rely on synthetic data, publicly available datasets, and proprietary data they already possess.¹³⁹ Synthetic data, in particular,

¹³⁶ This interpretation is supported by an interview conducted with a senior manager at a leading Chinese AI company (May 28, 2022), who noted that increases in AI patent activity following procurement contracts often reflect the development of customized technologies for government use, rather than the reuse of surveillance data.

¹³⁷ AliHuawei ‘Fengyong’ Zhihui Chensghi: Fenbao Zhulu Shuzi Jingji, Zaizao Chengshi Shengmingli (阿里华为‘蜂拥’智慧城市：分包筑路数字经济，再造城市生命体) [Alibaba and Huawei Flock to Smart Cities: Subcontracting to Build the Digital Economy and Reconstruct the Urban Organism], 21ST CENTURY BUSINESS HERALD (November 14, 2020), https://m.21jingji.com/article/20201114/herald/2465a7f1011d086977124910fcee71bd_zaker.html.

¹³⁸ *Id.* Our interview with a project manager at a state-owned enterprise in Beijing, China (May 20, 2022), who requested anonymity, confirmed that “AI companies only offer technology and products, with all information or data collected through these products being stored exclusively in government databases.”

¹³⁹ This observation is corroborated by our online interview with an AI chip engineer from a national AI Champion (September 16, 2024), who responded to our question by noting that companies prefer not to risk violating the law, and instead rely on alternative methods for data collection.

allows firms to simulate a wide range of real-world scenarios while mitigating privacy risks.¹⁴⁰ This enables the development of AI systems without the need to access sensitive personal or government-controlled information. By leveraging such alternative sources, companies can continue to refine their algorithms and improve their AI products without relying on privileged data access.

A concrete example of this approach is demonstrated by SenseTime, a leading AI National Champion specializing in facial recognition technology. SenseTime registered its first patent with the China National Intellectual Property Administration (CNIPA) for generating synthetic facial data.¹⁴¹ By generating synthetic data, companies like SenseTime are able to create new AI solutions while remaining compliant with strict data protection regulations.

DeepSeek’s development strategy further illustrates the role of alternative data sources in AI innovation. As a China-based private AI company specializing in large language models, DeepSeek trains its models using publicly available web data¹⁴² and various public datasets¹⁴³—none of which are government-controlled or restricted. DeepSeek’s approach highlights an alternative strategy in China’s AI landscape, prioritizing data transparency and algorithm openness in compliance with the country’s stringent information and data protection regulations,¹⁴⁴ rather than relying on government-held or sensitive data.

In short, AI product development seems to be largely driven by alignment with

¹⁴⁰ Peter Lee, *Synthetic Data and the Future of AI*, 110 CORNELL LAW REVIEW (Forthcoming).

¹⁴¹ Beijing Shangtang Keji Kaifa Youxian Gongsi (北京市商汤科技开发有限公司) [Beijing SenseTime Technology Development Co., Ltd], *Beijingshi Shangtang Keji Kaifa Youxian Gongsi Yongyu Hecheng Renlian Tuxiang de Fangfa he Xitong* (北京市商汤科技开发有限公司用于合成人脸图像的方法和系统) [Method and System for Synthesizing Facial Images by Beijing SenseTime Technology Development Co., Ltd.], China Patent No. 2009101737029 (filed Nov. 23, 2009).

¹⁴² Zhihong Shao et al., *DeepSeekMath: Pushing the Limits of Mathematical Reasoning in Open Language Models*, ARXIV (Apr. 27, 2024), <https://arxiv.org/abs/2402.03300>.

¹⁴³ DeepSeek, *DeepSeek-V3 Technical Report*, ARXIV (Dec. 27, 2024), <https://arxiv.org/html/2412.19437v1>.

¹⁴⁴ See DeepSeek, *DeepSeek Terms of Use* (2025), <https://chat.deepseek.com/downloads/DeepSeek%20Terms%20of%20Use.html>.

government-defined technical requirements rather than by direct access to sensitive government data. Government contracts typically specify particular functionalities or customization needs, prompting AI companies to innovate within those parameters. Therefore, the increase in AI-related patents following government procurement contracts likely reflects the creation of specialized products designed to meet government needs, rather than the exploitation of government-held data.

Indeed, rather than being granted access to government data, AI companies are typically subject to strict contractual obligations that prohibit them from using such data for commercial purposes. The innovation observed within these companies is thus driven by their ability to develop AI technologies independently, while still fulfilling the technical demands outlined in government contracts. To refine their algorithms and create new solutions, AI companies increasingly rely on alternative methods, including synthetic data generation, public datasets, and pre-existing proprietary data.

Notably, we do not exclude the possibility of informal agreements or undisclosed data-sharing practices that might provide some companies with preferential treatment, enabling them to maintain their competitive edge. Although there is no conclusive evidence of such practices, it is important to recognize that the procurement process involving sensitive government data may be confidential and restricted to key individuals, such as founders or senior executives.

Nevertheless, our analysis of procurement contracts suggests that access to government data is far more restricted than commonly assumed in the literature. This more nuanced understanding complicates the notion that government data directly fuels commercial AI

innovation, highlighting instead a model where regulatory compliance and technological adaptation, rather than privileged data access, drive development.

V. IMPLICATIONS AND LESSONS

This section draws out the strategic and comparative implications of the tripartite framework—investor–investee, regulator–regulatee, and procurer–procuree—developed in the preceding sections. It examines how China’s AI governance model challenges conventional assumptions about state capitalism, regime type, and the drivers of technological development.

A. Investor-Investee: Indirect and Blended State Influence that Challenges the State-owned Enterprise/Private-owned Enterprise Significance

Traditional definitions of state-owned enterprises and private-owned enterprises¹⁴⁵ oversimplify the complex relationship between Chinese AI companies and the state. While state support or alignment is often assumed to be limited to companies with substantial state ownership,¹⁴⁶ our findings reveal that the Chinese government exerts influence over AI companies through various indirect mechanisms, regardless of their ownership structure. In the case of China’s AI National Champions, this influence is exercised through strategic board representation, golden shares, and close party-state affiliations of corporate leadership, rather than direct majority ownership.

While China’s model of state-supported innovation is distinctive in its integration with party-state structures and long-term strategic projects, similar approaches exist elsewhere.

¹⁴⁵ OECD, OECD GUIDELINES ON CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES (2015), <https://doi.org/10.1787/9789264244160-en>.

¹⁴⁶ Curtis J. Milhaupt, *The State as Owner—China’s Experience*, 36 OXFORD REV. ECON. POL’Y 362 (2020); Nicholas C. Howson, *Protecting the State from Itself? Regulatory Interventions in Corporate Governance and the Financing of China’s ‘State Capitalism’*, in REGULATING THE VISIBLE HAND? THE INSTITUTIONAL IMPLICATIONS OF CHINESE STATE CAPITALISM (Benjamin L. Liebman & Curtis J. Milhaupt eds., 2015); HUANG, *supra* note 56.

Economists argue that a significant portion of America’s technological success stems from public investment in foundational research, often described as the work of an “entrepreneurial state.”¹⁴⁷ In this model, the government acts as the primary risk-taker, funding early-stage research and technologies that private companies may be reluctant to pursue due to high costs and uncertainties.¹⁴⁸ Companies like Apple and Google have benefited substantially from state-funded research in fields like microelectronics and the internet, using these advancements as a springboard for their commercial innovations.¹⁴⁹ More recently, the US government has increasingly supported key industries through government contracts, subsidies, and R&D funding, particularly in defense, space exploration, and renewable energy.¹⁵⁰

The underlying principle—that the state can steer private enterprises without majority ownership—applies across governance systems, especially in sectors critical to national security and technological competitiveness. Singapore, for example, promotes innovation through entities like Temasek Holdings, which holds strategic minority stakes and targeted investments in advanced manufacturing and life sciences.¹⁵¹ Although less formalized than China’s party-state model, these flexible forms of indirect state influence have been widely adopted by governments seeking to advance their national strategic priorities.

B. Regulator-Regulatee: Regulation as Innovation rather than Constraint

China’s regulatory approach to AI development does not merely impose constraints; it

¹⁴⁷ MARIANA MAZZUCATO, *THE ENTREPRENEURIAL STATE: DEBUNKING PUBLIC VS. PRIVATE SECTOR MYTHS* (2013).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ See, e.g., The White House, *United States Space Priorities Framework* (2021), https://www.whitehouse.gov/wp-content/uploads/2021/12/united-states-space-priorities-framework_-december-1-2021.pdf; US Development of Defense, *Space Policy Review and Strategy on Protection of Satellites* (2023), <https://media.defense.gov/2023/Sep/14/2003301146/-1/-1/0/COMPREHENSIVE-REPORT-FOR-RELEASE.PDF>; Tim Fernholz, *Elon Musk’s SpaceX and Tesla Get Far More Government Money Than NPR*, QUARTZ (Apr. 13, 2023), <https://qz.com/elon-musks-spacex-and-tesla-get-far-more-government-mon-1850332884>.

¹⁵¹ Hariz Baharudin, *Temasek to Invest \$1b a Year to Fund Deep-Tech Research and Innovation*, THE STRAITS TIMES (Oct. 15, 2021), <https://www.straitstimes.com/singapore/temasek-to-invest-1b-a-year-to-fund-deep-tech-research-and-innovation>.

actively incentivizes innovation. Unlike in the US or the EU, where regulation is often viewed as a compliance burden,¹⁵² Chinese authorities use regulatory instruments strategically to steer technological progress. Central policy goals—such as technological self-sufficiency and economic upgrading—are translated into specific innovation targets at the local level, creating what might be termed an “innovation mandate.” Local governments implement this mandate through subsidies, regulatory discretion, and tailored development plans. Companies designated as AI National Champions are not only expected to comply with policy directives but to lead the country’s broader innovation agenda.

Another reason regulation can drive and shape innovation is that regulated companies themselves often evolve into quasi-regulators, influencing the policies that govern their industries. This phenomenon is increasingly visible as AI leaders and other tech giants leverage their political influence to shape regulatory frameworks in ways that align with their business interests. In doing so, they transform regulation from a potential constraint into a catalyst for growth and technological advancement.

This dynamic is not unique to China. Globally, large tech companies frequently influence the rules governing their industries. In the US, recent reporting shows that firms such as SpaceX, Tesla, and Anduril Industries have cultivated deep influence in Washington by placing former employees, advisers, and investors into key federal agencies.¹⁵³ Since January 2025, more than thirty such individuals have been appointed to roles in agencies that regulate or contract with

¹⁵² Anupam Chander, *How Law Made Silicon Valley*, 63 EMORY L. J. 639 (2014); Josh Withrow, *Don’t Stifle U.S. Tech Innovation with Europe’s Rules*, R STREET (Oct. 9, 2022), <https://www.rstreet.org/commentary/withrow-dont-stifle-u-s-tech-innovation-with-europes-rules-opinion/>; An exception to this discussion is Anu Bradford, *The False Choice between Digital Regulation and Innovation*, 118 NW. U. L. REV. 2 (2024).

¹⁵³ Shane Shifflett et al., *Silicon Valley’s New Hold on Washington: See how allies of four tech titans are staffing the agencies meant to regulate them, raising ethics flags and securing billions*, WALL ST. J. (May 16, 2025), <https://www.wsj.com/politics/tech-silicon-valley-government-influence-70b43ca6>.

these companies.¹⁵⁴ Musk-linked staff, for example, assumed positions in the Federal Aviation Administration and the Consumer Financial Protection Bureau, both of which oversee areas directly affecting Tesla, SpaceX, and Musk’s broader business interests.¹⁵⁵

By assuming a quasi-regulatory role, companies help reduce uncertainty, which is one of the greatest barriers to investment in fast-evolving sectors like AI. Investors are often reluctant to commit resources when they cannot predict how rules will be shaped or how strictly they will be enforced. When powerful firms step in to shape regulatory expectations in advance—by drafting technical standards, publishing best-practice guidelines, or lobbying for favorable interpretations of existing law—they create a more predictable environment for themselves. This predictability allows them to plan long-term projects more effectively, attract outside capital, and deploy their own resources with greater confidence.

However, this reversal of roles also introduces significant risks. Public regulators are meant to act as neutral guardians of the broader public interest, balancing the needs of consumers, smaller businesses, and society at large against the interests of dominant firms. When regulators become overly responsive to industry giants, they risk sliding into what scholars call “regulatory capture”.¹⁵⁶ In such cases, government agencies no longer function primarily as independent overseers; instead, they begin to prioritize industry demands over public welfare.

The mechanisms through which capture occurs are varied. Lobbying campaigns and political contributions can directly shape legislative and regulatory priorities. Personal

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ Michael E. Levine & Jennifer L. Forrence, *Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis*, 6 J.L. ECON. & ORG. 167 (1990); Ernesto Dal Bó, *Regulatory Capture: A Review*, 22 OXFORD REV. ECON. POL’Y 203 (2006).

networks matter as well: company insiders may move into government agencies, or public officials may anticipate lucrative private-sector roles after their time in office, creating incentives to favor particular firms. In some instances, governments themselves become dependent on the companies they regulate—whether for contracts, tax revenues, or national security needs—further blurring the line between regulator and regulatee. Each of these pathways makes regulators more likely to accept the arguments of dominant companies, even when those arguments conflict with consumer protection, data privacy, or fair competition.

These dynamics are particularly acute in AI, where the pace of technological change consistently outstrips regulatory capacity. In such an environment, the disproportionate influence of major technology companies can erode both market fairness and democratic accountability. Without strong safeguards—such as transparency requirements, independent oversight, and clear limits on private-sector influence—innovation policy risks being captured by dominant players. Instead of advancing public goals, it may become a mechanism for entrenching private power, narrowing the field of innovation, and concentrating decision-making over technologies that affect society as a whole.

C. Procurer-Procuree: Promoting Commercial Innovation Not Through Data Transfer but Financial Incentives and Research Requirements

China's AI procurement model reveals that state-led innovation does not depend on unrestricted access to government data, as is often assumed.¹⁵⁷ While security-related contracts are widely believed to offer firms privileged surveillance data, in practice, China's

¹⁵⁷ Beraja, et al., *supra* note 10; Beraja, et al., *supra* note 111; Daniel Oberhaus, *Authoritarian Regimes' AI Innovation Advantage*, HARVARD MAGAZINE (May-June 2022) <https://www.harvardmagazine.com/2022/04/right-now-authoritarian-regimes-artificial-intelligence>; Angela Huyue Zhang, *Authoritarian Countries' AI Advantage*, PROJECT SYNDICATE (Sept. 4, 2024), <https://www.project-syndicate.org/commentary/how-china-uae-became-artificial-intelligence-powerhouses-by-angela-huyue-zhang-2024-09?>.

legal and contractual frameworks impose strict limits on data usage. What drives innovation instead is the design of the procurement process itself.

Through structured contracts that specify performance targets, technical requirements, and delivery timelines, the state provides clear incentives and direction for corporate R&D.¹⁵⁸ These contracts function as instruments of innovation policy, aligning private capabilities with national priorities.¹⁵⁹ In doing so, procurement serves not merely as a commercial transaction but as a mechanism for steering innovation—particularly in politically important sectors such as public security, transportation, and smart infrastructure.

This approach complicates the view that authoritarian advantage in AI stems primarily from data control. What appears more consequential is the state's ability to coordinate and fund targeted innovation at scale. In this respect, China's model illustrates how state procurement can substitute for market demand in emerging sectors where commercial viability is uncertain but strategic value is high.

More broadly, this invites a reassessment of how different political systems mobilize

¹⁵⁸ For example, Songjiang District's Smart Comprehensive Management Service Platform tender required AI analytics servers to process 96 simultaneous video streams, perform 160 face-to-video comparisons per second, detect 100 objects simultaneously with $\geq 99\%$ accuracy for face/vehicle recognition, and support a 1 million face image database for real-time analytics. See Shanghai's Songjiang District People's Government, *Songjiang District Zhihui Jiguan Shiwu Zonghe Guanli Fuwu Pingtai Jianshe Caigou Xiangmu Zhaobiao Wenjian (Zhaobiao Bianhao SJJCZB2022036)* (松江区智慧机关事务综合管理服务平台建设采购项目招标文件 (招标编号 SJJCZB2022036)) [Tender Document for the Construction Project of the Smart Comprehensive Management Service Platform for Government Affairs in Songjiang District (Tender Number SJJCZB2022036)] (2022), <https://www.songjiang.gov.cn/govxxgk/SHSJ38/2022-12-06/d48ffff3-f584-445a-ad64-0e192a94e886.html>.

¹⁵⁹ For example, see the Public Tender Document for Goods and Services Procurement in Fujian Province, which requires bidders to possess capabilities in 'research, integration, and maintenance of smart government and enterprise application platforms, big data platforms, AI development platforms, and security software,' along with specialized information security research capabilities. See Fuzhou Gaoxin Jishu Chanye Kaifazhi Zhihui Gaoxin Guanli Fuwu Zhongxin (福州高新技术产业开发区智慧高新区管理服务中心) [Fuzhou High-Tech Industrial Development Zone], *Fuzhou Gaoxin Zhihui Danao (Erqi) Xiangmu de Yugonggao* (福州高新区智慧大脑 (二期) 项目的预公告) [Pre-Announcement of the Phase II Smart Brain Project] (2021), https://fzgxq.fuzhou.gov.cn/zwgk/zfxgkzdgz/ggzypz/zfcg/202101/t20210111_3949763.htm. Similarly, Yizhuang town's tender required smart city management system research, focusing on advanced planning, evaluation, and data integration technologies to address redundant construction, fragmented data, and improve decision-making capabilities. See Beijing Jingji Jishu Kaifazhi (北京经济技术开发区) [Beijing Economic-Technological Development Area], *2024 Niandu Zhihui Chengshi Guihuahou Pinggu Fuwu Gongkai Zhaobiao Gonggao* (2024 年度智慧城市规划后评估服务公开招标公告) [Public Tender for Smart City Planning Post-Evaluation Services] (2024), https://kfqgw.beijing.gov.cn/zwgk/fq/zdlyxxgk/zfcg/202408/t20240828_3783657.html.

innovation. While further concrete evidence may be needed to deepen this claim,¹⁶⁰ it appears that state support and investment—rather than the type of political regime—play a more direct role in fostering innovation. In other words, both democratic and autocratic systems can drive innovation when they provide the right combination of funding, policy support, and R&D infrastructure.

Democratic regimes often encourage innovation through open markets, robust intellectual property protection, and the free flow of information, which together create conditions that support experimentation and competition.¹⁶¹ The US, for example, has built a globally dominant tech sector through its entrepreneurial culture and systemic advantages, including deep capital markets, a unified domestic market, and a robust talent pipeline.¹⁶² However, democracies are not without challenges. Issues such as policy fragmentation and political gridlock can hinder the mobilization of resources for large-scale projects, as exemplified by the EU, where market fragmentation has constrained the scaling of its tech industry.¹⁶³

Authoritarian regimes, on the other hand, can leverage centralized governance to drive innovation in strategic sectors. Through state-directed funding, streamlined policymaking, and long-term planning, these systems can rapidly mobilize resources toward national goals. China's experience demonstrates that this model can generate substantial short-term gains in priority areas such as AI. Yet the same features that enable rapid mobilization also carry structural risks. Heavy reliance on state procurement and policy mandates can discourage independent innovation and create distortions in resource allocation. In China, competition

¹⁶⁰ This idea is, to some extent, supported by Mazzucato's thesis that state intervention can be crucial in overcoming the initial risks and costs associated with innovation. *See* MAZZUCATO, *supra* note 147.

¹⁶¹ Bradford, *supra* note 153.

¹⁶² *Id.*

¹⁶³ *Id.*

among local governments to build AI industrial parks—often in response to central directives—has led to duplicated efforts, underutilized facilities, and shortages of skilled talent.¹⁶⁴ Companies, meanwhile, may become overly dependent on public funding and align their R&D strategies with short-term political objectives rather than long-term commercial viability.¹⁶⁵ This dependency increases vulnerability when state priorities shift or budgets tighten.

To ensure sustainable growth and long-term competitiveness, a more balanced model is needed—one that preserves the strategic coordination benefits of state involvement while encouraging firms to develop autonomous innovation capabilities and diversify beyond government-driven applications.

CONCLUSION

The global narrative surrounding China's AI governance often oversimplifies it as a monolithic, state-controlled model reflecting autocratic rigidity. This article challenges that view by demonstrating that China's approach represents a more dynamic and negotiated state-private nexus. By integrating centralized oversight with private-sector dynamism, the Chinese government relies on collaboration and mutual adaptation to drive AI innovation. Rather than exercising direct control, the state uses indirect mechanisms to align national priorities with private-sector capabilities.

To analyze this governance structure, the article adopts a tripartite framework: investor–

¹⁶⁴ KATHERINE ATHA, ET AL., CHINA'S SMART CITIES DEVELOPMENT: RESEARCH REPORT PREPARED ON BEHALF OF THE US-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION 41 (2020), https://www.uscc.gov/sites/default/files/China_Smart_Cities_Development.pdf. Political and economic pressures on local governments to demonstrate rapid progress may lead to a lack of cohesive, long-term planning for AI development.

¹⁶⁵ For example, in 2023, SenseTime shifted from facial recognition to generative AI and automotive systems despite limited technological continuity. The company has reported persistent losses since 2019, including 10.6% revenue decline in 2023 due to reduced smart city project income and unpaid public contracts. *See* SenseTime Group Inc., *SenseTime Group Inc. 2023 Annual Report* (2024), <https://www1.hkexnews.hk/listedco/listconews/sehk/2024/0425/2024042502571.pdf>. Thus, encouraging companies to commercialize AI technologies across a broader range of sectors beyond government contracts can reduce financial risks and promote more sustainable growth.

investee, regulator–regulatee, and procurer–procuree. As an investor, the state employs non-controlling mechanisms such as board representation and golden shares to retain strategic influence while preserving firms’ operational flexibility. In the regulator–regulatee relationship, local governments foster innovation through financial incentives and selective oversight, while firms actively shape emerging norms and standards. As a procurer, the state stimulates targeted innovation through performance-based contracts rather than unfettered data access, creating structured incentives for firms to develop technologies aligned with national objectives.

This model blends centralized authority with significant private-sector autonomy, enabling rapid progress in strategically critical sectors. Yet it also introduces systemic vulnerabilities. Excessive competition among firms and local governments can lead to resource misallocation, while companies’ dependence on state directives may hinder independent innovation and long-term adaptability. These limitations cast doubt on the model’s sustainability and its capacity to maintain global competitiveness over time.

In a broader comparative perspective, key differences can be observed among global AI governance regimes. The US relies on decentralized innovation and entrepreneurial culture but increasingly grapples with monopolistic practices and ethical dilemmas.¹⁶⁶ The EU champions a rights-based framework centered on privacy and accountability, yet struggles with market fragmentation and limited scale.¹⁶⁷ China’s model, by contrast, emphasizes state mobilization and strategic coordination. At the same time, the comparative analysis shows important similarities: all three systems seek to balance rapid technological innovation with mechanisms of public oversight, all confront the growing concentration of power in a handful of dominant

¹⁶⁶ See BRADFORD, *supra* note 8; Bradford, *supra* note 153.

¹⁶⁷ *Id.*

firms, and all wrestle with uncertainty over how to regulate technologies that evolve faster than the law. Despite institutional differences, jurisdictions are converging in their reliance on state guidance, public investment, and regulatory adaptation to steer AI development toward national priorities while managing social risk.

Rather than asking which model will prevail, the more pressing question is how to understand and manage the evolving relationship between the public and private sectors. This article contributes to that discussion by reframing China's experience as a collaborative, adaptive system that challenges simplistic assumptions about autocracy and control. It calls for moving beyond binary distinctions—between state-owned enterprises and private-owned enterprises, or authoritarianism and democracy—and instead examining the concrete mechanisms through which states and firms interact in practice.

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