

RESEARCH ARTICLE

# Fragmented but Enduring Authoritarianism: Supply-side Reform and Subnational Entrepreneurialism in China's Rail Delivery Services

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## Abstract

China's economic reform since 1978 has turned a shortage economy into an economy of overcapacity. To curb the capacity surplus, the government put forward a sweeping proposal of "supply-side structural reform," although without any specifics of implementation. This vagueness has resulted in fragmentation between China's central leadership and local agents. Based on two rail delivery services – China Railway Express Delivery (*Zhongtie kuaiyun* 中铁快运, CRED) and China–Europe Rail Freight (*Zhong-Ou banlie* 中欧班列, CERF) – this article argues that fragmentation in authority has allowed and even encouraged local actors to carve profit-making opportunities out of the excess capacities (including idle assets). In so doing, they give substance to what would otherwise be hollow policy rhetoric. Such subnational entrepreneurialism and the resulting tacit dynamics between state and local-level actors add another layer to the fine-grained theorization of fragmented authoritarianism in China: despite fragmentation, China's authoritarian governance endures, but with outcomes now shaped by a cyclical process of decentralization and re-centralization as well as continuous central–local interplay.

## 摘要

中国自1978年改革经济至今，生产资源由「短缺」变为「过剩」。为了解决产能过剩的问题，中国政府推出了「供给侧结构性改革」，却没有提出具体的实施办法。这种模糊的政策促使中央领导和地方人员的权力分裂。本文基于对中铁快运和中欧班列两项铁路货运服务发展的深入研究，提出模糊的权力分裂，有助激励地方人员利用过剩产能和闲置资产谋利；而在重置生产资源的过程中，同时也演绎了原本看似空泛的政策。这种地方企业家精神及其不断与中央互动角力并产生的默契，让我们进一步微调和完善有关中国「碎裂式威权主义」的理论——中国的威权管治在中央和地方出现权力分权的情况下依然历久不衰；然而，中央和地方的持续互动和重复的分权集权过程，却有效地影响着威权管治的结果。

**Keywords:** fragmented authoritarianism; supply-sided reform; rail freight; decentralization; re-centralization

**关键词:** 碎裂式威权主義; 供給側改革; 鐵路貨運; 分權; 集權

The economic reform launched in 1978 resolved China's deep-seated legacy of soft budget constraints inherited from the planned economy.<sup>1</sup> However, it induced another problem: China transitioned from a shortage economy into one of overcapacity, a transformation which brought significant development challenges. In 2006, the National Development and Reform Commission (NDRC) asked for a solution to the problem. Responding to the request, in 2007 Hebei authorities pledged to dismantle a first batch of inefficient steel-making enterprises and, in the years ahead, China's Ministry of Industry and Information Technology further identified inefficient enterprises

<sup>1</sup> Naughton 2007.

with excessive productive capacity.<sup>2</sup> In 2013, the Development Research Center of China's State Council reported that China had produced 720 million tons of steel in 2012, which was equivalent to 46 per cent of global production but only accounted for 72 per cent of China's total capacity. A similar pattern of overcapacity occurred within the cement production sector as well as the electrolytic aluminium and flat glass manufacturing industries.<sup>3</sup> In 2015, President Xi Jinping 习近平 formally acknowledged that industrial overcapacity was a bottleneck hindering further economic take-off and proposed "supply-side structural reform" to counter the problem.<sup>4</sup> However, the terms of the proposal were vague and offered no specifics on implementation.

Using an analysis of the development of the China Railway Express Delivery (*Zhongtie kuaiyun* 中铁快运, CRED hereafter) and China–Europe Rail Freight (*Zhong-Ou banlie* 中欧班列, CERF hereafter), this paper illustrates how such policy vagueness has decentralized and fragmented authority, giving local agents the opportunity and autonomy to engage in entrepreneurship and derive profit from the overcapacity (including idle assets), inadvertently embellishing the otherwise vague central policy with a rather pragmatic outcome. But the decentralization generated a re-centralization of control. This paper unpacks the superficiality of the initial policy, sheds light on the subnational entrepreneurial response and offers a refined theorization of fragmented authoritarianism. Although somewhat fragmented, China's authoritarian regime endures; more importantly, its policy outcomes, now influenced by the resulting central–local interplay, are often unexpected and unintended.

This paper first discusses the general conception of supply-side reform and China's fragmented authoritarianism. It then illustrates this fragmentation by tracing how subnational railway agents, in an effort to echo President Xi's Chinese dream, went above and beyond to build railways, causing capacity to exceed market demand. The subsequent CRED and CERF case studies illuminate the recurring subnational entrepreneurial response to the supply-side reform policy and also demonstrate the Chinese government's "charge ahead first, fix later" approach to development and expectation that if any policies lead to messy outcomes, subnational actors will be responsible for the clean-up. The paper concludes that during the process of decentralization, local railway agents were permitted enough autonomy to respond to the supply-side reform policy in line with their own interests; however, the centralized government maintained the flexibility to re-centralize authority. The cyclical process of decentralization and re-centralization, and the resulting unexpected and unintended outcomes, means that China's state governance can be considered a form of fragmented but enduring authoritarianism.

### Supply-side Reform and Fragmented but Enduring Authoritarianism

The policy of "supply-side reform" was first used in the United States in the 1970s to tackle surging inflation rates and a stagnating economy.<sup>5</sup> Faced with a shortage of capital and production capacity, President Ronald Reagan, in lieu of a Keynesian approach to stimulate demand, opted to stimulate *supply*. For China, "supply-side reform" has a different connotation. President Xi aimed to boost development, which had been bottlenecked by overcapacity, by *streamlining* supply-side capacity.<sup>6</sup>

2 "Fazhan gaige wei yaoqiu gangtie luohou channeng shenfen gongbu taotai mingdan" (NDRC requested provincial governments to release lists of inefficient steel-making enterprises and demolish excessive production capacity). *Gov.cn*, 5 December 2006, [http://www.gov.cn/banshi/2006-12/05/content\\_461357.htm](http://www.gov.cn/banshi/2006-12/05/content_461357.htm). Accessed 18 March 2022.

3 Zhao et al. 2015.

4 "Xi Jinping: tuijin gongji ce jiegouxing gaige shi yichang yinzhang" (Xi Jinping: advancing supply-side reform will be tough). *People.cn*, 21 June 2017, <http://cpc.people.com.cn/xuexi/n1/2017/0621/c385476-29352816.html>. Accessed 18 March 2022.

5 "Reagan's economic legacy." *Bloomberg Businessweek*, 21 June 2004, <https://www.bloomberg.com/news/articles/2004-06-20/reagans-economic-legacy>. Accessed 18 March 2022.

6 Fang, Fuqian 2020.

As Xi's proposal lacked any specific guidelines on implementation, the Western media mostly considered it to be yet another empty slogan.<sup>7</sup> The West, accepting the Chinese government's proclivity for hollow slogans, had considered much of China's post-1978 governance as being piecemeal and lacking in coordination.<sup>8</sup> However, as much as the Chinese government may like to package policies inside catchy slogans, such policies are not always without substance. In fact, scholars have theorized a "fragmented authoritarian" model for Chinese governance: persistent authoritarian indoctrination coupled with decentralized local agents who allocate resources.<sup>9</sup>

For some, the fragmentation of governance has increased the possibility of dissolving the entrenched authoritarianism, as the decentralization of policies and functional institutions supplies local cadres with extra-budgetary funding and resources for individual pursuits, allowing "many locales to become less sensitive to the policy demands from higher levels."<sup>10</sup> The resulting asymmetric information structure is believed to offer subnational actors extra bargaining power with which to "blunt" the state leaders' policy initiatives and "frustrate" the upper-level authorities.<sup>11</sup> A "fragmented authoritarianism 2.0" theorization thus arises, where the fragmentation and malleability of the state impact the media, non-governmental organizations as well as individual agents,<sup>12</sup> facilitating the market-oriented profit-seeking activities among China's state-owned enterprises.<sup>13</sup> In other words, fragmentation may have unintentionally fractured the authoritarian regime, promoting political pluralization and causing the state to retreat.<sup>14</sup>

Scholars have, however, challenged this theorization as state intervention, as "top-level design" continued to be apparent in, for example, the locomotive manufacturing sector<sup>15</sup> and rural medical cooperative scheme.<sup>16</sup> This paper argues that while China's local actors have time and again outmanoeuvred the central government's policy rhetoric, identifying opportunities and devising ways to profit from excess resources, the central government has also been tacitly accepting the subnational agents' operations by continuing to issue fragmented authoritarian directives of sweeping visions that allow local agents to quickly identify and exploit any space in which they can operate autonomously. Patterns of flourishing local entrepreneurialism thus follow, although the threat of the central government taking back control always looms large. In essence, such fragmented authoritarianism has rendered the Chinese statehood more flexible and practical, but no less powerful.

### The Authoritarian Railway Construction Plan and Fragmented Subnational Response

In the mid-1990s, the Chinese railway network coverage still lagged behind not only developed countries such as the UK, US and Japan but also developing countries with lower income per capita such as India.<sup>17</sup> However, China's total passenger product (passenger-km, i.e. the multiplicative product of the total number of passengers and total distance travelled) was greater than that of India, the UK and Japan.<sup>18</sup> In 2005, China's railway handled 3.6 million journeys per day while the daily carriage capacity was only 2.42 million.<sup>19</sup> This prompted the Chinese government to

7 Wong 2016.  
 8 "Reagan's Chinese echo: the mystery of Xi Jinping's supply-side strategy." *The Economist*, 2 January 2016, <https://www.economist.com/china/2016/01/02/reagans-chinese-echo>. Accessed 18 March 2022.  
 9 Lieberthal and Lampton 1992; Lampton 1987; Perry and Wong 1985; Lieberthal and Oksenberg 1988.  
 10 Lieberthal and Lampton 1992, 8.  
 11 Ibid., 9–11.  
 12 Mertha 2009.  
 13 Jones and Zou 2017.  
 14 Mertha 2009, 1012.  
 15 Huang 2018.  
 16 Duckett 2019.  
 17 Jian and Nash 2000.  
 18 Ibid.  
 19 Li, Shi 2005.

increase both passenger and cargo capacities.<sup>20</sup> In 2004, the State Council released the “Medium- to Long-term Railway Construction Plan 2004–2020” (2004–2020 Railway Plan hereafter), which proposed to expand the total rail tracks to 100,000 km for both passenger and freight transport, including more than 12,000 km dedicated to passenger transport.<sup>21</sup> In 2008, this ambitious goal was further revised up to a total route length reaching 120,000 km, 16,000 km of which was to be dedicated to passenger transport.<sup>22</sup>

Before 2013, China’s Ministry of Railways (MOR) had responsibility for formulating policies in line with the development objectives of the central government, maintaining national rail tracks and managing subnational railway agents, including 14 provincial and municipal railway administrations (responsible for daily railway operations) and numerous supporting institutions (focusing on railway construction, rolling stock manufacturing, material supplies and signalling and communications functions).<sup>23</sup> The MOR could be considered as a part of the central state, with some authority bestowed upon it by the State Council, and the ministerial subordinates as subnational actors. In the 2013 administrative reform, however, the MOR was dissolved and replaced by the China Railway Corporation (CRC), which shouldered the management of day-to-day passenger lines, and the Ministry of Transport (MOT), which took over the planning and administrative roles.<sup>24</sup> Both the CRC and the MOT headquarters assumed state roles, and the regional units remained subnational actors. These regional railway agents were quick to take up the centre’s call to expand the railway network and to fulfil their construction targets based on pragmatic evaluations of local developmental needs as well as other non-economic considerations such as Party loyalty, political conformity and career advancement. For example, China operated its first high-speed train service between Beijing and Tianjin in 2008, but by 2020, the total length of high-speed rail tracks in China had reached 37,900 km.<sup>25</sup>

The 2004–2020 Railway Plan’s aim to boost both passenger and cargo handling capacities ended up creating excessive (i.e. idle) and uneven transport capacities. This paper focuses on the overcapacity, which comprises excessive space in both ordinary and high-speed passenger trains as well as transnational freight trains that have been returning to China cargo-less. Ordinary rail cargo transport is still under-developed because of uneven subnational efforts, which have focused on high-speed passenger transport despite the continuing high demand for ordinary rail freight transport and the pressure on the government to guarantee an adequate and continuous coal supply nationwide.<sup>26</sup> The under-capacity of ordinary rail transport, however, is outside the scope of this investigation, as the primary focus of China’s supply-side reform is on overcapacity.

### Local Entrepreneurialism Springing from Railway Overcapacity

This study adopted a process tracing methodology based on four field trips to Guangzhou, Beijing, Shanghai and Wuhan between September 2003 and November 2006; three recent follow-up visits to Beijing, Yiwu, Changsha, Chengdu, Chongqing and Almaty in Kazakhstan between November 2016

20 Lu 2004.

21 “Introduction of China’s medium- to long-term railway network construction plan.” *Gov.cn*, 16 September 2005, [http://www.gov.cn/ztlz/2005-09/16/content\\_64413.htm](http://www.gov.cn/ztlz/2005-09/16/content_64413.htm). Accessed 18 March 2022.

22 “National Development and Reform Commission approves the medium- to long-term railway network construction revised plan.” *NDRC.gov.cn*, 8 October 2008, [https://www.ndrc.gov.cn/xxgk/zcfb/qt/200906/t20090605\\_967738.html?code=&state=123](https://www.ndrc.gov.cn/xxgk/zcfb/qt/200906/t20090605_967738.html?code=&state=123). Accessed 13 July 2022.

23 Tjia 2016, 48.

24 Briginshaw 2013.

25 “China National Railways’ passenger numbers down in 2020.” *Xinhua*, 10 January 2021, [http://english.www.gov.cn/archive/statistics/202101/10/content\\_WS5ffa36f3c6d0f725769438ad.html](http://english.www.gov.cn/archive/statistics/202101/10/content_WS5ffa36f3c6d0f725769438ad.html). Accessed 18 March 2022.

26 “China: strong railway transport capacity in China guarantees coal supply nationwide.” *Union International des Chemins de fer*, 19 October 2020, <https://uic.org/com/enews/article/china-strong-railway-transport-capacity-in-china-guarantees-coal-supply>. Accessed 18 March 2022.

and June 2019; in-depth interviews with China's railway cadres, logistics practitioners and relevant stakeholders; and analysis of government reports, policy announcements and news articles. The aim was to identify the subnational entrepreneurial evolutions of the CRED and CERF, which are administered by the China Railway Parcel Express Company Limited (*Zhongtie xingbao kuaidi youxian gongsi* 中铁行包快递有限公司, CRPEC hereafter) and the China Railway Container Transport Corporation (*Zhongtie jizhuangxiang yunshu gongsi* 中铁集装箱运输公司, CRCTC hereafter), respectively.<sup>27</sup>

The CRPEC and CRCTC were formed in 2003 as spin-off transport service companies of the MOR.<sup>28</sup> The initial objective was for the loss-making MOR to focus on regular passenger and freight services and rid itself of any off-shoot businesses. The two spin-off companies were put under the management of the State Assets Supervision and Administration Committee and would go on to capitalize on the business network that they had inherited from MOR, profiting from surplus capacity amid an otherwise highly state-monopolized railway sector. In the following sections, I explain the multiple occurrences of China's local entrepreneurialism, including how excess ordinary and high-speed passenger capacities have been refashioned to expedite parcel delivery, and how empty trains returning from Europe to China have driven various initiatives to explore and expand the range of commodities to be shipped to China by rail

### *The emergence of China Railway Express deliveries*

Before the 2004–2020 Railway Plan, the MOR had followed a central “dual-track system” reform policy which allowed subnational railway agents to use idle state assets and sell the resulting extra-budgetary products in markets outside the planned system.<sup>29</sup> The goal was for the planned regime to survive the “shortage economy.”<sup>30</sup> However, it was unclear as to how local cadres would rekindle entrepreneurial innovation, which had dissipated amid inefficient production plans and the compulsory state purchasing system.<sup>31</sup> As measures to decentralize were vague, short-sighted local railways were quick to make money by charging arbitrary hidden fees for serving drinking water on passenger trains and for providing waiting rooms at the train stations.<sup>32</sup> Some, however, uncovered the true value of using idling assets to grow side-line businesses involving intermodal container transport,<sup>33</sup> collaborating with the mining industries<sup>34</sup> or property development companies,<sup>35</sup> R&D business on electrification and automation,<sup>36</sup> recycling wasteland and food processing.<sup>37</sup>

Railway express services exemplified the subnational entrepreneurial mechanism. As far back as 1993, observing that many passengers would rather carry bulky pieces of luggage than to check them in, and given the expansiveness of the nationwide network and regularity of train services,

27 Bennett 2010.

28 Tjia 2016.

29 Naughton 1995.

30 Kornai 1990.

31 Interview with a railway cadre, Beijing, February 2003; interview with a railway cadre, Shanghai, October 2003.

32 “Han Shubin tongzhi wai luke songshui” (Han Shubin offered water to passengers). *People's Railway Daily*, 3 July 1993.

33 “Zhongguo tielu bumen nanxia kaizhan duoyuan jingying huatie nanfang jituan zai Shen choujian” (Chinese Railway Bureau goes south to start diversified business and establish Huatie Nanfang Corporation in Shenzhen). *Infobank.cn*, 7 August 1995, <http://www.infobank.cn.ezproxy.cityu.edu.hk/IrisBin/Text.dll?db=HK&no=280904&cs=10150729&str=%D6%D0%B9%FA%CC%FA%C2%B7%B2%BF%C3%C5%C4%CF%CF%C2%BF%AA%D5%B9%B6%E0%D4%AA>. Accessed 18 March 2022.

34 China Railway 1999, 323.

35 “Kaituo jingqu de Beijing tieluju duoyuan jingyin shiti” (Beijing Railway Administration and business diversification). *People's Railway Daily*, 18 February 2003.

36 “Tielu duoqing baihuayuan zhong de yiduo qipa” (One of many railway business diversifications). *People's Railway Daily*, 29 December 2002.

37 “Nanchang tieluju huangtugang bianqian xilie” (Change of Huangtugang at Nanchang Railway Administration). *People's Railway Daily*, 10 November 2000.

the China Railway Foreign Service Corporation (*Zhongguo tielu duiwai fuwu gongsi* 中国铁路对外服务公司, CRFSC), a MOR subsidiary, negotiated and obtained permission from the MOR to operate a railway express parcel business in Beijing, Shanghai, Tianjin, Guangzhou, Shenzhen, Shenyang and Zhengzhou. The CRFSC signed cooperative agreements with related regional railway administrations and research institutions,<sup>38</sup> and offered them 70 per cent of the total profit.<sup>39</sup> Regional railway partners mostly welcomed the idea, as they would bear no extra costs for mobilizing the empty luggage cars – the empty carriages would have to be moved with the rest of the trains as scheduled anyway. Moreover, any costs incurred could easily be offloaded onto the national budget, thus maximizing retainable profits.

By 1997, the railway express service covered 61 cities. That same year, the CRFSC formally registered the China Railway Express Company Ltd (*Zhongtie kuaiyun gongsi* 中铁快运公司, CRE) with the State Administration for Industry and Commerce to further enhance its business development, and established 41 regional subsidiaries.<sup>40</sup> These subsidiaries, comprising related regional railway administrations and subadministrations, would jointly buy 70 per cent of the shares and share 70 per cent of the profit. The subsidiaries were clearly managed by one working team disguised under two company names (*yige banzi liangge paizi* 一个板子, 两个牌子). They operated both the regular national passenger and freight transport services and were familiar with all essential procedures, such as loading and unloading, customs clearance, security checks, luggage car allocation, transit arrangements and parcel tracking, for a seamless parcel express service.

To unify the service standard and enhance the competitiveness of the railway parcel express service in comparison to truck delivery, the CRE gradually consolidated the regional subsidiaries by first increasing its own share of ownership from 30 to 51 per cent and then by turning the subsidiaries into regional branches, designating each as a regional cost centre to minimize operating costs. The profit sharing between the CRE headquarters and the regional branches dropped to 51 and 49 per cent. To this end, the CRFSC, through the CRE, identified the idle capacity of empty luggage cars and undertook a market-oriented strategy to develop the railway parcel express service. However, in December 2003, the-then vice railway minister, Sun Rongfu 孙永福, announced the establishment of the China Railway Parcel Express Company Ltd (*Zhongtie xingbao kuaidi youxian gongsi* 中铁行包快递有限公司, CRPEC) to take over the railway express delivery business.<sup>41</sup> At the same time, two more MOR subsidiaries were spun off and recentralized: the China Railway Container Transport Company Ltd (*Zhongtie jizhuangxiang yunshu youxian gongsi* 中铁集装箱运输有限公司, CRCTC), which would focus on container transport, and the China Railway Special Cargo Company Ltd (*Zhongtie tehuo yunshu youxian gongsi* 中铁特货运输有限公司, CRSCC), which would focus on special transport, such as cold chain and shipments of certain special sizes.

Faced with losing its primary profit-making railway delivery business, the CRE began to develop other domestic express services. No longer able to use the empty luggage cars, it identified an alternative market niche and shifted to providing a door-to-door delivery service.<sup>42</sup> This new business model, however, was later seen as a threat to the CRPEC, which only provided a station-to-station service. In 2005, the central government merged the CRE with CRPEC, with the new entity retaining the name CRE (hereafter denoted as “nCRE”).<sup>43</sup> Although the central government was vague in terms of how to turn businesses around in the railway sector, it reserved the right to take back control if it saw fit.

38 Interview with a railway cadre, Guangzhou, March 2004; interview with a railway cadre, Wuhan, January 2004.

39 Rong and Dong 2003.

40 Li, Bo 2002, 39.

41 Xu 2004.

42 Interview with a CRE manager, Beijing, January 2004.

43 Zhu 2006.

*Local entrepreneurialism in high-speed railway delivery*

The massive railway construction under the 2004–2020 Railway Plan required huge upfront investment. In 2013, Sheng Guangzu 盛光祖, the-then minister of railways, admitted that the MOR had total assets amounting to 4,304 billion yuan but accumulative debts of 2,660 billion yuan; however, despite the alarming 62 per cent debt-to-asset ratio, Sheng contended that it was essential to build a high-speed railway network (HSR) ahead of social demand.<sup>44</sup> It is difficult to ascertain the outcome and effectiveness of such infrastructure investment. For example, usage of the HSR has been controversially inconsistent: the official figure in 2011 was 120 per cent for the Shanghai–Ningbo HSR,<sup>45</sup> but was much lower in 2014 during the non-peak season between Beijingxi 北京西 and Zhengzhoudong 郑州东;<sup>46</sup> other scholarly research later reported the HSR's passenger load factor to range between 40 and 70 per cent.<sup>47</sup> Additionally, analyses of the spill-over economic effects of HSR connection have ranged widely, from positive facilitation of market integration<sup>48</sup> to negative association with GDP per capita in the peripheral prefectures.<sup>49</sup>

Despite such incertitude, it was apparent that certain idle HSR capacities could be better and more innovatively utilized to help recover the huge upfront investment. For example, in 2013, between Wuhan and Guangzhou, of the possible 89 pairs of daily high-speed trains, only 57 were operated – the spare capacity could have been used for much more.<sup>50</sup> Before being dissolved, the MOR had recognized the potential and capacity to develop subnational market-oriented logistics businesses, as evidenced by the establishment of nCRE. In 2013, when the CRC took over the day-to-day operations of the MOR, it was tasked with ensuring financial efficiency by adopting a market-oriented *modus operandi*.<sup>51</sup> One of the measures was to announce the “Temporary method for transport management of high-speed train express delivery” (temporary method hereafter)<sup>52</sup> and expand parcel delivery services across the HSR network beginning in March 2013.<sup>53</sup>

This directive again illustrates the typical “charge ahead first, fix later” model. The HSR express delivery stemmed from the Guangzhou Railway Corporation's (GRC) experiment in 2012 to use the morning inspection train between Guangzhou South and Changsha South for an express delivery service for Shunfeng Express. Inspired by the GRC, the CRC assigned nCRE to centralize the HSR express service. However, there were no clear plans on how to kick start the business. An informant at nCRE said that they had experience of operating an ordinary passenger train parcel delivery service but not HSR delivery: “We were asked to compete with those private logistics practitioners, yet China's HSR system was not designed for express delivery – there were no specific train cars to carry goods, nor handling facilities or space at the HSR platform for loading and unloading purposes.”<sup>54</sup> Many nCRE insiders shared similar sentiments: “We were like babies being thrown into the pool, expected to learn to swim on our own.”<sup>55</sup>

44 Zhang, Bin, and Yang 2013.

45 “Tiedaobu xiangjie gaotie pingjun shangzuolu 120% yishang jisuan fangfa” (MOR explains the calculation of HSR's 120% utility rate). *People's Daily*, 2 August 2011, <http://news.cntv.cn/china/20110802/105077.shtml>. Accessed 12 July 2022.

46 “Gaotie danji shangzuolu di xianxiang zenme kan” (HSR's underutilization during low season). *Cpcnews.com*, 20 June 2014, <http://cpc.people.com.cn/BIG5/n/2014/0620/c83083-25176885.html>. Accessed 17 July 2022.

47 Liu, Fanxiao, et al. 2018.

48 Zhang, Siqi, and Kahn 2013.

49 Yu et al. 2019.

50 Liu, Zhi 2014, 24.

51 Ibid.

52 Zhang, Zhimou 2020.

53 Liu, Zhi 2014.

54 Interview with a CRE manager, Chongqing, November 2016.

55 Interview with a CRE manager, Chengdu, September 2017; interview with a railway cadre, Beijing, April 2017; “Zhongtiekuaiyun laoyuangong gantan huoyun gaige: ganjue ba haizi reng jin le youyongchi” (Old employees of China Railway Express lament the freight reform: it feels like throwing a child into a swimming pool). *People.cn*, 1 July 2013, <http://finance.sina.com.cn/china/20130701/135515974762.shtml>. Accessed 18 March 2022.

Once again, the subnational entrepreneurial initiatives gradually overcame the operational challenges.<sup>56</sup> Specifically, the GRC's experiment of using an inspection train was problematic because it usually operated only once in the morning and did not travel across different regions. To better address market expectations for a more frequent and extensive service, the Beijing branch of the nCRE experimented with express delivery services using the regular HSR network trains between Beijing and Shanghai in April 2014.<sup>57</sup> Mailed parcels such as business documents, medical supplies, electronic samples and fresh food were stored in the unused luggage racks located between carriages.<sup>58</sup> In October 2016, this service was rolled out to 505 Chinese cities. Moreover, different services, including "same-day," "next-morning," "next-day," "day-after-the-next" and "special" deliveries, were offered to cater for different market segments.<sup>59</sup> These services were launched just before the 11 November Festival (*shuang shiyi* 双十一, double 11 hereafter), a popular nationwide electronic shopping day, in anticipation of an increase in shipment demands of 35 per cent year-on-year.<sup>60</sup>

The HSR express delivery grew rapidly. In 2016, the annual operating income increased by 31 per cent on the previous year, bringing in 152 million yuan of revenue in total.<sup>61</sup> By 2018, more than 400 HSR routes were signed up to express delivery.<sup>62</sup> The nCRE further negotiated with China's top-ranked logistics company, Shunfeng Express, to form the China Railway Shunfeng International Express Co. (*Zhongtie shunfeng guoji kuaiyun youxian gongsi* 中铁顺丰国际快运有限公司, CRS hereafter) in August 2018.<sup>63</sup> A railway logistics practitioner expressed pride in such a trustful and comprehensive operational cooperation: "We were told by the central directive to compete with the private express delivery companies. However, years of frontline experience in providing seamless delivery service have taught us that the best possible option is to form a strategic alliance with the market leader."<sup>64</sup> As such, the newly launched services, including the "HSR superfast delivery" (*gaotie jisuda* 高铁极速达) and "HSR handy delivery" (*gaotie shunshou ji* 高铁顺手寄), were to adapt the special loading and storing facilities on train carriages, at the stations and in rail yards according to specific operational needs arising from Shunfeng's growing electronic businesses. During the double 11 shopping festival in 2018, 700 HSR carriages were used for express delivery.<sup>65</sup> By 2018, China Railway Shunfeng had deployed 254 trains on 161 routes for HSR superfast delivery services to 44 cities, completing around 1.51 million orders. The company also offered HSR handy delivery services in 69 HSR stations across 33 cities.<sup>66</sup>

Leveraging the massive, nationwide HSR network and reliable train schedules, China Railway Shunfeng has managed to provide a competitive delivery service for small-sized, high-value goods. The nationwide transport capacity would otherwise be left idle if the subnational actors had not tapped into the recent surge in the e-commerce market and growing demand for household and commercial express delivery. Such a subnational entrepreneurial initiative not only maximizes the use of idle transport capacity but also gradually identifies the market demand and informs how

56 Interview with a railway cadre, Beijing, December 2019.

57 China Federation of Logistics and Purchasing 2019.

58 Liang and Tan 2019.

59 "Gaotie kuaiyun fuwu shi yue ershi ri qi jiang zai quanguo suoyou gaotie chengshi shixing" (Trial of high-speed rail express from 20 October). Liaoning Yi Xing Industrial Co. Ltd website, October 2016, [http://www.pjyx.net/Article\\_show.asp?id=178](http://www.pjyx.net/Article_show.asp?id=178). Accessed 18 March 2022.

60 "Shuang shiyi qian gaotie kuaiyun yewu shige san nian chongxing qidong" (Tough for HSR express service to restart before double 11 after three years). *Sina Finance*, 7 November 2016, <http://finance.sina.com.cn/roll/2016-11-07/doc-ixxnety7517013.shtml>. Accessed 18 March 2022.

61 Pan 2018.

62 "Shuang 11 quanguo chuli kuidi 4.16 yi jian" (China handled 416 million express deliveries on double 11). *Gov.cn*, 13 November 2018, [http://www.gov.cn/xinwen/2018-11/13/content\\_5339756.htm](http://www.gov.cn/xinwen/2018-11/13/content_5339756.htm). Accessed 18 March 2022.

63 Wang 2018; interview with a railway cadre, Beijing, December 2019.

64 Interview with a railway cadre, Beijing, December 2019.

65 Zhang, Yincun 2018.

66 China Federation of Logistics and Purchasing 2019.

to design pragmatic supply-side reform. For example, during the peak season for e-commerce shopping, some parts of the HSR network are temporarily used for transporting parcels only, paving the way for the development of dedicated HSR passenger trains in the future and adding freight vehicular access at the HSR stations.<sup>67</sup>

With practical adaptations, HSR express delivery can offer a fast, eco-friendly and reliable alternative for transporting small commodities and parcels as well as time-sensitive goods such as fresh fruit, seafood, commercial documents and medical supplies. Strategic alliances with other express delivery companies such as Jingdong Express and China Post also take advantage of the network synergy for a seamless service.<sup>68</sup> In 2019, railway agents in Kunming and Hunan promoted the use of HSR express delivery to market indigenous produce such as flowers, vegetables and fruit through an emerging electronic shopping platform in poverty alleviation schemes.<sup>69</sup> Similar subnational initiatives soon spread to Henan, Shaanxi, Ningxia, Xinjiang, Shandong and Gansu, transporting products such as rice dumplings, tea, honey, walnut, cherries and peaches from poor areas.<sup>70</sup> The market-driven logistics business has thus responded to another policy rhetoric: “targeted poverty alleviation.”<sup>71</sup> Seeing the promising results of the HSR logistics in alleviating rural poverty, the National Rural Revitalization Administration, despite not being the direct supervising entity for the CRED, began to promote collaboration between rural and non-rural sectors in general,<sup>72</sup> and cooperation with the railway in particular, for rural revitalization.<sup>73</sup> How this centralized initiative will further shape the development of HSR express services still remains to be seen.

### Loading the CERF

With 2.2 billion yuan of registration capital, the CRCTC was the biggest of the MOR subsidiaries in 2003. Its shareholders included the China Railway Container Transport Centre (*Zhongtie jizhuang-xiang zhongxin* 中铁集装箱中心), which owned 51 per cent of the company, and 14 local railway administrations, whose combined share totalled 49 per cent.<sup>74</sup> Time and again, the CRCTC helped the centralized leadership to resolve railway overcapacity. In the above case study, the CRPEC and the subsequent CRE and nCRE repurposed the idle capacity of both ordinary and high-speed passenger trains. Below, I show how the CRCTC and a group of subnational actors revived the partially empty China–Europe freight trains.

67 Gao, Zhang and Zhao 2020.

68 “Lanzhou tieluju qi shuang 11 dianshang huangjinzhou kuaijian yunshu” (Lanzhou Railway Bureau launched “double 11” express transportation). *Chinanews.com.cn*, 1 November 2021, <https://www.chinanews.com.cn/sh/2021/11-01/9599710.shtml>. Accessed 18 March 2022.

69 “Fupin zhunong, gaotie zhu ‘yun’ zihao fupin chanpin kuaisu chuzhen” (Poverty alleviation products quickly exported to Yunnan). *Paper.cn*, 16 November 2019, [https://m.thepaper.cn/baijiahao\\_4978077](https://m.thepaper.cn/baijiahao_4978077). Accessed 18 March 2022; “Xiangxi yangmei cheng gaotie chusheng” (Xiangxi waxberries leave province by high-speed railway). *Renmin tiedao bao*, 26 June 2019, [http://mp.weixin.qq.com/s?\\_\\_biz=MzA4NDAYNzMyNA==&mid=2651723086&idx=1&sn=d15526d9099d8ee3f3c4a4c677a7a86a&chksm=8417c79db3604e8bd836b9602c1726156e3960f2ce6ac3073b71bf88a12e0e9e566f3dbc2a47#rd](http://mp.weixin.qq.com/s?__biz=MzA4NDAYNzMyNA==&mid=2651723086&idx=1&sn=d15526d9099d8ee3f3c4a4c677a7a86a&chksm=8417c79db3604e8bd836b9602c1726156e3960f2ce6ac3073b71bf88a12e0e9e566f3dbc2a47#rd). Accessed 18 March 2022.

70 “Gaotie zhuli tuopin gongjian” (High-speed railways help fight poverty). *China Railway*, 27 June 2020, <http://news.tielu.cn/pinglun/2020-06-27/219225.html>. Accessed 18 March 2022; “Teshu daiyu! Zhepi ‘luke’ shouci dengshang gaotie” (Special treatment! This group of “passengers” boarded high-speed trains for the first time). *Weixin.qq*, 15 August 2021, [http://mp.weixin.qq.com/s?\\_\\_biz=MjM5NTc3MTgwMA==&mid=2651091455&idx=1&sn=7f885768dc0df5fa9a8825d472da05cd&chksm=bd03b5088a743c1e03e5dcb6b07a2766c2a145dfa7574d1b6480dc8575cee1972ae0e967c270#rd](http://mp.weixin.qq.com/s?__biz=MjM5NTc3MTgwMA==&mid=2651091455&idx=1&sn=7f885768dc0df5fa9a8825d472da05cd&chksm=bd03b5088a743c1e03e5dcb6b07a2766c2a145dfa7574d1b6480dc8575cee1972ae0e967c270#rd). Accessed 18 March 2022.

71 Fang, Lijie, and Huang 2020.

72 “Tisheng xiangcun chanye yiye lianmeng daidong xiangcun zhenxing” (Enhance collaboration between the rural and non-rural sectors for rural revitalization). *Xinhua*, 9 March 2021, available at: [http://www.nrra.gov.cn/art/2021/3/9/art\\_4336\\_187756.html](http://www.nrra.gov.cn/art/2021/3/9/art_4336_187756.html). Accessed 20 July 2022.

73 “Tielu zai xiangcun zhenxing zhong dayoukewei” (Railway has a great role to play in rural revitalization). *Guangming ribao*, 9 March 2021, available at: [http://www.nrra.gov.cn/art/2021/3/9/art\\_4336\\_187757.html](http://www.nrra.gov.cn/art/2021/3/9/art_4336_187757.html). Accessed 30 August 2022.

74 Xu 2004.

The China–Europe freight train initiative originated in Chongqing when the city’s ex-mayor, Huang Qifan 黃奇帆, brokered a deal in 2011 with Hewlett Packard (HP) to offer the company a seamless rail-borne freight service to transport its products from Chongqing to Western Europe at a cost cheaper than air transport and 20 days faster than sea shipping.<sup>75</sup> Huang promised to subsidize half of the transport cost if HP agreed to move its production facility and Asian accounts settlement centre to Chongqing.<sup>76</sup> In 2012, the Chengdu government deployed a similar local state corporatism to convince Dell to move its overseas manufacturing base to Chengdu and export its products using transnational trains to Lodz, Poland.<sup>77</sup>

Recognizing the symbolic implications for China’s Belt and Road Initiative (BRI) of the growing number of dedicated freight trains running between China and Europe, in 2013 the NDRC centralized the subnational initiatives under the CRCTC as a signature BRI project and rebranded it as “China–Europe Rail Freight” (CERF).<sup>78</sup> As the top leadership forcefully stirred up subnational enthusiasm for transnational rail freight projects, many local governments operated freight trains just to demonstrate their political support. Many of these politically driven freight trains departed China with only partial loads, returning empty, as “ghost trains.”<sup>79</sup> As of 2019, the economically driven freight trains had gradually scaled up into a few flagship freight train schedules that ran frequently and shared roughly half of the total volume of the China–Europe rail freight. The politically motivated trains were typically less frequent, sometimes running only on an ad-hoc basis, taking in a wide range of points of departure and together making up the rest of the freight share.<sup>80</sup> In short, the state-led politicization of such freight trains triggered an enormous waste of transport capacity.<sup>81</sup>

The growing number of empty returning trains is evidence of the type of imbalance in resource allocation that typifies an inefficient state project. To resolve the issue of unused capacity on the “ghost trains,” China again relied on subnational actors to streamline the freight capacity and come up with a more appealing tagline than just “faster than sea, cheaper than air.”<sup>82</sup> Once again, despite the politically driven initial rush to operate the transnational freight trains, a few subnational logistics actors in China and overseas have been trying to restructure and customize the freight trains for niche, high-value goods. For example, containers have been lined with foil and equipped with temperature control systems so that they can transport delicate, temperature-sensitive products such as sophisticated electronics, chilled meat, perishable agricultural goods, humidity-sensitive skincare and medical products, and fine wines.<sup>83</sup>

Taking advantage of the willingness shown by many local governments to subsidize the empty returning trains,<sup>84</sup> the respective freight service operators have also sought to exploit the idle rail freight capacity.<sup>85</sup> For example, seeing the potential to transport agricultural goods from Kazakhstan to China, various local CRE regional agents soon established trade offices in cities

75 Interview with a logistics practitioner, Chongqing, November 2016.

76 “Chongqing: land of laptops.” *China.org.cn*, 16 June 2014, [http://www.china.org.cn/business/2014-06/16/content\\_32674371.htm](http://www.china.org.cn/business/2014-06/16/content_32674371.htm). Accessed 18 March 2022; “Jiagong maoyi zai neilu diqu fazhan de moshi tansuo” (Development of export processing trade in inland regions). *Jingji ribao*, 20 October 2010, <http://mcrp.macrochina.com.cn/u/60/archives/2010/2073.html>. Accessed 18 March 2022; Tjia 2020.

77 Interview with a rail freight practitioner, Chengdu, September 2017. For more discussion about China’s local state involvement in bottom-up economic initiatives, see Chung 1999; Lin and Chen 1999.

78 “Yidaiyilu changyi xia de Zhong-Ou banlie” (China–Europe rail freight under One Belt One Road framework). *Xinhua Finance Agency*, 5 June 2018, [http://tc.xfafinance.com/html/BR/Business\\_Activities/2018/274512.shtml](http://tc.xfafinance.com/html/BR/Business_Activities/2018/274512.shtml). Accessed 18 March 2022.

79 Interview with a CERF manager, Yiwu, May 2019. Bandurski 2019.

80 Tjia 2020.

81 Interview with a CERF manager, Changsha, January 2019.

82 Interview with a CERF user, Changsha, January 2019.

83 Shepard 2016a; 2016b.

84 “Government to assess railway links to Europe.” *China Daily*, 18 October 2018, <http://www.chinadaily.com.cn/a/201810/17/WS5bc66b42a310eff303282bc2.html>. Accessed 18 March 2022.

85 Interview with a logistics practitioner, Changsha, January 2019.

along the freight routes. They also hired Chinese-speaking Kazakh representatives in Almaty to explore possible trade opportunities and to arrange exports using the empty China-bound trains.<sup>86</sup> Their entrepreneurial drive for survival and personal gain has unwittingly expanded the market for Kazakhstan's local agricultural and food-processing sectors.<sup>87</sup>

The subnational actors who negotiated for favourable bilateral trade policies and logistics arrangements successfully exported the first batch of wheat from Kazakhstan to Jiangsu in China in August 2018. Chilled beef, live donkeys and barley began to make their way into China in 2019. In addition to identifying potential shippers, these subnational brokers have also endeavoured to secure reliable food testing laboratories, finalize the best packaging for rail transport and retail consumption, and get sanitary certification for various agricultural products such as rapeseed, hay, barley, wheat, sweet corn, wheat flour, flaxseed and dairy products. Finally, in 2019, lists of Kazakhstan enterprises were announced as registered suppliers of soybean, sweet corn, barley and wheat goods for China.<sup>88</sup> These potential shippers were expected to fill China's empty freight trains and help to resolve the issue of overcapacity.

## Conclusion

This paper has examined the cycle of initial state-level policymaking, subnational response and subsequent state intervention and interaction with local actors to shape policy outcomes in an effort to fine-tune the theorization of "fragmented authoritarianism" in China. The Chinese leadership's "charge ahead first, fix later" mode of development seen in the railway sector has become a repeated pattern of policy implementation: while the state supplies "policy slogans," there is tacit understanding between the state and the subnational actors that the policies are intentionally vague, signalling a process of policy decentralization that the subnational actors can exploit to innovate for personal profit while also helping to clean up any mess that the policies and mode of implementation might cause. On the one hand, the fragmented decentralization policy and implied autonomy elicit an entrepreneurial flair from certain local cadres and subnational market actors while the state still has the power to take back control of selected economic activities. Such alienated autonomy has driven the subnational actors to roll out their economic activities as quickly and as wide as they can. On the other hand, the recurring patterns of local responses empower the authoritarian state to continue fast-tracking economic development. Therefore, despite fragmentation, China's authoritarian governance endures, with outcomes shaped by cycles of central–local interplay.

The emergence of the CRED over the past two decades illuminates a cycle of politically driven over-expansion of capacity, and subnational, market-driven refashioning of excessive, idle and/or uneven capacity. In the case of the HSR express, for example, the CRC centralized the GRC's experimental HSR express service via nCRE, without any strategic directions on how to compete with private express services partitioners. Responding to the "temporary method," subnational actors initiated a collaboration with Shenfeng Express and expanded the scope of the business from supporting e-commerce delivery to transporting indigenous agricultural produce. The successful business model involving the rural regions was soon picked up by the National Rural Revitalization Administration as a signature project of "targeted poverty alleviation."

The recent development of the CERF further affirms that President Xi's government has learnt to set the nationalistic "China dream" ethos and boldly scale up economic activities.<sup>89</sup> Then, following previous developmental logic, the Chinese government has boosted production capacity as much as possible, expecting to rely on subnational market-oriented survival strategies to resolve the ensuing overcapacity by moulding economic activities to absorb any excess.

86 Interview with a logistics practitioner, Almaty, June 2019.

87 Tjia 2020; 2022.

88 General Administration of Customs 2019.

89 Chai and Chai 2013.

While the CERF has always been criticized for having an insignificant market share, the recent pandemic triggered a sudden switch in freight transport from sea and air to railway, adding pressure to the already congested Chinese borders.<sup>90</sup> In 2021, the number of China–Europe freight trains reached 15,000, a figure far surpassing the planned 5,000 between 2016 and 2020.<sup>91</sup> Another cycle of state-led over-capacity building and subnational capacity adjustment may be in the pipeline. Like it or not, the evolution of China’s “fragmented authoritarianism” tends to tilt towards the development of masterful authority rather than towards liberal fragmentation. Such patterns of entrepreneurial responses enrich the theorization of the long-studied fragmented authoritarianism. Despite the implementation of decentralization strategies, which have created fragments of space in which state agents can manoeuvre and survive, the state retains the power to re-centralize economic development. Both fragmented authoritarianism and subnational entrepreneurialism enable China to “grope for stones while crossing the river” of economic transformation.<sup>92</sup>

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## References

- Bandurski, David.** 2019. “Ghost trains to Europe.” *Echowall*, 27 August, <https://www.echo-wall.eu/china-and-world/ghost-trains-europe>. Accessed 18 March 2022.
- Bennett, Andrew.** 2010. “Process tracing and causal inference.” In Henry E. Brady and David Collier (eds.), *Rethinking Social Inquiry*. Lanham, MD: Rowman and Littlefield, 207–219.
- Briginshaw, David.** 2013. “China confirms plans to abolish Ministry of Railways.” *International Railway Journal*, 11 March, <https://www.railjournal.com/index.php/policy/china-confirms-plans-to-abolish-ministry-of-railways>. Accessed 18 March 2022.
- Chai, Winberg, and May-lee Chai.** 2013. “The meaning of Xi Jinping’s Chinese dream.” *American Journal of Chinese Studies* 20(2), 95–97.
- China Federation of Logistics and Purchasing.** 2019. “Gaotie huoyun laixi: gaotie wangluo quanmian xingcheng gaotie kuaiyun fazhan xunsu” (High-speed rail freight is coming: high-speed rail network is fully formed and developing rapidly). Company website, 31 January 2019, <https://www.gushiciku.cn/pl/2iXg/zh-hk>. Accessed 18 March 2022.
- China Railway** (ed.). 1999. *Xin Zhongguo tielu wushinian (Fifty Years of the New China Railway)*. Beijing: China Railway Publisher.
- Chung, Jae Ho.** 1999. “A sub-provincial recipe of coastal development in China: the case of Qingdao.” *The China Quarterly* 160, 919–952.
- Duckett, Jane.** 2019. “International influences on policymaking in China: network authoritarianism from Jiang Zemin to Hu Jintao.” *The China Quarterly* 237, 15–37.
- Fang, Fuqian.** 2020. *China’s Supply-side Reform*. Singapore: Cengage Learning Asia.
- Fang, Lijie, and ChienChung Huang.** 2020. “Targeted poverty alleviation in China: evidence from Jingdong ecommerce poverty alleviation.” *Poverty and Public Policy* 12(4), 386–396.
- Gao, Hanlin, Meiqing Zhang and Qilan Zhao.** 2020. “How the convergence happens between industries of high-speed rail transportation and express delivery.” In Menggang Li, Martin Dresner, Runtong Zhang, Guowei Hua and Xiaopu Shang (eds.), *IEIS2019*. Singapore: Springer, 67–79, [https://doi.org/10.1007/978-981-15-5660-9\\_6](https://doi.org/10.1007/978-981-15-5660-9_6).
- General Administration of Customs.** 2019. “List of registered Kazakhstan enterprises to export soya bean, sweet corn, barley and wheat goods to China), 17 June, <http://www.customs.gov.cn/customs/302249/jyzy60/2aa7e043-3.html>. Accessed 18 March 2022.
- Huang, Dongya.** 2018. “Top-level design and fragmented decision-making: a case study of an SOE merger in China’s high-speed rail industry.” *The Journal of Contemporary China* 27(109), 151–164.
- Jian, Hong Wu, and Chris Nash.** 2000. “Railway reform in China.” *Transport Reviews* 20(1), 25–48.
- Jones, Lee, and Yizheng Zou.** 2017. “Rethinking the role of state-owned enterprises in China’s rise.” *New Political Economy* 22(6), 743–760.

90 Yeung 2020.

91 “Zhong-Ou banlie zhuyao pingtai, kouan 2021 quannian kaixing shuju yilan” (Annual statistics of China–Europe freight trains, 2021). *Zhihu zhuanlan*, 6 January 2022, <https://zhuanlan.zhihu.com/p/454114918>. Accessed 18 March 2022.

92 Keo 2020.

- Keo, Bernard Z.** 2020. “Grove for stones while crossing the river’ of economic transformation.” *Education about Asia: Online Archives* 25(2), <https://www.asianstudies.org/publications/ea/archives/crossing-the-river-by-feeling-the-stones-deng-xiaoping-in-the-making-of-modern-china/>. Accessed 22 March 2022.
- Kornai, Janos.** 1990. *Vision and Reality, Market and State*. New York: Routledge.
- Lampton, David** (ed.). 1987. *Policy Implementation in Post-Mao China*. Berkeley, CA: University of California Press.
- Li, Bo.** 2002. “Cong zhongtie kuaiyun kan woguo tielu kuaiyun de zhidu chuanguxin” (Institutional innovation of China’s railway express businesses). MPhil thesis, Northern Jiaotong University.
- Li, Shi.** 2005. “Time to stoke up railway reform.” *China Daily*, 7 February.
- Liang, Xiao-Hong, and Ke-Hu Tan.** 2019. “Market potential and approaches of parcels and mail by high-speed rail in China.” *Case Studies on Transport Policy* 7(3), 583–597.
- Lieberthal, Kenneth, and David Lampton** (eds.). 1992. *Bureaucracy, Politics, and Decision Making in Post-Mao China*. Berkeley, CA: University of California Press.
- Lieberthal, Kenneth, and Michel Oksenberg.** 1988. *Policy Making in China*. Princeton, NJ: Princeton University Press.
- Lin, Nan, and Chih-Jou Jay Chen.** 1999. “Local elites as officials and owners: shareholding and property rights in Daqiuizhuan.” In Jean Oi and Andrew Walder (eds.), *Property Rights and Economic Reform in China*. Stanford, CA: Stanford University Press, 145–170.
- Liu, Fanxiao, Zhanbo Sun, Peitong Zhang, Qiyuan Peng and Qingjie Qiao.** 2018. “Analyzing capacity utilization and travel patterns of Chinese high-speed trains: an exploratory data mining approach.” *Journal of Advanced Transportation* (2018), 1–9.
- Liu, Zhi.** 2014. “The Study of the Fusion Development between High-speed Railway and Express Industry.” MA Thesis, Beijing Jiaotong University.
- Lu, Haoting.** 2004. “Railway financing plan chugging along.” *China Daily*, 8 August, [http://www.chinadaily.com.cn/english/doc/2004-08/08/content\\_363168.htm](http://www.chinadaily.com.cn/english/doc/2004-08/08/content_363168.htm). Accessed 18 March 2022.
- Mertha, Andrew.** 2009. “Fragmented authoritarianism 2.0’: political pluralization in the Chinese policy process.” *The China Quarterly* 200, 955–1012.
- Naughton, Barry.** 1995. *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*. Cambridge: Cambridge University Press.
- Naughton, Barry.** 2007. *The Chinese Economy: Transitions and Growth*. Cambridge, MA: MIT Press.
- Pan, Zhu.** 2018. “Woguo gaotie wuliu kuaidi fazhan qianjing tanxi” (Development prospects of China’s HSR express delivery). *Shangye xiandaihua* 16, 23 November, <http://www.fx361.com/page/2018/11/23/4544631.shtml>. Accessed 10 September 2020.
- Perry, Elizabeth J., and Christine Wong** (eds.). 1985. *The Political Economy of Reform in Post-Mao China*. Cambridge, MA: Harvard University Press.
- Rong, Chaohe, and Yanhua Dong.** 2003. “Zhongtie kuaiyun ji qi dui tielu yunshu tizhi gaige de qishi” (China railway express transport and its implications to the railway reform). *Guangli shijie* 11, 146–47.
- Shepard, Wade.** 2016a. “How a company called Unit 45 revolutionized China–Europe Silk Road rail transport.” *Forbes*, 11 August, <https://www.forbes.com/sites/wadeshepard/2016/11/08/how-a-company-called-unit-45-revolutionized-china-europe-silk-road-rail-transport/?sh=4487c31d3f9e>.
- Shepard, Wade.** 2016b. “How European wine is now going to China aboard Silk Road trains.” *Forbes*, 23 July, <https://www.forbes.com/sites/wadeshepard/2017/07/23/europe-on-the-new-silk-road-european-wine-can-now-be-shipped-to-china-by-rail/?sh=69d89ca84a8c>.
- Tjia, Linda Yin-nor.** 2016. *Explaining Railway Reform in China*. London: Routledge.
- Tjia, Linda Yin-nor.** 2020. “The unintended consequences of the politicization of the Belt and Road’s China–Europe freight train initiative.” *The China Journal* 83, 58–78.
- Tjia, Linda Yin-nor.** 2022. “Kazakhstan’s leverage and economic diversification amid Chinese connectivity dreams.” *The Third World Quarterly* 43(4), 797–822.
- Wang, Lu.** 2018. “Tielu hun gai jinqi ‘kandian’ miji” (Railway’s mixed reform). *People.cn*, 30 August, <http://finance.people.com.cn/BIG5/n1/2018/0830/c1004-30259978.html>.
- Wong, Sue-Lin.** 2016. “China’s supply-side slogan means different things to different people.” *Reuters*, 14 March, <https://www.reuters.com/article/us-china-economy-reform/chinas-supply-side-slogan-means-different-things-to-different-people-idUSKCN0WF0ZL>. Accessed 18 March 2022.
- Xu, Wangguo.** 2004. “Tielu gaige tupoxing jingzhan: sanda huoyun gongsi jiepa” (The opening of three railway freight transport companies). *21st Century*, 11 January, <http://finance.sina.com.cn/roll/20040113/1649601654.shtml>. Accessed 18 March 2022.
- Yeung, Karen.** 2020. “Severe backlog in Europe-bound trains at Chinese border, as coronavirus increases rail freight volume.” *South China Morning Post*, 6 July, <https://www.scmp.com/economy/china-economy/article/3091883/severe-backlog-europe-bound-trains-chinese-border-coronavirus>. Accessed 18 March 2022.
- Yu, Feng, Faqin Lin, Yihong Tang and Changbiao Zhong.** 2019. “High-speed railway to success? The effects of highspeed rail connection on regional economic development in China.” *Journal of Regional Science* 59(4), 723–742.
- Zhang, Bin, and Hua Yang.** 2013. “Tiedaobu gaige: 2.6 wan yi fuzhai ruhe jie jue shi fenchai guanjian” (MOR reform: disintegration to resolve the 2,660 billion yuan debt). *Economic Information*, 3 May, [http://jjckb.xinhuanet.com/2013-03/05/content\\_431607.htm](http://jjckb.xinhuanet.com/2013-03/05/content_431607.htm). Accessed 12 July 2022.

- Zhang, Siqi, and Matthew Kahn.** 2013. "China's bullet trains facilitate market integration and mitigate the cost of megacity growth." *Proceedings of the National Academy of Sciences* **110**(14), E1248–53.
- Zhang, Yincun.** 2018. "Gaotie+kuaidi: woguo duoshi lianyun fazhan de zhongyao tansuo" (HSR and express delivery: development of multi-modal transport in China). *Technology and Enterprise Update* **11**, 104–06.
- Zhang, Zhimou.** 2020. "Gaotie kuaiyun shifou hui chongji hangkong huoyun" (Will high-speed rail express impact air freight?), 12 April, <https://zhuanlan>. Accessed 18 March 2022.
- Zhao, Changwen, Zhaoyuan Xu, Yuan Dong and Liao Bo.** 2015. "Dangqian woguo channeng guosheng de tezheng, fengxian ji duice yanjiu" (Study of the characteristics, risks and countermeasures of China's current excess production capacity). *Management World* **4**, 1–10.
- Zhu, Li.** 2006. "Chongzu zhenghe qudao xin zhongtiekuaiyun tansuo tielu rongzi douyuanhua" (Reorganizing the financing arrangements of new China Railway Express). *Sina.com*, 18 February, <http://finance.sina.com.cn/chanjing/b/20060218/21322354287.shtml>. Accessed 18 March 2022.

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