Campaign-Style Paired Assistance: The Chinese Experience in Fighting the COVID-19 Pandemic

Weixu Wu*, Xinyu Tan†, Qinzhi Jiang^  
* Tsinghua University, China  
† East China University of Science and Technology, China  
^ Shanghai Jiao Tong University, China

To cope with the COVID-19 pandemic, the Chinese government initiated a medical resource allocation and assistance mechanism that was characterized as a large-scale and regional mutual approach. Specifically, thirty provinces delivered medical resources (e.g., medical staff, medical supplies, and living materials) to “1+16” cities severely affected by the epidemic within a small amount of time, which solved the dilemma of medical collapse and governance “downtime” in epidemic areas, thereby changing the prevalence curve of the pandemic in China. “Campaign-style” targeted assistance can be interpreted based on the Chinese dual party-government model as well as the governance model of vertical accountability and horizontal competition, drawing from previous experience of normalized “designated assistance.” Consequently, paired assistance contributes to intergovernmental situations of decreasing divisibility and increasing cooperation. This study has the potential to bring insights to other countries around the world that are fighting the COVID-19 pandemic.

Keywords: COVID-19 Pandemic; Paired Assistance; Central-Local Relations of China; Hubei Province

With the global prevalence of the highly infectious COVID-19 virus, an increasing number of countries are being hit hard by the pandemic. The chief challenges were a surge in patients, extreme shortages of medical staff and supplies, and sharply increasing numbers of cases that exceed the public health services capacity. Due to a series of strict quarantine management measures in the epicenter of the pandemic, the resource supply capacity of governments and social organizations can rarely meet local medical, living and production demands. Hence, how to supply assistance quickly and effectively, thereby establishing a stable order for severely affected areas, has become a significant practical problem that most countries have confronted in this megacrisis (Lomborg, 2004; Comfort et al., 2012).

As the provincial capital of Hubei, Wuhan is a transportation hub with a population of over 10 million. During the early stage of the pandemic, more than 5 million people moved in and out of Wuhan due to the Spring Festival travel rush (Chen et al. 2020). Data analysis results showed that the vast majority of confirmed cases in various provinces of China were highly correlated with this population migration (Lai et al. 2020). Difficulty in diagnosis, an increasing number of infected medical staff and extreme shortages of medical resources resulted in the tragedy of severe cases as well as high death rates in Hubei Province and Wuhan city in the early stage of the pandemic (Huang et al., 2020). Despite its 61 large-scale and well-functioning comprehensive hospitals, Wuhan’s public health system was on the verge of collapse; in particular, as recently as February, more than 3,000 medical workers in Hubei Province were infected (NHCPRC 2020). The confirmed cases in Hubei Province accounted for 80.8% of those in the whole country (59.7% in Wuhan), and the death toll there accounted for 97.2% (83.3% in Wuhan) (see Figure 1).

Air, water, and land channels for arrivals in and departures from Wuhan were shut down on January
23, when the pandemic was confirmed by the Central Medical Expert Group, following which Wuhan entered a 76-day lockdown. Other cities in Hubei Province also entered a quasi-lockdown state that lasted for approximately two months. Meanwhile, the Chinese government initiated its most massive medical deployment since 1949. From January 24th to March 1st, 29 provinces and the army dispatched 344 medical teams consisting of 42,322 medical staff, including 11,416 doctors and 28,679 nurses, as well as more than 15,000 specialists in severe medical infection, respiration, circulation, and anesthesia (NHCPRC, 2020). Of the medical teams working in the severely affected provinces, 90.9% of the volunteers (38,478) were from 29 provinces, which effectively alleviated the dilemma of medical resource exhaustion.

The government, hospitals, private enterprises, social organizations, and the general public were all involved in the process of assistance. Regarding the critical role of paired assistance in fighting COVID-19, this study aims to demonstrate the assistance model of resource coordination and regional mutuality, which are considered Chinese characteristics and can be interpreted based on the Chinese logic of governance.

**Figure 1. Epidemic Trend and Medical Assistance in Hubei Province**

Source: NHCPRC (2020)

| Date       | Cumulative Confirmed Cases | Number of cured | Total Deaths | Medical staff from other provinces | Number of patients still in hospital |
|------------|---------------------------|-----------------|--------------|-----------------------------------|------------------------------------|
| 20 Jan     |                           |                 |              |                                   |                                    |
| 27 Jan     |                           |                 |              |                                   |                                    |
| 3 Feb      |                           |                 |              |                                   |                                    |
| 10 Feb     |                           |                 |              |                                   |                                    |
| 17 Feb     |                           |                 |              |                                   |                                    |
| 24 Feb     |                           |                 |              |                                   |                                    |
| 2 Mar      |                           |                 |              |                                   |                                    |
| 9 Mar      |                           |                 |              |                                   |                                    |
| 16 Mar     |                           |                 |              |                                   |                                    |
| 23 Mar     |                           |                 |              |                                   |                                    |
| 30 Mar     |                           |                 |              |                                   |                                    |
| 6 Apr      |                           |                 |              |                                   |                                    |
| 13 Apr     |                           |                 |              |                                   |                                    |
| 20 Apr     |                           |                 |              |                                   |                                    |
| 27 Apr     |                           |                 |              |                                   |                                    |

**PAIRED ASSISTANCE: NORMALIZED AND CAMPAIGN STYLE**

**Path Dependency of Paired Assistance**

Paired assistance refers to assistance through partnerships between different regions, industries, and even departments to support a certain region or industry by forming a cooperative exchange and supportive relationship (Zhong, 2013). The Chinese paired assistance mechanism can be traced back to the 1950s when it was first applied to mutual assistance between urban and rural areas. Gradually, paired assistance evolved into a normalized assistance mechanism that covered multiple areas (e.g., economic, education, health) in minority regions as well as poor areas. Paired assistance has been widely recognized and applied to the crisis management and disaster management fields; specifically, paired assistance can be applied to the process of recovery and reconstruction for areas that have just undergone major projects, severe natural disasters, and public health crises.

In summary, paired assistance relies on two vital approaches, normalized and campaign-style paired assistance, which are characterized by government-dominated multiparty and collaborative governance.
As the essence of designated assistance, the normalized model has been adopted mostly by developed regions in the process of providing paired assistance (medical treatment, education, antipoverty resources, etc.) to poor areas. For example, the National Health Commission (NHCPRC) established “one-to-one” assistance contract relationships between 963 Class 3A comprehensive hospitals and 1,180 county-level hospitals in 834 poverty-stricken counties during 2016-2018, and these relationships were guaranteed by an evaluation and supervision mechanism (NHCPRC, 2019). In contrast, short-term, task-based campaign-style assistance has been widely adopted to cope with sudden events such as major natural disasters and public health crises. For instance, to accomplish post-disaster reconstruction after the 2008 Wenchuan earthquake, a targeted assistance mode of “one province to one county” was implemented in 19 provinces and lasted three years.

Paired Assistance: Wuhan and the Remaining 16 Cities

Paired assistance for Hubei Province was divided into two components, one of which was prioritized assistance from the central government as well as local provincial governments to Wuhan. The other vital component was assistance from the remaining 16 cities in Hubei Province. Starting on February 6, the Chinese government initiated a “one province to one city” paired assistance mechanism, followed by two pairing schemes issued by the NHC from February 7 to February 10. Under these pairing schemes, 19 provinces were designated to undertake targeted assistance for the 16 other cities of Hubei Province outside Wuhan based on the epidemic class, human resource reserves, and medical resource gaps of the recipient cities (see Figure 2).

A set of necessary conditions were required to initiate (trigger the mechanism of) paired assistance to Hubei. In China’s national governance system, only the CPC Central Committee and the State Council have the power to initiate “one province to one city” paired assistance. First, this kind of short-term, large-scale, cross-province, and cross-ministry medical staffing and material resource mobilization must be authorized and coordinated by the central government. Neither a single province (such as Hubei) nor a single ministry (such as the NHC) has the power and resources to conduct large-scale paired assistance. Second, the premise of implementing medical paired assistance to the epidemic areas in Hubei Province was the lockdown
Figure 3. The Paired Assistance for Hubei Province

Figure 4. Epidemic Trend and Medical Assistance in Hubei Province

Source: NHCPRC (2020); Hubei Government (2020)

Source: MOTPRC (2020)
throughout these areas and the quasi-lockdown of other areas of China. Regarding the suspension of the population mobility of approximately 60 million people in Hubei Province, only the central government could make such a political decision. Third, due to the high political and economic costs of the large-scale lockdown and material mobilization, the CPC Central Committee and the State Council initiated the lockdown and paired assistance to Hubei Province only after reaching a consensus on the severity of the novel coronavirus epidemic. The medical judgment on the nature of the virus and the assessment of the severity of the epidemic required a process of policy-making, and local governments in China mostly follow the logic of “making less trouble for the central government.” It is clear that local governments in Hubei Province were not quick enough in responding to the epidemic in the initial stage. Moreover, local governments are subject to “The Chinese Law on the Prevention and Control of Infectious Diseases” when releasing information about an infectious disease.

The Chinese government implemented quasi-targeted emergency assistance before publishing the target list. A total of 165 medical teams consisting of 19,916 medical personnel from 30 provinces and the army arrived in Hubei before February. Of this personnel, 18,226 medical workers from 152 medical teams were assigned to hospitals in Wuhan, and 1,690 medical workers from 13 medical teams were assigned to 11 cities outside Wuhan, such as Huanggang, Xiaogan, and Ezhou. In the whole province, the proportion of medical assistance for 16 cities increased from 9% to 23% from February 10 to March 1. In total, 31,097 doctors were allocated to Wuhan, and 7,381 doctors were allocated to the other 16 cities (see Figure 3). The supporting doctors from other provinces worked side by side with local doctors in Hubei Province, showing a strong spirit of professionalism and sacrifice and restraining the spread of the local epidemic throughout the whole country since Wuhan was the primary epidemic-stricken area. In addition to the assistance of a large number of medical staff, a total of 1.767 million tons of epidemic prevention supplies and living materials, as well as 4.196 million tons of production materials (e.g., electric coal and fuel oil), most of which were provided by other provinces (see Figure 4), were delivered to Hubei from January 27 to June 4. After the accomplishment of the medical aid mission, medical assistance teams left Hubei Province from March 17 to April 15.

So far, the NHCPRC has not disclosed the details of how it matched each province/city with each city/county for the paired assistance to Hubei Province. However, the following characteristics could be identified from the observation of the paired assistance operations in February and March.

First, the unified deployment of medical manpower and material resources was planned. Wuhan city had the largest patient scale and was the first and foremost city that needed assistance. Military medical teams from 30 provinces and major medical supplies were provided to assist Wuhan.

Second, the NHC comprehensively considered the medical resources and epidemic situation of each province and aimed to achieve a regional balance. For example, Beijing, Shanghai, and Sichuan, which have abundant medical resources, not only dispatched medical teams to Hubei, but also retained additional medical forces in the province to be used as a regional reserve. Beijing and Shanghai also had to cope with the large-scale quarantine pressure of the entry population.

Third, among the 16 severely affected Hubei cities other than Wuhan, most received paired assistance from two provinces. For example, Chongqing and Heilongjiang Provinces provided paired assistance to Xiaogan (the second most severely affected city), Shandong and Hunan to Huanggang (the third most severely affected city), Guangdong and Hainan to Jingzhou (the fourth most severely affected city), Liaoning and Ningxia to Xiangyang (the fifth most severely affected city), and Inner Mongolia and Zhejiang to Jingmen (the ninth most severely affected city). Most Hubei cities received “one province to one city” paired assistance. For instance, Jiangxi provided paired assistance to Suizhou (the fourth most severely affected city), Jiangsu to Huangshi, Fujian to Yichang,
Guizhou to Ezhou, Yunnan to Xianning, Guangxi to Shiyan, Tianjin to Enshi, Hebei to Shennongjia, and Shanxi to Xiantao, Tianmen, and Qianjiang, three small cities that are geographically adjacent.

**A CHESSBOARD: INTERGOVERNMENTAL COOPERATION IN PAIRED ASSISTANCE**

**Vertical Bureaucratic Control and Horizontal Intergovernmental Cooperation**

The targeted assistance provided to Hubei Province by other provinces involved the short-term, large-scale, transregional mobilization of national resources. Consequently, on the one hand, positive responses of local governments to vertical commands from the central government were indispensable. On the other hand, a horizontal collaboration between local governments, which might normally relate to one another under peer competitive logic, was of equal importance.

First, the Chinese central government established a coordination mechanism based on a series of strong decision-making commands. Aiming to exercise a unified command over the country’s pandemic prevention and control, the Leading Group of the CPC Central Committee for Novel Coronavirus Prevention and Control, headed by the premier, was set up on January 25. Covering almost all central ministries and commissions, the leading group had extensive power to issue a series of joint prevention and control measures that involved every ministry and commission. Moreover, inspectors from the Central Discipline Inspection Commission as well as central steering groups were dispatched to the provinces for investigation and supervision. Most significantly, serving as the head of the central steering groups, a deputy prime minister of the State Council took charge of frontline supervision and displayed the role of director and coordinator in paired assistance.

Second, the anti-pandemic leading group gradually accomplished its political assignments and anti-pandemic tasks based on administrative contracts. Drawing from the one-party government structure of Chinese central and local governments, all levels of government established anti-pandemic leading groups to respond to the central executive orders (Li 2015); therefore, the isomorphic responsibility from the horizontal and vertical one-party government organization enhanced the functional foundation of paired assistance (see Figure 5).

Third, relying on the Chinese public health network, which was activated by vertical subordination and horizontal management mechanisms, paired assistance was fulfilled in the bar-block (vertical-horizontal) authority system (Zhu & Zhao, 2018). For instance, public hospitals and centers for disease control and prevention, as well as territorial governments, were responsible for vertical health commissions. When the epidemic entered an emergency state, the divisibility of the vertical and horizontal axes decreased, while cooperation across regional levels strengthened. For example, the provinces could fulfill the requirements of targeted assistance by delivering medical materials and rapidly establishing interprovincial assistance relationships under the guidance of the public health network of the health commission.

**Assistance Model: An Innovative Approach to Addressing Governance Downtime**

Based on two-dimensional criteria (i.e., region and hierarchy), rescue supplies were effectively dispatched and distributed. Due to the spread and quarantine measures of the COVID-19 pandemic, governments and social organizations located in
severely affected areas were twice confronted with governance “downtime.” Congestion situations related to personnel, information, and supplies occurred as a result of a large amount of external assistance being poured through the top-down unified distribution method of the bureaucracy. For example, in the early phase of the pandemic, aiming to avoid becoming stuck in the coordinated warehouse allocation process (Qian, 2020), most hospitals in Wuhan turned directly to society for medical supplies, bypassing the higher-level administration. Specifically, local governments obtained discretion beyond the top-down resource allocation in the process of paired assistance, thereby bypassing governance downtime and enabling supporters to communicate directly with recipients (Zhang & Xu, 2020). Accurately identifying the assistance demand of the targeted cities, the supporting provinces delivered doctors, medical teams, and materials directly to the target hospitals, which alleviated the problems of information overlap and asymmetry.

The implementation of assistance provision was enhanced under the leadership of senior officials (Stazyk & Goerdel, 2011). The higher the official level in the Chinese bureaucracy, the more resources could be mobilized, as was shown in the frontline command process of the vice-premier of the State Council. Similarly, the provinces dispatched high-level officials, who played the frontline coordination commander role, to the target cities together with the medical teams to ensure the availability of medical team assignments and materials in addition to medical teams and medical and living supplies. The execution efficiency of the de-layered organizational structure was significantly enhanced by this innovative approach.

**Vertical Accountability and Horizontal Competition**

China is a state that has a tradition of centralization. Activated by institutional rules of fiscal federalism with Chinese characteristics and the promotion of competition (Qian & Roland, 1998; Li & Zhou, 2005; Zhou, 2007), the government has constructed an accountability mechanism based on the vertical subcontract logic and an incentive system based on the horizontal competition logic (Wu, 2013; Zhong, 2018). Local governments are subject to both vertical accountability to higher levels of government in terms of personnel management and fiscal restraint (Jae, 2015), and horizontal accountability to local councils and the judicial system in terms of the budget and judicial review. Nonetheless, local governments have still obtained limited decentralization of accountability and ample space for independent behaviors in terms of local resource allocation owing to information asymmetry related to vertical accountability as well as the limitations of horizontal accountability under the integration of party and government (Yu & Gao, 2012; James et al., 2009).

On the one hand, vertical accountability of local governments to the central government has been greatly strengthened during the COVID-19 pandemic. The Chinese central government sent party and government leading officials at all levels to take command on the front line; those who failed to undertake such political assistance tasks were inevitably punished by their superiors, as in the appointment and removal of the top officials of Hubei and Wuhan. Potentially, personnel appointments could account for local officials’ loyalty and task execution (Edin, 2003). Consequently, central policymakers’ orders to fight COVID-19 could be rapidly implemented at all levels in terms of the dual-track of the party and government, as most local government officials are CPC members.

On the other hand, an underlying competition mechanism exists in different local governments throughout the whole process of paired assistance. Political pressure from superiors and the general public, along with a strong sense of morality, intensified horizontal intergovernmental competition, leading to approaches to implement efficient measures or deliberately increase workload so that governments could satisfy the requirements for assistance.

Furthermore, influenced by the collectivist cultural tradition of East Asia, local governments were in accord with superior governments in fighting COVID-19 instead of acting on an individual basis in...
the horizontal competition. As noted previously, the rapid and massive concentration of medical teams and medical and living materials from other provinces to Hubei immediately followed instructions for assistance from the central government. Moreover, the production capacity of medical materials in China underwent a significant increase. As of April 7, the daily production capacity of disposable medical protective suits, medical N95 masks, and chloroquine phosphate had reached more than 1.5 million, 3.4 million, and 100,000, respectively (MIITPRC, 2020). Increasing production capacity in China could be regarded as a resource guarantee for paired support.

In contrast to the paired assistance for postdisaster reconstruction after the Sichuan earthquake in China, which lasted 1-3 years, this paired assistance for fighting COVID-19 was characterized by rapid entry and exit. In addition, the cost of the rescue supplies was covered by the supporting provinces, which could be interpreted as a horizontal fiscal transfer between governments, accompanied by short-term subsidies from the Chinese central government (NHSPRC, 2020). As far as the provinces were concerned, normalized and campaign-style paired assistance costs are controllable in the short term. For example, in 2008, the Chinese central government expressly stipulated that every province’s assistance budget for the postdisaster reconstruction of earthquake-stricken areas should be not less than 1% of the local fiscal revenue of the province in the previous year (GOSCPRC, 2008); thus, most of the supporting provinces retained more than 80% of their critical care forces to fight COVID-19 in their jurisdictions (Li, 2020).

CONCLUSION

In the official Chinese nationalist discourse system, fighting COVID-19 in Hubei was viewed as a defensive action that manifested national cohesion and promoted the Chinese national spirit. As the essence of reversing the spread of COVID-19 in Hubei, campaign-style paired assistance is similar to a short-term blood transfusion that aimed to buy the necessary time for Hubei to restore its hematopoiesis function. The experience of Hubei revealed that the functional cooperation networks covering local areas under the overall command of the Chinese central government were critical to the pandemic emergency response. After all, whether the fight against the epidemic could succeed relied on the “short bar of a wooden barrel.”

Fundamentally, campaign-style paired assistance for Hubei depended on the unique system of government led by the CPC, followed by the high level of support from doctors, public employees, and the general public for assistance action in China. Can the experience of China in paired assistance be replicated? Due to the unique national conditions, China’s experience, although useful, is difficult to replicate.

First, in terms of the central government’s coordination, support, and enhancement of mutual assistance between local governments, despite differences regarding the epidemic situation, intergovernmental relations and emergency response systems in different countries that implement federal or unitary systems and democratic or non-democratic systems, the overall goal of pooling superior resources to assist severely affected areas is explicit (Schnall et al., 2017).

Second, it is obvious that paired assistance that responds to the epidemic on a large scale within a short period of time requires strong governmental capability. However, it is challenging to replicate or extend the Chinese anti-pandemic model in other countries, especially those organized with federal states (Zhong, 2018). The response measures of federal and state governments will inevitably be hampered by a lack of consistency and certainty (Knauer, 2020). Drawing on the historical experiences, federalism had successfully dealt with many kinds of crises, but leadership was indispensable. Polarized competition between political parties and weak leadership of the federal government would weaken the cooperation between the central government and the local government in epidemic prevention (Rozell & Wilcox, 2020).

In addition, short-term campaign-style paired assistance also has limits, including the unsustainability of supplying high levels of human and material input,
local differences in assistance demands, competition arising from excessive assistance, and unequal distribution of assistance among recipients. Therefore, functionally designated assistance with a lower assistance intensity and a focus on education, health care, anti-poverty efforts, and other issues could remain sustainable and normalized.

REFERENCES

Bjorn, L. (2009). Global Crises, Global Solutions: Costs and Benefits. Cambridge University Press.

Chen, S., Yang, J., Yang, W., Wang, C., & Bärnighausen, T. (2020). COVID-19 control in China during mass population movements at New Year. The Lancet, 395(10226), 764-766.

Chung, J. H. (2016). China’s local governance in perspective: Instruments of central government control. The China Journal, 75(1), 38-60.

Comfort, L. K., Waugh, W. L., & Cigler, B. A. (2012). Emergency management research and practice in public administration: Emergence, evolution, expansion, and future directions. Public Administration Review, 72(4), 539-547.

Edin, M. (2003). Remaking the communist party-state: The cadre responsibility system at the local level in China. China: An International Journal, 1(1), 1-15.

General Office of the State Council of PRC (GOSCPRC). (2008). Paired Assistance plan for recovery and reconstruction after the Wenchuan earthquake. http://www.gov.cn/jrzg/2008-06/25/content_1026583.htm

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... & Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. The Lancet, 395(10223), 497-506.

Knauer, N. J. (2020). The COVID-19 Pandemic and Federalism: Who Decides?. New York University Journal of Legislation and Public Policy.

Kung, J., Cai, Y., & Sun, X. (2009). Rural cadres and governance in China: incentive, institution and accountability. The China Journal, 62, 61-77.

Li, H., & Zhou, L. A. (2005). Political turnover and economic performance: the incentive role of personnel control in China. Journal of Public Economics, 89(9-10), 1743-1762.

Li, J. (2020 Mar 11). 10% of the national critical forces support Wuhan [in Chinese]. China News Weekly. http://www.inewsweek.cn/society/2020-03-11/8767.shtml

Li, R. (2015). Define “Partner Aid Practice with Chinese Characteristics”: A Political Giving Explanation [in Chinese]. Comparative Economic & Social System, 4, 194-204.

Liu, Y., & Wang Y. (2019). Paired Assistance: Precision Assistance Improves Effectiveness. China Health, 3, 64-66. [in Chinese]

Ministry of Industry and Information Technology of PRC (MIITPRC). (2020). The Press Conference on Production Guarantee of Medical Materials. http://www.miit.gov.cn/n1146290/n1146402/c7856999/content.html

Ministry of Transport of the PRC (MOTPRC). (2020). Daily data of epidemic prevention and control in transportation January 27-June 4. http://www.mot.gov.cn/jiaotongyaowen/

National Health Commission of the PRC (NHCPRC). (2020). The record of press conference, February 4-April 29, http://www.nhc.gov.cn/

Qian, T. (2020 Feb 1). Why is it so difficult for epidemic prevention materials when domestic coordination is insufficient and overseas is obstructed? [in Chinese]. Caixin. http://www.caixin.com/2020-02-01/101510420.html

Qian, Y., & Roland, G. (1998). Federalism and the soft budget constraint. American Economic Review, 88(5), 1143-1162.

Rozell, M. J., & Wilcox, C. (2020). Federalism in a time of plague: how federal systems cope with pandemic. The American Review of Public Administration, 50(6-7), 519-525.

Schnall, A., Nakata, N., Talbert, T., Bayleyegn, T., Martinez, D., & Wolkin, A. (2017). Community Assessment for Public Health Emergency Response (CASPER): an innovative emergency management tool in the United States. American Journal of Public Health, 107(S2), S186-S192.

Stazyk, E. C., & Goerdel, H. T. (2011). The benefits of bureaucracy: Public managers’ perceptions of political support, goal ambiguity, and organizational effectiveness. Journal of Public Administration Research and Theory, 21(4), 645-672.
Wu, J., Ma, L., & Yang, Y. (2013). Innovation in the Chinese public sector: Typology and distribution. *Public Administration, 91*(2), 347-365.

Yu, J. & Gao, X. (2012). Behavioral Logic and Institutional Basis of Local Developmental States [in Chinese], *Social Sciences in China, 32*(5), 95-112.

Zhang, X. & Xu, L. (2020 Feb 26). *China’s “Paired Assistance” Approach to Coronavirus: Lessons from the Wenchuan Earthquake Response*. Center For Global Development Notes. https://www.cg-dev.org/publication/chinas-paired-assistance-approach-coronavirus-lessons-wenchuan-earthquake-response

Zhao, S., Lin, Q., Ran, J., Musa, S. S., Yang, G., Wang, W., ... & Wang, M. H. (2020). Preliminary estimation of the basic reproduction number of novel coronavirus (2019-nCoV) in China, from 2019 to 2020: A data-driven analysis in the early phase of the outbreak. *International Journal of Infectious Diseases, 92*, 214-217.

Zhong, K. (2013). Paired Assistance in China: Origins, Formation and Development [in Chinese]. *The Journal of Gansu Administration Institute, 4*, 14-24.

Zhong, K. (2018). Explaining the Mechanism of the Paired Assistance to Disaster-Affected Areas Program Work in China: A Multiple Moderated-Competitions Framework [in Chinese]. *Journal of Gansu Administration Institute, 1*, 4-14.

Zhou, L. A. (2007). Research on the Tournament Promotion Model of Local Officials in China[in Chinese]. *Economic Research Journal, 7*, 36-50.

Zhu, X., & Zhao, H. (2018). Experimentalist governance with interactive central–local relations: Making new pension policies in China. *Policy Studies Journal*.

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**ABOUT THE AUTHORS**

Weixu Wu is assistant professor in School of Public Policy and Management School at Tsinghua University. His research focuses on comparative political economy and regional economics, the Taiwan issue. Email: wuweixu1221@mail.tsinghua.edu.cn.

Xinyu Tan is assistant professor in School of Social and Public Administration at East China University of Science and Technology. His research focuses on organizational behavior and human resource management in Chinese public sectors. He is the corresponding author of this article. Email: tanxinyu1989@foxmail.com.

Qinzhi Jiang is a doctoral student in School of International and Public Affairs at Shanghai Jiao Tong University. His research focuses on public policy and comparative politics. Email: qinzhi.jiang@sjtu.edu.cn.