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Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

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### Empfohlene Zitierung / Suggested Citation:

Sun, Y., & Yu, B. (2023). Mask diplomacy? Understanding China's goals in delivering medical aid in the first wave of the COVID-19 pandemic. *Journal of Current Chinese Affairs*, 52(3), 381-412. <https://doi.org/10.1177/18681026221139499>

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# Mask Diplomacy? Understanding China's Goals in Delivering Medical Aid in the First Wave of the COVID-19 Pandemic

Journal of Current Chinese Affairs  
2023, Vol. 52(3) 381–412  
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DOI: 10.1177/18681026221139499  
journals.sagepub.com/home/cca



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## Abstract

In the first wave of the COVID-19 pandemic, China provided medical assistance on an unprecedented scale. While some observers have underscored the strategic purposes of China's COVID-19 aid, referred to as “mask diplomacy,” they have yet to assess this argument against empirical evidence. We seek to examine whether China's medical aid was used as a strategic tool, or it remained reactionary and fragmented, by combining a new dataset on the global distribution of Chinese in-kind medical aid with a qualitative analysis of government and news reports during the first wave of the pandemic. Our findings show that although COVID-19 aid did have the potential to strengthen China's influence over recipients and promote Chinese knowledge of health governance, Chinese policymakers were underprepared to use aid strategically during the pandemic. The reactionary and fragmented nature of China's COVID-19 aid was reflected in its allocation, its policy-making processes, and its implementation.

Manuscript received 24 March 2022; accepted 31 October 2022

## Keywords

COVID-19, China, medical assistance, mask diplomacy

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## Introduction

The COVID-19 pandemic has caused public health crises across the globe and a global economic downturn. The pandemic has placed a disproportionate burden on low- and middle-income countries (L&MICs) that lack the capacity for public health responses and economic recovery (Noy et al., 2020). In this turbulent time, foreign assistance is urgently needed to support the L&MICs. China, as the first victim of COVID-19, has unexpectedly served as a key supplier of medical assistance for the rest of the world. As soon as it slowed down the spread of the virus within its own borders in late February 2020, China began donating medical equipment and sending medical experts abroad. As of 31 May 2020, China had sent twenty-nine medical expert teams to twenty-seven countries and offered assistance to 150 countries and four international organisations (State Council Information Office, 2020b). China has also striven to make COVID vaccines a global public good by donating 24.2 million doses of vaccines overseas – a number substantially larger than the European Union’s (EU) donation (Deutsch and Furlong, 2021).

However, China’s COVID-19 aid has been perceived as controversial. Observers have expressed different views on China’s goals in delivering aid. Some believe that China has leveraged COVID-19 aid to pursue strategic goals, such as enhancing geopolitical influence over recipient countries and reshaping the global governance systems (Li and Musiitwa, 2020; Mulakala and Ji, 2020; Myers, 2020; Verma, 2020; Wong, 2020). Others, however, have emphasised the reactionary nature of China’s aid, which had been shaped by the principle of non-interference and diverse domestic interests (Zhou, 2020). Although the above debate is valuable, the relevant arguments have been rarely assessed against empirical evidence. To provide a more systemic analysis of China’s goals in its COVID-19 aid, we need to zoom into the design, allocation, and implementation of aid. To date, researchers of international development and Chinese foreign policy, with a few notable exceptions (Telias and Urdinez, 2020; Urdinez, 2021), have conducted insufficient empirical research on this subject. Our study provides an empirical assessment of China’s COVID-19 aid based on a novel dataset on the distribution of aid, statements by the Chinese government, and media reports in Chinese and English. To keep our study focused on the Chinese central government’s policy thinking, we analyse official aid provided by the central government and exclude commercial trade and non-state and subnational donations. In the meantime, our empirical research focuses on the first wave of the COVID-19 pandemic between February and July 2020 – a period where tensions between China and the West around the pandemic were high. This was also a period in which traditional donors were unable to provide sufficient aid, giving China a better opportunity to make an impact.

Through a mixed-method study of the in-kind medical assistance provided by the Chinese central government during the first wave of COVID-19 in 2020, this article delivers two key take-aways. First, different from the popular narrative in the media, the allocation of Chinese aid in the COVID-19 pandemic was primarily driven by recipient countries’ needs and requests, which was in line with China’s humanitarian aid in the past. Second, although Beijing did set general foreign policy goals such as improving China’s global image and promoting Chinese anti-virus knowledge, the passiveness of

aid design, fragmented implementation, and the involvement of diverse domestic interests suggest that those strategic goals were not well pursued. These findings provide a more nuanced account of Beijing's aid policy during the pandemic, and therefore, shed light on not only the impact of COVID-19 on China's global influence but also challenges in development cooperation in a post-COVID world.

We proceed as follows. Section "Understanding China's COVID-19 Aid: Theories and Hypotheses" builds on international relations (IR) theories and studies on China's foreign aid to developing four specific hypotheses on China's goals in delivering COVID-19 aid. Next, we explain our research design. Section "Correlates of China's COVID-19 Aid" introduces our quantitative data and provides a quantitative analysis of the factors influencing the delivery of China's medical assistance as of July 2020. We then complement our quantitative findings with a qualitative assessment of the features of China's COVID-19 aid, which shows mixed findings on the strategic nature of China's aid. We conclude by offering recommendations on how to enhance cooperation between China and traditional donors in order to assist L&MICs after the COVID-19 crisis.

## **Understanding China's COVID-19 Aid: Theories and Hypotheses**

Building on IR theories and literature on China's foreign aid, we can identify three analytical approaches to understanding China's motivation in providing foreign aid. The first builds on realist IR theories to view aid as a geopolitical tool to enhance national power, the second follows a constructivist approach to see China's aid policy as being shaped by its traditional norms of non-interference, and the third stresses the influence of different domestic interests on China's foreign aid. Based on these theoretical approaches, we deduct four hypotheses on China's goals in delivering COVID-19 aid.

### *Geopolitics, Soft Power, and China's COVID-19 Aid*

IR scholars in the realist school have long stressed that countries' foreign policies are means to increase national power (Morgenthau, 1985). Through this lens, scholars suggest that foreign aid is a tool that allows the donor country to gain more political influence over the recipient country (Apodaca, 2017). This realist perspective is also applied to the analysis of China's foreign aid, as scholars argue that China has been using aid to gain more support for its international agenda (Brazys and Dukalskis, 2017; Dreher et al., 2018). In the same logic, some observers have labelled China's aid during the COVID-19 pandemic as "mask diplomacy" (later "vaccine diplomacy") and indicated that its central goal is to increase China's diplomatic influence over recipient countries (Lee, 2023; Wong, 2020). Meanwhile, given the fact that many countries, especially the US, blamed China for failing to contain the virus, China should be eager to change the COVID-19 narrative. Accordingly, one can believe that medical aid is also part of Beijing's plan to repaint China's global image and gain international support for

China's COVID-19 narrative (Bachulska, 2020; Kowalski, 2021; Myers, 2020; Verma, 2020; Wen, 2021). These arguments can be summarised as the following hypothesis:

H1: China used COVID-19 aid as a geopolitical tool to improve its global image and increase its influence over recipient countries.

Beyond inter-state relations, realist theories can also guide the analysis of change in global governance. Global governance is not politically neutral, as actors seek the leadership position and use the authority to embed their interests, knowledge, and beliefs into rules and policies governing the globe (Barnett and Duvall, 2004). In the realm of foreign aid, traditional donors in the Global North have shaped the global development system by actively designing coordinated aid programs (e.g. The US President's Emergency Plan for AIDS Relief) that emphasise institution-building, local empowerment, capacity-building, and governance reform (Brautigam, 2011; Ng and Ruger, 2011).

Through this theoretical lens, foreign aid would also provide China with an opportunity to build global leadership and reshape international best practices on development cooperation (Beeson and Li, 2016; Nordin and Weissmann, 2018; State Council Information Office, 2021). Therefore, some commentators see a broader ambition in China's COVID-19 aid as China has been filling the leadership gap left by traditional donors in the global fight against the pandemic (Editorial Board of Washington Post, 2020; Li and Musiitwa, 2020; Mulakala and Ji, 2020; Zhai and Vasovic, 2020). Hence, in addition to H1 – but in line with the realist approach, one can expect:

H2: China's COVID-19 aid embodied Beijing's ambition to seek a leadership position in global governance and to promote Chinese knowledge and solutions in global development and health governance.

### *Normative Beliefs and China's COVID-19 Aid*

While the aforementioned realist insights can help us understand China's motivations behind aid, constructivist theorists may disagree with their underestimation of the influence of norms. Constructivists argue that countries' international behaviour is often shaped by policymakers' normative beliefs (Johnston, 2014). Scholars and Chinese policymakers have long argued that China's approaches to aid project design and project implementation have all been influenced by the long-standing norm of non-interference in China's foreign policy (Dunford, 2020; State Council Information Office, 2011; Yu, 2021). Since the 1980s, governed by the Ministry of Commerce (MOFCOM), a technical bureaucracy that cares more about project implementation than developing strategic aid plans, China has developed a habit-like practice of putting recipient countries into the driver's seat of aid design, and avoiding pre-design of project packages (Li et al., 2014; Varrall, 2016; Zhang and Smith, 2017). Accordingly, each aid project is individually designed and implemented, lacking coordination among each other (Kopiński and Sun, 2014; Vazquez et al., 2016). This passive approach to aid design and implementation was not only reflected in infrastructure projects but also reflected in the health and humanitarian aid (Chen, 2012; Huang, 2014; Li, 2012).

Although the request- and project-centric foreign aid model is efficient – as shown by China’s timely assistance during the early days of the Ebola epidemic (Huang, 2017), the lack of systemic solutions and project coordination often reduced aid effectiveness and constrained China’s potential to build leadership (Brautigam, 2011; Huang, 2014). Over the past few years, China’s foreign aid has been attached to the major strategic mission of promoting a “global community of shared future.” As a result, China has placed greater emphasis on issues such as project coordination, capacity-building, and knowledge sharing (State Council Information Office, 2021). However, the traditional norm’s dominance sustains as high-ranking officials and the high-level policy documents (i.e. the white papers) continue to treat non-interference as the primary principle and emphasise respecting recipient governments’ full ownership (Guo, 2017; State Council Information Office, 2021). Hence, building on the above perspectives one may make the following hypothesis:

H3: China’s COVID-19 aid followed the non-interference norm and focused on answering the needs of recipient countries.

Because the non-interference norm that has shaped China’s foreign aid for decades will only produce a non-conditional, request-driven, and project-centric foreign aid model, if the norm remains dominant during the COVID-19 pandemic, it will be hard for China to use aid more strategically. Therefore, H3 does not align with H1 and H2.

### *Domestic Interests and China’s COVID-19 Aid*

Beyond the two theories that focus on China’s general strategic intention, another approach focusing on domestic actors and their interests may also help us understand China’s foreign aid. As Moravcsik (1997) argues, countries are not simply unitary actors. National interests are products of interactions of domestic actors with varied preferences. In recent years, domestic actors’ influence on China’s foreign policy has drawn more academic attention (Jones and Hameiri, 2021). Among studies on China’s foreign aid, some scholars noticed that the general public’s criticisms of the government’s over-generosity with foreign aid have discouraged policymakers to frame China’s foreign aid as highly altruistic (Sun, 2015). In addition, due largely to the lack of central-level control as discussed above, provinces and companies operating overseas were able to conduct aid activities based on their diverse interests and knowledge (Brautigam, 2009; Varrall, 2016; Zhang and Smith, 2017). Although Beijing has been stressing top-level design in the Belt and Road Initiative (BRI), provincial governments and business groups are still able to devise projects to serve their economic interests (Jones and Zeng, 2019; Ye, 2019, 2020). Compared to other types of foreign aid, China’s humanitarian aid seems even more fragmented due to the involvement of several bureaucracies in addition to the China International Development Cooperation Agency (CIDCA) including the Ministry of Foreign Affairs, the Ministry of Finance, and the National Health Commission (NHC; Li, 2012).

Because of the divergent interests of domestic actors involved in aid implementation, China has had difficulty building an image as a generous donor, which is crucial for

building global leadership in the foreign aid realm. In fact, China always seeks to find a balance between self-interest and altruism. For instance, the Ministry of Health has unveiled its business-oriented plans to reform China's medical aid, by promoting jointly-run hospitals and pharmaceutical firms to enhance mutually beneficial cooperation (Huang, 2014). The involvement of commercial interests not only has made China less generous but more seriously, can create space for elites in recipient countries to seek private profits at the expense of public goods (Camba, 2022; Camba et al., 2023). This would significantly limit potential political gains of aid. Hence, the difficulties that China has faced in image-building and public relations management caused, at times, misunderstanding and negative reactions from actors in recipient countries (Jiang, 2014).

Taken altogether, the following hypothesis can be made:

H4: China's aid policy during COVID-19 was shaped by diverse domestic interests, which made aid practices fragmented and could even undermine the pursuit of strategic goals.

Noticeably, we take H4 as in line with H3 and in contrast with H1 and H2 in this specific case. We agree that Beijing can have clear foreign policy goals, but simultaneously lacks the capacity to achieve them, as local and business actors may act based on their own preferences (Jones and Hameiri, 2021). However, because foreign aid (especially official humanitarian aid that this study investigates) has a centralised policy-making structure, if Beijing indeed has a clear strategic goal and the will to turn it into reality, it should be able to control or orchestrate subnational and non-state actors' behaviours. Therefore, it is reasonable to expect that domestic actors' influence should depend on the policy space left by the central government and top leaders (Yu, 2021). In this sense, the presence of disparate behaviours by Chinese actors implementing foreign aid can be seen as an indication of the lack of clear and coherent strategic goals.

## **Research Design**

To test the four hypotheses drawn from different theoretical approaches, we adopted a mixed-method research design. Directly examining the Chinese government's intentions in COVID-19 aid is difficult as data on the relevant policy development processes are not always accessible. Therefore, we used the best available data from different sources and combined quantitative and qualitative methods. We developed a dataset of countries receiving China's in-kind medical assistance between 25 February and 2 July 2020 and use statistical tools to identify country characteristics associated with the provision of Chinese aid (see details in the "Correlates of China's COVID-19 Aid" section). This quantitative assessment is supplemented by a qualitative analysis of government and media reports in both Chinese and English in the same period, which allows us to identify the key features of China's aid policy during COVID-19. Below we discuss specific observable implications (OIs) for each hypothesis and our strategy to empirically assess them using different data and methods.

H1 has at least two OIs. First, when using aid as a geopolitical tool, China is likely to prioritise its pre-existing partners to strengthen bilateral relationships and seek political

support. Accordingly, countries having close economic and political ties with China would be more likely to receive China's aid. To assess this OI, we tested the effects of countries' economic and political relationships with China in the regression analysis of China's aid allocation. Second and related, if the ultimate goal of medical aid is political support, China should add conditions when delivering aid, even in an implicit way. Namely, China would require recipient countries to publicly praise its assistance and support the depoliticisation of COVID-19. We used documents by the Chinese government and reports from official media to examine the existence of such conditions.

H2 has at least three OIs. First, if aid is to help China become a new global leader, Beijing should seek support more than from its traditional allies. This means recipients of China's COVID-19 aid are likely to differ from beneficiaries of Chinese aid in the past. Hence, countries that did not have close political relations with China still received Chinese assistance. The OI can be also assessed through regression analysis of China's aid allocation in comparison with China's past aid deliveries. Second, to better promote China's leadership in the global fight against the pandemic, Beijing needs to develop its own solutions and increase their uptake around the world, which follows traditional donors' way of taking leadership in foreign aid. Third, a new leader is more likely to be accepted by the international community if it makes significant contributions to global public goods with little self-interest. Therefore, China would emphasise generosity, altruism, and the provision of global public goods when delivering aid. We assessed the last two OIs by qualitatively investigating Chinese solutions and altruistic elements in the Chinese government's narratives on COVID-19 aid.

H3 has four OIs. First, when the allocation of aid is based on the pandemic situation, China would send assistance to countries that had severely suffered from the pandemic. Second and related, when controlling for the capacity of the national health system, countries taking strict containment measures are more likely to request China's support. Accordingly, China is more likely to provide aid to countries in need of a large number of medical resources to contain the virus. We assessed these two OIs by adding variables on countries' COVID-19 situation and policy in the regression analysis of China's aid allocation. Third, evidence supporting this hypothesis can be also reflected by a decision-making process of China's COVID-19 aid that focuses on answering foreign requests. Fourth, if H3 is valid, we should see no effort by China to add conditions on aid or actively promote Chinese anti-virus solutions during aid delivery. The last two OIs can be examined through a qualitative analysis of China's aid policy during the pandemic using official documents and media reports.

H4 has two OIs. First, being guided by unclear strategic goals and under the influence of diverse domestic interests, China could not build a coherent image of an altruistic donor when delivering its COVID-19 aid. Second, because domestic actors' interests differ, we may even observe aid practices that do not fit with China's foreign policy interests. The OIs of H4 were assessed against qualitative evidence from media reports.

Our mixed-method design can help us not only investigate quantitatively countries' likelihood of receiving Chinese aid given their relationships with China and



COVID-19 situations but also examine qualitatively the key features of China's aid policy during the pandemic (see Table 1). That said, our approach has several limitations. First, due to the lack of official data on aid quantity, we could only construct a binary variable to differentiate countries having received aid from non-recipients. This measurement prevented us from testing if China's aid strategy includes a tiered system that further classifies recipients. Second, our qualitative analysis relied on publicly available data from government and media reports. Without direct access to relevant policymakers (e.g. through interviews), we could not fully unpack the whole decision-making process of aid allocation and the specific influence of each actor. Future research with more comprehensive data would complement our study.

### **Correlates of China's COVID-19 Aid**

Compared to its activities during Ebola and H1N1, China has played an unprecedented role during COVID-19 by being the leading supplier of medical assistance in the world and supporting not only L&MICs but also developed countries. To understand where and when the Chinese government provided medical assistance, we developed a dataset of China's in-kind medical assistance to United Nations (UN) member states in February–June 2020. By “in-kind assistance,” we consider the donation of medical equipment – including personal protective equipment (such as masks and gowns), test kits, and ventilators – as well as the dispatch of medical experts. Through this dataset, we aim to first identify the recipients of the Chinese government's medical aid in the

**Table 1.** Application of Mixed Methods.

Hypotheses	Research approaches
H1: China used COVID-19 aid as a geopolitical tool.	<ul style="list-style-type: none"> <li>• OI 1.1 Aid allocation: Regression analysis</li> <li>• OI 1.2 Require political support as a condition: Qualitative analysis</li> </ul>
H2: China used COVID-19 aid to enhance its global leadership.	<ul style="list-style-type: none"> <li>• OI 2.1 Aid allocation: Statistical analysis</li> <li>• OI 2.2 Promotion of Chinese solutions: Qualitative analysis</li> <li>• OI 2.3 Use of altruistic narrative: Qualitative analysis</li> </ul>
H3: Non-interference norm dominated China's COVID-19 aid.	<ul style="list-style-type: none"> <li>• OI 3.1 &amp; 3.2 Aid allocation: Regression analysis</li> <li>• OI 3.3 Aid-making processes in response to recipients' needs: Qualitative analysis</li> <li>• OI 3.4: Lack of conditionality &amp; Chinese solutions: Qualitative analysis</li> </ul>
H4: Domestic actors with diverse interests shaped China's COVID-19 aid.	<ul style="list-style-type: none"> <li>• OI 4.1 Lack of altruistic narrative: Qualitative analysis</li> <li>• OI 4.2 Fragmented implementation: Qualitative analysis</li> </ul>

first wave of the pandemic, and then investigate the factors that influenced Beijing's decisions about the destinations of its aid. Our focus is on the forces driving Beijing's "mask diplomacy" and for this reason, we did not consider financial assistance.

Gathering data on China's aid is a challenging task as the Chinese government does not publish any registry of foreign assistance. Meanwhile, Chinese non-state actors – including businesses and charitable foundations – and subnational governments have also provided medical assistance to countries suffering from the pandemic. To ensure the accuracy of our data, we developed a three-step approach to identify the aid officially commissioned by the central government. First, we searched for information on aid provided by the Chinese central government on the website of each Chinese embassy. If in-kind donations were made or medical experts were deployed, we noted the arrival date of equipment (along with the categories and quantity of the equipment donated when the relevant information was disclosed) and that of the medical team in each country. Second, for countries for which information was unavailable from their Chinese embassies, as well as those that have no diplomatic relationship with China, we searched for reports on COVID-19 aid by major Chinese state media outlets including *Xinhua*, *People's Daily*, and *CCTV* (including *CGTN*). If media reports exist, we added data on these countries to our database. Third, for all remaining countries about which no information was found after the first two steps, we used the search string (China) AND (anti-COVID-19 OR assistance OR donation) AND (country X) in the most popular search engines in English (Google) and Chinese (Baidu) to check other reports.

Through these steps, we identified 142 countries to which China's central government has donated medical supplies as of 2 July 2020: 133 of these cases are clearly stated as official donations by the central government, and in the other nine cases, representatives of the central government, such as embassies, participated in donations supported by Chinese state-owned enterprises (SOE), subnational governments, or charitable foundations. This number of 142 is in line with the government's announcement, which indicated in June 2020 that China had offered assistance to 150 countries (State Council Information Office, 2020b). While recognising that a few countries are missing from our database due to the lack of reporting, we believe that these "hidden" cases have little relevance to China's "mask diplomacy," as they have not been publicly advertised by Beijing. To investigate whether or not China has provided timely support to countries suffering from the pandemic, we noted the time of the first batch of donations.

We also found twenty-eight countries to which China sent medical expert teams, all but one of which was sent by the Chinese government. Twenty-seven official expert teams correspond to the number announced by the State Council Information Office. The only exception is Nigeria, where the team was sent by an SOE (China Railway Construction Corporation). This arrangement was likely caused by the opposition from several stakeholder groups in Nigeria to the Nigerian government's invitation to Chinese experts (Olander, 2020). Hence, we still include this case in our database, as that team was very likely organised by the Chinese government under the name of the SOE in order to appease public opinion in the recipient country. In sum, to our

knowledge, this is the first database on China's COVID-19 aid, and we believe it provides a nearly full picture of China's medical aid in the first half of 2020.

### *Global Distribution of China's Medical Assistance in COVID-19*

On the distribution of China's aid, Figures 1 and 2 show, respectively, the arrival date of China's equipment donation and medical expert teams in each recipient country and the then total case fatality rate (CFR) of that country. China began to offer in-kind assistance in late February, starting with Iran (25 February) and Japan (27 February). Between March and May, more than 130 countries received official assistance from China, with peak donation disbursement in April ( $N=75$ ). Although official reports sometimes disclosed the types of equipment in China's aid, detailed data on the quantity of equipment remained very limited (we could only find incomplete data for thirty-nine countries). At a glance, the allocation of aid seems to correspond to the location of the outbreak of the pandemic. Using CFR as an indicator to reflect countries' epidemiological situations, we find that more than three-quarters of the countries having a CFR higher than 5 per cent – the global average as of the end of June 2020 – had received equipment donations from China. Nonetheless, many countries still had a low CFR when they received China's assistance. The fact that China provided aid to many developed countries is also worth noting as this delivery pattern seems to differ from China's humanitarian aid in the past. Such South–North flows of aid, along with the prominence of South–South aid, actually constitute an indicator of China's growing influence in global development.

Regarding the deployment of medical experts, most recipient countries are L&MICs, but Chinese experts were also sent to Italy, Serbia, and Russia. Looking at the CFR in these countries, again we see that they were not equally affected by COVID-19 at the time when Chinese experts arrived.

Considering country-level variables, we can identify some general patterns in the global distribution of China's COVID-19 aid. First, there was no aid given to countries having no diplomatic relationship with China. This is in line with China's tradition in aid policy (Hodzi et al., 2012). Second, on the state's capacity, most non-recipients are rich countries (see Figure 3 in which blue diamonds denote non-recipients while red circles denote recipients). This may be explained by the fact that rich countries have more power to purchase medical supplies, so, from China's perspective, there was less need for donations. Nonetheless, there is a large variation in economic capacity across recipient countries, which requires regression analysis to explore factors shaping Beijing's decisions.

### *Statistical Analysis*

We used two dependent variables to measure the allocation of China's equipment donation and deployment of medical teams. Given the impossibility of quantifying both types of assistance, we used binary variables to measure the existence of aid in each country. Additionally, as a robustness check for equipment donation, we used a more conservative

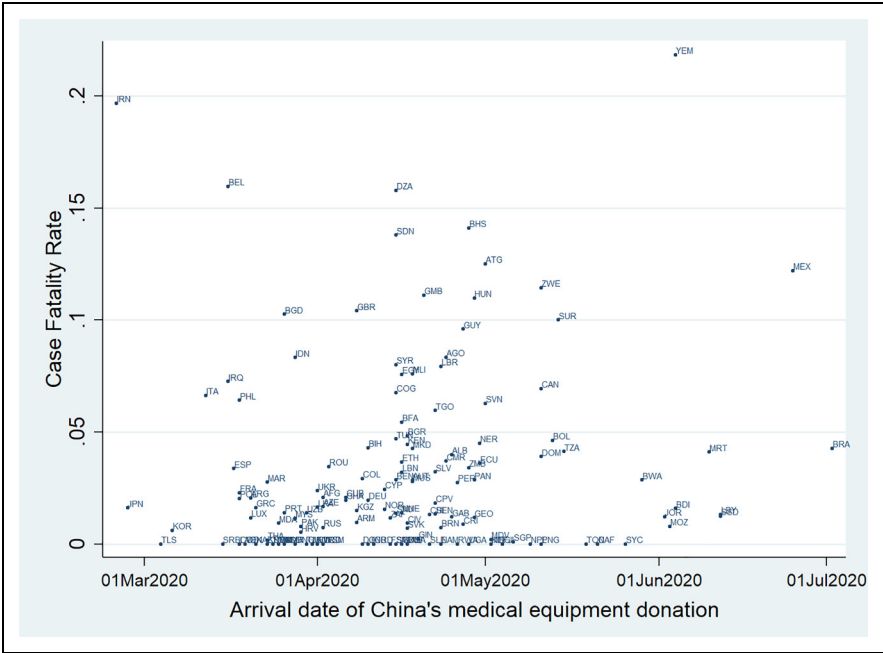
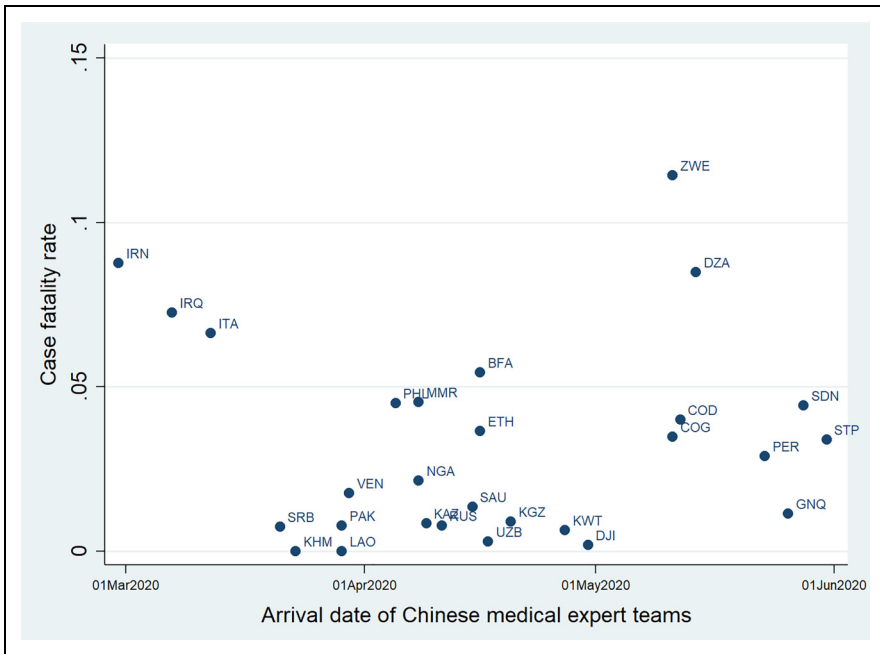


Figure 1. Countries receiving China's donation of medical equipment.

measure of equipment donation that only considers those 133 countries where the donation from the Chinese central government can be identified.

To test H1 to H3 discussed in Section “Understanding China’s COVID-19 Aid: Theories and Hypotheses,” we include in our regression two types of factors that may influence China’s aid delivery. First, we assess to what extent each country’s need to contain the virus affected its likelihood to receive assistance from China. In this respect, we included several variables representing countries’ epidemiological situations including the cumulative case number and CFR. These two variables were measured using data reported by the World Health Organisation (WHO): more specifically, for each recipient country, we recorded the number of cumulative cases and the CFR as of the day before China’s assistance arrived. For non-recipient countries, we recorded their data as of 25 June, when studying their likelihood of receiving equipment donations (this date was also used to plot Figure 3), and 31 May, when studying their likelihood of receiving expert teams. We used data on these dates because these are the last dates when the Chinese government sent abroad, respectively, equipment donations and medical teams in the time period covered by our study.

Moreover, we recognise that these indicators of an epidemiological situation are not always comparable across countries, and therefore added another variable reflecting countries’ needs to contain the virus, measured by the number of cumulative tests per 1,000



**Figure 2.** Countries hosting teams of Chinese medical experts.

people. The rationale for choosing this variable is that countries lacking test capacity are more likely to request China's in-kind assistance, such as test kits, at the beginning of the pandemic. Additionally, governmental reactions to the pandemic significantly vary in stringency and speed around the world, such variation may play a key role in shaping each government's perception of the need for medical equipment (Cheng et al., 2020; Hale et al., 2020). Hence, we added another variable using the containment and health index in the Oxford Covid-19 Government Response Tracker. Built up by fourteen component indicators of relevant national policies including school and testing, contact tracing, and emergency investment in healthcare, this index allows us to assess if the stringency of containment and health system policies made by each government affects the likelihood to receive medical assistance from China. Together, these variables allow us to test the extent to which China's aid was driven by the needs of recipient countries (H3). For these variables reflecting countries' needs for medical equipment, we recognise the potential issue of endogeneity in our measurement, and therefore only interpret our results as correlation.

Second, we introduce several variables measuring countries' bilateral relationships with China to assess the strategic goals of China's aid as suggested by H1 and H2. In this regard, we investigate whether China's delivery of COVID-19 aid prioritised its political allies (using UN General Assembly voting behaviour as a

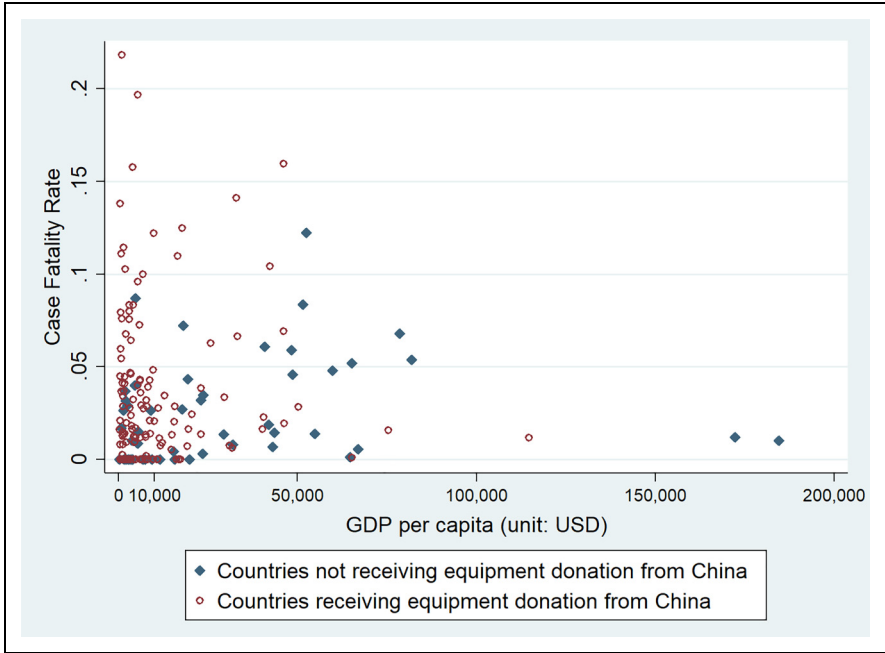


Figure 3. Comparison between recipients and non-recipients of China’s equipment donation.

proxy measure), economic partners (e.g. countries dependent on trade with China measured by the import value of Chinese goods and services), or those supporting the BRI (i.e. countries having signed memorandum of understandings [MoUs] on the BRI with China). To test whether China has sought a new global leadership by sending aid to its non-traditional partners (H2), we also compare China’s delivery of COVID-19 aid with the distribution of Chinese aid in the past by adding a variable measuring China’s official development assistance from 2000 to 2014, based on the data provided by AidData (Dreher et al., 2017). Lastly, we added several variables controlling key material conditions. They include countries’ gross domestic product per capita, population, geographic regions, and the distance between their capital city and Beijing. Table 2 lists the sources and descriptive statistics of all variables used in our regression analysis.

We employed logistic regression due to our binary dependent variable. Table 3 shows the results using the existence of China’s equipment donation as the dependent variable. The models in Columns 1 to 3 counted China’s aid to 142 recipient countries where the Chinese central government was involved in the donation (*Equipment\_donation*) whereas those in Columns 4 and 5 only considered the 133 countries to which the donation from the central government was explicitly specified (*Govt\_Equipment\_donation*).

To measure countries' epidemiological situation, our baseline model (column 1) only considered the number of cumulative cases and CFR, and we then added the stringency of national containment and health system policies and the number of cumulative tests per 1,000 people in the model (columns 2–5). We find that, for both measures of our dependent variable, the variable *Tests\_perthousand* consistently has negative and statistically significant coefficients. This suggests that countries lacking test capacity are more likely to get in-kind medical support from China during the initial outbreak of the pandemic. Relatedly, the coefficients of the variable *ContainmentIndex* remain positive, and in many models, statistically significant. This finding suggests, despite in a less robust way, that countries taking stronger measures to contain the virus are more likely to receive assistance from China. At the same time, we found no robust correlation between CFR and the existence of Chinese aid. Even more surprisingly, the number of cases is negatively associated with the existence of Chinese donations across all models. This finding is likely to be caused by the fact that many L&MICs had received China's aid before their cases began to rise. In sum, our findings provide some support for H3 by showing evidence that countries in need of medical resources due to their capacity limits or health policies were more likely to receive equipment donated by China.

Considering the political economy of aid delivery, we found no evidence that China primarily donated to its political allies. The coefficients of the variable *lnImp* are significant in several models, especially when using *Govt\_Equipment\_donation* as the dependent variable. These results imply that dependence on trade with China may increase countries' likelihood to receive donations from Beijing. Participation in the BRI has significant effects in the baseline model, but the results become statistically non-significant when more variables measuring countries' needs for medical resources are added (columns 2–4). Overall, there is only weak and non-robust evidence from our regression analysis to support H1. Regarding the extent to which China's COVID-19 aid was used to seek new allies, we identified significant positive correlations between China's donations and its past delivery of aid, but the statistical significance disappears when the variable on countries' test capacity was included. Hence, we cannot find robust evidence on the delivery of China's COVID-19 strictly followed its past practices. Instead, the fact that many countries, especially developed ones, received equipment donated by Beijing gives a hint of the novelty of China's aid policy during COVID-19. We will draw on qualitative analysis to further assess H2.

When using the dispatch of Chinese medical experts as the dependent variable, we see a clearer pattern. Table 4 shows that all else equal, the stronger national containment and health system policies, the more likely countries are to receive support from Chinese expert teams. This kind of assistance seems also conditioned by physical capacity as expert teams were less likely to be sent to countries distant from China. In summary, no evidence was found here to support H1 and H2. On H3, while our regression analysis cannot identify specific causal mechanisms, our findings imply that countries taking strong containment and health system policies were more likely to need or seek assistance of Chinese experts, which indirectly supports H3. We will use qualitative evidence to complement the analysis in this respect.

**Table 2.** Explanation of the Variables and Their Descriptive Statistics.

Variable name	Explanation and data sources	Mean	SD	Min	Max	Count
Equipment_donation	Binary variable on the donation of medical equipment from China (Source: Data gathered by the authors)	0.74	0.44	0	1	192
Govt_Equipment_donation	Binary variable on the identifiable donation of medical equipment from China's central government (Source: Data gathered by the authors)	0.69	0.46	0	1	192
Expert_team	Binary variable on the dispatch of Chinese medical experts (Source: Data gathered by the authors)	0.15	0.35	0	1	192
lnCases	Natural logs of cumulative cases as of the day before the arrival of China's equipment donation or as of 25 June 2020, for countries without assistance (Source: WHO)	5.77	3.12	0	14.66	192
lnCases_M	Natural logs of cumulative cases as of the day before the arrival of Chinese medical experts or as of 31 May 2020, for countries not receiving Chinese experts (Source: WHO)	6.84	3.07	0	14.37	192
CFR	Total case facility rate as of the day before the arrival of China's equipment donation or as of 25 June 2020, for countries without donation (Source: WHO)	0.03	0.04	0	0.22	192
CFR_M	Total case facility rate as of the day before the arrival of Chinese medical experts or as of 31 May 2020, for countries not receiving Chinese experts (Source: WHO)	0.03	0.04	0	0.27	192
Tests_perthousand	Cumulative COVID-19 tests per 1,000 people by the arrival of Chinese medical equipment donation or as of 25 June 2020 for countries without donation (Source: Our World in Data COVID-19 dataset)	35.34	118.51	0.002	1110.1	109
ContainmentIndex	Containment and health policy index on the day when China's medical donation arrived or on 25 June for	67.92	19.22	7	95	166

(Continued)



Table 2. (continued)

Variable name	Explanation and data sources	Mean	SD	Min	Max	Count
ContainmentIndex_M	countries without donation (Source: Oxford COVID-19 Government Response Tracker) Containment and health policy index on the day when Chinese expert teams arrived or on 31 May for countries not receiving Chinese experts (Source: Oxford COVID-19 Government Response Tracker)	69.18	16.58	12.12	100	166
UNGA_voting_agree	Similarity index of countries' voting behaviour with China in 1970–2019 (Source: Voeten et al., 2009)	0.82	0.12	0.31	0.93	192
InImp	Natural logs of the import value of Chinese goods and services in 2015–2019 (Source: UN Comtrade)	19.10	8.87	0	28.77	192
BRI	Whether or not a country has signed MOUs with China on the Belt and Road Initiative (Source: Belt and Road Portal)	0.69	0.46	0	1	192
InChinaAid	Natural logs of the total official development assistance from China in 2000–2014 (Source: Dreher et al., 2017)	13.54	9.74	0	24.32	192
gdp_pc	Gross domestic product per capita in 2019 or the latest year when data is available (Source: The World Bank's World Development Indicators)	15,665.55	25,400.79	261.25	184,484.1	192
Capdis	The great circle distance in kilometres between Beijing and the capital city of each country (Source: The distance between capital cities dataset developed by Kristian Skrede Gleditsch)	9036.02	3806.70	820	19,275	187
Population	The latest data on the population of each country as of 2019 (Source: The World Bank's World Development Indicators)	$3.25 \times 10^7$	$1.07 \times 10^8$	11,646	$1.37 \times 10^9$	192
WB_region	Seven geographic regions defined by the World Bank: East Asia & Pacific were used as the baseline (Source: World Bank Country and Lending Groups)	3.677	2.228	1	7	192

**Table 3.** Regressions analysis on China's Delivery of Medical Equipment Donation.

	(1)	(2)	(3)	(4)	(5)
	Medical_donation	Medical_donation	Medical_donation	Govt_medical_donation	Govt_medical_donation
Main					
lnCases	-0.157 (-1.40)	-0.344* (-2.43)	-0.127 (-0.50)	-0.356** (-2.80)	-0.455* (-2.01)
CFR	15.39* (2.00)	16.55* (1.98)	9.044 (0.74)	9.302 (1.29)	5.069 (0.53)
ContainmentIndex		0.0595*** (3.46)	0.0631 (1.78)	0.0459** (3.21)	
Tests_perthousand			-0.160* (-2.23)		-0.0416* (-2.08)
UNGA_voting_agree	1.819 (0.60)	-1.765 (-0.45)	-15.15 (-1.63)	0.365 (0.08)	0.559 (0.11)
lnImp	0.0557 (1.72)	0.0982* (2.35)	0.0560 (0.44)	0.0880* (2.53)	0.126* (2.01)
BRI	1.682** (3.26)	1.227 (1.90)	2.015 (1.52)	0.852 (1.47)	0.355 (0.39)
lnChinaAid	0.0790** (2.65)	0.123** (3.12)	0.112 (1.33)	0.0839* (2.41)	0.0465 (0.75)
gdp_pc	-0.00000692 (-0.60)	-0.00000295 (-0.18)	0.0000288 (0.77)	-0.0000153 (-0.93)	0.000000869 (0.04)
Population	-1.13 × 10 <sup>-9</sup> (-0.54)	-4.70 × 10 <sup>-10</sup> (-0.20)	-4.09 × 10 <sup>-9</sup> (-1.19)	5.22 × 10 <sup>-11</sup> (0.02)	-1.51 × 10 <sup>-9</sup> (-0.63)
Capdis	0.000213 (1.43)	0.0000631 (0.37)	-0.0000651 (-0.40)	-0.0000153 (-0.10)	0.00000363 (0.03)
WB_region (Europe & Central Asia)	0.107 (0.12)	0.120 (0.12)		-0.199 (-0.20)	

(Continued)

**Table 3.** (continued)

	(1)	(2)	(3)	(4)	(5)
	Medical_donation	Medical_donation	Medical_donation	Govt_medical_donation	Govt_medical_donation
WB_region (Latin America & Caribbean)	-2.309 (-1.27)	-1.483 (-0.74)		-0.598 (-0.31)	
WB_region (Middle East & North Africa)	-1.007 (-0.90)	-1.075 (-0.88)		-1.003 (-0.83)	
WB_region (North America)	0.979 (0.48)	1.270 (0.56)		2.671 (1.13)	
WB_region (South Asia)	0.484 (0.30)	-1.503 (-0.75)		-1.627 (-0.95)	
WB_region (Sub-Saharan Africa)	0.0790 (0.05)	1.107 (0.66)		0.211 (0.14)	
N	187	165	103	165	103

t statistics in parentheses \*p < .05, \*\*p < .01, \*\*\*p < .001.  
CFR: case fatality rate.

## Design and Implementation of China's COVID-19 Aid and Their Implications

Having examined the allocation of China's COVID-19 aid, we now consider its key features. To infer Beijing's intentions, four aspects of Chinese aid will be investigated: the general logic of aid design, China's conditions (if any) for recipient countries, whether China promoted new solutions to global health governance and an altruistic image, and evidence of fragmented and incoherent practices by Chinese actors during aid implementation. As discussed above, for foreign aid to serve strategic goals (H1 and H2), China needs to carefully design its aid policy, apply conditions, build an image as a generous donor, offer Chinese solutions, and exert better control over aid implementation. On the contrary, if traditional norms dominate (H3) and domestic actors have great agency (H4), we should observe a request-centric aid design without conditions attached, incoherent narratives on China's motivations, lack of unique solutions, as well as fragmented and sometimes counterproductive behaviours in delivering aid. Our qualitative analysis presents mixed findings on these hypotheses.

### *The General Logic of Aid Design: Little Strategic Thinking, More Traditional Norms*

Linking foreign aid to strategic goals requires careful design and management by top policymakers (H1 and H2). However, this was unlikely the case during the first wave of the COVID-19 pandemic as we find evidence showing the Chinese central government's thinking of medical assistance remained reactionary (H3). Two types of evidence support this feature.

First, like in the pre-COVID era, Chinese policymakers have continued to endorse a request-centric approach to aid design since the beginning of the pandemic. In a press conference on 26 March 2020, Deng Boqing, the vice-director of CIDCA, noted that when making aid decisions, three factors were considered: recipient countries' conditions (i.e. the severity of the pandemic and the shortage of medical supplies), their requests, and the capacity of the Chinese government (State Council Information Office, 2020a). This official description of the policy-making process for COVID-19 aid aligns with China's past habit of humanitarian aid provision (Li, 2012). In addition, Chinese government officials stressed that the increase in China's COVID-19 aid has been driven by fast-growing global demand: according to the Ministry of Foreign Affairs spokesperson, the outbreak of the pandemic in the Global North and the subsequent shortage of aid by traditional donors have put China in a situation where it could not simply "sit back and watch others suffer" (*Global Times*, 2020). This motive seems to be further strengthened as the US chose to shirk its responsibility and pulled back its contribution to the WHO. Relatedly, China's dramatic increase in its financial contributions to the WHO was more of a direct response to the US's decision to halt WHO's funding, rather than a pre-planned effort to take control of the WHO (MFA, 2020a).

Table 4. Regression Analysis on China's Dispatch of Medical Expert Teams.

	(1)	(2)	(3)	(4)
	Medical_expert_team	Medical_expert_team	Medical_expert_team	Medical_expert_team
lnCases_M	-0.0276 (-0.29)	-0.0758 (-0.70)	-0.226 (-1.86)	-0.283* (-2.06)
CFR_M	5.560 (0.94)	3.803 (0.60)	11.19 (1.68)	9.102 (1.27)
ContainmentIndex_M			0.0528** (2.77)	0.0532** (2.78)
UNGA_voting_agree	9.528* (2.24)	14.41* (2.08)	6.780 (1.49)	10.57 (1.37)
lnImp	0.00679 (0.23)	0.0174 (0.56)	0.0172 (0.53)	0.0252 (0.72)
BRI	0.571 (0.87)	0.532 (0.75)	0.532 (0.71)	0.458 (0.56)
lnChinaAid	0.00577 (0.16)	-0.00171 (-0.05)	0.0410 (1.00)	0.0353 (0.80)
gdp_pc	-0.0000132 (-0.54)	-0.0000157 (-0.57)	0.00000382 (0.14)	-0.00000328 (-0.11)
Population	$5.13 \times 10^{-10}$ (0.30)	$2.27 \times 10^{-9}$ (1.14)	$5.25 \times 10^{-10}$ (0.30)	$2.41 \times 10^{-9}$ (1.17)
Capdis	-0.000128* (-2.10)	-0.000194 (-1.16)	-0.000191** (-2.68)	-0.000304 (-1.65)
WB_region (Europe & Central Asia)		1.964 (1.93)		1.970 (1.73)
WB_region (Latin America & Caribbean)		1.199 (0.59)		1.726 (0.79)
WB_region (Middle		1.193		1.564

(Continued)

**Table 4.** (continued)

	(1)	(2)	(3)	(4)
	Medical_expert_team	Medical_expert_team	Medical_expert_team	Medical_expert_team
East & North Africa		(1.08)		(1.27)
WB_region (South Asia)		-1.089 (-0.71)		-1.323 (-0.82)
WB_region (Sub-Saharan Africa)		1.150 (0.82)		1.372 (0.91)
N	187	185	165	163

t statistics in parentheses \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Second, the fact that Chinese medical assistance primarily responded to recipient governments' demands with little engagement with key local stakeholders in recipient countries further demonstrates the dominance of traditional norms and habits and the lack of strategic planning. For example, the Chinese medical team in Nigeria encountered unexpected responses, as a local association of doctors viewed "inviting foreign doctors presented a national security concern and demeans their sacrifices so far in this pandemic" (Asiedu, 2020; Olander, 2020). This case demonstrates that by allocating medical assistance based only on recipient countries' official requests, the Chinese government remained underprepared to actively assess complex local situations, which is crucial to improve the global image and political impacts of China's aid (Li et al., 2014).

To summarise, in line with the results of the statistical analysis, the qualitative evidence presented here also challenges the argument that China has carefully designed its COVID-19 aid to pursue geopolitical gains, as suggested by H1 and H2. On the contrary, these features were more like a product of the long-lasting non-interference norm and the request-centric habit of aid design (H3).

### *Setting Political Support as a Condition?*

Beyond the top-level design of aid, another way to assess China's intentions with COVID-19 aid is to check if any conditionalities are applied during the delivery of aid (H1). Some evidence seems to suggest that China has become more demanding in the current pandemic than before. As the mishandling of the initial outbreak in Wuhan damaged China's international reputation, shaping a narrative that recognises China's anti-pandemic efforts have become the overarching goal of China's foreign policy (State Council Information Office, 2020b). Accordingly, China has launched a foreign policy campaign to push back the "politicization of the virus," which also carried the task of reducing international pressure on China about its responsibility for the global spread of the virus (MFA, 2020b). In this context, representatives of the Chinese government, such as ambassadors in recipient countries, have underscored international solidarity and the need to depoliticise the pandemic when delivering aid. This has led some observers to suggest that China has introduced conditionalities in terms of diplomatic support in its COVID-19 aid (H1) (Allen-Ebrahimian, 2020; The Economist, 2020).

However, caution needs to be taken when categorising China's requests for diplomatic support and public praise as "conditionalities." Logically speaking, conditionalities are designed in advance and tied to the provision of aid. Failing to fulfil those conditions attached to aid will lead to the reduction and even suspension of aid. In contrast, no evidence shows that China ever set offering diplomatic support as a pre-condition of receiving its aid. In fact, countries that had criticised China (e.g. India) and those that refused to offer enthusiastic gratitude for Chinese aid (e.g. Romania and Poland) received aid anyway (*ABC News*, 2021; Kowalski, 2021). Therefore, although Beijing has been eager to gain recipient countries' political support, making such requests in a non-coercive way means that China did not want to break with the principle of non-interference in its aid policy, as suggested by H3. While Chinese diplomats were

likely given the task of seeking foreign support for China, they have relied on other tools to achieve this foreign policy goal, such as publishing articles in host countries' media, posting comments on Twitter, coordinating joint statements, and taking interviews (Uznanska and Fila, 2020; *Xinhua*, 2021).

### *Promoting Chinese Solutions and Building an Image of a Global Leader?*

To further infer to what extent Beijing had the intention to enhance China's leadership in global governance through COVID-19 aid, it is worthwhile to examine whether China has made efforts to promote Chinese anti-virus solutions and to frame its aid as an altruistic endeavour for the global common good (H2). In this regard, we observe mixed evidence.

In a departure from the reluctance to provide solutions in the past, during COVID-19 the Chinese government stressed the importance to promote Chinese anti-virus experiences (State Council Information Office, 2020a). Specifically, Chinese experiences to contain and control the virus were advocated at multiple venues. First, the NHC has worked out the diagnosis, treatment, prevention, and control solutions and shared them with over 180 countries and more than ten international and regional organisations (State Council Information Office, 2020b). China's Center for International Knowledge on Development (CIKD), an institute tasked with promoting Chinese knowledge for international development, has published over 100 reports detailing China's anti-virus experience. In a report entitled "China's Strategies and actions against COVID-19 and Key Insights," CIKD researchers offered L&MICs an anti-COVID-19 strategy including granting the state more power to intervene in socio-economic activities, emphasising political leadership, developing policies based on national conditions, consulting scientists and professionals, policy coordination, and using strong supervision mechanisms to ensure local policy enforcement (Liu and Chen, 2020). Second, China's central government has held more than seventy sessions of technical exchange events that brought in Chinese experts on the prevention and control of the pandemic and also clinic treatment (State Council Information Office, 2020b). Third, Chinese overseas medical teams were also encouraged by the central government to share Chinese anti-virus experiences to host countries. More than 400 training events have been held by those teams (State Council Information Office, 2020b).

The above evidence seems to support H2, but we should also note that on the ground China's knowledge and solution promotion efforts remained in line with the non-interference norm. Chinese experts merely shared information with aid recipients and refrained from pushing recipients to accept their suggestions. For example, as the leader of the Chinese medical team in Italy recalled, although Chinese experts presented measures that they believed useful to their Italian colleagues (e.g. Fangcang shelter hospitals and traditional medications), none of them expected that all their suggestions would be taken by Italians (Shanghai Observer, 2020). Therefore, despite Beijing's intention to build some sort of intellectual leadership, it was also reluctant to impose its knowledge on others and was ready to back down when disagreement occurred. In addition, the



presence of diverse knowledge-sharing venues shows that the central government, although expressed a clear strategic intent, still lacked a coherent strategy for knowledge promotion. This, as shown below, gave frontline experts leeway and created some unintended impacts on the general goal of leadership-building.

Concerning the narrative that China used for identifying its COVID-19 aid, we find more evidence supporting H3, in contrast with H2. As noted above, if China intended to use aid to build a leadership image, it should have claimed the credit for other countries' successful anti-COVID-19 work. However, instead of framing China's medical aid as generous gifts, the CIDCA officials and the White Paper on China's fight against COVID-19 have all framed the provision of China's assistance as following the principle of reciprocity, which was to return the favour of international support for China during the initial outbreak of the pandemic in early 2020 (CIDCA, 2020; State Council Information Office, 2020b). Although the narrative might have turned to stress China's "contribution" and "leadership" since mid-2021, the "reciprocity" framing was the dominant one during the first wave of the pandemic. Furthermore, China has continuously emphasised the balance between altruism and national interests in its delivery of aid. For example, when discussing the functions of a Chinese medical team sent to the UK by the provincial government of Shandong, Chinese officials emphasised that its priorities were to help Chinese students, the employees of Chinese companies, and Chinese expatriates in the UK (Chinese Embassy in the UK, 2020). By emphasising national interests, the message sent was counterproductive to building China's image as a global leader in the fight against the pandemic.

### *Fragmented Implementation of COVID-19 Aid*

Our analysis above shows the continuous dominance of non-interference norms, lack of conditions, and reluctance to do coordinated knowledge promotion or to stress altruism. These findings thus favour H3 over H1 and H2. As discussed in the "Understanding China's COVID-19 Aid: Theories and Hypotheses" section if the central government of China lacks strategic planning for its COVID-19 aid, we should also expect H4, as domestic actors' space of action is often linked to Beijing's will to control. In fact, some scholars have already revealed that diverse Chinese players, including non-state and subnational ones, have been involved in medical equipment donation (Urdinez, 2021). When zooming into interactions between the Chinese central government and frontline practitioners in the implementation of official aid, we find more evidence supporting H4.

A strong indicator of the fragmented nature of China's COVID-19 aid is controversies over the quality of Chinese medical equipment. Several European countries, including the Netherlands, Spain, Czech Republic, and Turkey, have reported that supplies from China (e.g. protective masks and testing kits) were not fit for purpose (Brennan, 2020). However, these disputes seem to be partially caused by the Western media's misunderstanding of China's official aid and unclear information provided by the Chinese government. For example, in response to the Dutch media's claim about quality problems with

Chinese masks, China's Ministry of Foreign Affairs (2020c) noted that "the Chinese enterprises informed the Netherlands that these masks are non-medical masks before delivery, and the export declaration procedures were also performed in the name of 'non-medical masks.'" Moreover, our database shows that the medical equipment that the Netherlands, Czech Republic, and Turkey received was not part of official aid, but actually commercial procurement. In these cases, the lack of clear identification and communication about official aid reflected the fragmented decision-making process of China's COVID-19 aid.

Fragmentation in the aid delivery process is also supported by diverse activities of frontline experts when promoting Chinese solutions. Because the central government only had the intent to promote China's anti-virus knowledge but lacked strategic planning, frontline experts with special preferences acted on their own terms. For example, beyond methods of pandemic prevention and control, some Chinese experts have also actively promoted Traditional Chinese Medicines (TCM) (e.g. the *Lianhua Qingwen* capsule) to treat COVID-19. These efforts, which were not initially designed by top policymakers, later led to the internationalisation of the "COVID-19 TCM prevention and control program." However, since using TCM for COVID-19 is not without controversies, promoting TCM unavoidably generated disagreements and concerns in Western countries, and might have created uncertain impacts on China's leadership image (Jakhar, 2020). Therefore, the TCM example shows how domestic actors can shape China's aid practices, and how domestic interests and national strategic goals may not fit perfectly well with each other.

## **Conclusion: Key Findings and Broader Implications**

Since the COVID-19 pandemic, international development cooperation has faced a dilemma. On one hand, with traditional donors turning to domestic affairs and giving very limited humanitarian and medical aid, the world needs contributions from China. On the other hand, traditional donors worry that China seizes the opportunity to expand its political influence, which could further weaken the West's position in international development. Our analysis shows that, despite the opportunity China faced during the first wave of the pandemic, it has not developed a clear plan to use humanitarian aid in the pursuit of strategic goals. First, the request-centric allocation of aid and official confirmation of the reactionary decision-making process constitute strong evidence in support of the constructivist argument (H3) and challenge the realist perspectives (H1 and H2). Second, while China did show the intention to gain political support from recipient countries, as suggested by H1, it never explicitly set political support as a condition of aid. Third, although China's efforts to deliver more anti-virus solutions seem to support H2, the lack of coordination in knowledge promotion activities and China's reluctance to build an altruistic image cast doubt on H2. Fourth, we also find evidence suggesting that when delivering aid, different Chinese actors followed their preferences, which were not entirely in line with the central government's strategic interests. In short, our mixed-method analysis suggests that China's COVID-19 aid was driven by unclear

strategic thinking at best, and was still heavily influenced by the traditional non-intervention norm and diverse interests of different domestic actors.

These findings have both theoretical and policy implications. On the theoretical front, our findings once again cast doubt on the argument that China has become an assertive challenger to the existing world order (Chen et al., 2013). Although China is indeed in pursuit of global leadership, its practices in functional areas are still shaped by factors such as traditional norms and fragmented domestic policy-making processes. On the policy front, these findings lead us to expect China's aid policy to evolve based on the information and response it receives from others. In other words, through more communication and mutual learning, traditional donors like the US and the EU could have a significant influence on China's future policy. In fact, China has been responsive to international demand. For example, as more countries complained about the quality of China's medical equipment (Horwitz, 2020), the MOFCOM decided to tighten its regulations on the delivery of medical equipment in April 2020. In addition, China does not blindly reject successful experiences developed by other countries. China has also been eager to learn good anti-virus practices from countries such as Singapore and has been willing to support multilateral knowledge-sharing mechanisms (Li and Chen, 2020). Therefore, we recommend countries having more experience with aid help China better design its aid policy, in order to provide more effective aid to L&MICs.

The COVID-19 pandemic has demonstrated the limitations of international development led by the Global North and therefore accentuates a case for the transformation of the development paradigm through multi-directional learning (Oldekop et al., 2020). Acharya (2018) noted that the world order after the US hegemony can be described as a multiplex order in which different actors can choose from multiple governance strategies. Accordingly, the fundamental logic governing this new order could be governance competition and collaboration, and priority should be given to the best-performing plans. Multilateral platforms such as the UN High-level Political Forum, G20, and even the BRI may provide opportunities for enabling such cooperation between China and traditional donors (Maffettone and Oldani, 2020). As the world's largest emerging economy, China needs to play a more prominent role in the post-COVID world. But the Chinese government still faces many constraints in taking the lead in global development. Therefore, both internal reforms and international collaboration are urgently needed for China to reach the full potential of its development assistance.

### **Acknowledgements**

The authors thank Zeqi Yang for his research assistance to build the dataset on China's COVID-19 aid. Earlier versions of the paper were presented in a research seminar organised by the University of Bath's Centre for Development Studies and a panel at the Development Studies Association's 2021 annual conference, and the feedback received during these sessions helped the authors improve the paper. The authors are also grateful for the constructive comments provided by three anonymous reviewers.


## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was funded by the Shanghai Philosophy and Social Science Planning Project (grant number: 2020EGJ001).

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## Supplemental Material

Supplemental material for this article is available online.

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