Nation Branding and COVID-19: An Empirical Investigation of Self-Reports of Medical Donations in Chinese Digital Diplomacy[*]

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Abstract

This research examines how Beijing uses social media to publicize donations and engage in nation branding as it responds to the global backlash sparked by COVID-19. It argues that self-reports of medical donations aim to enhance China's national brand, and therefore, reports about donations are expected to target countries harder hit by the virus. To test its claims, the research analyzes over 55,000 tweets published by Chinese diplomatic missions. The results show —controlled for Chinese donation exports— a positive and significant relationship between self-reports of medical donations and the host's spread of COVID-19. Conversely, political or economic partners tend not to be mentioned as recipients. A comparison of government (CCP, ministries, etc.) and non-government donors (immigrants, firms, etc.) shows that only tweets about government donors are positively correlated with the spread of the virus. This research advances our knowledge of Chinese diplomats' online political behavior.

Keywords: Chinese foreign policy, COVID-19, Public diplomacy, Social media, China

Introduction

On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. China has been badly damaged as a national brand by the spread of COVID-19. Beijing has been criticized for poor sanitary regulations because the virus is suspected to have spread from a live animal market in Wuhan, China. International allegations of alleged negligence in handling the virus in early stages and concerns about the accuracy of case and death tolls have also sparked a global backlash against Beijing. An internal report by China's Ministry of State Security even concluded that global anti-China sentiment is at its highest since the 1989 Tiananmen Square crackdown (Reuters Staff, 2020). In response, Beijing has shipped medical supplies and equipment to other parts of the world to help fight the pandemic, an effort dubbed "mask diplomacy", and Chinese government organizations have actively highlighted these donations on foreign social media platforms like Twitter.

This research explores how Beijing uses social media to publicize medical donations and engage in nation branding while responding to the COVID-19-sparked global backlash. Specifically, the study answers what drives self-reports of medical donations and whether there are differences across donors by taking a look at Chinese mask and digital diplomacy. It applies the nation branding theoretical framework to analyze self-reports of medical donations in Chinese digital diplomacy. Specifically, it uses the text in messages published by Chinese embassies and consulates on Twitter to assess the extent to which they strategically report Chinese medical donations.

The pandemic has sparked interest in the relationship between China's reputational concerns and health aid. Many argue that China is using medical donations to change the COVID-19 narrative to favor its interests (Verma, 2020; Le Corre and Brattberg, 2020; Chen, 2021). While genuinely needed by the recipients, medical donations come with strings attached in the form of propaganda value for Beijing. The displays of generosity to struggling communities are routinely accompanied by ribbon-cutting events with local officials, showcased by Chinese state-media and diplomatic missions on social media (Lederman, 2020). However, we know very little about Chinese diplomats' online political behavior and their response to the pandemic. It is important to understand China's online re-branding campaign because self-reports of medical donations could influence Chinese soft power and influence public opinion abroad (Dietrich et al., 2018; Blair et al., 2021).

This research theorizes four possible explanations for self-reporting medical donations in Chinese digital diplomacy:

economic interests, political interests, altruism, and nation branding. Self-reports of medical donations could be related to economic and political interests, according to findings in the Chinese foreign aid literature. On the other hand, the third explanation is that Chinese medical donations could be going to countries suffering the most from COVID-19 based on need (i.e., altruism). However, political scientists have long argued that strategic concerns drive aid flows (Qian, 2015). The fourth option is that Chinese digital diplomacy practitioners target more self-reports of medical donations to countries severely affected by the virus. This is because Beijing's international reputation suffers more in host countries with higher numbers of positive cases or deaths than hosts with lower numbers.

This research analyzes over 55,000 tweets published by 88 Chinese overseas missions from March to December 2020 to test the four possible explanations. It uses text-as-data methods to collect, translate, and classify Chinese diplomatic tweets. Then it uses quantitative research methods to examine what drives Chinese medical donations.

The findings support the explanations of altruism and nation branding. Chinese donations are positively and significantly correlated to the spread of COVID-19 in the recipient country. Diplomatic Twitter accounts from countries with higher numbers of infections or deaths are more likely to report medical donations than those with lower numbers. COVID-19 is a significant driver of self-reports of medical donations. A further analysis compares Chinese government donors, such as the party, ministries, and provincial governments, with non-government donors like immigrants, private companies, and NGOs. The results show that only tweets about government donors are correlated with the spread of COVID-19 in the host country. This suggests indirect evidence for the nation branding argument, as government actors are likely more concerned with China's international reputation in the wake of COVID-19 than non-government actors.

This research mainly makes two contributions to the literature. First, it adds to our understanding of Chinese foreign policy by investigating Chinese digital diplomacy. The study shows how reputational interests influence the online political behavior of Chinese diplomatic accounts, providing new insights into this area. Second, the research contributes to the literature on Chinese health aid, which is an understudied aspect of China's foreign aid program. While the Chinese foreign aid literature (e.g., Bräutigam, 2010; Dreher et al., 2018; Telias and Urdinez, 2020) suggests that it is crucial to distinguish between different types of Chinese aid (e.g., health aid vs. commercial loans), this study emphasizes the importance of distinguishing between different types of Chinese donors (e.g., provincial governments vs. private companies). It reveals that Chinese donors are not a homogeneous group.

China's online re-branding campaign: A brief overview

In 2020, China faced a global backlash due to the COVID-19 outbreak. Around the world, leaders and citizens accused Beijing of having poor sanitary regulations, initially mishandling the crisis, inaccurately counting case and death tolls, etc. Former President Donald Trump, for example, blamed Beijing for allowing the global spread of what he called "the China virus." Other leaders also adopted an anti-China narrative, such as Brazilian President Jair Bolsonaro. In addition, negative views of China grew across many countries. In 2020, a majority of respondents in fourteen advanced economies held negative evaluations of China, with a median of 61 percent saying China has done a "bad job" handling the outbreak (Silver et al., 2020). An internal report by China's Ministry of State Security even concluded that global anti-China sentiment is at its highest since the 1989 Tiananmen Square crackdown (Reuters Staff, 2020).

Since bringing the domestic outbreak under control, China has been sending medical supplies and equipment to other parts of the world to help fight the pandemic, an effort dubbed "mask diplomacy." Mask diplomacy is part of a larger strategy known as health diplomacy, in which international actors attempt to coordinate global policy solutions to improve global health. The current pandemic has also been characterized by a great deal of Chinese health diplomacy. Beijing has offered humanitarian aid and medical expertise to many countries struggling with their own outbreaks. Just in Latin America, for instance, China has donated medical supplies to Argentina, Chile, Colombia, Venezuela, Suriname, Mexico, Peru, Bolivia, Brazil, Costa Rica, Panama, El Salvador, and Cuba in critical times of the pandemic (Gamba, 2020). Chinese medical donations often include surgical masks, thermometers, protective gears, gowns, thermometer guns, gloves, beds, blankets, disinfectants, medical goggles, invasive and non-invasive ventilators, testing kits, air purifiers, etc.

The impact of mask diplomacy on China's international reputation is not always positive. Some countries have rejected defective Chinese-made medical donations, while there are claims that China is not donating but selling ventilators, face masks, COVID-19 tests, and other medical supplies (Dunst, 2020). Although these claims are causing Beijing to lose face, mask diplomacy is giving China the chance to re-brand itself not as the authoritarian incubator of a pandemic but as a responsible global leader at a moment of worldwide crisis.

To advertise these donations as much as possible, Chinese government organizations are highlighting Chinese medical donations (i.e., self-reports of medical donations) on Twitter. Mentions of Beijing's outward donations first

appeared on Twitter in late February 2020, with Japan as the recipient (Chen and Molter, 2020). The donation coincided with the global news about a mass outbreak on board the Diamond Princess cruise ship (Rich and Yamamitsu, 2020). There is significant coverage about self-reports of medical donations by English-language Chinese state media accounts, such as *China Daily* (*zhōngguó rìbào*, 中国日报) (Chen and Molter, 2020).

Medical donations are actively reported by Chinese overseas missions. For example, the Chinese Embassy in the U.S. wrote on April 21: "Medical supplies donated by Liaoning Province to the State of Utah arrived in Salt Lake City on April 17. Fourteen years of friendship, tested and strengthened by adversity. Utah and Liaoning will stay strong together!" (Chinese Embassy in US, 2020). Interestingly, self-reports of donations like this are likely to be picked up by local news agencies. Similarly, Liaoning's medical supplies to Utah were reported by KTVX, an ABC-affiliated local television station (Nguyen, 2020). The news articles cited a tweet by Chinese diplomats as a source. This is just one example of thousands of self-reports of medical donations from Chinese overseas missions on Twitter.

Figure 1: Donation by Liaoning Province to the United States

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China's reputational concerns and health aid

In the wake of China's economic rise, Chinese leaders have been preoccupied with questions about how the country is viewed abroad. Pu (2019) argues that China is deeply concerned about its international reputation because it is a deeply conflicted rising power with six competing international identities: socialist country, developing country, emerging or rising power, great power, superpower, and regional power. Beijing has invested significant resources to strengthen public diplomacy and build soft power across a broad range of activities (Wang, 2008). Over the past twenty years, Chinese elites have attempted to directly court foreign audiences through cultural and language programs (e.g., Confucius Institutes), tourism campaigns, journalist hosting programs, sport exchange programs, and more recently through health aid and digital diplomacy.

For China, giving health aid is an important part of statecraft that enhances its international reputation. As such, the pandemic has sparked interest in the relationship between China's reputational concerns and health aid distribution. Many argue that China is using medical donations to change the COVID-19 narrative to favor its interests. For instance, Verma (2020) argues that China has provided medical assistance to portray itself as a "Good Samaritan" and a responsible and reliable partner in combating COVID-19. China's efforts to change the COVID-19 narrative are derived from "the need to maintain the CCP's regime legitimacy", but also "to push President Xi's rhetoric of a community of common destiny," a core part of the Belt and Road Initiative narrative (Verma, 2020, 255-256). Similarly, Le Corre and Brattberg (2020) write that China is using medical donations to convince "others to think it is better at handling the pandemic... while avoiding an open debate on the origins of the virus". However, Chen (2021) focuses on Chinese mask diplomacy in Italy and argues that we should not understand China's aid as a way to increase its soft power globally. Instead, health aid should be viewed as a powerful tool to boost its domestic legitimacy and conviction that it is a world power (Chen, 2021).

One of the few studies about Chinese self-reports of medical donations or shipments on social media is Chen and Molter (2020). By analyzing English-language tweets from official Chinese state media (e.g., Global Times and China Daily) from January to May, they find that Chinese shipments are framed in the context of Beijing's foreign policy goals in the recipient country, such as shipments to Canada mentioning Huawei and its trial in Canada (Chen and Molter, 2020). Besides cross-national variation, there are temporal differences in reporting donations. Chen and Molter

(2020) argue that the global negative coverage of China's mask diplomacy significantly decreased Chinese state media coverage on donations around late Spring 2020.

This research contributes to the above literature by looking at self-reports of medical donations in Chinese digital diplomacy. While the pandemic has sparked interest in the relationship between China's reputational concerns and health aid distribution, we know very little about Chinese diplomats' online political behavior and their response to the pandemic. Also, many donors are involved in Chinese mask diplomacy, including Chinese private companies, provincial governments, immigrants, government ministries, etc. However, we do not know whether there are differences across donors in China's online re-branding campaign.

Theory: What drives self-reports of medical donations?

This section theorizes four possible explanations for self-reporting medical donations in Chinese digital diplomacy: economic interests, political interests, altruism, and nation branding. Self-reports of medical donations could be related to economic and political interests, according to findings in the Chinese foreign aid literature. On the other hand, the third explanation is that Chinese medical donations could be going to countries suffering the most from COVID-19 based on need (i.e., altruism). However, political scientists have long argued that strategic concerns drive aid flows (Qian, 2015). According to the nation branding theoretical framework, the fourth option is for Chinese digital diplomacy practitioners to target more self-reports of medical donations to countries severely affected by the virus. This is because Beijing's international reputation will be more affected in host countries with higher numbers of positive cases or deaths than in hosts with lower numbers. Finally, this section argues that differences among donors in China's online re-branding campaign can shed light on the reputational concerns driving self-reports of medical donations.

Economic interests

Economic interests are often seen as a central aim of Chinese aid. One argument is that Beijing uses aid to gain access to natural resources, such as oil, minerals, and timber (Naím, 2007). Besides resource security, China is accused of using its aid to target future access to export markets and profitable investments. For instance, Shinn (2006, 15) describes Chinese health aid as "a clever and low cost way to introduce Chinese-made medications to the African market." Also, the Ministry of Foreign Affairs (MFA) and the Chinese Ministry of Commerce (MOFCOM) are the two principal

actors in the Chinese foreign aid landscape (Bräutigam, 2010). All this clearly indicates the overriding importance of economic motives.

Economic interests could also be correlated with Chinese self-reports of medical donations on social media mainly for two reasons. First, self-reporting medical donations might be a tool to improve the reputation of Chinese-made medications in the host country. This in turn could lead to an increase in Chinese exports. For example, medical donations on social media can be a way to ameliorate concerns about Chinese-made vaccines. On November 6, the Chinese Embassy in Brazil tweeted: "The Chinese central gov. has already offered the Brazilian gov. 3 batches of material aid, in addition to donations made by provinces and companies in China and other cooperation like the partnership in research and clinical trials of phase III of [China's] vaccines, which is in an advanced phase. We are together!" (*Embaixada da China no Brasil*, 2020). This tweet highlights Chinese vaccines are being developed in cooperation with local partners, which could add legitimacy to its perceived efficacy among locals.

Second, Beijing could use self-reports of medical donations to improve the image of Chinese companies. The literature on business legitimacy suggests that companies doing business abroad face difficulties in gaining social acceptance or legitimacy (Kostova and Zaheer, 1999; Yang et al., 2012). Considering this, self-reporting donations by Chinese companies could serve to cultivate good public perceptions of China and its economic activities in the host. For example, on March 28, the Chinese Embassy in the United States shared: "New York state becomes COVID19 epicenter in the U.S., suffering from a shortage of medical supplies. Chinese company Huawei donated 10,000 masks, 20,000 protective clothing, 10,000 gloves and 50,000 goggles to them. New York state governor Andrew Cuomo thanked Huawei on Twitter" (China News, 2020). Improving the business legitimacy of Huawei, which has been under scrutiny over national security concerns in the U.S., by showing it cares about the aid-receiving country allows Huawei more leverage to trade and invest in the host.

Economic interests could be an important determinant of Chinese self-reports of medical donations. Self-reporting medical donations could be a tool to improve the reputation of Chinese-made medical products in the host. Beijing could also use self-reports of medical donations to improve the image of Chinese companies in the host. These actions in turn will lead to an increase in Chinese economic gains. In short, Beijing could use self-reports of medical donations to strengthen its relationships with countries already enjoying strong economic relationships with China. Therefore, the first hypothesis is:

Economic hypothesis (H1): *All else held equal, economic ties between the host and China will have a positive effect on Chinese self-reports of medical donations.*

Political interests

Another possibility is that political interests are an important determinant of Chinese self-reports of medical donations. The literature often talks about the political motivations of China's aid allocation. For instance, China uses foreign aid to support high-level diplomatic events. According to MOFCOM, for example, to achieve a higher participation of leaders in the opening and closing ceremonies of the 2008 Olympic Games in Beijing, China speeded up the implementation of the projects concerned by bilateral leaders. In addition, quantitative research finds Chinese aid is driven by political interests, such as influencing the voting behavior of recipient governments in international organizations like the United Nations (Dreher and Fuchs, 2015).

Beijing could use self-reports of medical donations to improve its political relationships abroad. This is an important motivator because strong political relationships are necessary for Beijing to achieve its foreign policy goals. For instance, African aid recipients have played a crucial role in helping China to avoid censure of its human rights record in the United Nations Commission of Human Rights (Taylor, 1998). Beijing could use self-reports of medical donations to improve its political relationship with the host because a closer relationship would lead the local population and government to be more supportive of China and policies that seem favorable to it. Therefore, the second hypothesis is:

Political hypothesis (H2): *All else held equal, political ties between the host and China will have a positive effect on Chinese self-reports of medical donations.*

COVID-19 and nation branding

Although Chinese self-reports of medical donations could be driven by economic and political interests, an important factor that might influence the cross-national variation of these messages is the spread of COVID-19. It is reasonable to expect to see a positive correlation between the targeting of messages about Chinese donations and the host's spread of the COVID-19 outbreak for two reasons.

Self-reporting medical donations according to the severity of the pandemic could be explained by the needs of the recipient (i.e., altruism). Host countries with a larger spread of COVID-19 should simply need more masks and other

protective equipment, which Beijing is willing to provide in times of need. Providing aid according to the recipients' need is important because countries that are deemed the most altruistic, with no political or economic motives, stand to gain the most soft power for their donations (Leight-Give'on, 2010).

The above argument assumes Beijing is selflessly caring for the aid recipient country and its people. However, it would be naive to view donations as purely altruistic. While individuals sometimes give money to charity for moral or even sentimental reasons (Frank, 1988; Glazer and Konrad, 1996), it is harder to assume that political actors like Beijing donate to charity primarily out of altruistic considerations. In fact, the political science literature suggests that foreign aid is rarely altruistic, driven primarily by geopolitics and national interests (Alesina and Dollar, 2000; Milner and Tingley, 2010). While economic and political interests were discussed above, an alternative explanation is that Beijing's concerns about the virus' negative impact on China's national brand are driving self-reports of medical donations.

Every country has a national brand, whether it is more or less cultivated, that reflects a country's image and reputation. Here "image" is what people recognize as most central about their nation, while "reputation" relates to the perception by others regarding the credibility of a nation's claims about itself. The process through which states can cultivate their image and reputation is called nation branding. Nation branding can be defined as "a process by which a nation's images can be created, monitored, evaluated and proactively managed in order to improve or enhance the country's reputation among a target international audience" (Fan, 2010, 6). Through nation branding, states project a certain image of themselves that can be accepted or rejected by the outside world. If this image is accepted, nation branding can be used to attract material benefits, such as foreign investment and tourism (Anholt, 2007). It could also be used to promote a country's culture, values, and political system.

On the other hand, if the national brand is rejected, a state might want to use nation branding to re-shape its image and reputation. Nation branding can serve as a pro-active tool enabling nations "to repair reputations damaged by political and economic legacies, to dodge unfavorable international attention in the aftermath of unpopular domestic decisions, or to control and manage impressions in the context of unforeseen or uncontrollable events" (Aronczyk, 2013, 16). Governments can use public relations, advertising, and various communication channels aimed at re-branding themselves by creating a more positive image of a nation in the eyes of the world. "Re-branding" here refers to the efforts of building a new image. And digital diplomacy is a powerful tool to launch re-branding campaigns.

Countries often use their official social media accounts to promote their country's brand, including culture,

values, technological achievements, etc. (Manor, 2019, 261). In the face of international criticism, states and their representatives can also launch online re-branding campaigns to distance themselves from the negative connotations of their previous brand. For example, Manor and Segev (2015, 97) argue that the British campaign to end sexual violence in conflict, aggressively promoted on the Foreign Office's Twitter and Facebook channels using the hashtag Timetoact, was an attempt to associate the U.K. with humanistic values and distance itself from the legacies of the invasions of Iraq and Afghanistan.

In the case of China, the spread of COVID-19 that originated within the city of Wuhan had a detrimental impact on Beijing's national brand. Self-reporting medical donations via Chinese digital diplomacy can be interpreted as a nation re-branding strategy. Self-reports of medical donations can influence China's brand through a process of exposure, affect, and ideological alignment. People in recipient countries can be exposed to foreign aid either directly (as beneficiaries) or indirectly (through social media, newspapers, or word of mouth). The perception that the donor cares about the aid-receiving country and its people should generate diffuse positive affect toward the donor (Dietrich et al., 2018). Therefore, increasing the number of self-reports of medical donations, on average, could positively shift the opinion of individuals toward China. Individuals might create feelings of gratitude and a sense of needing to repay China by, for example, being more supportive of it and policies that seem favorable to it. Increasing the number of self-reports of medical donations might even reduce anti-China sentiment surrounding the spread of the virus.

In addition, foreign aid may induce a more profound shift in recipients' perceptions of the models of governance and development that donors promote (Blair et al., 2021). For instance, increasing the number of self-reports of medical donations could make people in the host country more receptive to Chinese-style governance. This is increasingly important as China is an attractive model for some in the developing world as its authoritarian system is perceived to be more effective in tackling public policy challenges (e.g., pandemics or economic crises) compared to Western democracies (Chan and Lee, 2022).

Given that the spread of COVID-19 was largely blamed on China's early management of the pandemic, it is logical to assume that Beijing's international reputation will be more affected in host countries with higher numbers of positive cases or deaths than hosts with lower numbers. Therefore, if China is indeed advertising medical donations to repair its image damaged by the spread of the virus and "re-brand" itself, we should expect a positive correlation between the targeting of messages about Chinese donations and the host's spread of the COVID-19 outbreak. Facing the

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backlash unleashed by COVID-19, China sought to re-brand itself not as the authoritarian incubator of a pandemic but as a responsible global leader at a moment of worldwide crisis (Myers and Rubin, 2020). Chinese digital diplomacy practitioners should direct more self-reports of medical donations to countries severely affected by the virus to improve perceptions of China among locals or at least engage in a sort of "damage control", reducing anti-China sentiment.

In summary, Chinese self-reports of medical donations could be correlated with the spread of the virus. On the one hand, self-reporting medical donations could be done according to the severity of the pandemic based on the needs of the recipient. On the other hand, Chinese digital diplomacy practitioners could target more messages about medical donations to countries where Beijing's international reputation is being affected by the virus. Both arguments lead Chinese digital diplomacy to report more donations in host countries with higher numbers of positive cases or deaths than hosts with lower numbers. Therefore, the third hypothesis is:

COVID-19 hypothesis (H3): *All else held equal, the spread of the virus in the host will have a positive effect on Chinese self-reports of medical donations.*

The above paragraphs propose two reasons to explain why there should be a positive correlation between Chinese self-reports of medical donations and the host's spread of the virus, namely altruistic and reputational interests. But how to distinguish between self-reports of medical donations driven by the needs of the recipient or motivated by Beijing's concerns about the virus' negative impact on China's national brand? One option is to look at whether there are different motivations across Chinese donors.

If self-reports of medical donations are driven by the needs of the recipient (i.e., altruism), the spread of the virus should have a positive effect on reporting donations by all donors. Consistent with the Chinese foreign aid literature (Bräutigam, 2010), self-reports of medical donations during the pandemic offer a decentralized image of China's aid program. Many donors are involved in Chinese mask diplomacy, including Chinese private companies, state-owned enterprises (SOEs), provincial governments, ambassadors, immigrants, and government ministries.

Among these donors, however, political elites and those directly linked to the government like ministries or provincial governments, should be more susceptible to the anti-China sentiment sparked by the coronavirus. If true, Chinese digital diplomacy practitioners should consistently report more donations by government donors to countries harder hit by the virus. This is because government donors are more concerned about the negative effect of the virus on China's national brand than non-government donors such as NGOs or private companies.

There is evidence that government donors care more about China's national brand than non-government donors. First, Chinese political elites are often concerned about brand and reputation, especially given the anti-China sentiment sparked by the coronavirus. Most scholars agree that leaders and policy elites are often concerned, even obsessed, with their status and reputation (Dafoe et al., 2014). Like foreign political elites, many Chinese elites contend that China must manage its role and image on the world stage (Pu, 2019, 10). Internal reports by the Chinese Ministry of State Security even show that the government is deeply concerned about the negative impact of COVID-19 on China's national brand. Specifically, the government is concerned that anti-China sentiment sparked by the virus could fuel resistance to China's Belt and Road infrastructure investment projects, and that Washington could step up financial and military support for regional allies, making the security situation in Asia more volatile (Reuters staff, 2020).

Figure 2: Donation by the Bank of China to Angola
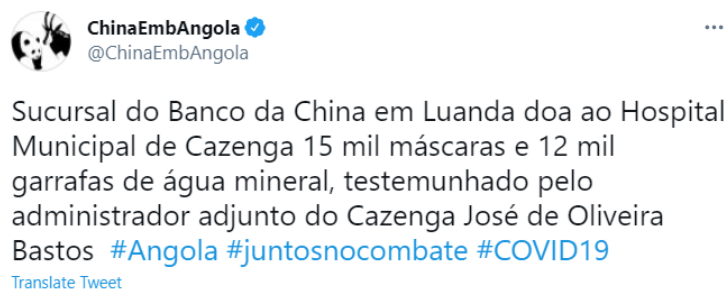
Additionally, there are some differences between self-reports of medical donations by government and non-government donors, suggesting the former are more likely to connect donations to China as a brand. Self-reports of medical donations by government donors are a grand display often involving political slogans, official pictures, and

national cues. This strategy is not only to indirectly expose individuals in recipient countries to Chinese foreign aid via social media but also to remind them who the donor is. On July 2, for instance, the Chinese Embassy in Angola wrote: "Bank of China branch in Luanda donated to the Municipal Hospital of Cazenga 15,000 masks and 12,000 bottles of mineral water, witnessed by the deputy administrator of Cazenga José de Oliveira Bastos #Angola #juntosnocombate # COVID19" (ChinaEmbAngola, 2020). The Bank of China is arguably a government donor since it is a SOE. As Figure 2 shows, a delegation from the bank poses for an official photo alongside masks, bottles of water, boxes, and local medical staff. The banner, which includes both national flags and the logo of the company, reads in Portuguese and Chinese: "China and Angola, together in the fight against COVID-19." On the other hand, donations by non-government donors are understated. On April 5, the Chinese Embassy in Argentina wrote: "#Chinayuda | As part of the second batch of donations from #China, medical supplies such as respirators, reagents and chinstraps arrived to #Argentina. Thank you very much Jack Ma Foundation and Alibaba Foundation!" (*Embajada de China en Argentina*, 2020). The Jack Ma Foundation and Alibaba Foundation are non-governments donors as they are NGOs. As Figure 3 shows, there are no banners nor flags. There are no political slogans nor official pictures with representatives from the NGOs and locals. There are only pictures of boxes in a warehouse.

Figure 3: Donation by the Jack Ma Foundation and Alibaba Foundation to Argentina

Embajada de China en Argentina ✔
@ChinaEmbArg

#Chinayuda | Como parte del segundo envío de donaciones de #China, los insumos médicos como respiradores, reactivos y barbijos llegaron a #Argentina. ¡Muchas gracias Jack Ma Foundation y Alibaba Foundation!

Translate Tweet

3:52 PM · Apr 5, 2020 · Twitter for Mac

If medical donations are driven by concerns over China's national brand and international reputation, Chinese digital diplomacy should consistently report more donations by government donors to countries suffering more from the virus. This is because government donors should be more concerned about the negative effect of COVID-19 on China's national brand than non-government donors. self-reports of donations by Chinese government entities should be more positively and strongly correlated to the spread of the virus than self-reports of donations by Chinese non-government entities. Therefore, the fourth hypothesis is:

Gov. donors hypothesis (H4): *All else held equal, the spread of the virus in the host will have a positive effect on Chinese self-reports of medical donations by Chinese government donors.*

Data collection

Chinese diplomatic tweets

This research uses data from Twitter to test these hypotheses. It analyzes diplomatic tweets because Chinese embassies and consulates might have active YouTube, Instagram, and Facebook accounts, but they are most active on Twitter. As of May 5, 2021, for example, the Twitter account of the Chinese Embassy in the U.K. had 28,104 followers while its

Facebook account only had 4,996 followers, even though Facebook has a higher penetration rate among active internet users in the U.K.

With 272 diplomatic missions, China has the largest diplomatic network in the world. The list of Chinese diplomatic missions is retrieved from the MFA website. For each of the 272 missions, a manual search for an associated Twitter account is done. First, the websites of all foreign agencies listed on the "Missions Overseas" website of the Ministry of Foreign Affairs are monitored. Many of them have links to the Twitter accounts of their missions published directly on the official websites. In addition, a Twitter search is done using keywords such as "Chinese embassy" and "embassy of China." The accounts are included in the sample if they have a blue verified badge next to their name or they are followed by official Chinese government accounts, such as the Chinese MFA, embassies, ambassadors, etc. There is a total of ninety embassies and consulates with Twitter accounts. No account failed the previous requirements, but the Embassy in Suriname (@CHNEmbSuriname) and the Embassy in Oman (@ChinaEmbOman) did not have any tweets. These two accounts are removed from the sample.

This study extracted tweets between December 26 and 27, 2020. It used Twitter's API via rtweet, in the R programming language, to collect all tweets for each account (Kearney, 2020). This approach has one potential limitation as data requests via Twitter's API do not include deleted or private Tweets. The research includes a total of 55,047 tweets (including retweets) published by 88 Chinese embassies and consulates on Twitter. "Retweets" are messages re-posted verbatim by a user that were originated by someone else. Retweets are included because digital diplomacy scholars suggest that embassies and diplomats often shared one another's messages through retweets to increase their online reach (Manor, 2019, 107). Including retweets increases data quality as it extends the data collection to not only original messages by Chinese overseas missions but also tweets by individual diplomats and state media retweeted by the overseas missions. The time period is from March 2020 to December 2020. The starting period is March because the WHO declared the novel coronavirus outbreak a global pandemic in that month. During data pre-processing, all tweets are translated into English using the Google machine translation API. This strategy has been used by political scientists to simultaneously analyze text in different languages (e.g., Lucas et al., 2015).

Classifying Chinese medical donations

This study uses a dictionary and hand-coding to identify self-reports of donations by Chinese digital diplomacy practitioners on Twitter. The dictionary method is appropriate when texts are being classified into known categories (Grimmer and Stewart, 2013). It also reduces the risk of false positives – a result that indicates a given condition exists when it does not – in the text data. To do this, a list or "dictionary" of terms associated with medical donations is created. The dictionary contains the following keywords: "donation(s)", "donate(s/d)", "mask(s)", "ventilator(s)", and "equipment(s)." This list of words is similar to the one used by Chen and Molter (2020) to categorize tweets published by English-language Chinese state media about Beijing's medical equipment donations and exports. Then, tweets that contain any of the keywords are identified. There is a total of 1,962 tweets containing at least one of the terms in the dictionary. Then, these tweets are hand-coded. The messages are classified as being about medical donations if they mentioned a Chinese donation to the host country. Mentions of sales or exports of medical equipment to other countries during the pandemic do not count as donations.

Figure 4: Daily self-reports of medical donations by Chinese diplomatic missions (2020-03:2020-12)
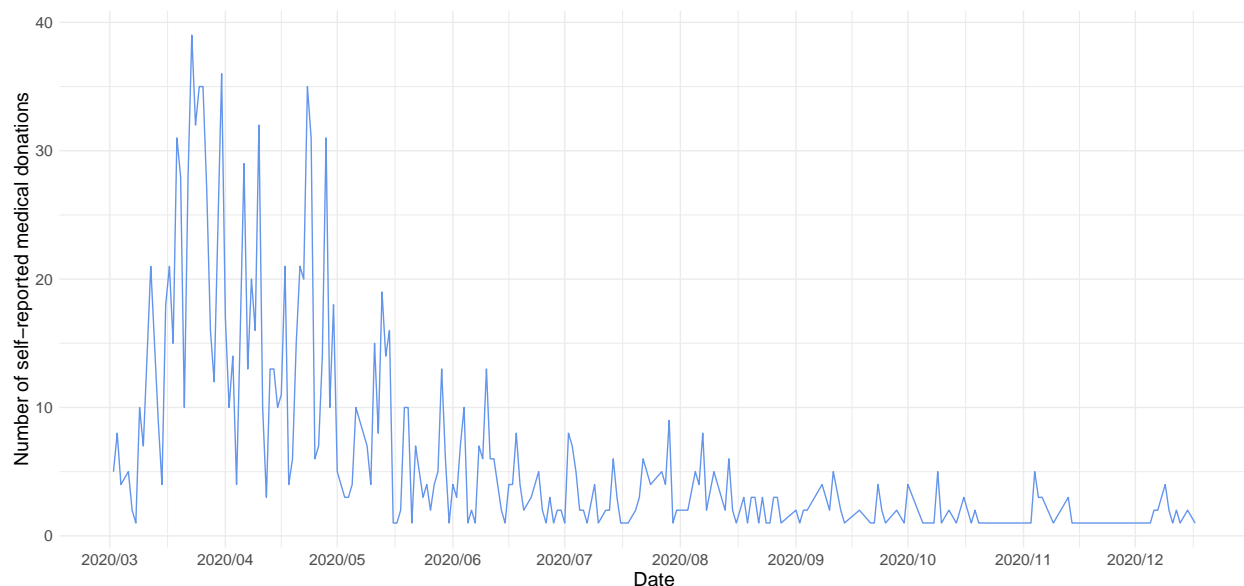
There is a total of 1,565 self-reports of medical donations by Chinese overseas missions. Figure 4 plots the daily distribution of these tweets. The x-axis represents the date, while the y-axis shows the number of tweets about outward donations published by Chinese diplomatic missions on Twitter from March to December 2020. As the figure shows,

most of the coverage of Chinese medical donations occurred between March and May 2020. Despite some lingering mentions of Chinese donations, Beijing's Twitter mask diplomacy has waned significantly since its peak in these months. Interestingly, this coincides with top Chinese scholars and foreign policy advisers warning diplomats and state media that their efforts to defend Beijing's handling of the pandemic are backfiring (Wong, 2020).

Empirical strategy

This research conducts a linear regression analysis to examine what drives Chinese medical donations: the economic relationship between the host and China (*Economic hypothesis, H1*), the political relationship between the host and China (*Political hypothesis, H2*), or the spread of the virus in the host (*COVID-19 hypothesis, H3*). The dependent variable is the monthly proportion of self-reports of medical donations by Chinese diplomatic missions. The analysis uses proportions instead of raw numbers to control for the fact that some accounts tweet more than others.

The analysis employs the logged value of China's existing trade average over a five-year period (2016–2020) with a particular country (*Trade with China*) as a proxy for China's economic relationship with the host. This is used to determine whether economic motivations influence the distribution of Chinese medical donations during the pandemic (H1). Trade data are obtained from the International Monetary Fund Directions of Trade Statistics (DOTS) dataset (International Monetary Fund, 2020). The analysis then employs the United Nations General Assembly (UNGA) voting similarity average over a five-year period (2016–2020) between China and the host (*UN voting with China*) as a proxy for China's political relationship with the host (Bailey et al., 2017). This is used to determine whether political interests influence the distribution of Chinese medical donations during the pandemic (H2). Indicators of trade and UNGA voting similarity are frequently used in the literature to measure economic ties and political alignment between states (e.g., Bader, 2015; Dreher et al., 2018).

To examine the impact of the virus on Chinese medical donations (H3), this research measures the spread of the COVID-19 outbreak using the logged values of monthly infections per capita (*Host's new cases pc*) and deaths per capita (*Host's new deaths pc*). These two variables are necessary to measure the spread of the virus because while positive cases are the immediate consequence of the virus, deaths are the lagged effect of the impact of the virus. In addition, death rates are the most severe consequence of the virus, but since this paper is being written as the virus continues to spread, current death rates are not final and might not be adequate measures. Using both confirmed cases

and deaths provides a clear snapshot of the virus's spread in each country, adjusted for population. COVID-19 data is obtained from *Our World in Data*, which provides detailed information updated daily (Ritchie et al., 2020).

Data on Chinese donation exports is included to control for the influence of actual donations on the dependent and independent variables. Following Fuchs et al. (2020), this research relies on the custom reporting system by the official monthly China Custom Statistics to identify donation exports. Donations refer to exports under the custom regimes "Aid or Donation between Governments and International Organizations" (code 11) and "Other Donations" (code 12) (China Customs, 2022).

In addition, the analysis includes various control variables at the country level, such as the host country's population density and GDP per capita in 2020, and at the diplomatic mission level, like the number of followers and a binary variable equal to 1 if the account is a Chinese embassy and 0 if it is a consulate. Finally, geographical region fixed-effects based on the Chinese MFA geographical regions are included to follow common empirical approaches to control for regional effects.

The unit of analysis is at the Twitter account-month (or Chinese mission-month) level. All the models have month fixed-effects to account for the decreasing coverage of Chinese medical donations over time. It would be naive to think that what Chinese digital diplomacy practitioners write on Twitter is completely uncorrelated, so to address the serial correlation in the dataset, the analysis includes a lagged dependent variable in the models and use robust standard errors. With these adjustments, a Breusch-Godfrey/Wooldridge test for serial correlation in panel models suggests that we cannot reject ($p > 0.05$) the null hypothesis that there is no serial correlation in idiosyncratic errors in the models.

Results

What drives self-reports of medical donations?

This section uses linear regression analysis to test the first three hypotheses. Table 1 shows results from a pair of fixed-effect regression models estimating the proportion of self-reports of medical donations by Chinese diplomatic missions on Twitter between March and December 2020.

Table 1 Model 1 provides support for the *COVID-19 hypothesis* (H3). There is a positive and significant relationship ($p < 0.05$) between self-reports of Chinese donations and the host's spread of the COVID-19 outbreak (*Host's new cases pc*). For a one-unit (standard deviation) increase in the host's infections per capita, the difference in the expected

mean medical donations will be approximately 0.4 percent, all else held equal. These effects are modestly large given that only 2.99 percent of monthly Chinese diplomatic tweets are about Chinese medical donations. As predicted by the nation branding framework, countries with a higher number of confirmed cases are more likely to be targeted by self-reports of medical donations than countries with a lower number of confirmed cases.

Table 1: Estimating the relationship between the spread of COVID-19 and self-reports of Chinese medical donations

	DV: Monthly self-reports of medical donations	
	(1)	(2)
Log (Host's new cases pc)	0.004**	
	(0.002)	
Log (Host's new deaths pc)		0.01**
		(0.005)
Log (Trade with China), 2016-2020	0.0000	0.0000
	(0.002)	(0.003)
UN voting with China, 2016-2020	−0.01	−0.02
	(0.03)	(0.03)
Population density	−0.0000	−0.0000
	(0.0000)	(0.0000)
Log (GDP pc)	−0.004	−0.002
	(0.004)	(0.004)
Embassy	−0.004	−0.003
	(0.01)	(0.01)
Log (Number of followers)	−0.003	−0.003
	(0.002)	(0.002)
Log (Chinese donation exports)	0.0003	0.0003
	(0.0005)	(0.0005)
DV t-1	0.25***	0.24***
	(0.08)	(0.09)
Region and month fixed-effects	✓	✓
Observations	692	664
R^2	0.29	0.31
Adjusted R^2	0.27	0.28
F Statistic	7.48*** (df = 23; 668)	8.53*** (df = 23; 640)

Note: Robust standard errors in parentheses clustered at the Twitter account level.
*$p<0.1$; **$p<0.05$; ***$p<0.01$

On the other hand, Table 1 Model 1 does not provide support for the *Economic hypothesis* (H1) nor the *Political hypothesis* (H2). Economic and political interests do not seem to influence the distribution of reported Chinese medical donations during the pandemic. The bilateral trade between China and the host (*Trade with China*) and the UNGA voting similarity between China and the host (*UN voting with China*) have a negative, but not significant relationship ($p > 0.05$) with Chinese donations. Diplomatic accounts in important trading and/or political partners of Beijing are not more likely to report Chinese medical donations.

Table 1 Model 2, which uses deaths per capita (*Host's new deaths pc*) to measure the spread of the COVID-19 outbreak, also provides support for the *COVID-19 hypothesis* (H3). As the model shows, there is a positive and significant relationship ($p < 0.05$) between the monthly proportion of tweets about Chinese donations and the host's monthly deaths from COVID-19. For a one-unit (standard deviation) increase in the host's deaths per capita, the difference in the expected mean medical donations will be approximately 1 percent. These effects are large given that only 2.99 percent of monthly Chinese diplomatic tweets are about medical donations. This suggests that Chinese diplomatic Twitter accounts in countries with a higher number of deaths from COVID-19 are more likely to report medical donations than accounts in countries with a lower number of confirmed deaths.

Similar to Model 1, Model 2 does not provide support for the *Economic hypothesis* (H1) nor the *Political hypothesis* (H2). Economic and political interests do not seem to influence the distribution of reported Chinese medical donations during the pandemic. The other covariates in Model 2 are similar to those in Model 1.

Following the *COVID-19 hypothesis* (H3), the regression models show that there is a strong positive and significant relationship between self-reports of Chinese medical donations and the host's spread of the COVID-19 outbreak. Interestingly, the estimated coefficient for deaths per capita (*Host's new deaths pc*) is larger than the one for confirmed cases per capita (*Host's new cases pc*). We can interpret this as indirect evidence for the nation branding argument. Deaths from COVID-19 are the most severe consequence of the virus, so they should have the biggest negative effect on China's international image and have a stronger positive association with the dependent variable.

Differences among donors in China's online re-branding campaign

This section tests the *Gov. donors hypothesis* (H4) and examines whether there are differences among donors in China's online re-branding campaign. As mentioned earlier, if self-reports of medical donations are driven by the needs of the recipient (i.e., altruism), the spread of the virus should have a positive effect on reporting donations by all donors. On the other hand, if medical donations are driven by concerns over China's national brand and international reputation, Chinese digital diplomacy practitioners should consistently report more donations by government donors to countries suffering more from the virus. This is because government donors should be more concerned about the negative effect of COVID-19 on China's national brand than non-government donors. Self-reports of donations by Chinese government entities should be more positively and strongly correlated to the spread of the virus than self-reports of donations by

Chinese non-government entities.

To test H4, Table 2 estimates a series of fixed-effect regression models estimating the relationship between the spread of COVID-19 and self-reports of Chinese medical donations by government and non-government donors. The dependent variable and co-variates are identical to those in Table 1. This research divides Chinese donors into two groups: government and non-government donors. Overseas missions, ambassadors, provincial governments, ministries, the CCP, Peng Liyuan, the central government, and other entities are considered government donors. On the other hand, Chinese communities in the host, universities, private companies, NGOs (e.g., Chinese Olympic Committee), Jack Ma, and other entities are considered non-government donors.

This study makes the assumption that it is easy to draw a line between these two groups, which is not always the case in Chinese society. While civil society entities like trade unions and private companies tend to function independently of any government in many countries, many of them might have a close relationship with the CCP and the government in China. For example, the All-China Federation of Trade Unions (ACFTU) has donated medical supplies to Austria and other countries (Li, 2020). While the trade union is an NGO on paper, ACFTU often works closely with local governments and factory management and often turns a blind eye to labor exploitation (Chan, 2018). Thus, it is fair to question whether ACFTU is really an independent trade union.

While this distinction may be less apparent in China than in other countries, state and non-state actors differ in the Chinese context. In business, for example, one can say that SOEs like Sinopec or China Mobile have a closer relationship with Beijing than private firms like Alibaba or Lenovo. SOEs in China are powerful actors that can negotiate policy concessions with the government (Naoi et al., 2022). The executives of SOEs are integrated into China's cadre system and often have a similar rank to deputy ministers at central bureaucracies and provincial leaders at the local level. As political appointees of the government, they have direct channels to exert policy demands (Kennedy, 2005). In contrast, private firms typically lack access to top policymakers in China and are more vulnerable to the government's discretion than SOEs. Additionally, private firms face many constraints imposed by the government, such as restricted entry into certain industries, difficulty in securing credit and subsidies, and excessive tax burdens (Naoi et al., 2022). These differences explain why previous studies find that Chinese SOEs and private firms exhibit different economic (Huang et al., 2020) and political (Zhu, 2017) behavior. For the purposes of the study, actors that are relatively independent from the government like private firms are considered non-government donors.

Table 2: Estimating the relationship between the spread of COVID-19 and self-reports of Chinese medical donations by government and non-government donors

	DV: Monthly self-reports of medical donations by gov. and non-gov. donors			
	Government	Government	Non-government	Non-government
	(1)	(2)	(3)	(4)
Log (Host's new cases pc)	0.01**		−0.01**	
	(0.004)		(0.005)	
Log (Host's new deaths pc)		0.01*		−0.02
		(0.01)		(0.01)
Log (Trade with China), 2016-2020	−0.005	−0.01**	0.01	0.02**
	(0.004)	(0.01)	(0.005)	(0.01)
UN voting with China, 2016-2020	0.11	−0.003	−0.03	0.09
	(0.08)	(0.09)	(0.07)	(0.08)
Population density	0.0000	0.0000	−0.0000	0.0000
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Log (GDP pc)	0.01	0.01	−0.002	−0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Embassy	−0.02	−0.02	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Log (Number of followers)	0.003	0.01	0.004	−0.001
	(0.005)	(0.004)	(0.01)	(0.01)
Log (Chinese donation exports)	−0.001	−0.0003	−0.0000	0.0002
	(0.001)	(0.001)	(0.001)	(0.001)
Donations by government donors t-1	0.20**	0.15		
	(0.09)	(0.10)		
Donations by non-government donors t-1			0.22**	0.20*
			(0.10)	(0.11)
Region and month fixed-effects	✓	✓	✓	✓
Observations	191	179	191	179
R^2	0.22	0.24	0.30	0.31
Adjusted R^2	0.11	0.12	0.20	0.21
F Statistic	8.92*** (df = 23; 167)	6.48*** (df = 23; 155)	5.39*** (df = 23; 167)	5.49*** (df = 23; 155)

Note: Robust standard errors in parentheses clustered at the Twitter account level.
*p<0.1; **p<0.05; ***p<0.01

Both Table 2 Models 1 and 2 provide support for the *Gov. donors hypothesis* (H4). In Model 1, there is a positive and significant relationship ($p < 0.05$) between reported donations by Chinese government actors and the host's spread of the COVID-19 outbreak (*Host's new cases pc*). According to Model 2, there is also a positive and moderately significant relationship ($p < 0.1$) between reported donations by government donors and deaths per capita (*Host's new deaths pc*). For a one-unit (standard deviation) increase in the host's infections per capita or deaths per capita, the difference in the expected mean reported medical donations by government entities will be approximately 1 percent, all else held equal. These effects are large given that only 2.99 percent of monthly Chinese diplomatic tweets are about medical donations.

Discussion

The quantitative analysis shows COVID-19 is an important driver of self-reports of medical donations. In contrast, economic and political motives do not seem to be important drivers of self-reports of medical donations. And as expected, self-reports of donations by Chinese government entities (e.g., the party, ministries, provincial governments, etc.) are more positively and strongly correlated to the spread of the virus than self-reports of donations by Chinese non-government entities (e.g., immigrants, private companies, NGOs, etc.). Government donors drive the positive relationship between the host's spread of the virus and self-reports of Chinese medical donations. This can be interpreted as further evidence for the nation branding argument because government actors should be more concerned about the repercussions of COVID-19 on China's reputation than non-government actors.

An alternative explanation for the results is that Chinese government donors are more altruistic than non-government donors. However, it is hard to assume that government actors are more likely to be driven by altruistic considerations than non-government actors. Foreign aid is rarely altruistic, driven primarily by geopolitics and national interests (Alesina and Dollar, 2000; Milner and Tingley, 2010). Moreover, anecdotal evidence suggests that Chinese non-government donors are very altruistic. Early in the pandemic, for instance, Chinese communities across the U.S. volunteered to help and organized donations of medical supplies and food to communities in need (Wong, 2020).

Another alternative explanation for the results is access to information. Diplomatic missions might have more access to information about government donors, and therefore, report more donations by government actors than non-government actors. However, both anecdotal and empirical evidence suggest this is not a plausible explanation.

Table 3: Chinese diplomatic accounts more likely to report donations by government (left) and non-government (right) donors

	Reported majority government donors		Reported majority non-government donors	
	Twitter Account	Country	Twitter Account	Country
1	AmbChineBurundi	Burundi	ChinaEmbAddis	Ethiopia
2	AmbChineCmr	Cameroon	ChinaEmbAngola	Angola
3	china_emb_ng	Nigeria	chinaembcongobz	Congo, Rep. of
4	ChinaEmbAlgeria	Algeria	ChinaEmbinGH	Ghana
5	ChinaEmbassy_MW	Malawi	ChinaEmbinMR	Mauritania
6	ChineAmbDjibout	Djibouti	ChinaEmbLesotho	Lesotho
7	ChineseEmbKenya	Kenya	ChineseEmb_Uga	Uganda
8	ChineseEmbTZ	Tanzania	ChineseSomalia	Somalia
9	ChineseLiberia	Liberia	CathayPak	Pakistan
10	ChineseZimbabwe	Zimbabwe	ChinaEmbKazakh	Kazakhstan
11	ChnConsulateJhb	South Africa	ChinaEmbKSA	Saudi Arabia
12	CGPRCinDubai	United Arab Emirates	ChinaEmbTurkey	Turkey
13	chinaconsulist	Turkey	AmbCina	Italy
14	Chinaembmanila	Philippines	China_Lyon	France
15	ChinaEmbSL	Sri Lanka	ChinaEmbEsp	Spain
16	ChineseembassyJ	Jordan	ChinaEmbIreland	Ireland
17	ChnConsul_osaka	Japan	ChinaEmbPoland	Poland
18	ChnConsulateFuk	Japan	ChinaEmbSVK	Slovak Rep.
19	ChnConsulateNgo	Japan	ChineseEmbinCZ	Czech Republic
20	ChnEmbassy_jp	Japan	ChineseEmbinHU	Hungary
21	jejuZLG	South Korea	ConsulChinaBcn	Spain
22	AmbassadeChine	France	ZhongBai2020	Belarus
23	China_Ukraine_	Ukraine	ChinaCGCalgary	Canada
24	chinacgedi	United Kingdom	ChinaEmbajadaRD	Dominican Republic
25	ChinaembassyT	Albania	EmbChinaCuba	Cuba
26	chinaembaustria	Austria	CGChinaSP	Brazil
27	ChinaEmbFinland	Finland	china_embajada	Colombia
28	ChinaEmbGermany	Germany	ChinaEmbPeru	Peru
29	ChinaEmSlovenia	Slovenia	ConsulChinaRJ	Brazil
30	ChinaInDenmark	Denmark	Emb_ChinaVen	Venezuela
31	ChineseEmbinUK	United Kingdom	EmbaixadaChina	Brazil
32	consulat_de	France		
33	EmbChina_RS	Serbia		
34	ChinaConsulate	United States		
35	ChinaEmbGrenada	Grenada		
36	ChinaEmbOttawa	Canada		
37	ChineseEmbinUS	United States		
38	ConsulateSan	United States		
39	EmbajadaChinaSV	El Salvador		
40	chinaandsamoa	Samoa		
41	ChinaConSydney	Australia		
42	ChineseEmb_PNG	Papua New Guinea		
43	ChinaEmbajada	Chile		
44	ChinaEmbArg	Argentina		
45	ConsuladoCHNSC	Bolivia		
46	EmbajadaChinaEc	Ecuador		

The information shared by overseas missions on Twitter often comes from WeChat groups formed by Chinese communities in the host country. Diplomatic missions would not have better access to information about government donors, because Chinese immigrants have no apparent interest to over-report donations by government actors. WeChat groups put out calls for donations, creating a wide network of Chinese individuals and entities who are donating medical and personal supplies (Wong, 2020). Donations by both government and non-government donors are reported by overseas missions through WeChat groups. For example, the donation by the Bank of China in Luanda (Figure 2) was reported by a Wechat group of Chinese immigrants in Angola, called "angolanews" (*āngēlā huárén bào*, 安哥拉华人报) . Similarly, the Chinese Consulate in São Paulo has reported donations sourced from WeChat groups composed by Chinese and Chinese-Brazilians (*Consulado-Geral da China em São Paulo*, 2020). Chinese diplomatic missions have good access to information about private donors.

Additionally, empirical evidence suggests overseas missions are not simply tweeting more about Chinese government donors than non-government donors. Instead, some diplomatic accounts focus on government donors while others focus on non-government donors. The correlation between self-reports of donations by government and non-government actors is strong and negative ($\rho = -0.70$), suggesting Chinese diplomatic accounts are reporting different donors. Table 3 shows the distribution of reporting by Chinese diplomatic accounts. Those on the left reported a majority of donations by government entities, while those on the right mostly reported about non-government donors. Although there is a larger number of accounts that reported a majority government donors, the table suggests accounts are focusing on different entities.

It should be noted that the COVID-19 pandemic is still ongoing at the time of writing. Patterns are still evolving, and the story is incomplete. This research only analyzes a brief snapshot of the data which may not be a full enough picture. Nevertheless, it is able to look at the peak of Chinese mask diplomacy (March-May 2020) and produce some interesting findings. Another limitation is that the research does not consider the qualitative difference between donations. For example, the analysis does not make a difference between a donation of 100 masks and a donation of 1,000 masks. It uses a count variable to measure Chinese reported health aid. However, count variables are a common indicator of financial assistance in the Chinese aid literature (e.g., Dreher and Fuchs, 2015). This is because China's aid program is not transparent and does not often provide accurate information about the total financial amounts committed to a recipient.

Conclusion

Due to the COVID-19 pandemic, global anti-China sentiment is at its highest since 1989. As a response, Beijing has been sending medical donations to other parts of the world, an effort dubbed "mask diplomacy", and Chinese government organizations are actively highlighting these donations on foreign social media platforms like Twitter. To explore the ways in which China engages in nation-branding to respond to the COVID-19-sparked global backlash, this research collects, translates, and analyzes tweets published by 88 Chinese diplomatic missions from March to December 2020. The theoretical discussion suggests that countries can use digital diplomacy channels to engage in re-branding campaigns. Here, "re-branding" refers to the efforts of building a new image. As such, we can interpret self-reports of outward medical donations in Chinese digital diplomacy channels as an online re-branding campaign meant to give Beijing the chance to re-brand itself not as the authoritarian incubator of a pandemic but as a responsible global leader at a moment of worldwide crisis.

The quantitative analysis reveals a positive and significant relationship between self-reports of Chinese donations and the recipient's spread of the COVID-19 outbreak. Chinese diplomatic Twitter accounts in countries with a higher number of infections or deaths from COVID-19 are more likely to report medical donations than accounts in countries with a lower number of confirmed deaths. On the other hand, Chinese diplomatic Twitter accounts in important trading and/or political partners of Beijing are not more likely to report Chinese medical donations. This suggests that economic and political motives do not seem to be important drivers of self-reports of medical donations.

The results also point out significant differences across donors in China's online re-branding campaign. In an effort to distinguish between self-reports of medical donations driven by the needs of the recipient (i.e., altruism) or motivated by Beijing's concerns about the negative impact of the virus on China's national brand (i.e., nation branding), this study divides Chinese donors into two groups: government and non-government donors. Reports about Chinese government donors drive the positive relationship between the host's spread of the virus and self-reports of Chinese medical donations. This can be interpreted as further evidence for the nation branding argument. Chinese digital diplomacy practitioners should report more donations by government donors to countries suffering from the virus because government donors should be more concerned about the negative effect of COVID-19 on China's national brand than non-government donors.

Although the findings support the nation branding argument, reputational concerns often overlap with economic and political interests in the long term. China is deeply concerned about its national brand and international reputation (Pu, 2019). But while these concepts have a deep symbolic value for any nation-state, governments often seek reputation to achieve material interests. For example, improving China's national brand could be an effective way to improve the image of Chinese-made products or companies in the host. Therefore, self-reporting medical donations on foreign social media may also serve to protect China's economic and political interests in the long term.

Nevertheless, this study advances our knowledge of Chinese foreign policy by examining Chinese digital diplomacy. Digital diplomacy is an increasingly important aspect of international relations and Chinese public diplomacy (Huang and Wang, 2019, 2021; Mattingly and Sundquist, 2022), and as such, it is important to understand how reputational interests influence Chinese diplomatic accounts' online political behavior. This research also advances our knowledge regarding health aid, an understudied area of China's foreign aid program (Telias and Urdinez, 2020). It is crucial to distinguish between different types of Chinese aid (e.g., health aid vs. commercial loans), but also important to distinguish between different types of Chinese donors.

In closing, a number of future directions for research are identified. First, it is worth studying Chinese digital diplomacy's response to the COVID-19-sparked global backlash beyond the period analyzed in this study. Although Beijing's Twitter mask diplomacy has significantly waned since its peak between March and May 2020, the COVID-19 pandemic is still ongoing at the time of writing. Second, future studies can look at Chinese digital diplomacy's response to other international events that reflect negatively on China's national brand. One interesting event might be Chinese digital diplomacy's response to the global backlash against internment camps or "vocational schools" in Xinjiang. While China claims their aim is to tackle poverty and religious extremism in the region, the detention centers have been heavily criticized for alleged human rights abuses by Western countries and human rights organizations. Future studies can examine how China uses digital diplomacy to engage in nation branding while responding to the global backlash against Beijing's policies toward Xinjiang.

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