

## **US-CHINA TECHNOLOGICAL COMPETITION: HUAWEI'S RESILIENT ENGAGEMENT IN LATIN AMERICA AMID COVID-19**

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### **SUMMARY**

Huawei has become an important actor in Latin America's digital economy and a crucial partner for the development of the region's telecommunications infrastructure. Its engagement has proved resilient amid the Covid-19 pandemic which has provided it with opportunities for the deployment of artificial intelligence and cloud-based health applications. On the other hand, the firm faces ongoing US pressures and attempts to limit its presence, especially in Brazil, the major 5G market in the region. US officials are promoting a securitized approach on Huawei's engagement and alternatives to China's digital infrastructures. This has prompted strong reactions from the latter. US initiatives have had a limited influence across Latin America as top economies have ruled out banning Huawei. Nevertheless there is some evidence of a geopolitical and security-driven approach from the Brazilian presidency which may entail limitations to Huawei's engagement in its domestic 5G network. Globally, it is unlikely that most Latin American countries will risk tensions with China amid the Covid-19 health and economic crisis, nor that this would foster a regional strategic thinking on dependencies towards the Chinese economy. Navigating between the US and China will remain a long-term challenge for Latin American countries.

## INTRODUCTION

Covid-19 has greatly impacted Latin American (LA) economies, but has not put a halt to the long-term technological competition between the United States (US) and the People's Republic of China (PRC or China) which had already reached the region. It is also unlikely that it would have a significant impact on China-LA relations, except if the pandemic were to favour regional initiatives and cooperation against foreign dependency, economic (re)primarisation, and in support of industrial policies, export diversification, and autonomy in strategic sectors. But Covid-19 has showed an overall lack of comprehensive regional response and limited regional cooperation on health and technological issues, and China will continue to be an ever-increasing necessary partner for Latin America's economic recovery. Covid-19 may have contributed to a slowdown of large-scale Chinese investments and infrastructure projects,<sup>1</sup> but China-LA economic relations have once again proved resilient and LA exports to China have recovered swiftly after the initial shock of Covid-19. In addition, China has not registered new adhesions to the Belt and Road Initiative (BRI) in the region, but the pandemic has offered an opportunity to showcase the Health Silk Road (HSR) and the Digital Silk Road (DSR) through donations and trade of medical supplies and the implementation of Chinese technological solutions to combat Covid-19.

This paper analyses the specific case of Huawei, its presence in LA digital economy, and its contribution to digital health applications across the region amid the pandemic. It will also explore its involvement in the 5G sector in the Brazilian market and the foreseeable impact the US-China technological competition will have on its presence in Latin America in the post-Covid era.

## LEVERING COVID-19: HUAWEI'S Foothold IN DIGITAL HEALTH APPLICATIONS

Huawei has succeeded in positioning itself as a major actor in Latin America's digital economy. It has registered high growth rates and gained significant market shares in the mobile phone market, becoming a top brand in Colombia, Mexico, Peru, and Central

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<sup>1</sup> Data from the American Enterprise Institute points out a sevenfold interannual decrease of infrastructure investment and construction contracts – from USD10.3 billion to USD1.4 billion – during the January-October period .

America. It has entered the regional cloud market and opened its first Latin American cloud centre in Chile in 2019, while also developing data centres in Argentina, Brazil, Mexico, and Peru. The firm is likely to face high competition in this sector from the two main providers, Amazon Web Services and Microsoft Azure, whose estimated regional shares amounted to 63% in 2018. Huawei also carries out training in information and communications technologies across Latin America through its global seeds for the future program.

The firm is deeply involved in Latin America's telecommunications network and has become a significant partner for the digital transformation of the region which faces the double challenge of achieving the deployment of the fourth generation of cellular network technology (4G) while planning the first 5G rollouts during the next years. 5G is expected to have applications in a broad range of sectors, including automation, robotics, healthcare, smart cities, or financial services, with a high potential to transform regional industries and economic productivity. Huawei appears as a partner of choice as one of the five providers of complete 5G systems (together with Ericsson, Nokia, Samsung and ZTE) and one of the few companies which can integrate 5G with artificial intelligence (AI), the internet of things (IoT), and cloud computing technologies. Huawei is already involved in early 5G trials across the region including in Argentina, Brazil, Columbia, Ecuador, and Peru. This involvement in Latin America's telecommunications network has raised security and geopolitical concerns from US authorities as they face long-term competition with China over the global technological leadership.

Covid-19 has had a severe impact on Latin America which has become the region with the highest death toll, as well as the most severely hit by the economic crisis. It has contributed to delays over 5G auctions as in the case Brazil or Mexico. But it has also provided China – and Chinese companies – with a window of opportunity to showcase the convergence of the HSR and the DSR through the deployment of health diplomacy and technological solutions to curb the pandemic, which have won recognition by several Latin American authorities. Arguably, Covid-19 has not impacted Huawei's expansion plans in Latin America. Amid the pandemic, the firm has maintained financial commitments and digital initiatives in the region. It has announced a USD50 million

developer program with the opening of a digital lab in Mexico which the brand has identified as one of its five priority markets. The firm will also open a second data centre in Chile by the end of 2020. Covid-19 has provided Huawei with an opportunity to boost its brand image through donations of medical equipment – mainly personal protective equipment (PPE) – amounting to more than 100,000 pieces of PPE in countries like Colombia, Mexico, Peru, and Uruguay. It has also allowed it to deploy digital solutions to fight the pandemic ranging from distance learning education to digital health applications at the crossroads of Cloud-computing, AI, and 5G. Huawei has been involved in a 5G trial in Colombia and has supplied thermal cameras to the Ezeiza International Airport, Argentina, to support Covid-19 detection systems. It has also developed AI and Cloud-based solutions to map the pandemic and provide secondary diagnostic. The latter have been firstly deployed in Ecuador – Quito and Guayaquil – followed by countries like Guatemala, Honduras, and Panama. In addition, in Brazil, more than 40 hospitals had adopted the Ravid-19 diagnostic system, based on algorithms from Siemens and Huawei.

#### US-CHINA COMPETITION IN BRAZIL: HUAWEI'S INVOLVEMENT IN 5G NETWORKS

Amid the pandemic, US authorities have kept pushing against China's engagement in Latin America. This has been notably the case with regards to Huawei's involvement in the 5G rollout in Brazil. The coming Brazilian 5G auction is anticipated to become the world's largest in terms of spectrum and will give access to the major Latin American market in terms of population and future 5G users in the country. The firm has been involved in 5G pilots in cooperation with the four main Brazilian carriers: Telefonica, TIM, Claro, and Oi. It also owns a factory of telecommunication equipment in the State of Sao Paulo and has announced the construction of a second plant by 2022.

The administration of President Donald Trump has actively tried to convince Brazilian authorities to limit China's influence in Latin America and has explicitly called upon Brazil to ban Huawei from its 5G telecommunication networks. In an op-ed published in August in the Brazilian newspaper *Globo*, Keith Krach, Under Secretary of State for Economic Growth, Energy and the Environment, pointed out that 5G will be critical to the 'most sensitive personal, commercial, and governmental data'. He also asserted the ties between Huawei and the Chinese government, calling it the 'backbone of China's

worldwide surveillance state', while promoting 'trustworthy' alternatives, namely Ericsson, Nokia, and Samsung. In July 2020, the US ambassador in Brazil, Todd Chapman, warned that Brazil could face 'consequences' if it were to pick Huawei for its 5G rollout (although it would not face reprisals) but the US administration has recently resorted to a more incentivist approach and during the visit of National Security adviser Robert O'Brien, October 2020, US officials have offered financing options backed by the Export-Import Bank of the United States and the International Development Finance Corporation to choose alternatives to Huawei.

Chinese officials have strongly protested against these US initiatives. They have denounced the claims over the risks and threats posed by Chinese technology and stressed that the company was a private one, without any links to the Chinese government. They have also insisted on the lack of reported cybersecurity incidents and called for a 'rational' decision from Brazilian authorities.

Latin American countries face a difficult geopolitical panorama as they will seek to strengthen their economic ties with China, the main export market of many Latin American countries, while coping with US actions to limit Chinese influence in the region. US initiatives amid the pandemic have had a limited impact and officials from major regional economies have explicitly ruled out banning Huawei. In Brazil, the main four telecommunications carriers have supported 'free-market choices' and declined to meet with Keith Krach during its diplomatic visit in Brazil, November 2020. Major members of the Brazilian administration, including Vice-president Hamilton Mourão and Minister of Science and Technology Marcos Pontes, have opposed the ban of Huawei from the 5G rollout. Nevertheless, Brazilian President Jair Bolsonaro seems to have endorsed a more geopolitical approach and stated that the final decision on Huawei would take into consideration concerns about data security, and foreign policy. This has led, on 12th November, to the endorsement of the Clean Network proposal promoted by the United States, which explicitly aims to limit the use of Chinese technology.

Were it to decide to effectively limit Huawei's involvement in its 5G networks, Brazil would be a rare exception across the region. In a context of economic crisis, it appears unlikely that Latin American countries would risk diplomatic (and economic) tensions by banning

Huawei, especially as China will prove a crucial export market for the economic recovery. It also appears unlikely that Latin American countries would finally bridge the strategic gap in their relations with China and address dependency-related risks which may persist towards China's digital economy. Overall, Latin American countries will probably stay focused on achieving access to high-speed telecommunications technologies, and stick to a more developmental approach rather than a security-driven one despite its high relevance given the significance of future 5G networks as critical infrastructures.

## CONCLUSIONS

Latin America has become a major frontier of US-China technological competition which has continued amid Covid-19 and has crystallised around Huawei's engagement in Brazil. Huawei's strong presence has consolidated thanks to a continued commitment towards the region and its engagement in the health sector through donations of medical equipment and the deployment of digital health applications to combat the pandemic. At the same time, the firm keeps facing US pressure to limit its involvement in Latin American telecommunications networks. In Brazil, where the company is firmly established, US officials have been particularly active in trying to limit Huawei's involvement in the future 5G rollout. The company, as well as the Chinese authorities, have firmly rejected concerns over security risks and ambiguous ties between Huawei and the Chinese government while criticizing the US's own espionage record.

So far, US initiatives have had a limited impact on Latin American countries' approach towards Huawei, as governments of the main regional economies have refrained from supporting a formal ban on the firm. As an exception, the Brazilian presidency has shown signs of a more securitized and geopolitical approach but is yet to formally settle the case of Huawei. Major members of the current administration, and Brazilian main telecommunications carriers, have expressed their reluctance to opt for a ban. Overall, it is very unlikely that the region would risk incurring tensions with China over technological issues in the context of severe economic crisis.

China's involvement in Latin America's telecommunications networks is likely to remain a focal point of US-China technological competition and a significant issue for Latin American countries to address, especially as economic difficulties would make partnering

with Huawei an increasingly appealing option. This should remain true despite the change of US president. Although Joe Biden has promoted a multilateral and less confrontational approach towards China – and Latin America – he has still endorsed a competitive approach over global technological leadership. It is likely that the next administration might promote a security-driven approach to 5G, while aiming to provide alternatives to China's digital infrastructures.



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