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Aubrey Hruby, Senior Fellow at Atlantic Council
Testimony before the U.S.-China Economic and Security Review Commission
China in Africa: Recent Trends and New Developments

Distinguished members of the committee, Ambassadors, and fellow witnesses:

I would like to begin by thanking you for the opportunity to testify before you today.

My name is Aubrey Hruby. I am a Senior Fellow with the Africa Center at the Atlantic Council, and I have spent my career advising Fortune 500 companies and investors to design and implement successful investment and market entry strategies in over twenty African markets. I will devote my testimony to the following eight themes: 1) Jumia’s dominance of the nascent African e-commerce industry; 2) how Chinese venture capital differs in nature from the Silicon Valley model; 3) that Chinese telecom infrastructure companies are well-established in the region; 4) how Chinese firms are creating new tech standards on the continent; 5) Chinese companies are entering the government policing/security market, and 6) how China is investing heavily in Africa’s media space. Despite the rapid evolution and deepening of Chinese commercial interest in African markets, I still believe that the US has great potential in the media and digital economy space in the region.

**Definitional note: The difference between e-commerce and digital economy**

In providing this testimony, it is important to distinguish between e-commerce and digital economy. E-commerce has been defined by the OECD as “the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.”

While payment and delivery may be conducted offline, the transactional process is conducted through the internet. The digital economy, on the other hand, has a far broader definition, with no broad agreements on what it entails. For some it encompasses all activities that use digitized data, but for others that it is more narrowly defined by online stores, online services and internet-related ICT services. I will refer to the broader digital economy as including telecom infrastructure, media industry, venture capital, and the startup ecosystem. The concern from a US policy perspective is the growing and evolving Chinese commercial footprint in the digital economy, not to the more limited e-commerce market.

**Introduction**

When National Security Advisor John Bolton unveiled the Trump administration’s new Africa strategy in December 2018, there were only two countries that he mentioned more than ten times.

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One was the United States, and the other was China. (The most-mentioned African nation, South Sudan, was referenced four times.)

The administration’s approach to Africa is inextricably linked to its perception of China as a strategic threat. China’s challenge to American hegemony in Africa is primarily in the economic sphere: Chinese investment and trade are rapidly eclipsing those of American firms, as evidenced by a 40 percent annual growth rate in Chinese foreign direct investment and tens of billions in government loans and grants over the past decade. But there is a profound lack of understanding among US policy makers about how China actually operates in African markets. As a result, the current or future administrations could misdiagnose the true nature of the threat that China poses. My testimony here today will outline China’s evolving technological footprint in Africa and how the United States can respond.

1) E-Commerce in African markets is currently dominated by Jumia and local firms. Alibaba has yet to start significant operations or make large investments on the continent.

The main player in Africa’s nascent e-commerce business sector is Jumia. Dubbed the “Amazon of Africa,” it has serviced 4.3 million users and 81 thousand active sellers in 14 African countries since its founding in 2012.3 Founded in Nigeria (with capital from the German Rocket Internet), Jumia had to find innovative solutions to fostering trust and addressing logistical constraints as it expanded across the continent. To do this, the company learned from the experiences of Alibaba—the e-commerce pioneer that created the sector in China 20 years ago. Alibaba had to overcome many of the same challenges that Jumia faces while creating and expanding the e-commerce sector in Africa. For example, to achieve scale and build trust in a cash-dominated marketplace, Alibaba created AliPay, the Chinese equivalent of Paypal, which established a way for consumers to pay for their services online. Jumia launched a similar payment system called JumiaPay in 2016, which allowed its customers to pay a small fee for the delivery of purchased goods on their platform. Jumia expanded on Alibaba’s success by allowing customers to pay their driver upon the delivery with cash, allowing anyone who had access to the internet—even if they did not own a credit card—to use their services.

It is important to note, however, that while Jumia and African e-commerce companies learned from Alibaba’s experiences,4 Alibaba has never directly worked with these companies to influence or assist them in solving these challenges. The global players, like Alibaba and Amazon, do not yet have significant operations on the continent.5 Rather, these companies are selling into the continent then using overseas shipping to deliver their goods. However, both companies are only serving people that have access to international credit cards—usually equated with middle- and upper-class Africans. Jumia is attempting to target a greater share of the growing African

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4 Note that there was strong backlash against Jumia calling itself an African company as the founders and funding were European. Yomi Kazeem, “What makes Africa’s largest e-commerce platform Africa?,” Quartz Africa, March 19, 2019. http://qz.com/africa/1572318/what-makes-jumia-an-african-startup/.
5 Ibid.
discretionary spending. E-commerce companies with a focus on African markets, like Jumia, are simply learning from a proven model and adapting it to local market realities.

In 2019, Jumia announced its listing on the New York Stock Exchange (NSE), becoming the first venture capital backed startup in Africa to go public on a major exchange. When Jumia’s Kenya CEO Sam Chappatte was asked why the company listed in New York, he responded by saying that “we listed in a foreign market because that’s the place where people understand the business model best.” Following its debut on the NSE in April 2019, the company’s share soared by 75 percent on the first day, pegging the company a valuation at $1.9 billion. But, to date, Jumia’s performance on the NSE has steadily declined. After its promising start, jumping from around $25 to over $40, the stock now sells for less than $3 a share. The German venture builder Rocket Internet, which was birthed Jumia, sold its 11 percent stake in the company on the onset of COVID-19.

While Jumia’s performance has suffered over the past year, the COVID crisis and resultant lockdowns in African countries will certainly increase the speed in which people transition from offline to online purchases of food and other essentials. This use of physical money on the streets and in markets threatens the spread of the virus and the use of mobile money is growing as fees are reduced and demand increases. Mobile money, plus the incentive to have essentials delivered to homes, will boost e-commerce during COVID and fast-forward a move toward digital commerce.

2) **Chinese venture capital is increasingly prominent and not always compatible with the Silicon Valley US model**

Chinese firms and funds’ approach to investing in the start-up space in African markets is becoming increasingly more prominent and is not always compatible with the more familiar Silicon Valley US model. The African venture capital (VC) industry really only matured into the beginnings of an industry five years ago. To date, it has been dominated by VC firms with deep US or European ties and a traditional Silicon Valley approach whereby funds invest in locally-operating, mostly-African owned tech startups operating in the digital economy. US Venture capital funding of African start-ups has increased over time; since 2015, funding of African VC tech deals has totaled over 4 billion for African startups across 674 deals. In 2019 alone, funding made up half of the total investment during this period, totaling $2 billion across 250 deals.

In contrast, the first significant moves made by Chinese in the startup ecosystem in African markets in 2019 consisted of creating Chinese-owned operating companies. For example, in May 2019, Opera, a Chinese browser company, pledged to invest $100 million in Africa’s digital economy.

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10 Ibid.

11 Ibid.
and most recently launched a bike hailing platform in Nigeria called ORide. The concern with growing Chinese interest and involvement in the digital economy, even at this early stage of development, is that Chinese venture money prioritizes market share dominance over profitability and returning capital to investors in the medium term. Accordingly, the Chinese invest with longer-term horizons, a greater tolerance for experimentation and losing money, and looser structures than Silicon Valley style VC funds.

Note, that in the immediate term, COVID-19 and the resultant recession in African markets has slowed venture capital investment into Africa from across the world, not just from Chinese firms. 12

3) Chinese telecom infrastructure companies dominate the markets

Chinese telecom infrastructure providers such as Huawei and ZTE dominate the effort to build the backend of the continent’s telecommunications infrastructure. Huawei Technologies and ZTE, whose largest shareholder is a Chinese state-owned firm, have established more than 40 third-generation telecom networks in more than 30 African countries. 13 Additionally, according to Cobus van Staden, a senior China-Africa research at the Southern African Institute of International Affairs, Huawei has built roughly 70 percent of the continent’s 4G network. 14

Today, mobile devices have near-universal penetration in Africa’s media markets, 15 and increasingly, smartphones are becoming more accessible and affordable throughout the continent. It is estimated that a third, roughly 250 million Africans, own smartphones. 16 Chinese firms are responsible for a large amount of cell phones manufacture then sold on the continent. Transsion, which does not operate in the United States or Europe, dominates the African smartphone space. It holds 40.6 percent unit share under its three brands (Tecno, Indinix, and iTel), ahead of second-place Samsung with roughly 19 percent. 17 These Transsion brands also dominate the featured phone landscape with a combined 69.5 percent share. In 2018, the company sold 133 million phones across Africa, 70 percent of which are considered dumbphones, while 70 percent of the company’s revenue came from smartphones.

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14 Amy Mackinnon, “For Africa, Chinese-Built Internet is Better Than No Internet at All,” Foreign Policy, March 19, 2019, http://foreignpolicy.com/2019/03/19/for-africa-chinese-built-internet-is-better-than-no-internet-at-all/.
In South Africa, meanwhile, Huawei accounts for 14.5 percent of phones sold, the second-highest share and significantly more than Apple’s 4 percent.\textsuperscript{18} Chinese phone maker’s success comes at their price point. While its competitor’s products costs range from $200 to over $600, the Chinese companies sell their phones for less than $100. On a continent where the urban middle class earns less than $500 a month, Transsion, Huawei, and BBK (Oppo brand) have quickly dominated the smartphone market by providing low-cost alternatives. Their success is seen in the export numbers. Smartphones that cost under $100 composed of half the total market share in Africa in Q4 in 2019.\textsuperscript{19} Supporting its expansion, Transsion recently raised $6.5 billion through an initial public offering on the Shanghai Stock Exchange’s STAR Market technology board.\textsuperscript{20}

Although much of Africa consume media through mobile devices, TV sales are growing among the middle class, and Chinese electronics companies are aggressively pursuing that market. Konka Group has set up a factory in Egypt to serve the region as it is widely reported that Chinese dominance of telecom infrastructure and new security technologies are creating temporary closures of factories in China, severely disrupting the supply chain of components used in the production of smartphones and televisions. This supply chain disruption combined with the lockdowns and spreading recession will have vast implications on smartphone and television sales to Africa in 2020.

4) Chinese dominance of telecom infrastructure and new security technologies are creating new standards for the industry

In 2015, China launched its ‘Made in China’ initiative, which aims to dominate cutting-edge technological industries. However, through this initiative, it is widely reported that Chinese companies have and continue to use African markets as a laboratory to test and improve its artificial intelligence products, including its surveillance technologies, potentially setting lasting technology standards in the process.\textsuperscript{23} For example, in 2018, CloudWalk Technology signed a deal with the Zimbabwean government to provide a mass facial recognition program.\textsuperscript{24} The company is at the cutting-edge, working toward solving problems in the current facial recognition software.
that historically has had trouble identifying people with darker skin. With Zimbabwe’s weak human rights record, this technology may pose as a dangerous tool in the hands of the government, providing them the ability to establish surveillance infrastructure that may further limit the freedoms of its people, as it has done in China.

Chinese companies such as ZTE and Dahua are also setting the international standards at the United Nations International Telecommunications Union (ITU), similarly providing the infrastructure for facial recognition, video monitoring, and city and vehicle surveillance. These standards have been ratified the ITU and are the commonly adopted policies by African nations. Currently, eleven Sub-Saharan African nations are deploying Huawei’s AI surveillance technologies. They include Cote d’Ivoire, Ghana, Kenya, Uganda, Nigeria, Rwanda, South Africa, Zambia, and Zimbabwe. During the COVID crisis, China is greatly expanding its aid to African countries and may support countries with surveillance technologies that can support tracking and tracing that may have other uses beyond the pandemic.

5) Increasing Chinese security commercial interests in African markets

The recently launched African Youth Survey, which interviewed 4,200 African youths aged 18 to 24, finds that 80 percent of those surveyed view regular access to the internet as a human right. However, as China’s telecommunication infrastructure expands across the continent, there are concerns around privacy, data protection, and over dependence. Access to the internet, especially in autocratic countries where internet is often restricted or completely shut down during periods of protests and around elections. In 2019, these shutdowns increased 34 percent from the previous year and included countries that have never used that measure before. A report by Access Now, indicates that globally, in 2019, there were 36 incidents in nineteen countries of internet shutdowns lasting longer than seven days. Among these countries include eight African nations including Chad, Ethiopia, the Democratic Republic of the Congo, Eritrea, Mauritania, Sudan and Zimbabwe.

26 Anna Gross, Madhumita Murgia, Yuan Yang, “Chinese tech groups shaping UN facial recognition standards,” Foreign Policy, December 1, 2019, http://www.ft.com/content/c3555a3c-0d3e-11ea-b2d6-9bf4d1957a67.
27 Ibid.
31 Yomi Kazeem, “Internet shutdowns in Africa were more frequent and lasted longer in 2019,” February 27, 2020, http://qz.com/africa/1808728/african-internet-shutdowns-were-more-frequent-in-2019/.
32 Ibid.
Chad’s shutdown was the longest in the world—blocking social media apps for 16 months starting in 2018.\(^{33}\)

Further, with the new Chinese-installed surveillance technology, the internet has provided African governments with an entirely new toolbox. A report from the Wall Street Journal indicates that Huawei technicians may have helped cybersecurity forces in Uganda and Zambia intercept the communication and track down political opponents.\(^{34}\) This comes after Uganda purchased closed-circuit television cameras for $126 million from Huawei ahead of the 2021 election.\(^{35}\)

As African countries expand their digital infrastructure, some countries have become increasingly dependent on Chinese companies for their installation and maintenance. The United States has warned that the technology of Huawei and ZTE presents a security risk along similar grounds—that it provides Beijing a backdoor to spy on African governments and its people. But, African network operators have few alternatives as US and European firms are not as active in the region and governments are quickly becoming dependent on Chinese ICT products and telecom infrastructure, especially given tight financial constraints they operate under and the financing terms which Chinese companies offer.\(^{36}\)

With Chinese companies facilitating soft loans for governments to purchase equipment, install it, and help manage the systems, companies like Huawei and ZTE have quickly penetrated the African market, making their continued services indispensable. In Kenya, for example, Huawei has installed 1,800 high definition (HD) cameras and 200 HD traffic surveillance systems across Nairobi.\(^{37}\) However, Kenyan citizens have voiced their protest, concerned about where this data will be stored, who will have access to it, and its uses.\(^{38}\) Further demonstrating the pushback that has resulted from the emergence of the surveillance technology, in 2018, China denied accusations that the servers installed in the Chinese-built African Union building were bugged to gain confidential information.\(^{39}\)

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China’s efforts in maintaining their telecom infrastructure will likely not have been impacted by COVID-19. However, if the spread of the virus persists in Africa and global supply chains remain disrupted, the installation of new equipment may be affected.

6) China’s investment in African media markets

China is also rapidly investing in the content and infrastructure for African television programming and digital content development. In 2012, China established CCTV Africa—renamed China Global Television Network (CGTN) Africa in 2016 and made a part of the Voice of China media group in 2018—an English-language news channel run by the Chinese state broadcaster. It was the first international investment in a $6.6 billion global plan to strengthen China’s global presence. CGTN, with a large broadcasting subsidiary in Nairobi, lacks popular appeal in African markets. But it is offered nearly everywhere.

In Kenya, China’s Pan-Africa Network Group (PANG) won the right to be one of two broadcast distributors in 2015, when the country switched from analog to digital. Not a single U.S. company competed. There were rumors of corruption in the deal, and PANG is partially owned by StarTimes, a Beijing-based media and telecommunications firm with strong ties to the Chinese government. It has subsidiaries in more than 30 African countries and was selected as the sole contractor for the “10,000 villages” program, designed to bring digital TV services to more than 10,000 villages across 25 African countries and announced by Chinese President Xi Jinping at the Forum on China-Africa Cooperation in Johannesburg in 2015. StarTimes is the Chinese government’s primary contractor in carrying out the 10,000 Village Project. As of July 2019, the company was in homes of 10 million subscribers in 30 African countries.

StarTimes, partially owned by the China Development Bank’s China-Africa Development Fund, offers middle-class consumers a full range of services in the digital TV sector. The company’s big selling point is its affordability: The most basic digital cable package in Kenya costs just about $2.50, compared with $9.50 for the South African-owned DStv. No wonder that it has ten million subscribers in 25 African countries.

43 “China’s satellite TV project for 10,000 African villages benefits Africa,” People’s Daily.
subscribers across the continent, with 1.4 million in Kenya alone. Even during the current global pandemic, following the closure of schools as a result of government efforts to mitigate the spread of COVID-19, the StarTime’s Kenyan subsidiary has launched a homeschool programming. It presents primary and high school students with the unique opportunity to continue their education thorough audio visual programming that will include live sessions by experienced teachers. Access to this program will come at no cost to subscribers in the month of April 2020.

China’s media plays are not limited to expanding or operating its own companies, but also to investing in established African media companies. In South Africa, companies linked to China have a 20 percent stake in Independent Media, the country’s second-largest media group, which includes 20 prominent newspapers. The outlet proved less than independent when it drew controversy by canceling a column that focused on the plight of Chinese Uighur Muslims in Xinjiang, a touchy subject for Beijing.

Incidents like this combined with the heavy subsidization of its own content and other investments indicate the seriousness with which China takes its penetration into African media, not merely as a commercial endeavor but also as an instrument of state policy. Some observers have argued that the Chinese government uses its media subsidiaries in Africa much as the Russian government uses RT in Europe; finding the cracks in Western media and filling them with alternative narratives deemed favorable to Chinese interests.

As it has been increasing its media presence on the continent, China is also shaping the careers of African journalists through high-level media cooperation initiatives and new China-Africa press centers. Each year about 1,000 African journalists participate in training programs in China with the aim to build deeper understanding and cultural ties with the country. This is a concerning practice given China’s history of media coercion and censorship.

**Conclusion: The US still has great potential in the media and digital economy space in African markets**

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50 Darrel Frost, “Even if you don’t think you have a relationship with China, China has a big relationship with you,” Columbia Journalism Review, June 20, 2019, http://www.cjr.org/special_report/china-foreign-journalists-oral-history.php.
Despite the influx of Chinese investment into the backend of the continent’s telecommunications infrastructure, venture start-ups, and the media space, the United States still has many assets to leverage and build upon.\textsuperscript{53} For example, in 2016, CNN established a multiplatform bureau in Lagos to focus on its digital presence in Nigeria.\textsuperscript{54} and Bloomberg launched an Africa edition to target the continent’s growing audience of business and financial professionals.\textsuperscript{55} Netflix has been available continent wide since 2016 and in December 2018 announced it would begin investing in original series from Africa.\textsuperscript{56} The COVID crisis has boosted Netflix subscriptions among more wealthy Africans.

However, US media investment growth in African markets has been relatively slow, and China’s rapidly increasing investment will certainly chip away at the incumbent advantage in the near term. There are several things the United States can do to keep its advantage. It could convene an Africa media and technology investment forum in 2021, for example, which would help identify and address the issues preventing greater U.S. investment in the media sector in Africa’s largest markets. The Administration could also appoint a member of a US media company to the President’s Advisory Council on Doing Business in Africa (PAC-DBIA) and could assign a senior Commerce Department official the task of liaising with top American media and tech companies—YouTube, Netflix, Amazon, WarnerMedia, Facebook, Google, and others—in order to develop a sectoral strategy for advancing opportunities in African markets. Tech giants such as Google and Facebook are already working to capitalize on Africa’s growing internet-connected population, and cheaper data and smartphones will intensify this trend.

By marrying soft power and commercial success, the United States can do much more than simply help the bottom line of American companies—it can win the next generation of hearts and minds in some of the world’s fastest-growing and youngest markets. The COVID crisis will naturally slow private sector interest in African markets in the short term, but the current or future administration should double-down on Prosper Africa efforts to encourage and support American commercial expansion into African markets.


\textsuperscript{56} Yomi Kazeem, “Netflix is finally investing in original African content,” \emph{Quartz Africa}, December 3, 2018, \url{http://qz.com/africa/1482172/netflix-will-commission-original-african-shows/}.