



Latin America

| Regional Assessment |

June 16, 2023

Introduction

Latin American nations are primarily concerned with rising crime rates, which have skyrocketed in traditionally safe countries and will remain elevated elsewhere in the region. Political instability—including wide social unrest, protest movements, and high rates of political turnover—is linked to the crime wave and presents major obstacles to business operations in the region. Nearly every major election in the last five years has seen the incumbent party thrown from office despite ideology, usually after a widespread protest movement. These political realities are likely to remain throughout 2023.

To combat rising crime rates and political turnover, governments have been rolling out surveillance technology that tracks movements, obtains secure communications, and builds large databases of citizen data. These nascent technologies do not come with an increased focus on cyber and data protections, as demonstrated by the numerous hacks of Latin American government databases in the last year. How the region improves its cybersecurity will likely depend on private investments, as local governments have few resources to address the digital divide.

The region is also home to a valuable commodities trade that includes historic food-producing industries in Brazil and Argentina as well as materials needed in the energy transition like lithium and copper, which are available across the region. Supply of these commodities is unlikely to match demand in the coming years, giving financially-motivated threat actors an incentive to target these sectors, which will be moving more of their operations digitally to meet consumer and societal expectations for things like emissions requirements and ease of business. The region is also key to the geopolitical rivalry between the West and China. China has spent years building infrastructure in countries traditionally seen as U.S. allies, and the United States is belatedly attempting to regain influence through trade and technology. Latin American nations will have difficulty navigating a geopolitical terrain that increasingly calls on them to choose sides.

Key Threats



Government databases are being targeted by cyber threat actors.



Financially-motivated threat actors could target commodities industries.



Crime has increased regionwide.



Politically-motivated threat actors could target government data.



Political instability will threaten mining and energy businesses.



Cyber espionage campaigns designed to steal trade secrets are likely.

Key Findings

- Widespread protest movements that destabilize governments and disrupt supply chains are likely
- Increased competition across the region likely between the West and China
- A stark digital divide between rural and urban locations
- Major cyber vulnerabilities in several lucrative financial and commodities trades in the region
- Misinformation campaigns likely ahead of elections and key political decisions
- Incoming El Niño weather phenomenon presents key risk to food suppliers in the region



Crime

Violent crime is the main contemporary geopolitical issue in Latin America. While the region has consistently endured ubiquitous drug-related violence in places like Colombia and Mexico, high murder rates in Brazil and Venezuela, and gang-related activity in Central America, this era is unique in that violent crime is replacing political corruption as the primary political concern, especially in places with historically low crime rates like Chile and Ecuador. This has resulted in a brand of tough-on-crime politics based on crime-fighting tactics used successfully in El Salvador.[1]

For example, Chile is in the middle of drafting a new constitution, which was a key demand of leftist-led protests in 2019 and 2020. However, voters rejected the initial constitutional rewrite; the new constitution set to be voted on in late 2023 is being drafted by far-right politicians and will likely be the antithesis of what protesters initially demanded. The drastic shift has come as voters most concerned with violent crime have risen from 13 percent to 50 percent from 2019 to 2023.[2] This follows Chile's murder rate doubling in a decade and increasing by one-third in 2022—despite Chile still being safer than Colombia, Brazil, and the United States. This will likely result in a Chilean constitution that places more emphasis on rule-of-law issues, benefits for private and international business, and, ultimately, a return to conservative politics.

Ecuadorian politics have also been immensely impacted by crime concerns as Ecuador experiences the worst violence in its history in terms of incidents and the scale of attacks on security forces. This will have an impact on the August 2023 snap elections, which are likely to remove the conservative, pro-business administration of Guillermo Lasso and replace him with politicians allied with the previous Venezuela-friendly government of Rafael Correa, known as Correísmo. Similar crime-focused political policies are likely to impact October 2023 elections in the previously-safer countries of Uruguay, Peru, and Costa Rica.[3]

Regionwide, there have also been violent protest movements. Chile saw two years of on-and-off protests, as did Colombia from 2019 to 2021. Peru has experienced political dysfunction due to having had six presidents since 2016, with several nationwide protest movements erupting following the removal of the last two presidents, Martin Vizcarra and Pedro Castillo.[4] Bolivia is also not far removed from mass protests that overthrew the government in 2019 and 2020, and Brazil saw protesters attempt a coup at the start of 2023 akin to the events of January 6, 2021, in the United States.

With crime rising to the top of voters' political concerns, ZeroFox anticipates that incumbent governments, regardless of ideology, will stagnate or be removed—like the left-leaning government in Chile or the conservative government in Ecuador, respectively—and be replaced by new political forces focused on crime fighting.

A similar pattern occurred following a region-wide scandal in 2010, when corruption concerns saw countless governments replaced by new governments ostensibly focused on anti-corruption.

New anti-crime policy choices will likely mimic or be heavily inspired by El Salvadoran President Nayib Bukele, who has arrested over 2 percent of the population under a constant state of emergency since March 2022.[5] The policies have seen violent crime drop precipitously while gaining praise from other Latin American governments and residents—despite credible allegations of human rights violations.

Neighboring states Honduras and Guatemala have instituted similar policies and held large pro-Bukele marches,[6] while opposition leaders in Chile, Peru, and Colombia have used support for his policies to gain political momentum. The support has transversed the political spectrum but will mainly harm incumbent politicians, who happen to be on the left in places like Colombia, Argentina, and Chile currently. Brazil also has a leftist president that recently assumed office, likely benefiting from the anti-incumbent wave in the region, and Peru's leftist president was recently removed via impeachment.

While Bukele's exact policies will be difficult to replicate outside of Central America given the larger geography and more diverse populations in almost every other state, there will likely be Bukele-inspired policies across Latin America where there are relatively weak political institutions in perma-violent states along with a quick rise in violent crime in traditionally safer countries. Also, Bukele's ideas likely have staying power because their popularity has persisted despite the poor economic conditions in El Salvador, which would have been the most obvious factor derailing his approval.

> Assessment:

- Violent crime is the new main geopolitical concern across the region
- Incumbent politicians in states with rising crime will likely struggle.
- Expect a series of political victories for those seen as combating crime.
- Policies similar to those pushed by El Salvadoran president Nayib Bukele are forthcoming.
- Expect further disruptive protests in 2023 over crime and anti-status quo political movements.

FOOTNOTES

[1] <https://citizenlab.ca/2022/01/project-torogoz-extensive-hacking-media-civil-society-el-salvador-pegasus-spyware/>
 [2] <https://twitter.com/BrazilBriant/status/165523811414999041>
 [3] <https://elpais.com/internacional/2022-10-24/la-inseguridad-perturba-la-pura-vida-de-costa-rica.html>
 [4] <https://arepublica.pe/fotos-y-respuestas/2022/12/11/peru-tuvo-6-presidentes-desde-2016-cuantos-voces-hubo-tantos-gobernantes-en-tan-pocos-anos-cuantos-presidentes-tuvo-el-peru-golpe-de-estado-congreso-pedro-castillo-evot>

[5] <https://www.ohchr.org/es/press-briefing-notes/2023/03/el-salvador-state-emergency>
 [6] https://www.swissinfo.ch/spa/el-salvador-bukele_encuesta-revela-que-77-2---de-los-salvadore%C3%82%81os-apoya-la-reelecci%C3%B3n-d-e-bukele/48048664



Commodities

Most of the region's biggest economies are commodity-based. This presents a key risk when global economic conditions are sluggish, since it reduces demand for the region's main commodities. In Chile and Peru, this has been reflected by lower demand for copper and lithium.[7] The Argentine economy has been unable to profit from its key agricultural exports of corn, wheat, and meat. Colombia exports a mix of agricultural and energy products, while Uruguay and Paraguay have similar exports to Argentina. Brazil is the only economy growing, but it is still dependent on purchases from China. Overall, the region is expecting to see continued slow growth in 2023 and 2024; this increases the risk of large, indefinite protest movements, which have been common in recent years.

Agricultural commodities are also dependent on the climate, which, with the incoming El Niño weather pattern, poses a particular risk to Peru and Chile and other nations in the region.[8]

Despite the lower current prices for commodities needed in the energy transition like copper and lithium, ZeroFox anticipates there will be a general overall supply shortage beginning once the global economy recovers in 2024 that will provide a revenue boost for countries along the lithium triangle of Chile, Bolivia, and Argentina, as well as the major copper-producing regions of Chile and Peru. Therefore, the mining and extractive industries will do well going forward. These industries are facing increasing legal and societal pressures to monitor their supply chains for environmental and human rights concerns, which presents an opportunity for technology that tracks movements across the supply chain. It also makes these industries vulnerable to financially-motivated cyber threat actors. Outside of government data breaches, cyber threat actors have consistently targeted the regions most lucrative industries, which includes financial services and commodities trade.[9]

> Assessment:

- Latin America's commodity-dependent economies will struggle in 2023–2024, increasing the risk of social unrest.
- Commodities needed in the energy transition like copper and lithium are unlikely to be cheaper than they are now for years.
- Extractive and mining industries are therefore at the biggest risk for targeting by cybercriminal groups.
- The El Niño weather pattern will impact agricultural commodities.

> Recommendations:

- Increase outreach to extractive and mining industries.

U.S.–China Dispute

Under the Biden Administration, the United States has made constraining China's growth its main foreign policy initiative. The administration has successfully lobbied Europe, Australia, and several key technology-producing countries like Japan and South Korea to its side through the CHIPS and Science Act, which restricts exports of advanced technology to China,[10] and the Inflation Reduction Act (IRA), which in part encourages companies to move production away from China to the United States. This demonstrates a move away from actions taken at the early onset of the pandemic, when Western leaders urged companies to reduce their reliance on China by homeshoring, friendshoring, and nearshoring and towards building new economic and trade infrastructure in developing states—a strategy that China has used to increase alliances.

The region stands to benefit from U.S. policies—especially Mexico, which is already seeing a massive influx of new investments from companies previously operating in China. This has allowed Mexico to transition from a low-wage, commodity-based country to a manufacturing hub. Other Latin American states will likely see increased U.S. and allied investment—particularly in the cleaner energy and advanced technology industries, which include the mining hubs of Ecuador, Peru, Argentina, and Chile.

However, this also presents a risk to Latin American countries, which have grown closer with China; China is the largest trade partner of both Brazil and Chile[11] and the second largest of Argentina. It has also coincided with a slew of mainly Central American states no longer recognizing the sovereignty of Taiwan with the promise of improved trade ties with China. These countries will have difficulty publicly taking sides because they are worried their trade and investment ties with China could be at risk. For example, both Brazil and Argentina have signed key economic agreements with China in 2023,[12] which likely means they will remain impartial in the geopolitical disputes. If they do remain neutral, they risk losing out on economic investments promised by Europe and the United States. On the other hand, they risk damaging trade reprisals if they side with the United States. Were China to end its corn or meat trade with Brazil, the powerful agri-farming community would likely push out the incumbent government, for example. China also knows that it has a stranglehold on the rare-earth minerals trade and could leverage its dominance to restrict U.S. access to key supplies. This also makes Latin American nations vulnerable to cyber espionage campaigns from China, which is eager to steal data on emerging technologies that the United States is actively restricting it from obtaining.

FOOTNOTES

[7] <https://www.eqmagpro.com/copper-supply-deficit-will-last-til-2030-with-unstable-output-in-chile-and-peru-eq-mag/>
 [8] <https://www.bloomberg.com/graphics/2023-el-nino-climate-change-extreme-weather/>
 [9] ZeroFox Internal Collections

[10] <https://www.japantimes.co.jp/news/2023/06/02/business/japan-south-korea-chips-collaboration/>

[11] <https://www.worldstopexports.com/chiles-top-import-partners/>

[12] <https://valor.globo.com/brasil/noticia/2023/01/28/china-ocupa-espaco-que-era-do-brasil-na-argentina.ghtml>



Politics

Latin America is in the midst of an anti-incumbency wave, whereby the party in power loses the next election or is thrown out early. Since 2018, the party in power has lost almost every general election, with the exception of Paraguay in 2023.^[13] Such a political environment can quickly change the operating environment for businesses within a given country. Those operating in Mexico, for example, have grown increasingly concerned that their private investments could be upended by the nationalist policies of President Andres Obrador (AMLO).^[14] This has likely reduced the amount of business moving away from China to Mexico in a process known as friendshoring or nearshoring. Mining and energy companies used to a steady operating environment in places like Chile and Colombia have also seen new governments come in with massive reorientations on tax, labor, and environmental policies that are upending decades-old business models.^[15]

The constant political shifts also present the risk that governments will deploy illegal means to monitor voter behavior in a bid to hold onto power or use online disinformation campaigns to influence voters.

For example, following the failed coup attempt in January 2023 in Brazil, authorities have been quickly cracking down on social media campaigns, which allowed organizers to gather support ahead of time, as well as other private messaging apps that allowed political misinformation to propagate.^[16] There has also been a proliferation of surveillance and monitoring technology purchased by governments across the region, both to monitor political opponents and to crack down on crime, which, as discussed earlier, is a winning political issue.

> Assessment:

- Latin American governments are increasingly using surveillance and monitoring technology to meet tough-on-crime political objectives.
- Most nations lack the rule of law protections to guarantee privacy or human rights safeguards for the data that is being gathered.
- Cyber threats actors are likely to target large databases being compiled by governments.
- There is a likelihood opposition political opinions are being collected by governments.

> Recommendations:

- Avoid sharing data with local government agencies.

Elections

Many of the regions' important elections have passed, with leaders in Brazil, Colombia, and Chile still having years left on their terms. Also, Mexican President AMLO is term-limited but has likely navigated the anti-incumbency wave, and his party looks set to remain in power in 2024. However, both Peru and Ecuador saw their presidents thrown out in 2023, and there could be more elections forthcoming. Furthermore, Argentina has elections in October 2023, and the ruling party is polling at around 10 percent, suggesting there is a strong possibility of a new government.

Ecuador has elections on August 20 after President Guillermo Lasso called for snap elections rather than be impeached; he will not run again.^[17] The most likely winners will be candidates affiliated with former President Rafael Correa, known as Correismo. The first iteration of Correismo was characterized by excessive social spending from mining and energy profits, which is less sustainable given lower commodity prices and environmental concerns. Domestically, Correismo was socially conservative on issues like abortion, and there was a major crackdown on dissent. Ecuador was also categorized as having a far-left foreign policy akin to Venezuela's. Correismo candidates have done well in the last year, mainly as a more moderate version of the Correa years. Moderation when it comes to social spending, cultural issues, and some foreign policy areas is likely under the new Correismo. However, retribution against political rivals and censorship is likely. Correismo also has no clear policy on drug-related crime, which is likely to continue. International investors will not welcome Correismo's return.

Argentina holds mandatory primary elections in August,^[18] whose outcome often determines the winner of the actual elections in October. The key economic issues are rampant inflation and the high cost of living, as well as criminal violence and street clashes. Argentina is also facing issues with its existing commodities trade, led by corn, wheat, and beef, as well as developing its nascent natural gas and lithium commodities businesses. Argentina is also at the center of the U.S.-China rivalry, with China appearing as a key economic ally ahead of the elections.

Despite the economic crisis, Argentina's election outcome is still unpredictable. On the one hand, tough-on-crime candidate Patricia Bullrich has performed well. There is also a key outsider candidate, Libertarian Javier Mieli, who holds far-right cultural stances on abortion and gender and is polling well but would likely preside over a divided Congress were he to win. The incumbent party, despite ruling during a period of high inflation and a currency crisis, still stands a chance given its strong left-wing, grassroots political support and the possibility of an economic game changer from a natural gas pipeline and economic stimulus coming from China ahead of the election.

FOOTNOTES

[13] <https://www.as-cog.org/articles/latam-focus-will-anti-incumbency-wave-reach-argentina-and-guatemala>

[14] <https://www.forbes.com.mx/amlo-abre-paso-al-tren-maya-y-suburbano-al-afa-con-32-decretos-de-expropiacion/>

[15] <https://www.latimes.com/espanol/politica/articulo/2023-02-27/ap-explica-que-son-las-reformas-de-petra-en-colombia>

[16] <https://www.dw.com/en/brazil-court-lifts-telegram-suspension-despite-non-compliance-for-neo-nazi-group-data/a-65474168>

[17] <https://elpais.com/internacional/2023-05-26/ecuador-convo-ca-elecciones-anticipadas-para-el-20-de-agosto-y-se-lanza-a-la-precampa.html>

[18] <https://www.pagina12.com.ar/557602-elecciones-argentina-2023-resultados-y-quien-gana-en-tucuman>



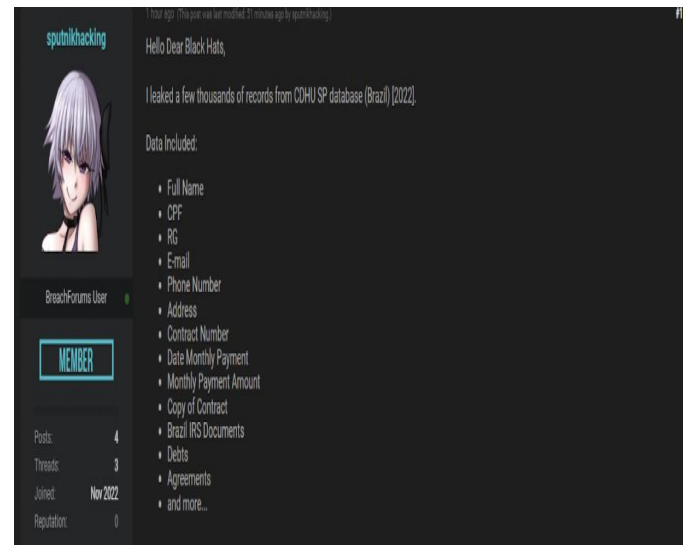
Surveillance Technology

Regionally, governments are increasingly using surveillance and monitoring technology such as Pegasus—which has been used by at least the governments of Mexico, Panama, El Salvador, and the Dominican Republic—to spy on journalists and rival politicians.[19] While their increased deployment is a global issue, as Pegasus is also used by Greece and Spain’s governments, it is especially relevant to Latin America, where security forces have relatively large budgets and a political incentive to crack down on crime.

Going forward, state budgets will likely be used to purchase technology like Pegasus that allows government agencies full remote access to a target’s device. Argentina and Honduras have reportedly bought a tool that extracts information from a mobile device,[20] while Chile, Ecuador, Peru, and several Central American states have reportedly purchased technology that can identify a device’s location using the phone number.[21] These technologies are being used alongside mass surveillance technologies like facial recognition systems purchased by Brazil and those that allow the integration of different official databases, such as vaccination and other COVID-19-related data, with criminal records for cross-border law enforcement collaboration.

This presents obvious privacy and human rights concerns, which cyber threat actors are using to justify their hacks and routine leaks of data obtained from massive databases. This then presents a risk of data on private citizens being exposed in dark web forums. Given the anti-incumbency wave in regional politics, it also presents a risk that private political expressions will be collected by governments that do not take the appropriate data protection measures. Only Brazil has passed a data protection law in response,[22] and even that contains exemptions for law enforcement.

Large-scale and controversial data collection gives cyber threat actors ample reason to target the databases to obtain wide swaths of data that can include entire populations. For example, in May 2023, ZeroFox reported hackers selling a database belonging to Serasa, a Brazilian credit bureau similar to Experian, which reportedly contained data on 200 million users. In Colombia, ZeroFox observed calls for more hackers to target the Colombian government after the SiegedSec hacker group repeatedly disrupted radio and satellite broadcasts in May 2023. In late 2022, hackers likely affiliated with Everest Group claimed access to three separate Brazilian databases, arguing they could be influential ahead of the late 2022 presidential elections. In the last quarter of 2022, ZeroFox observed at least two hacks that included data allegedly stolen from Brazilian government databases that included passport numbers, health insurance information, drivers licenses, tax IDs, and vehicle tracking information.[23]



BreachForums user reportedly selling access to different types of PII belonging to Brazilian citizens

Source: ZeroFox Internal Collections

During the same time period, ZeroFox observed similar government data breaches, including one each in Argentina, Mexico, Peru, and Chile, and two in Colombia.[24] While the impetus behind some of the attacks may have been different, including likely environmental hacktivism in Peru and a strong financial motive in the others, this demonstrates that hackers are deliberately targeting Latin American government databases. They may be encouraged by the increasing amount of government spending on surveillance and data collection that has not come alongside increasing cyber and data protections.

Misinformation

Given the anti-incumbency positions of the electorate, incumbent politicians are incentivized to deploy technology to identify voter trends and eliminate opposition momentum. Conversely, opposition movements are also using technology to reach voters and influence their behavior through disinformation campaigns.

During the 2022 referendum campaign to rewrite the Chilean constitution, there was a massive disinformation campaign designed to influence voters against approving a new constitution that included fraudulent claims about what would make it into the new constitution.[25] Ahead of Brazilian general elections in late 2022, there was disinformation playing out on social media, which led to the Supreme Court prohibiting political speech on places like WhatsApp and Telegram.

FOOTNOTES

[19] <https://citizenlab.ca/2022/01/project-torogoz-extensive-hacking-media-civil-society-el-salvador-pegasus-spyware/>
 [20] <https://privacyinternational.org/news-analysis/301/heres-surveillance-us-exports-central-america-aid-and-its-surviving-trumps-puts>
 [21] <https://citizenlab.ca/2020/12/running-in-circles-uncovering-the-clients-of-cyberespionage-firm-circles/>
 [22] <https://happi.org/news/alan-overview-of-brazil-igpd/>
 [23] ZeroFox Internal Collections

[24] ZeroFox Internal Collections
 [25] <https://www.ciperchile.cl/2022/10/28/desinformacion-en-el-plebiscito-el-vacio-legal-que-deja-a-202-denuncias-ante-el-servel-sin-ser-investigadas-ni-sancionadas/>



Technology and Income Inequality

The Latin American region has some of the world’s most pronounced income inequality, which affects its criminal and geopolitical realities. It also helps explain the technological divide, which is especially stark between urban and rural environments. Urban residents increasingly have access to broadband internet, while rural residents either rely on mobile phone internet plans or no internet at all—putting them further behind when it comes to education, banking, and other online transactions. This means there is the potential to reach populations that have been excluded from digital and technological growth. While some South American countries have the resources to launch plans to help close the divide, most will require foreign private investment to do so. However, a general lack of public financing and an expensive private operating environment have precluded further adoption until now. This has left the region routinely buying technology, as demonstrated by the segment on surveillance technology that is typically developed in places like Israel, the United States, and China, and sold to countries in the region. This makes these countries targets in the U.S.–China rivalry, which can only change if they develop more technology domestically.

Technology providers eager for growth should target the region; it has relative wealth compared to other developing regions like Africa and large amounts of still-untapped potential, like a relatively educated workforce and some governments eager to offer incentives to develop technologically. For example, Brazil is the furthest ahead when it comes to passing legislation to protect data but lacks enforcement, while Colombia and Chile are both courting clean energy and tech investments. The increasing profitability and digitization of these industries will make them vulnerable to financially and politically-motivated cyber threat actors. For example, Chinese-backed threat actors could launch cyber espionage campaigns to identify sensitive trade secrets between lithium suppliers in places like Chile and Argentina and Western consumers. Supply chain attacks on agricultural suppliers would also be lucrative, as a single hack could expose data belonging to hundreds of clients. Brazilian meatpacking giant JBS was targeted for similar reasons.[26]

Assessment:

- Many Latin American industries lack cybersecurity protections, making their data vulnerable to hackers.
- Commodities involved in the energy transition will be key to regional growth.

Recommendations:

- Increase outreach to commodities producers, including those involved in rare-earth mineral extraction and agricultural production.

APPENDIX:

Traffic Light Protocol for Information Dissemination

TLP: RED

HOW IT IS USED

Sources may use TLP: RED when information cannot be effectively acted upon by additional parties and could lead to impacts on a party’s privacy, reputation, or operations if misused.

HOW IT IS SHARED

Recipients may NOT share TLP: RED with any parties outside of the specific exchange, meeting, or conversation in which it is originally disclosed.

TLP: AMBER

HOW IT IS USED

Sources may use TLP: AMBER when information requires support to be effectively acted upon but carries risks to privacy, reputation, or operations if shared outside of the organizations involved.

HOW IT IS SHARED

Recipients may ONLY share TLP: AMBER information with members of their own organization and its clients, but only on a need-to-know basis to protect their organization and its clients and prevent further harm.
Note that TLP: AMBER+ STRICT restricts sharing to the organization only.

TLP: GREEN

HOW IT IS USED

Sources may use TLP: GREEN when information is useful for the awareness of all participating organizations, as well as with peers within the broader community or sector.

HOW IT IS SHARED

Recipients may share TLP: GREEN information with peers and partner organizations within their sector or community but not via publicly accessible channels.

TLP: CLEAR

HOW IT IS USED

Sources may use TLP: CLEAR when information carries minimal or no risk of misuse in accordance with applicable rules and procedures for public release.

HOW IT IS SHARED

Recipients may share TLP: CLEAR information without restriction, subject to copyright controls.

About ZeroFox

ZeroFox (Nasdaq: ZFOX), an enterprise software-as-a-service leader in external cybersecurity, has redefined security outside the corporate perimeter on the internet, where businesses operate and threat actors thrive. The ZeroFox platform combines advanced AI analytics, digital risk and privacy protection, full-spectrum threat intelligence, and a robust portfolio of breach, incident, and takedown response capabilities to expose and disrupt phishing and fraud campaigns, botnet exposures, credential theft, impersonations, data breaches, and physical threats that target your brands, domains, people, and assets. Join thousands of customers—including some of the largest public-sector organizations, as well as finance, media, technology, and retail companies—to stay ahead of adversaries and address the entire lifecycle of external cyber risks.

See ZeroFox in action

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FOOTNOTES

[26] <https://g1.globo.com/economia/noticia/2021/06/09/ba-diz-que-pagou-11-milhoes-em-resposta-a-ataque-hacker-em-operacoes-nos-eua.ghtml>

