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● BSI Supply Chain Risk Insights Report 2021



By Royal Charter



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Foreword

COVID-19 had an immense impact on shaping the way organizations conducted business in 2020, requiring new business plans, workflow processes and even alternative sourcing that exposed organizations to a host of unexpected risks. The pandemic shifted priorities and exposed gaps in business continuity plans that required companies to quickly adapt to the changing landscape of risk presented through the lens of the pandemic. Alternative sourcing similarly exposed unprepared organizations to new security challenges that were not present in existing supply chains.

However, even as the virus became the top priority for organizations, other risks to supply chains and organizational resilience continued to occur concurrently with the spread of COVID-19. The pandemic, in many cases, exacerbated extant threats to security, business continuity and sustainability. The spread of the virus shifted the way criminals operated and exposed a larger portion of the global population to labour exploitation.

It was this assortment of challenges and shifts in trends last year that will form the basis for threats that are likely to test organizational resilience in 2021. Organizations across the world are set to contend with the lingering effects of COVID-19 this year, along with chief security concerns, including cargo theft and smuggling, the economic toll of lockdown measures that in many cases, has only served to amplify social issues likely to contribute to business continuity concerns. The spread of COVID-19 last year also had the effect of increasing risks of food fraud and food safety violations in 2021.

Beyond these concerns, stemming directly from the impact of COVID-19, are other challenges that are likely to materialize in 2021. The increasing focus by governments on rooting out major labour rights violations, particularly forced labour, will likely require organizations to maintain and even expand efforts to comply with new regulations. New government measures pertaining to increasing the security and ethical conduct of the supply chain are likely to require supply chain professionals to adapt further this year.

The following report details how the above risks are likely to test organizational resilience in 2021. While concerning, these challenges are not unmanageable. Organizations, armed with this knowledge can begin to plan mitigation actions and adaptive measures to ensure a secure and sustainable supply chain.



Jim Yarbrough
Director, Global Intelligence
Programme, BSI

Introduction

2020 proved to be the most challenging year for organizations and the resilience of their supply chains in decades. Many of the obstacles that businesses faced last year clearly stemmed from the spread and aftermath of COVID-19, forcing organizations to adjust in novel ways to maintain their supply chain continuity, integrity, and overall resilience. Yet, at the same time, the spread of the virus seemed merely to exacerbate known threats and historical trends organizations have grappled with for years.

COVID-19 will certainly have latent effects on organizational resilience throughout 2021, directly and indirectly shifting the way organizations do business. However, several other issues, including increased regulation of supply chains and continued multifaceted impacts from business continuity events are poised to challenge businesses in parallel with the lingering impacts of the virus. This report explores those risks and projects the threats that companies are likely to encounter this year.

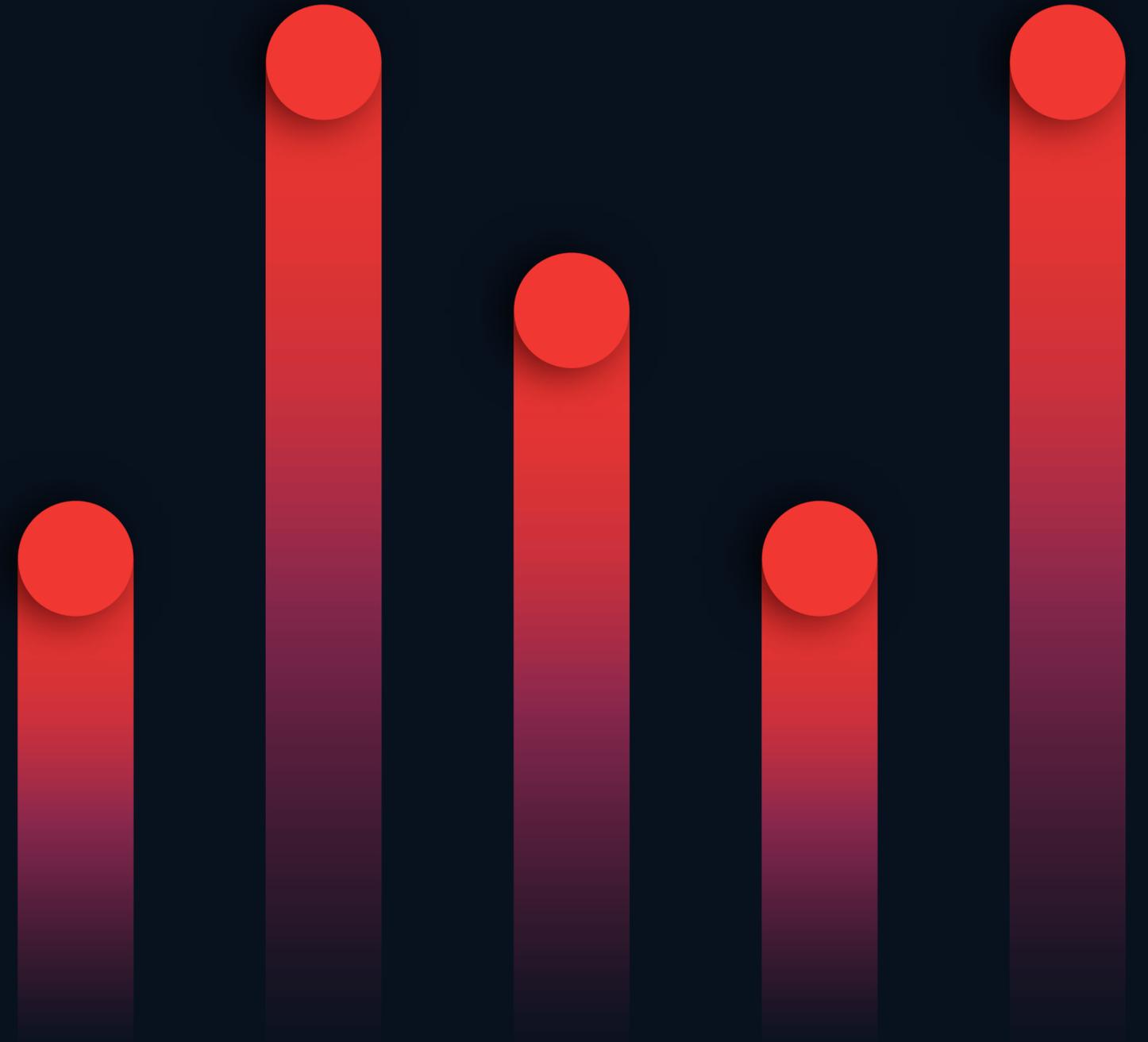
Organizational Resilience is defined by BSI standard BS 65000:

“the ability of an organization to anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper”.

Report highlights:

- COVID-19 continues to exacerbate existing threats and create new risks
- Cargo theft trends likely to return to pre-pandemic levels
- Economic hardships to propel risk of labour and migration issues
- Drug smuggling trends to remain consistent
- Labour strikes tied to economic downturn continue globally
- Food fraud and safety will continue to challenge supply chain resilience
- Increased regulations are likely to challenge organizational resilience

● Chapter 1 Summary of forecast global risks



COVID-19: Exacerbating existing threats and creating new risks

Throughout 2020, COVID-19 posed one of the largest threats to the security, continuity, and resiliency of global supply chains, and it continues to cause disruptions, threaten supply systems, and have residual impacts. Many of the other concerns BSI monitored in 2020, including cargo crime, labour exploitation, human rights violations, drug smuggling, food insecurity, and man-made disruptions, remain risks to supply chain resiliency in 2021.

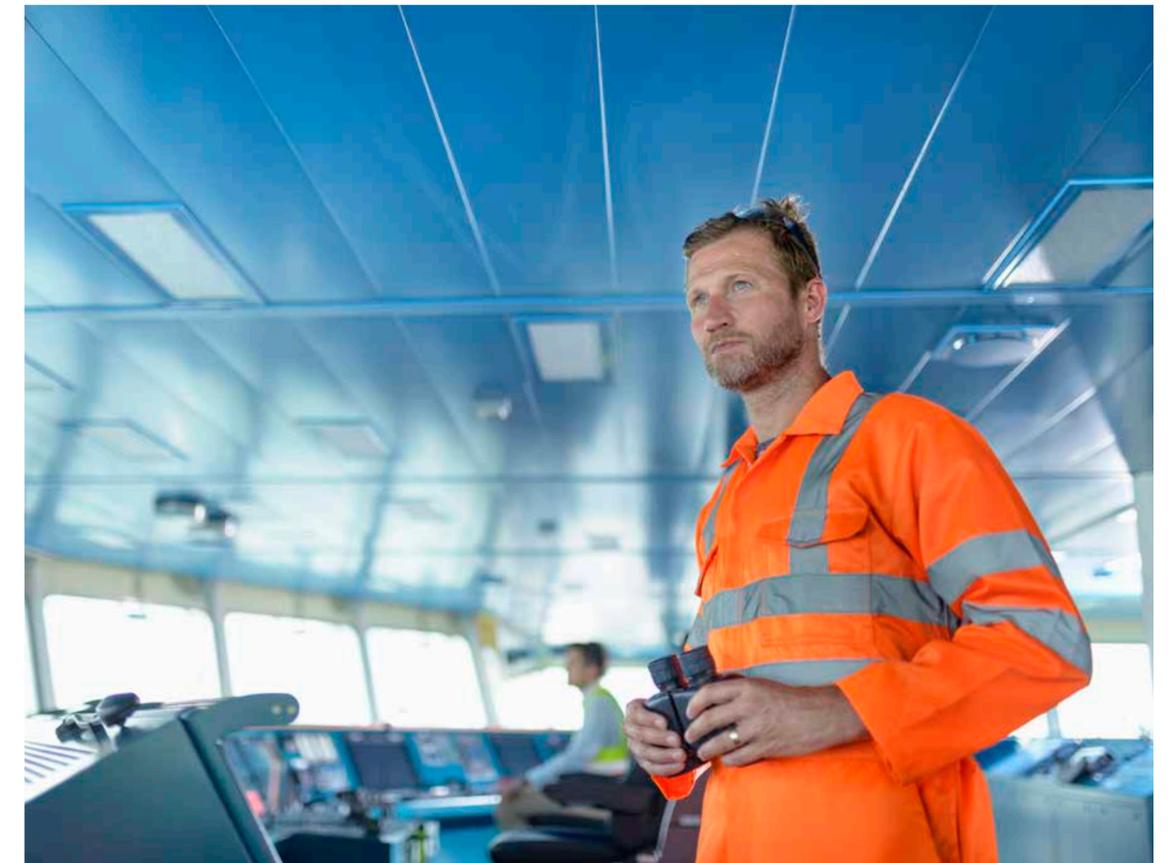
The Americas

In the Americas, organizations, particularly those operating in North America, will likely encounter increased regulation in 2021. This trend is already in evidence with the escalation of US government withhold release orders (WROs) toward the end of 2020. These orders, 15 of which were issued by US Customs and Border Protection (CBP) in the second half of 2020 alone – a 150 per cent increase over WROs issued during the entirety of 2019 – culminated in an order in early 2021 that targeted an entire region and class of products,

rather than specific organizations, as being produced by forced labour. Also notable was the issuance of new measures by the Canadian government that similarly require companies to take steps to ensure that forced labour doesn't exist in their supply chains. Other regulations, including the Securing America's Ports Act and the required implementation of the International Civil Aviation Organization's (ICAO) cargo screening standards, may also test business continuity and the general resilience of supply chains in North America.

The spread of COVID-19 had major detrimental effects on the economies of Latin America that are seen continuing to drive ongoing migration in the region, potentially exposing migrants to labour exploitation and leading to a rise in crime and social unrest as inequality grows. These issues are likely to come to a head in Peru, Haiti, Nicaragua, Chile, and Honduras, all of which have presidential elections in 2021 and may see shifts in political ideologies that could affect business operations.

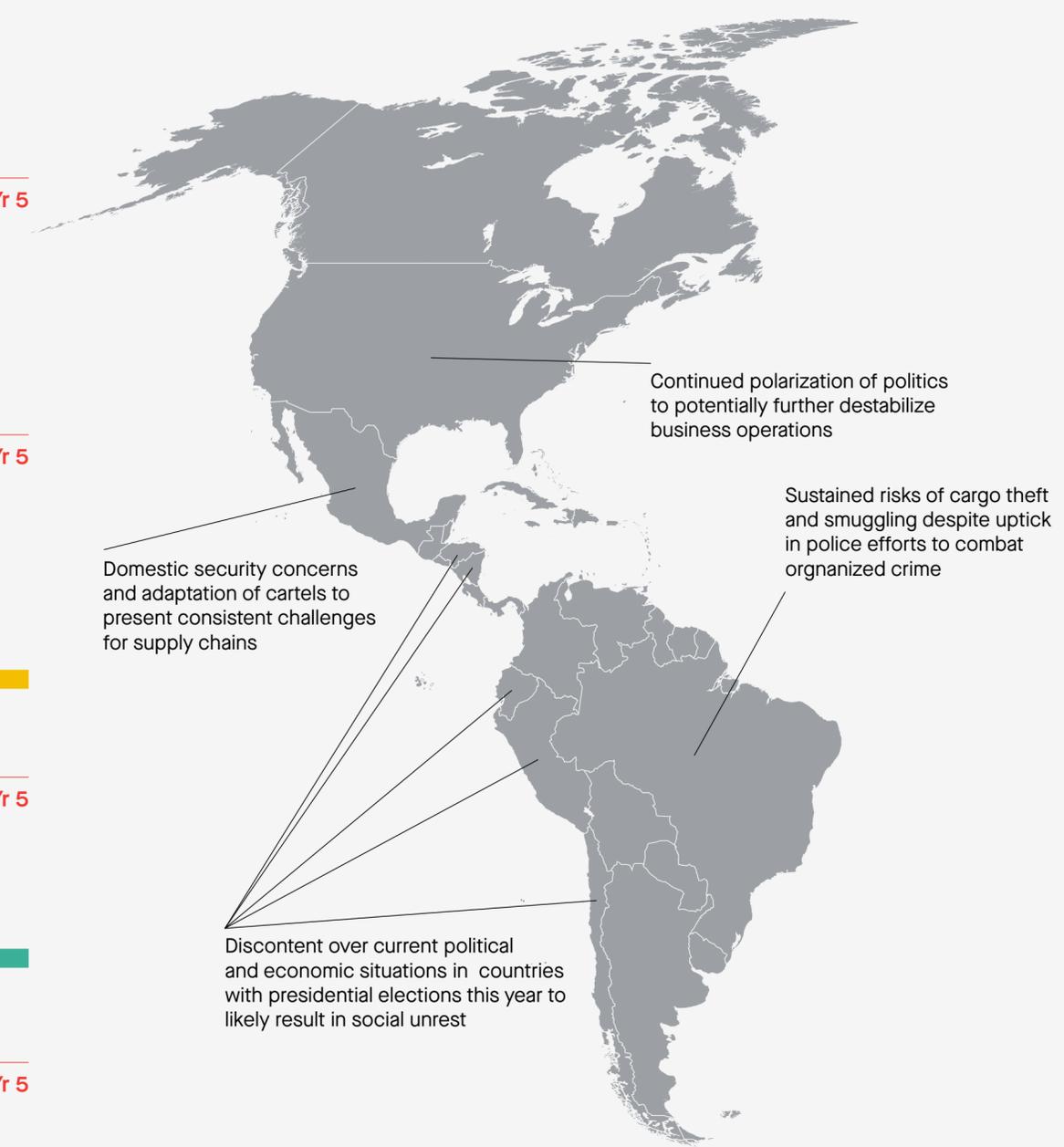
Throughout 2020, COVID-19 posed one of the largest threats to security, continuity, and resiliency of global supply chains, and it continues to cause disruptions, threaten supply systems, and have residual impact globally.



Supply chain risk forecast Americas

- Improving Trend
- Continued Trend
- Worsening Trend

Risk Category	Trend	Description	Yr 1	Yr 3	Yr 5
Regulatory	↓	Scrutiny on company supply chains likely to continue through application of regulatory changes or mechanisms, such as withhold release orders	Red	Red	Red
	↓	Environmental concerns to likely play a greater role in trade negotiations with countries in the region	Red	Red	Red
COVID-19 Impacts	→	Ineffective delivery, application of vaccine, and spread of new strains to likely lead to further lockdowns affecting supply chains in the region	Yellow	Yellow	Yellow
	→	Region to likely struggle in recovering economically, leading to potentially more security and labour rights concerns	Yellow	Yellow	Yellow
Physical Security	→	Economic strife to likely perpetuate regional migration, with concerns for potential stowaway risks	Yellow	Yellow	Yellow
	↓	Inequality and poverty to likely drive more crime, creating new and exacerbating existing trends impacting supply chains	Red	Red	Red
	→	Entrenched criminal organizations to continue to drive region to the top as the world's primary producer of illegal drugs	Yellow	Yellow	Yellow
Geopolitics	↓	String of presidential elections in next two to three years to potentially result in swings in ruling parties as discontent grows over economic and government performance	Red	Red	Red
	↑	Global importance of Latin America to likely continue to stagnate, leaving countries to focus on solving internal issues	Green	Green	Green
Business Continuity	↓	Inequality and economic disparity in Latin America likely to manifest itself in the form of more protests	Red	Red	Red



Asia and the Middle East

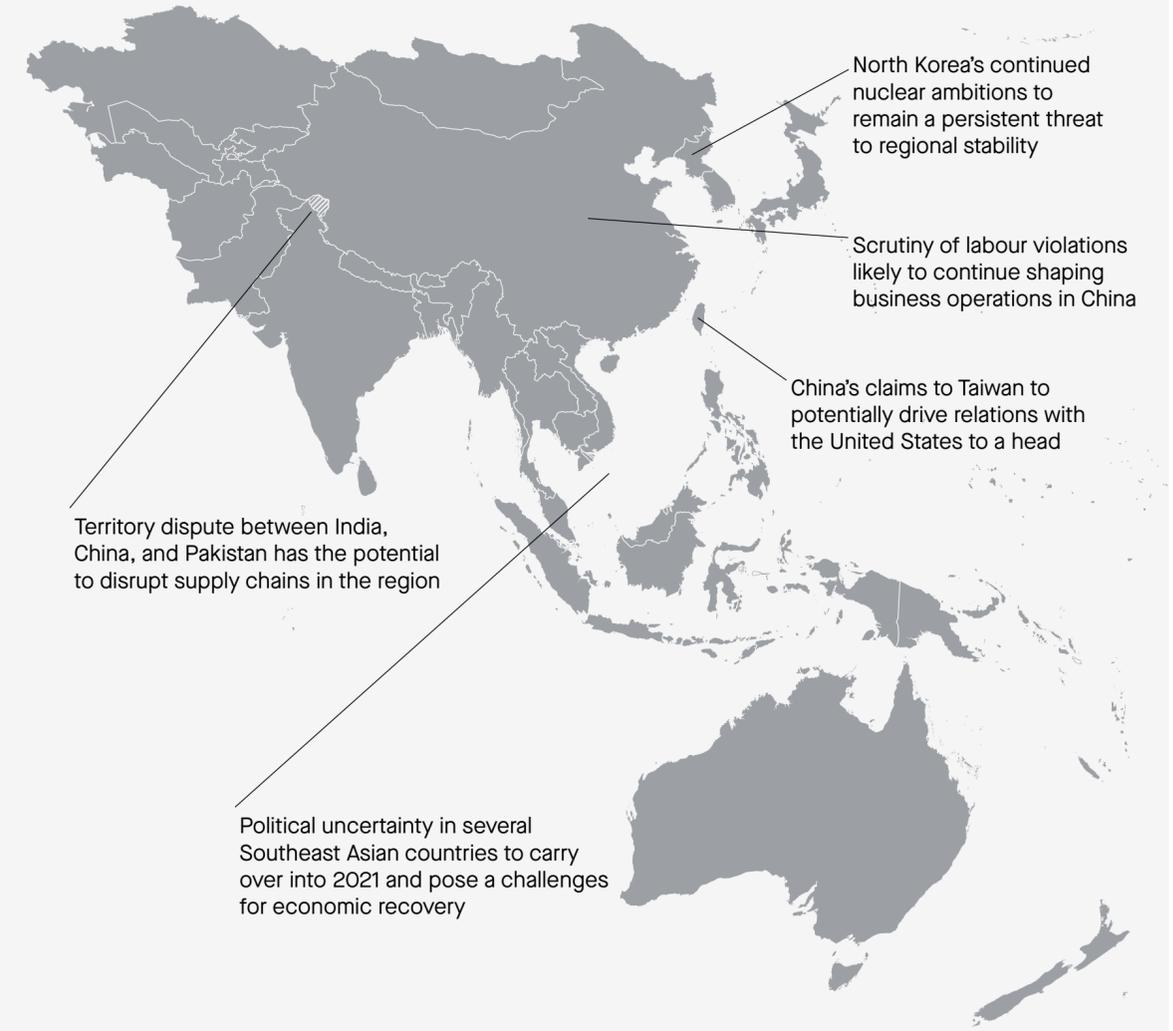
In Asia and the Middle East, the spread of COVID-19 had similar negative effects on the regions' economies, forcing many countries, such as India, Indonesia, and Saudi Arabia, to adjust labour laws to remain competitive on the global stage. This move simultaneously weakened worker protections against exploitation. The impacts of these labour law adjustments are expected to manifest in 2021 and could be modified further, depending on the status of the virus in the region, potentially exposing a larger percentage of the working population to diminished labour protections. Other business continuity tests, including natural disasters resulting from climate change and the ongoing global imbalance of shipping containers, may carry into 2021 and threaten supply chain resilience.



Supply chain risk forecast Asia Pacific

- Improving Trend
- Continued Trend
- Worsening Trend

<p>Regulatory</p> <p>↑ Application of regulatory changes or mechanisms, such as withhold release orders, to pressure countries to improve human and labour rights issues</p> <p>↑ Signing of the Regional Comprehensive Economic Partnership may help to offset regional tensions while spurring economic growth</p> <hr/> <p>COVID-19 Impacts</p> <p>→ More stringent safety controls for imported goods from known COVID hotspots to potential delay shipments, as lockdowns are implemented for resurgent hotspots</p> <p>↓ Region to likely initially struggle in recovering economically, driving more security and labour rights concerns as young population contends with unemployment</p> <hr/> <p>Physical Security</p> <p>→ Physical security risks to remain comprehensive, with countries vulnerable to smuggling and possibly increased sea piracy for ships transiting the Strait of Malacca</p> <p>→ Potential for terrorism to make a resurgence in the region, with the disputed region of Kashmir a likely flashpoint</p> <hr/> <p>Geopolitics</p> <p>↓ Territorial disputes between China, India, and Pakistan to continue to threaten stability</p> <p>↓ US - China relationship to continue to be strained and could possibly come to a head over China's claims to Taiwan</p> <hr/> <p>Business Continuity</p> <p>↓ Capacity issues, stemming in part from container shortages, to hinder ability to move goods to destination markets</p> <p>→ Climate change to impact transportation in Asia, especially in flood prone countries</p>	<p>Yr 1 Yr 3 Yr 5</p> <p>█</p> <p>█</p> <hr/> <p>Yr 1 Yr 3 Yr 5</p> <p>█</p> <p>█</p> <hr/> <p>Yr 1 Yr 3 Yr 5</p> <p>█</p> <p>█</p> <hr/> <p>Yr 1 Yr 3 Yr 5</p> <p>█</p> <p>█</p> <hr/> <p>Yr 1 Yr 3 Yr 5</p> <p>█</p> <p>█</p>
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Europe

In 2021, European supply chains will need to navigate the effects of Brexit, while increased regulatory compliance, like that seen in North America by the US government's increased issuance of WROs or the Canadian government's regulations restricting organizations from contributing to forced labour, will require a wider range of organizations to adjust their business practices. A growing focus on environmental sustainability should move to the forefront of regulatory developments in Europe, with the ongoing issue of deforestation in the Amazon blocking a conclusion to a trade agreement between the European Union (EU) and Brazil.

Africa

Terrorism could return to dominate supply chain risk in Africa in 2021, with rogue groups throughout the region certain to remain active this year. Also compounding supply chain resilience on that continent is the potential for more social unrest amid multiple countries' presidential elections this year. Furthermore, shifting regional alliances, economic downturn, persistent migration and ongoing conflict may add to the difficulties of operating in Africa.

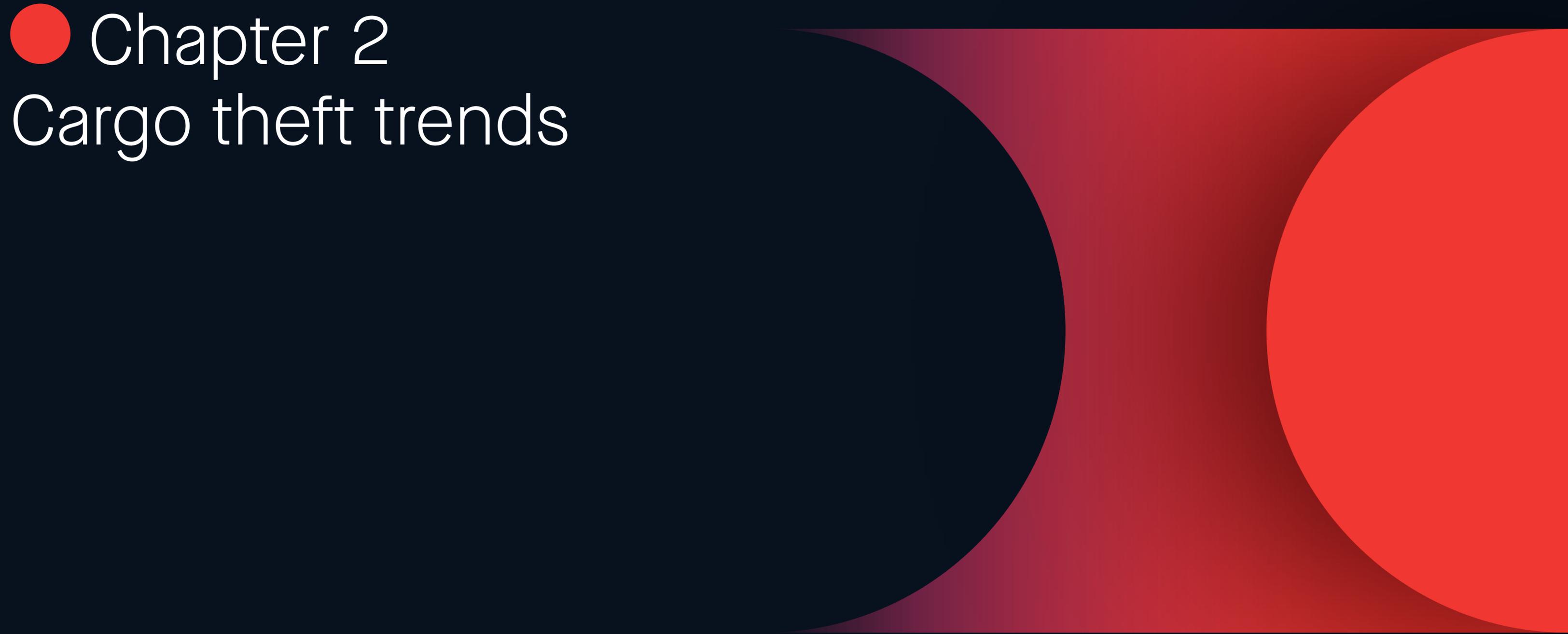


Supply chain risk forecast Europe, Middle East, Africa

- Improving Trend
- Continued Trend
- Worsening Trend

<p>Regulatory</p> <ul style="list-style-type: none"> ↑ Regional governments likely to continue to pass regulatory changes or mechanisms aimed at solving human rights issues ↑ Environmental concerns to likely play a greater role in trade negotiations with countries in the region ↓ Weakening economies and shifting migration routes, as seen in Gulf countries, to result in detrimental labour law changes 	<p>Yr 1 Yr 3 Yr 5</p> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> </div>
<p>COVID-19 Impacts</p> <ul style="list-style-type: none"> → Continued localized lockdowns as outbreaks occur, contingent on countries' ability to effectively and efficiently vaccinate citizens → Gulf countries to continue nationalizing economies due to worsening economies from the pandemic and drop in oil prices 	<p>Yr 1 Yr 3 Yr 5</p> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> </div>
<p>Physical Security</p> <ul style="list-style-type: none"> ↓ Piracy along the Gulf of Guinea will likely shift back to focusing on oil-based targets as oil prices recover to pre-COVID levels → Terrorism will continue to disrupt the supply chains in the Horn of Africa, West-Central Africa, and the Sahel region 	<p>Yr 1 Yr 3 Yr 5</p> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> </div>
<p>Geopolitics</p> <ul style="list-style-type: none"> ↓ Increased potential for political shifts in the Middle East and North Africa resulting in changes to regional alliances ↑ Decreasing barriers for business opportunities between Arab nations and Israel, as diplomatic ties are formalized → United Kingdom and European Union relationship to likely continue to face tests relating to Brexit 	<p>Yr 1 Yr 3 Yr 5</p> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> <div style="width: 33%; height: 10px; background-color: yellow;"></div> </div>
<p>Business Continuity</p> <ul style="list-style-type: none"> ↓ Increased potential for social unrest in Africa, as ten countries prepare for elections in 2021, including Ethiopia, Somalia, and South Sudan ↑ Potential for increased investment in Africa as the region possibly becomes a cheaper alternative for manufacturing 	<p>Yr 1 Yr 3 Yr 5</p> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> <div style="width: 33%; height: 10px; background-color: red;"></div> </div> <div style="display: flex; justify-content: space-around; width: 100px; margin-top: 10px;"> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> <div style="width: 33%; height: 10px; background-color: green;"></div> </div>





● Chapter 2

Cargo theft trends

Cargo theft trends likely to return to normal following pandemic shifts

- The spread of COVID-19 forced criminals to adapt, causing a shift in regional trends, such as greater targeting of certain products and modalities. BSI Connect SCREEN intelligence noted an increase in thefts from facilities in Africa and Europe, and an increase in stolen medical supplies
- Despite these changes noted in BSI incident data, some trends stayed the same, such as Latin America continuing to suffer a high number of hijackings and the US and Canada seeing consistent trends in the targeting of trucks parked in vulnerable locations
- As the spread and impact of COVID-19 lessens, cargo theft trends are expected to return to pre-pandemic levels, with certain types of goods losing value again, such as Personal Protective Equipment (PPE), and the resumption in trade leading to more movement of vehicles, restoring thieves' opportunities to again strike this transportation mode

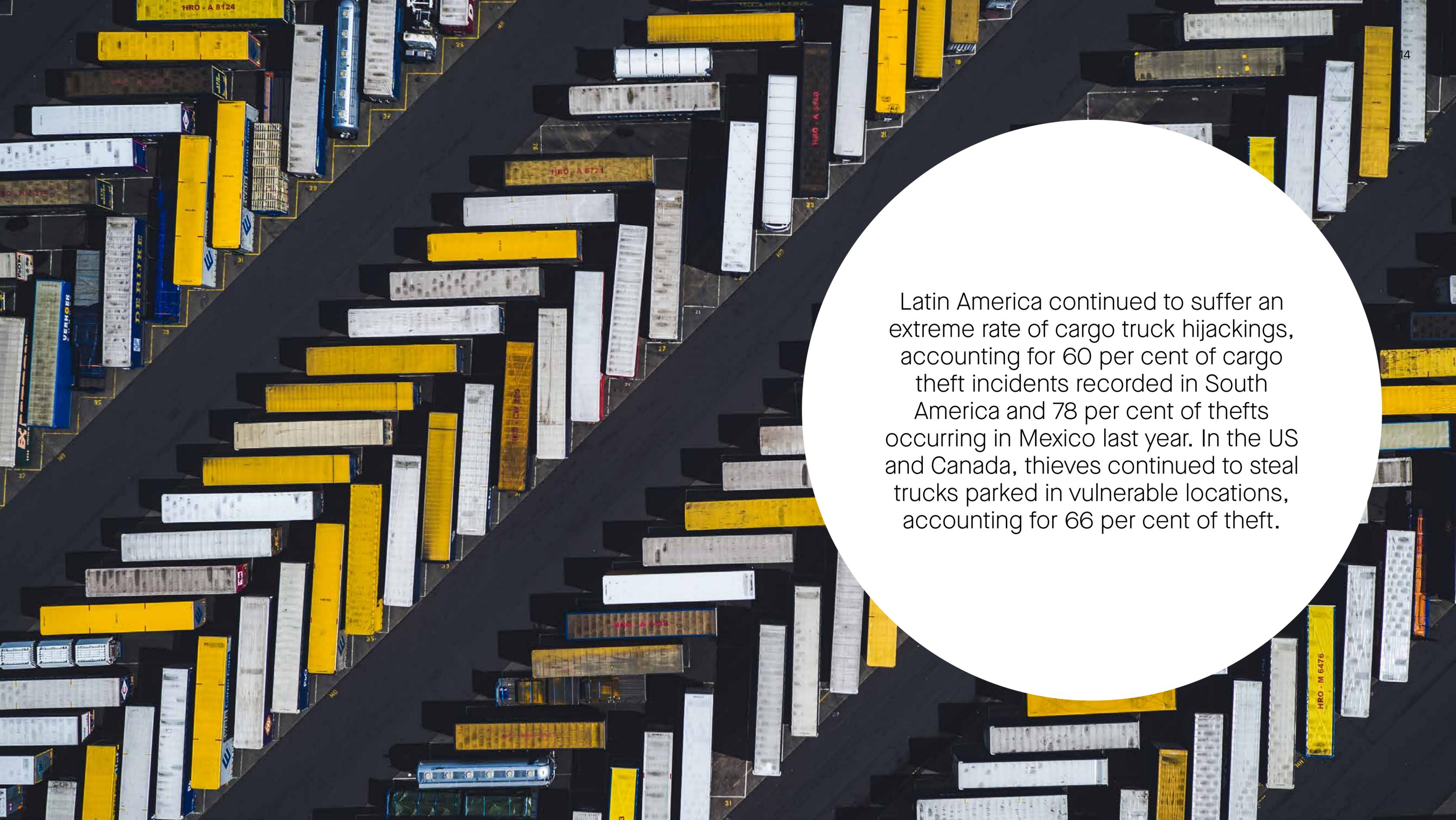
BSI-recorded cargo thefts of medical devices and supplies, which includes PPE, jumped by over 5,000 per cent in 2020 compared with 2019.



The spread of COVID-19 in 2020 not only affected legitimate supply chains and business operations, it also forced criminals to adapt. This led to shifts in regional cargo theft trends, including more targeting of goods not commonly seen as attractive to thieves and an added vulnerability for shipments stalled in facilities. This, in turn, led to more thefts involving warehouses and distribution centres in Europe and Africa. Although the spread of COVID-19 continues to influence cargo theft around the world, it's expected that the altered patterns of 2020 will revert to historic norms as the pandemic fades.

In many ways, cargo theft trends in 2020 stayed similar to activity seen in previous years; Latin America continued to suffer an extreme rate of cargo truck hijackings, for example, accounting for 60 per cent of cargo theft incidents recorded in South America and 78 per cent of thefts occurring in Mexico last year. In the US and Canada, thieves continued to steal trucks parked in vulnerable locations, accounting for 66 per cent of theft.

The spread of COVID-19 in 2020 brought about increased targeting and theft of products unusual for cargo theft incidents — arguably the most pronounced shift in this area last year. Early on, during the initial spread of the virus, thieves began to target essential goods, or products associated with preventing the spread of COVID-19, at a much higher rate as the limited supply and spike in demand drastically increased the black-market value of such items. Thefts of products such as PPE and chemicals, including hand sanitizer, and food and beverages, jumped in frequency worldwide, replacing the theft of goods more historically targeted, such as electronics. BSI-recorded cargo thefts of medical devices and supplies, which includes PPE, jumped by over 5,000 per cent in 2020 compared with 2019. Overall, the highest number of PPE thefts occurred in Europe, where a much larger portion occurred at warehouses: 70 per cent took place at warehouses and storage facilities, while only 30 per cent of thefts involved cargo trucks. Alcohol and tobacco products similarly saw a jump in thefts around the world as consumption rose while people were under lockdown.



Latin America continued to suffer an extreme rate of cargo truck hijackings, accounting for 60 per cent of cargo theft incidents recorded in South America and 78 per cent of thefts occurring in Mexico last year. In the US and Canada, thieves continued to steal trucks parked in vulnerable locations, accounting for 66 per cent of theft.

While COVID-19 drove this trend in targeting commodities, other factors also led to a spike in theft of such products. In general, the volume of such shipments increased to meet the surge in demand, giving thieves ample opportunity. In addition, and in BSI's experience, the typical security applied to such shipments is generally much lighter than that applied to high-value loads of electronics or pharmaceuticals, which contributed to the elevated rate of some types of theft.

Although global cargo theft trends are likely to reset to the norm once the spread and impact of COVID-19 lessens, the pandemic will continue to influence these trends around the world during 2021, with a spike in incidents involving medical-grade oxygen being the latest development. Many regions, including Latin America, the Middle East, and Africa, are facing extreme shortages of medical-grade oxygen as demand, pushed up by rising cases of COVID-19, has depleted normal global supplies. This shortage has sent the black-market price for medical-grade oxygen soaring, leading to a dramatic rise in the appeal of the product for cargo thieves in affected regions. As a result of this spike in price and demand, BSI recorded multiple cargo thefts involving medical-grade oxygen in the later months of

2020 before picking up dramatically in early 2021. Incidents so far this year represent a 200 per cent increase over total 2019 theft.

Looking forward to the rest of 2021, none of the COVID-19 impacts on cargo thefts are expected to remain permanent. Once the virus declines, it seems as if certain types of goods that spiked in terms of theft will lose value and therefore account for less crime moving forward, as illustrated by BSI Connect SCREEN intelligence noting a decrease in the frequency that PPE had been stolen in the second half of 2020. Additionally, cargo thefts of medical devices and supplies, while still seeing some targeting by thieves, dropped by 25 per cent in the second half of 2020 versus the year's first two quarters. However, the economic impact of COVID-19 has been detrimental for economies around the world, so it is possible that crime, including cargo theft, may rise in the early part of this year as individuals continue to try to compensate for lost income.

Looking forward to the rest of 2021, none of the COVID impacts on cargo thefts are expected to remain permanent. Once the virus declines, it seems as if certain types of goods that spiked in terms of theft will lose value and therefore account for less crime moving forward.



Advisor Insight

Organizations looking to mitigate cargo crime in their supply chain need to stay ahead of risk. By proactively understanding the risk profile of a region, implementing relevant procedures to secure the supply chain, and consistently re-evaluating crime vulnerabilities, organizations will build a supply chain that is ahead of the criminal tactics and trends detailed in this report. To better prepare for and respond to emerging risks, organizations should consider the following recommendations to protect cargo, both in-transit and when at rest:

- Review security risk assessments regularly to identify and capture emerging theft risks and apply loss prevention measures
- Review operational security measures for facilities that are closed or where there are reduced operations to ensure appropriate protection is in place
- Review facility security systems and physical maintenance programs to ensure security equipment is operational during closed or reduced-activity periods

- Review service-level agreements with security service providers; where an increased risk of theft is identified, consider increasing the number of personnel patrolling the facility as a deterrence
- Liaise with local law enforcement to understand crime activity and risks, and where appropriate, consider requesting regular police visits to the facility
- Transportation organizations should regularly review their route risk management planning and anti-hijacking protocols to ensure effective alarm response and escalation communications, particularly with law enforcement.

Warehouses and facilities storing and distributing products attractive to thieves should be more vigilant than ever with their security protocols. Specifically focus on managing and controlling access to products and logistics information, including:

- Locking storage areas when not in use, and strictly controlling the number of personnel given access to these areas
- Meticulously control and record who is authorized to access product logistics information
- Manage access to restricted storage areas with physical keys or swipe-card protocols Record issuance and return of physical keys in a log; all keys should be secured when not in use
- Train staff to recognize and report suspicious activity or unauthorized persons seeking access to restricted areas or product logistics
- Ensure appropriate due diligence is conducted when hiring temporary staff, and strictly supervise their activities and access to restricted areas and logistics information.



Paul Raw
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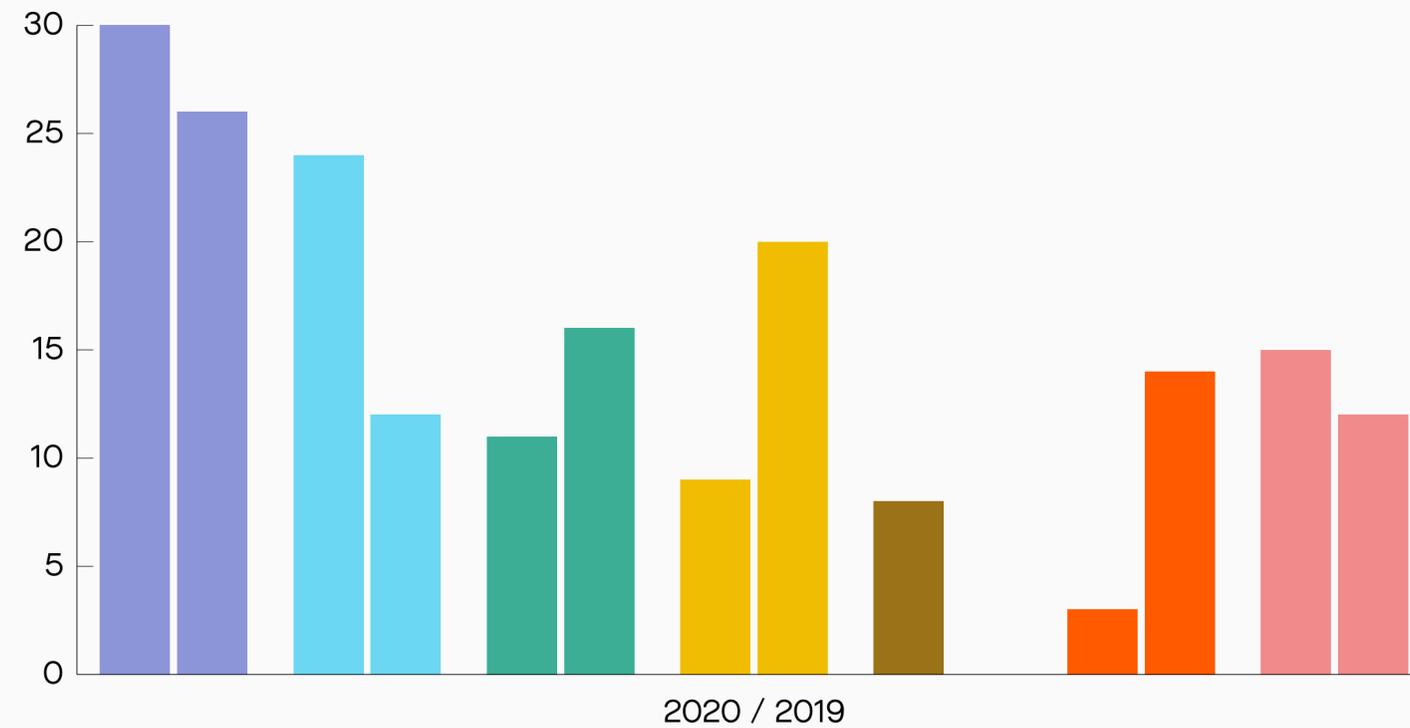
David Fairnie
Principal
Consultant,
Supply Chain
Security, BSI

Cargo theft trends

Global 2019 v. 2020

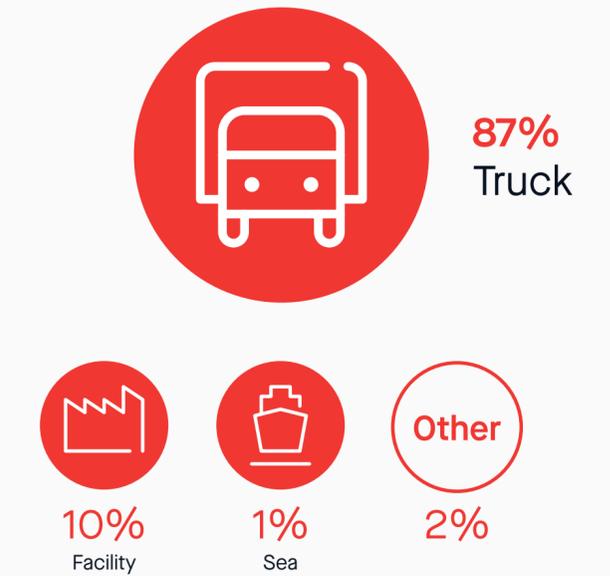
Cargo theft types

	2020	2019
Hijacking	30%	26%
Theft from facility	24%	12%
Theft of vehicle	11%	16%
Theft from vehicle	9%	20%
Theft from container/trailer	8%	0%
Slash and grab	3%	14%
Other	15%	12%

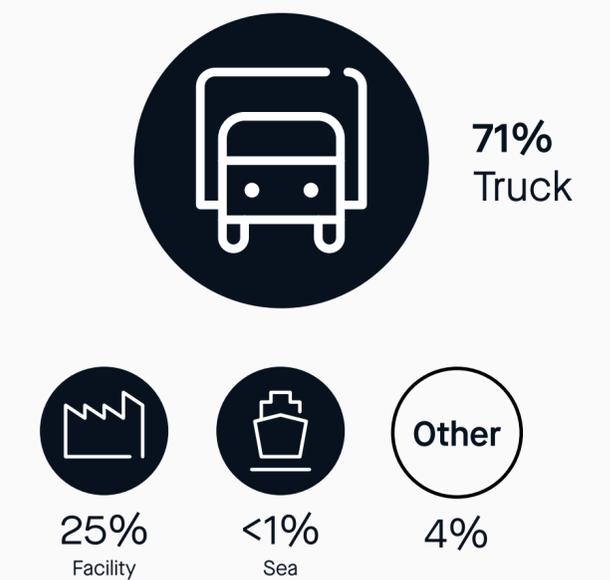


Modalities of theft

2019

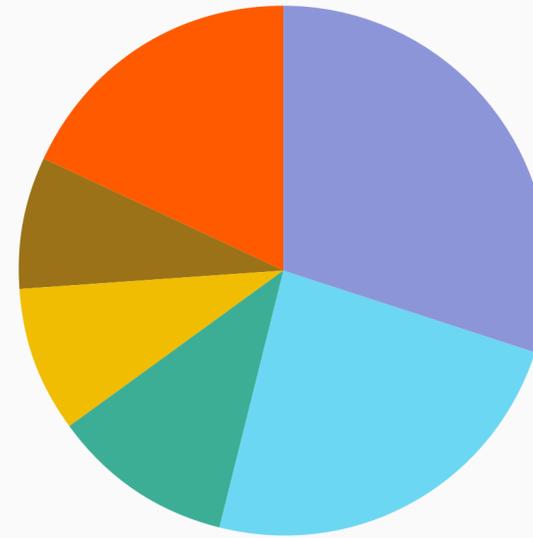
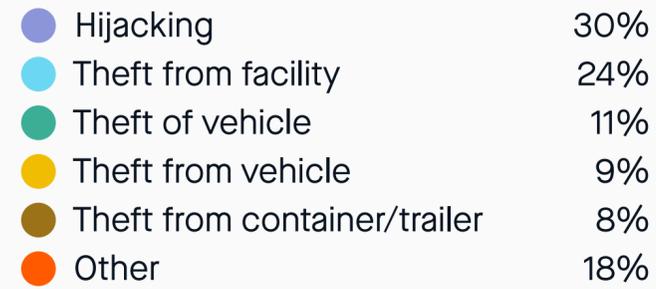


2020



Cargo theft trends Global 2020

Cargo theft types 2020



Top commodities stolen 2020



Modalities of theft 2020



Top countries for cargo theft 2020

- Brazil
- India
- Mexico
- Germany
- Russia
- United Kingdom

● Chapter 3

Migration trends



Economic hardships to propel risk of labour, human rights violations, and stowaway smuggling

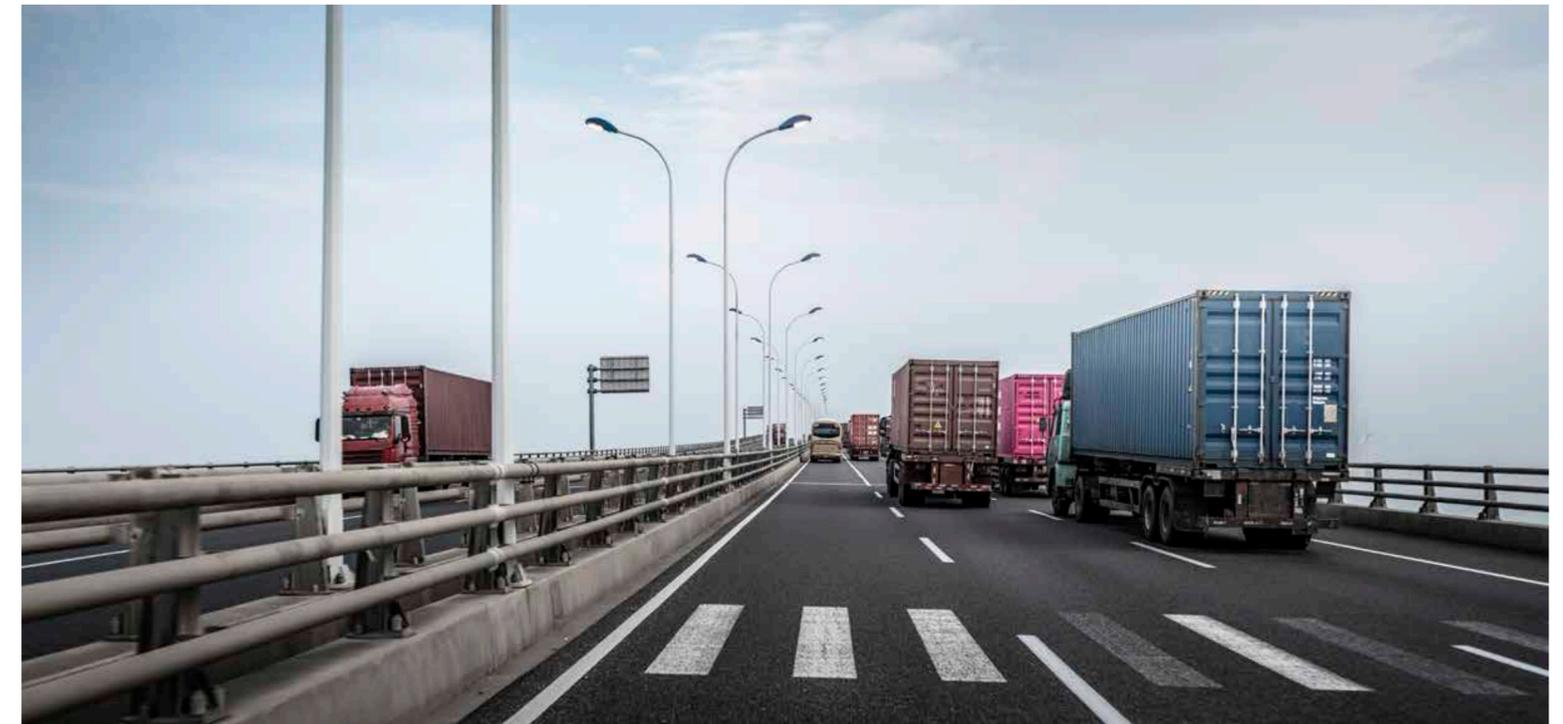
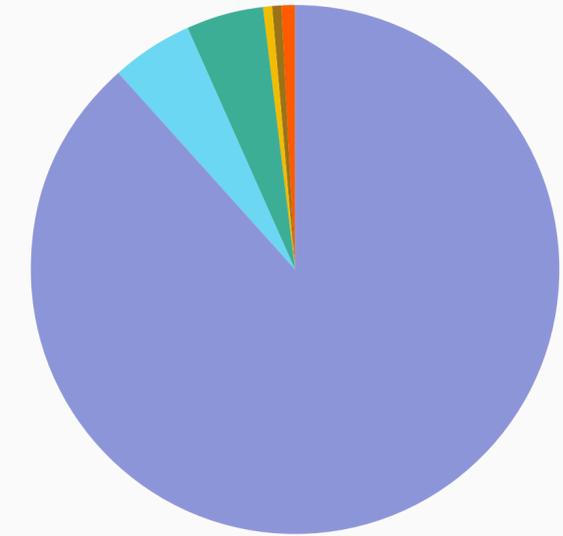
- COVID-19's pushing economies into lockdown put the world's most vulnerable communities at greater risk of labour exploitation and human rights violations, creating new migration trends as people attempt to avoid hardships and seek economic opportunities
- At the start of 2020, border closures and other pandemic impacts led to a decrease in migration, but new stowaway smuggling routes and labour risks developed later in the year as controls declined but economic opportunity continued to be sparse, leaving migrants outside their countries susceptible to labour exploitation

Shifting migration routes in Europe, Asia, Middle East and Africa

Mass migration on its own does not pose an overt threat to supply chains; instead, it is the tendency for some individuals, often facilitated by organized crime, to exploit gaps in security that are the real risk. Europe and the Americas are two regions where stowaways are consistently present in supply chains. This trend proved to be true throughout 2020 and will almost certainly carry over into 2021. As in previous years, an overwhelming majority of stowaway incidents involved the trucks, accounting for approximately 89 per cent of incidents recorded by BSI. Lockdowns and restrictions created queues and idle times for trucks, further aggravating this problem in 2020.

Top Modalities of stowaway incidents 2020

Truck	89.13%
Rail	4.98%
Sea	4.9%
Van	0.54%
Air	0.38%
Facility	0.08%



Despite the temporary downturn in migration early last year due to COVID-19 and related lockdowns, a significant increase and shift in migration occurred by summer¹. Escalating political and economic issues led migrants increasingly to attempt to reach other regions of the world, notably migrants from North Africa and the Middle East traveling to Europe.

An uptick in migration from the Middle East and North Africa occurred along the Balkan and Central Mediterranean routes², with human traffickers often targeting trucks to move stowaways. Migrants in border EU countries, often facilitated by human traffickers, will attempt to stow away into parked and slow-moving trucks.

Although migration levels in Europe continue to remain well below peak levels, with the EU border agency, Frontex, indicating that irregular migration into the region last year was at its lowest point since 2013 due to the spread of COVID-19³, the risk of stowaways remains for organizations operating in Europe.

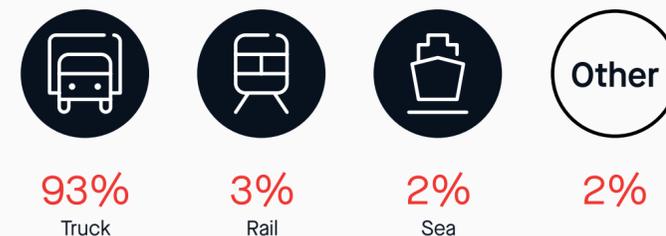
Stowaway risks in Europe

- Migration route
- EU Schengen
- EU Non-Schengen
- Non-EU Schengen

Countries of detection in recorded stowaway incidents 2020

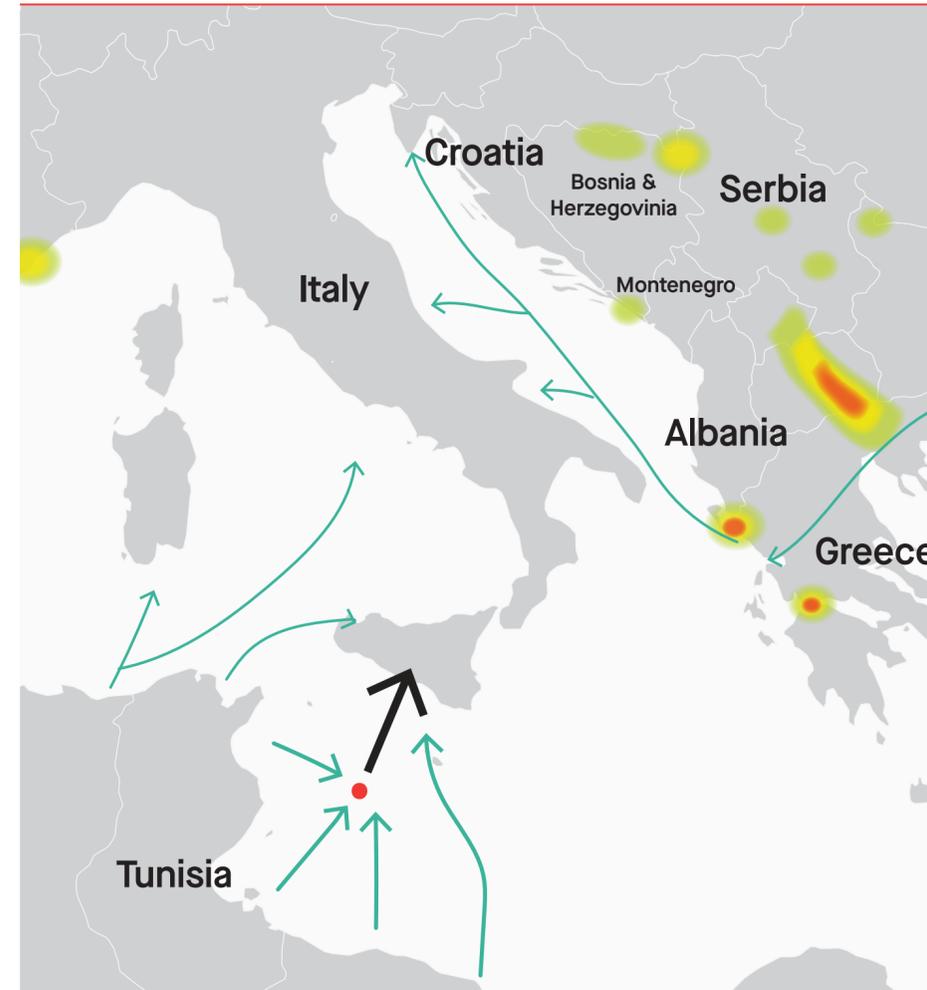
Romania 16%	Germany 9%
Greece 7%	France 7%
North Macedonia 7%	Other 55%

Modalities of recorded stowaway incidents 2020



¹ <https://frontex.europa.eu/media-centre/news/news-release/situation-at-eu-external-borders-arrivals-picking-up-still-down-for-the-year-nqkCT5>
² <https://frontex.europa.eu/media-centre/news/news-release/irregular-migration-into-eu-last-year-lowest-since-2013-due-to-covid-19-j34zp2>
³ <https://frontex.europa.eu/media-centre/news/news-release/irregular-migration-into-eu-last-year-lowest-since-2013-due-to-covid-19-j34zp2>

Besides migration from the Middle East and Africa towards Europe, the Americas also continued to experience a high number of stowaway incidents in 2020. Like Europe, authorities there initially recorded a slight dip in frequency at the beginning of the year, but movements eventually increased as controls to stop the spread of COVID-19 eased⁴. Throughout the year, the dominant trend in stowaway activity was through shipments originating in Mexico and destined for the US, primarily Texas. Some migrants from Central American countries, attempting to travel north to the US, tried to do so by stowing away in trucks or by forming large caravans passing through Mexico either on foot or on top of rail freight. The frequency of these events suggests that such a risk will continue into 2021.



Migration trends in the Mediterranean

Based on historical data and qualitative analysis

- Hospots for migrant discovery
- Migrant transit point in Lampedusa, Italy
- Illegal migration route
- Legal migration route



General path of rail freight routes in Mexico used by migrant stowaways

- El Diablo rail
- La Bestia rail freight route

⁴ <https://www.cbp.gov/newsroom/national-media-release/cbp-announces-january-2021-operational-update>

Further COVID-19 fallout: Child labour forecast to increase in Latin America

Along with the security risks to supply chains associated with mass migration, it also poses several key corporate social responsibility risks, most notably, the increased potential for labour rights violations. Various international organizations have voiced concern over the growth of child labour in countries across Latin America due to the economic and social impacts of the pandemic. At the start of the pandemic, the International Labour Organization (ILO) predicted that child and forced labour would increase due to the crisis⁵ and some signs of that materializing have been seen both in 2020 and early 2021.

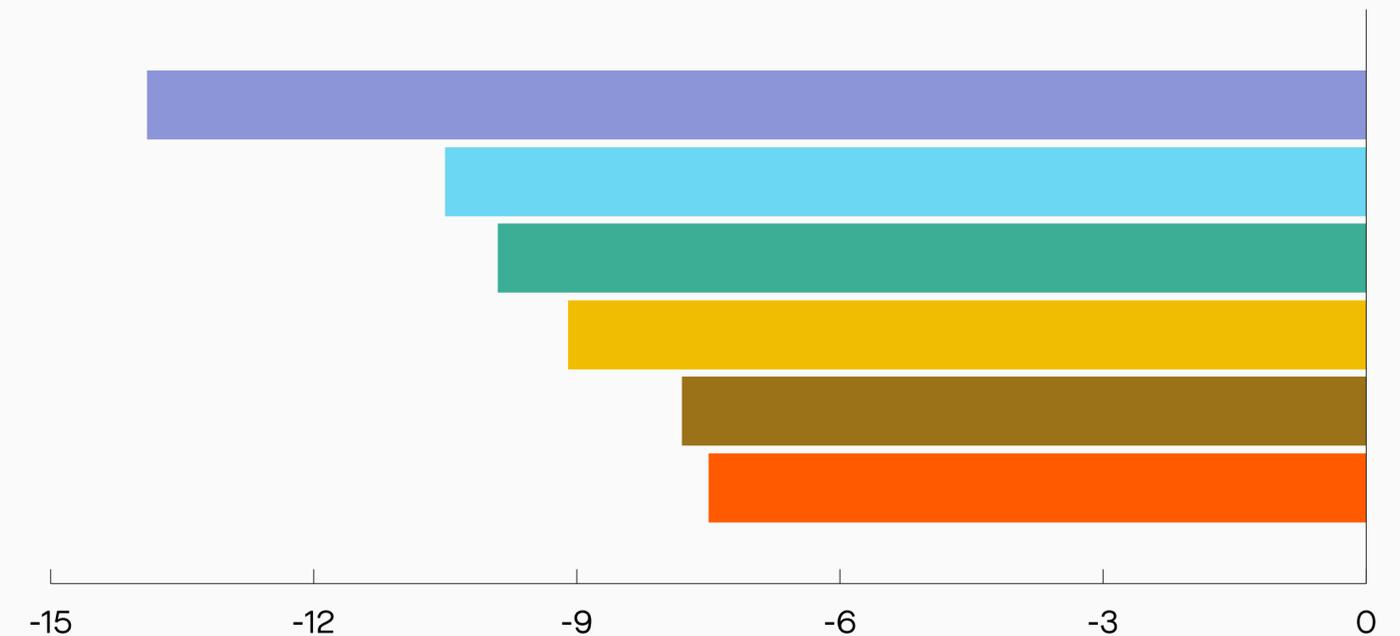
The multifaceted nature of child labour in developing countries has made tackling the issue difficult, especially as the economic situation has deteriorated in some countries. Further, as these hardships continue and schools remain closed, child and forced

labour incidents are seen increasing in 2021, as the possibility grows of all family members being forced to work to make a living. Hence, focusing on mitigating these threats and enhancing the vetting of suppliers and workers throughout the supply chain is increasingly important in 2021.

Decreased economic output also has influenced government revenue and, in turn, the ability to enforce labour laws. According to the International Monetary Fund (IMF), major Latin American countries have significant projected decreases in gross domestic product (GDP), with Mexico, Ecuador, Peru and Argentina standouts for detrimental economic impact⁶. Many governments have sought to spur growth by scaling back labour regulations in reaction to the economic downturn. However, deregulation holds the inherent risks of increasing child and forced labour, as well as worsening general working conditions.

Estimated GDP growth 2020

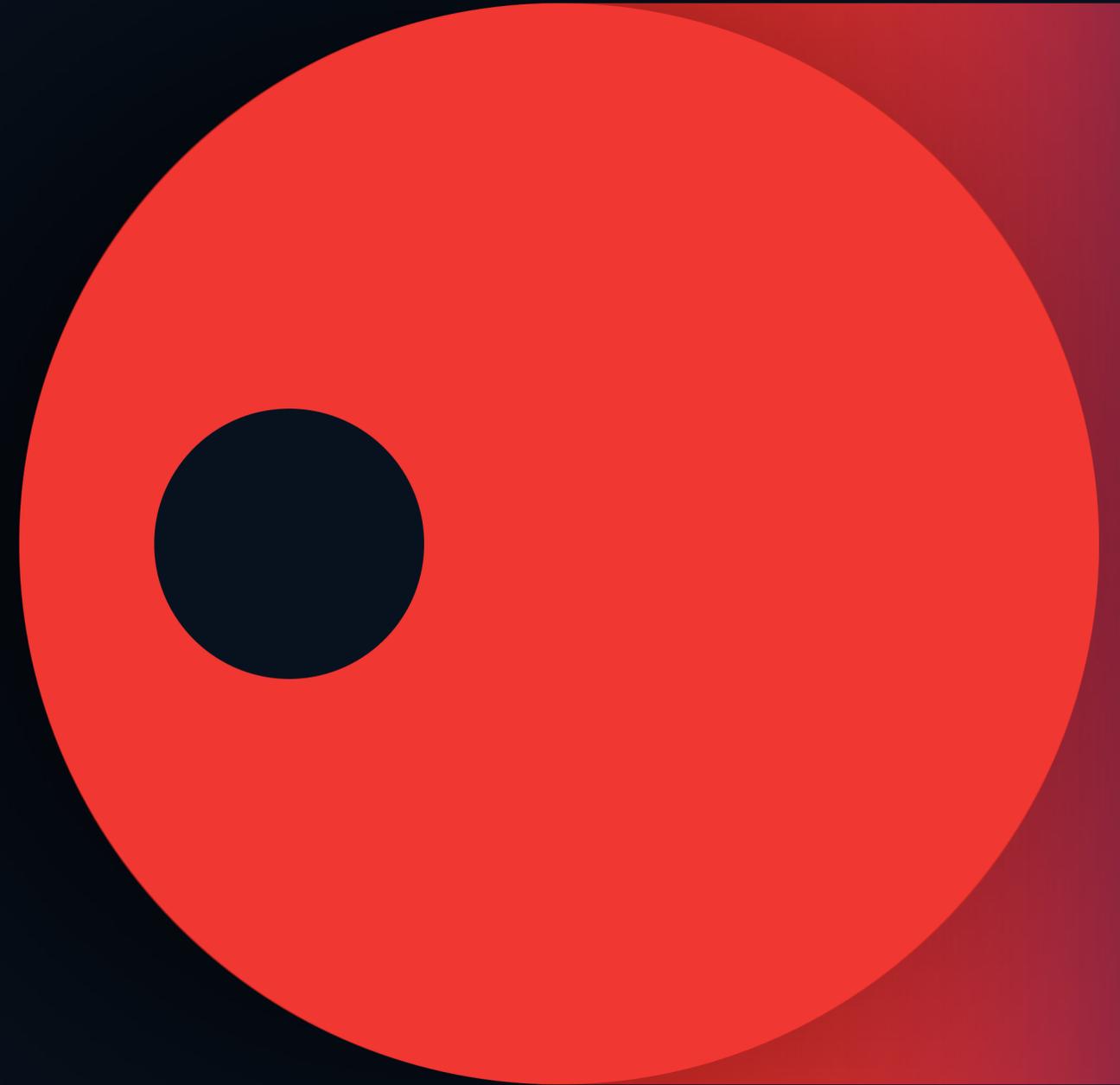
Peru	-13.9%
Mexico	-10.5%
Argentina	-9.9%
Brazil	-9.1%
Colombia	-7.8%
Chile	-7.5%



⁵ https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_747583/lang--en/index.htm

⁶ <https://blogs.imf.org/2020/10/22/pandemic-persistence-clouds-latin-america-and-caribbean-recovery/>

● Chapter 4 Drug smuggling trends



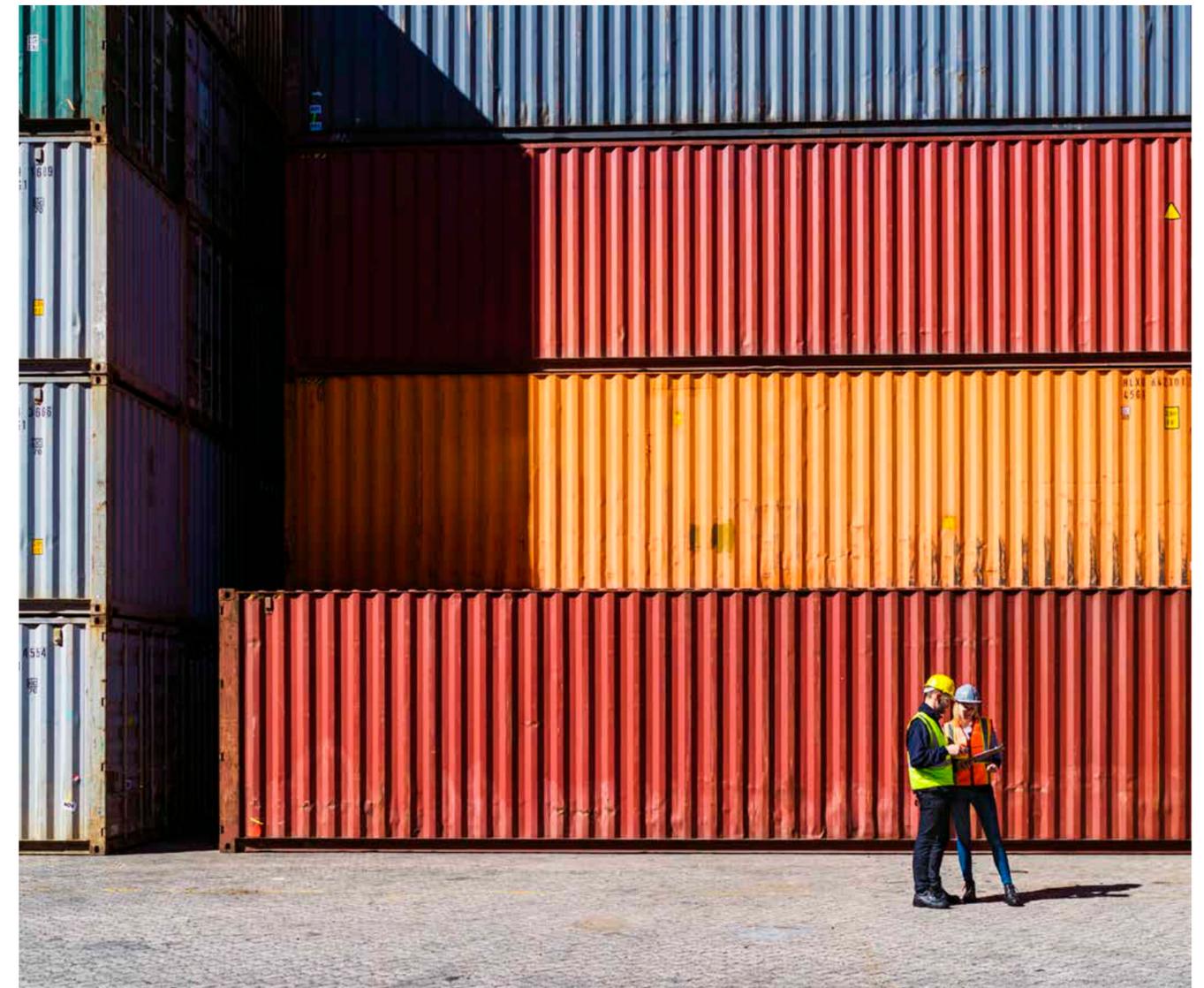
Drug smuggling trends to remain consistent as details shift

- Gangs in the historical production centres for illegal drugs in Latin America and Asia continued to produce and attempt to transport to the same destinations, including North America and Europe
- However, smugglers employed novel methods of concealment or routes to move shipments of illegal drugs to destination markets in North America and Europe

As with cargo theft, the spread of COVID-19 had a major impact on drug smuggling in 2020, leading groups to adapt in tactical ways that led to altered risks to supply chains. The spread and response to COVID-19 had cut off traditional supply chains through lockdowns and mobility bans, challenging operators, port security, and other introduction points. Despite these changes, smugglers adapted

to the COVID-19 world by changing means and methods, while largely following historic patterns. This ingenuity could continue to confront organizations throughout this year, with smugglers using novel methods of concealment or routes to move shipments of illegal drugs to destination markets in North America and Europe.

While not all dockworkers are corrupt of course, there are some workers who will coordinate with gangs at ports in South America to remove the drugs from ships and put them on cargo trucks transiting Europe. Shipments of illegal drugs found in cargo in Europe were embedded in food and beverage products on a large scale in 2020.



The closure of the US-Mexico border to all but essential traffic, namely freight, removed a key avenue for cartels to traffic illegal drugs into the US.



COVID-19 affects criminal supply chains in Asia and the Americas

Just as with many organizations, Mexican drug cartels felt the impact of the initial outbreak and spread of COVID-19 on their criminal supply chain in 2020. The measures implemented to halt the initial spread of COVID-19 disrupted the ability of cartels to secure the chemicals needed to produce illegal drugs, along with the cocaine from South America that cartels sell both domestically and internationally.

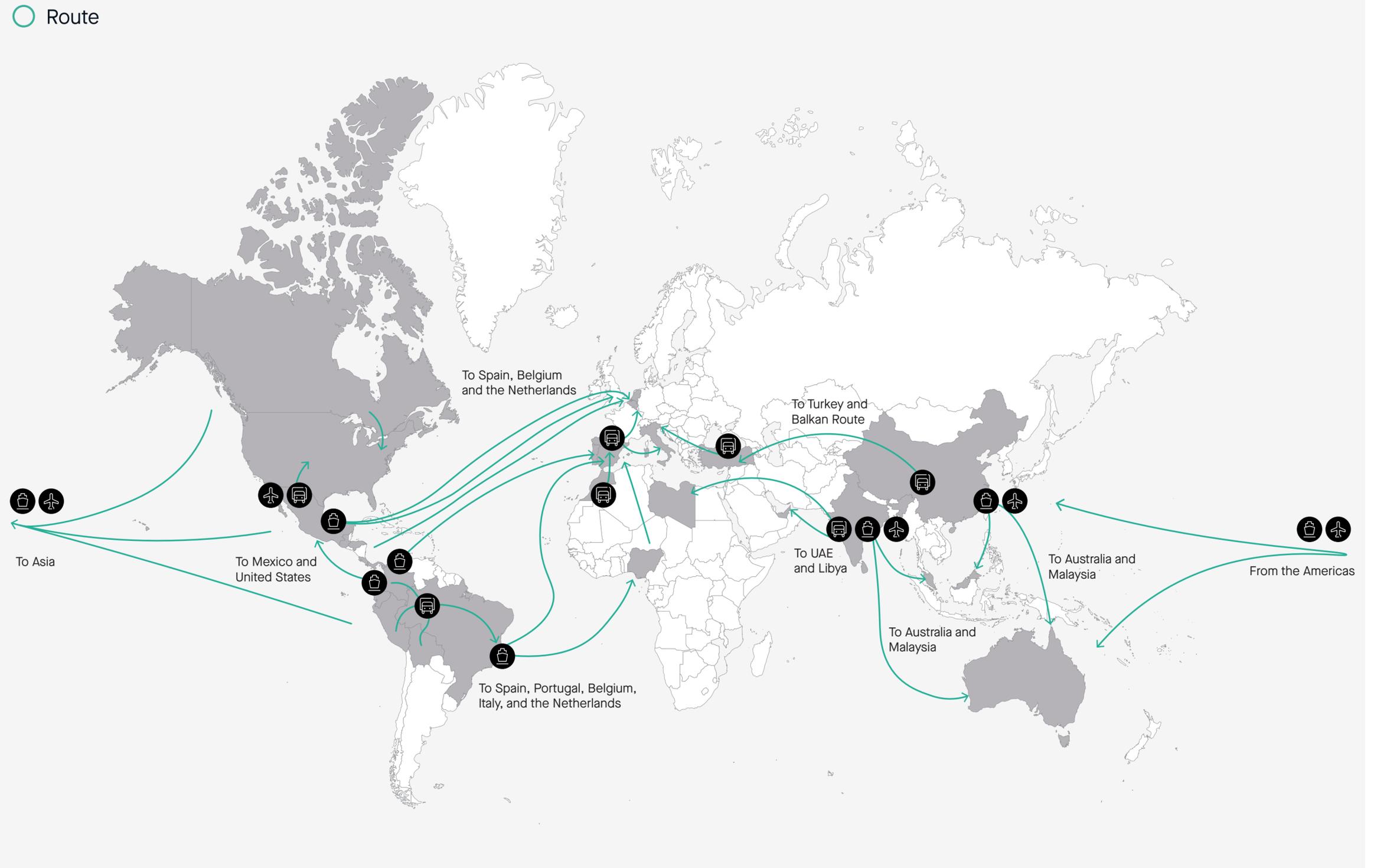
Beyond the supply disruption, the US government's announcement of enhanced illegal drug interdiction efforts in the Caribbean Sea converged with ingredient supply constraints to have an impact on Mexican cartel supplies. As a result, cartels were forced to develop alternative sources. Perhaps most notably, the closure of the US-Mexico border to all but essential traffic, namely freight, removed a key avenue for cartels to traffic illegal drugs into the US. That, combined with supply constraints, had significant ramifications for supply chains in the short to medium term. Cartels increasingly looked to exploit corrupt individuals or to infiltrate supply chains deemed essential to replace this restricted transportation route.

The impact of COVID-19 was measurable in seizure totals by month, which fell last year from March to the lowest level in May before picking up significantly through August. One possible adaptation that can help to explain the uninterrupted trafficking of substances, including methamphetamine and fentanyl, could be a pivot to air cargo as a means of acquiring the chemicals to produce illegal drugs. BSI Connect SCREEN intelligence noted this by recording two seizures of fentanyl from air cargo shipments.

Another possible factor to explain the continued ability of cartels in Mexico to traffic illegal drugs is the development of alternative chemicals, beyond diversifying their sources of chemicals.

Lastly, thefts of legal pharmaceuticals have occurred on a massive scale in Mexico since the outbreak of COVID-19, with incidents often occurring at hospitals, pharmacies, and even from freight.

Major global illegal drug smuggling flows 2020



Advisor Insight

Tips for leveraging technology to audit business partners in the post-COVID-19 world

Organizations are increasingly using technology to carry out remote audits of business partners around the world. However, there are several considerations and tips that organizations should follow to ensure effective implementation of such audits.

- Immersive technologies have allowed organizations to reach their suppliers more easily through virtual means
- Even post-pandemic, it is likely that remote assessments that include in-depth document review paired with immersive technology giving a live view of the site will continue to be used to connect in-demand specialists and allow for the ability to see hard-to-reach areas and real-time assessment

- Moving forward, these types of technologies will allow organizations to troubleshoot supply chain issues in real time
- Organizations will be able to give their suppliers training, assistance with investigations, and on-demand review of standard operating procedures whenever needed without traveling to a site
- We suggest reaching out to suppliers to understand their willingness and ability to participate in virtual assessments, auditing, and coaching.

Questions and considerations should include:

- How good is the internet, Wi-Fi, and cell signal at the site to allow for sharing of video? Recording of videos can work, but live video is preferred
- What is the best way to share documents securely and confidentially?
- What are the key portions of the facility that the company wants to see and assess, either in pictures or live video? For security assessments, we suggest both interior and exterior loading docks, facility perimeter, all visitor and employee entrances, any key production areas, IT control rooms, video and alarm control rooms, and a walk around the exterior of the facility. A floor plan of the site can be helpful for planning
- Who will participate in the audit? Prepare an agenda to better plan when speaking with key personnel on-site



Tony Pelli
Practice Director,
Security and
Resilience, BSI

Emerging drug-smuggling trends

The increase in trafficking of methamphetamine and fentanyl from Mexico to the US is expected by BSI to continue in 2021. This, in turn, could affect measures that organizations take to mitigate the risk of illegal drug smuggling in their cargo. In line with BSI-recorded incidents involving cargo, data from CBP shows an increase in seizures of methamphetamine and a decrease in cocaine seizures for 2020⁷.

BSI intelligence-recorded seizures of illegal drugs from cargo entering the US

	2019	2020
Amphetamine-type stimulants	22.4%	40.6%
Cannabis	27.5%	27.2%
Coca and Cocaine	38.7%	24.28%
Other	11.2%	7.8%

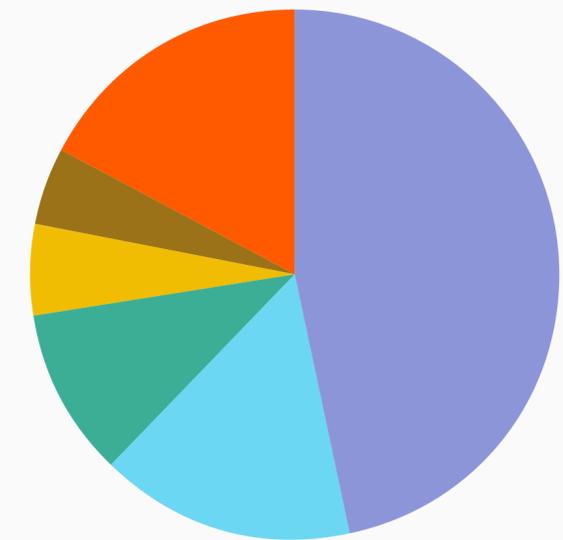
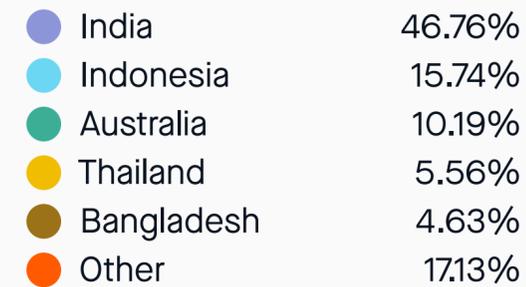
Disruptions in cargo flows between cocaine-producing countries and cocaine-importing countries during the spread of COVID-19 probably forced organized criminal groups to find different smuggling routes and to seek new modalities for transporting drugs. In addition, markets for cocaine have shifted, with Europe taking over as the top destination for the illegal substance, while the US market became

dominated by amphetamine-type substances. The increased smuggling of methamphetamine tracks with trends outlined by the United Nations Office on Drugs and Crime (UNODC) and US Drug Enforcement Administration (DEA).

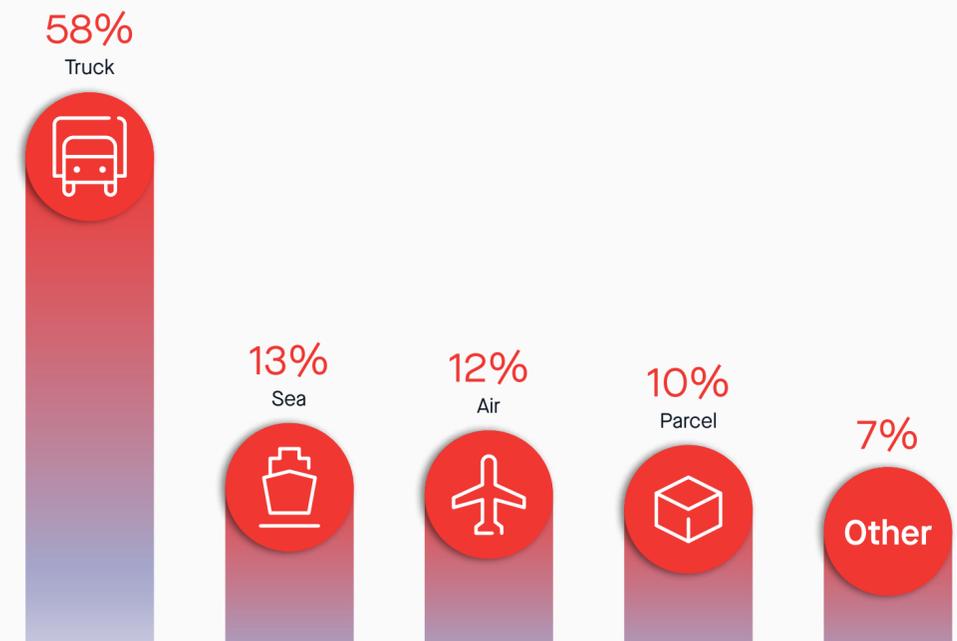
This trend in illegal drug seizures in the US is expected to continue in 2021 and require organizations to shift strategies to combat the risk in several slightly different ways. Unlike marijuana and even cocaine, seizures of methamphetamine largely have been less-than-truckload quantities. This suggests that organizations may be more likely to encounter the introduction of illegal drugs in otherwise-legitimate shipments of goods, rather than by dedicated truckloads facilitated by corrupt supply chain employees. A shift to greater emphasis on employee vetting may help mitigate this risk, rather than concentrating on vetting the contracting company to determine legitimacy.

Another trend that BSI expects to continue in 2021 is the growing trade of illegal drugs in Asia. Last year, the proportion of incidents of illegal drugs seized from cargo in Asia increased by 77 per cent over 2019 in BSI Connect SCREEN intelligence-recorded incidents. Although in terms of raw numbers, more seizures of illegal drugs from cargo still occur in the Americas and Europe, the increased proportion of incidents occurring in Asia is indicative of the growing smuggling trend in the region.

Top countries in Asia for illegal drug seizures from cargo 2020



Modality of seizures of illegal drugs from cargo in Asia 2020

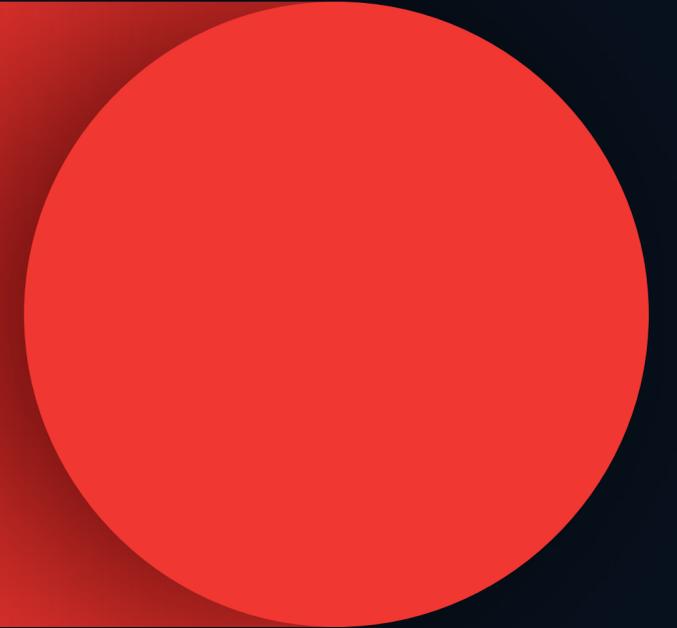


⁷ <https://www.cbp.gov/newsroom/stats/cbp-enforcement-statistics-fy2020>



The growing trade of illegal drugs in Asia is expected to continue in 2021. Last year, the proportion of incidents of illegal drugs seized from cargo in Asia increased by 77 per cent over 2019 BSI-recorded incidents.

● Chapter 5 Man-made disruption trends





Political protests and labour strikes to carry into 2021

- The risk of man-made disruption to supply chains grows as the consequences of the pandemic amplify socio-economic inequalities
- Widespread human-led disruption initially decreased in the first half of 2020 due to lockdown measures
- Governments and supply chains may face new challenges in 2021 as single-issue anti-lockdown protests or industry-specific labour strikes evolve into complex anti-government protests that challenge the resilience of business operations

Political protests not stopped by COVID-19 lockdowns

Political protests and labour strikes will remain prevalent in 2021 as countries continue to grapple with the uncertainties of a pandemic, high rates of unemployment, and continued social unrest. In 2020, protests occurred in each region of the world, with some of the most impactful ones reported in Belarus, Russia, the Netherlands, and Germany in Europe; Hong Kong, India, and Myanmar in Asia; Chile and Brazil in South America; Mexico and the US in North America; Iran, Lebanon, and Israel in the Middle East; and South Africa, Nigeria, and Tunisia in Africa. While varied events initially triggered these protests, in most cases the unifying trends underlying them are stagnating inequality and poor living standards.

As political protests emerged, some remained concentrated, resulting in generally peaceful demonstrations with limited impact to business operations, as seen in parts of the US and Europe. In other instances, social unrest quickly evolved into nationwide demonstrations, sometimes becoming violent and highly disruptive as protestors demanded political changes through strikes, road blockages, and looting, as was seen in Belarus, Nigeria, and India.

Labour strikes tied to economic downturn continue globally

As the pandemic takes its toll on economies, workforces across various industries have been hit by unanticipated business closures and subsequent unemployment. As a result, some countries initiated changes in labour laws, disallowing or making collective bargaining more difficult and other movements, as seen as a part of Indian labour law reforms in Q3 2020, for example⁸. These moves led to a significant increase in labour strikes in the second half of 2020, following facility closures and restrictions on gatherings.

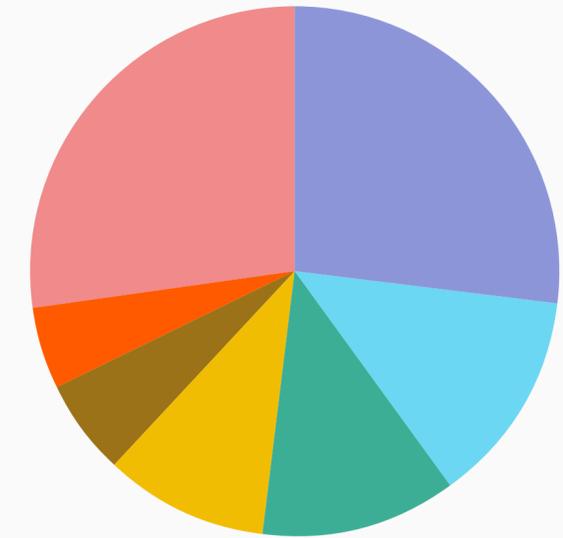
Globally, BSI Connect SCREEN intelligence recorded 27 per cent of labour strikes taking place in the food and beverage industries, followed by 13 per cent in the metals industry and 12 per cent in the apparel and footwear sector.

However, as the economy opens back up around the world following the pandemic, labour strikes could ensue with demands related to compensation, wage withholdings, and benefits, as well as payment for added complexities resulting from working through the pandemic.

⁸ India Ministry of Labour and Employment, 2020: <http://egazette.nic.in/WriteReadData/2019/210356.pdf>

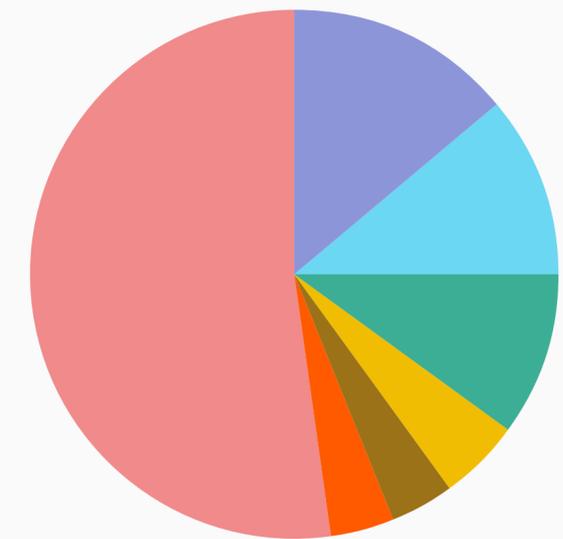
Top industries experiencing labour strikes 2020

● Food and Beverage	27%
● Metal	13%
● Apparel and Footwear	12%
● Fuel	10%
● Manufacturing materials	6%
● Construction materials	5%
● Other	27%



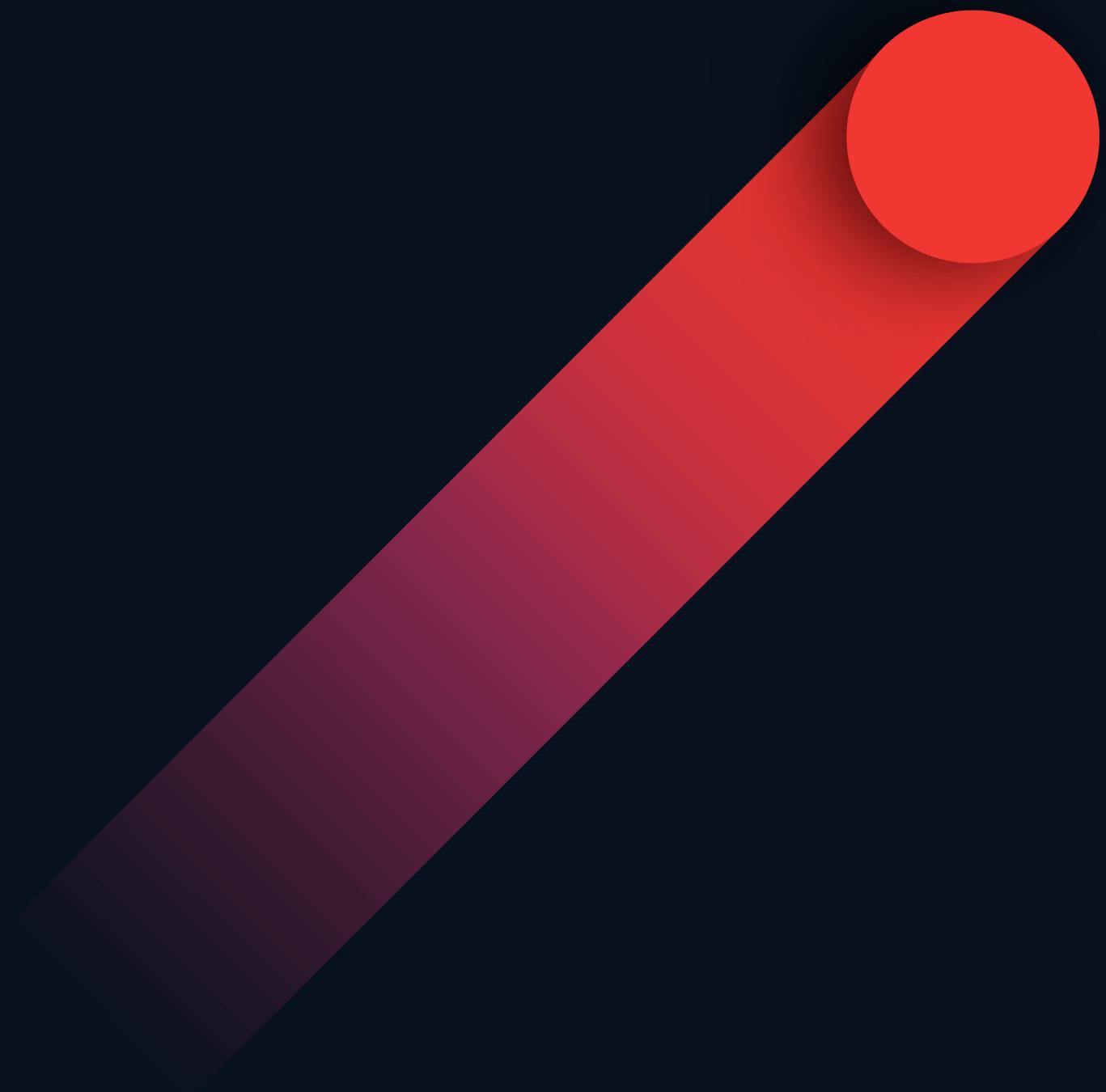
Top countries experiencing labour strikes 2020

● Italy	14%
● India	11%
● France	10%
● Argentina	5%
● Greece	5%
● Bangladesh	4%
● Other	52%



● Chapter 6

Business continuity planning



Disruptive events highlighting importance of business continuity planning

- Increasingly, natural disasters and man-made disruption are having multiple impacts on business operations, either through secondary or tertiary continuity challenges or exposure to security threats such as cargo theft
- These incidents must be analyzed from multiple angles to determine the true impact to businesses, so comprehensive planning is important

Like man-made disruption and the effects of COVID-19, shifting business continuity challenges for supply chains remain widespread. In 2020, incidents ranging from rising container shortages to transporting constraints in the United Kingdom (UK) highlighted the need for business continuity planning. Another ongoing concern is the growing risk that natural disasters pose for supply chain resilience, as demonstrated, for example, by the impact of major storms in Vietnam on transportation through port and road closures last year.

As we begin 2021, we notice that these disruptive events continue to have significant impact on business operations, worker safety, and transportation continuity. This trend should intensify as the pandemic continues to reveal and, in some cases worsen, existing supply chain issues. In a survey conducted by BSI last year, 62 per cent of organizations reported having a business continuity plan in place.⁹ Even for those with continuity plans, supply chain disruption remains a top three concern throughout 2020.

Simultaneously, climate change presents an increasing threat to supply chains around the world. There are also concerns that the economic, as well as physical, effects of the pandemic will hinder disaster recovery efforts as countries re-allocate funds or slow recovery efforts with more lockdown measures. In the same vein, organizations should ensure their internal relief funds aren't re-allocated to counter the negative economic effects of the pandemic.

In a survey conducted by BSI last year, 62 per cent of organizations reported having a business continuity plan in place. Even for those with continuity plans, supply chain disruption remains a top three concern throughout 2020.



⁹ <https://www.bsigroup.com/topics/novel-coronavirus-covid-19>

Multifaceted impact of natural disasters and man-made disruption

Throughout last year, natural disasters and man-made disruption not only had business continuity impact on organizations but also often led to new security and other types of concerns.

Natural disasters are increasingly creating both business continuity and security concerns around the world. This trend is seen intensifying in 2021, given the ongoing disruption from COVID-19 combined with repeated storms, earthquakes, and other types of natural disasters. In addition to the more obvious impacts of natural disaster events, such as facility and infrastructure disruption, BSI recorded other impacts as well, such as protests involving rail blockades and disrupting international supply chains in Mexico. Protests and labour strikes may not seem to have direct impact on the security of supply chains but they often indirectly make freight vulnerable. Besides adding security concerns, these types of incidents can hinder other operations, such as the ability to obtain insurance.

There are several countries that can be highlighted as examples. In Mexico, BSI Connect SCREEN intelligence recorded lengthy protests that involved railway blockades that

stalled cargo via that modality, creating a backup of goods at ports, storage facilities, and even on railways themselves when freight trains were unable to travel. This backup of goods created an added exposure to cargo theft, especially if organizations did not anticipate situations in which shipments would be required to remain in storage facilities. BSI Connect SCREEN intelligence recorded



another example in Vietnam, where the country experienced repeated, major storms last year. Authorities said the typhoons, which they referred to as “abnormal,” resulted in a total of \$1.3 billion in damage. While storms are a major concern for the continuity of supply chains because they cause forced closure of ports and roads, such incidents can also affect the security of shipments because evacuations can leave facilities vulnerable to theft.

Another example can be seen in the spread of wildfires in California last year, which highlights the myriad challenges that natural disasters can pose to supply chains. Wildfires can disrupt supply chains, including delaying transportation. Interruptions to utilities can also occur, including preventing manufacturing or other operations, as was the case for organizations in California. During last year’s wildfire season, many had to contend with blackouts instituted by the state power operator that left residents and businesses without electricity to prevent further fires. Other wildfire issues are also highly relevant for employee safety: In California, smoke conditions also posed a risk to those working in affected areas, which forced some organizations to halt operations.

The threat that these incidents posed to supply chains highlights the need for establishing and updating comprehensive risk assessments

based on current geographical risk of all types of natural disasters and man-made disruption. Whether natural or man-made, the assessment should also integrate parts of the organization that are perhaps more focused on security.

Second, current and flexible contingency plans should be in place and provided in employee training so that the proper actions can be taken in the event of an incident impacting business continuity. One effective way to ensure that response plans are flexible is to develop broad, enterprise-level policies that are then altered slightly for regional risk differences.

Organizations should implement a general framework for managing or governing an emergency response that incorporates some basics for different scenarios. Depending on the scope of the organization, implement regional or office/facility-level differences. Maintaining an effective communication system is also critical, both from a logistical standpoint and to constitute a plan for maintaining a safe working environment. Conducting an after-action report or exercise to identify gaps in contingency planning is also recommended, as it allows for improvement of procedures and lends itself to greater organizational resilience.

A satellite view of Earth showing a large white circle on the left side. The circle contains text about natural disasters. The background shows a large storm system over the ocean, with a clear eye and spiral clouds. The landmasses of Africa and Europe are visible in the upper left.

Natural disasters are increasingly creating both business continuity and security concerns around the world. This trend is seen intensifying in 2021, given the ongoing disruption from COVID-19 combined with repeated storms, earthquakes, and other types of natural disasters.

Advisor Insight

Disaster management and emergency response cycle

As we approach our disaster seasons around the world, clearly the impact of COVID-19 will continue to disrupt planning cycles and disaster management capabilities. In many cases, the cumulative effect can be managed by taking the capabilities we have developed and applying a change management approach to identifying new risks. Then we must build strategies to mitigate them. The critical resource we can't control, however, is time. If we delay acting, it is quite possible we will run out of time to develop and implement effective disaster management plans.

If we look at the disaster and emergency management cycle, three of the five elements are pre-event measures that can and should be developed now. Action taken now can reduce the impact of events and potentially save lives and money for communities, organizations, and individuals.

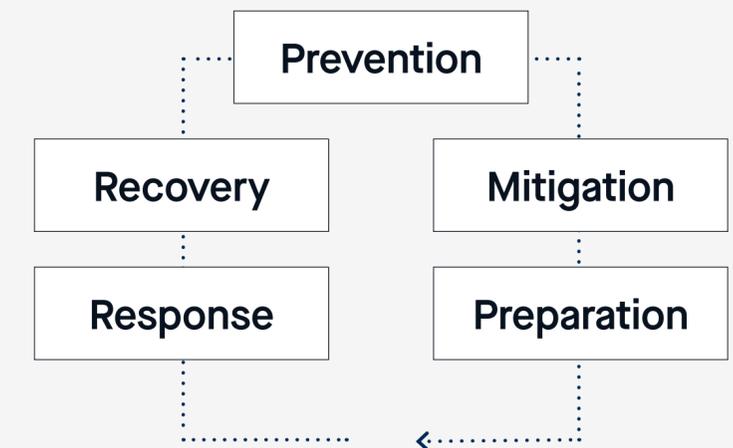
Prevention strategies include removing yourself or your organization from the impact area of disasters. Where this isn't possible,

take actions to reduce the impact (commonly, moving resources to safe harbors, stockpiling, and/or setting up secondary infrastructure). The preparation phase includes developing and implementing strategies for the risks that remain present, to further reduce the impact of the event. For a hurricane, this could include the fortification of facilities; for wildfires, it may include cutting back foliage and scrub and setting up evacuation bunkers. As the final phase of the disaster management cycle before the event arrives, it is the last opportunity to evacuate.

The response phase is initiated by the onset of the event itself and should result in seamless and timely response measures as the event unfolds. The key to effective response is the identification beforehand of risks and development of those insights into decisive actions. Beyond the development of effective response plans, flexibility is a tremendously powerful tool in the arsenal of resilient communities, organizations, and individuals. This level of flexibility and positive action can be achieved proactively. Train and give staff a clear understanding of desired outcomes, constraints, and resources available. Also ensure effective communication so that all

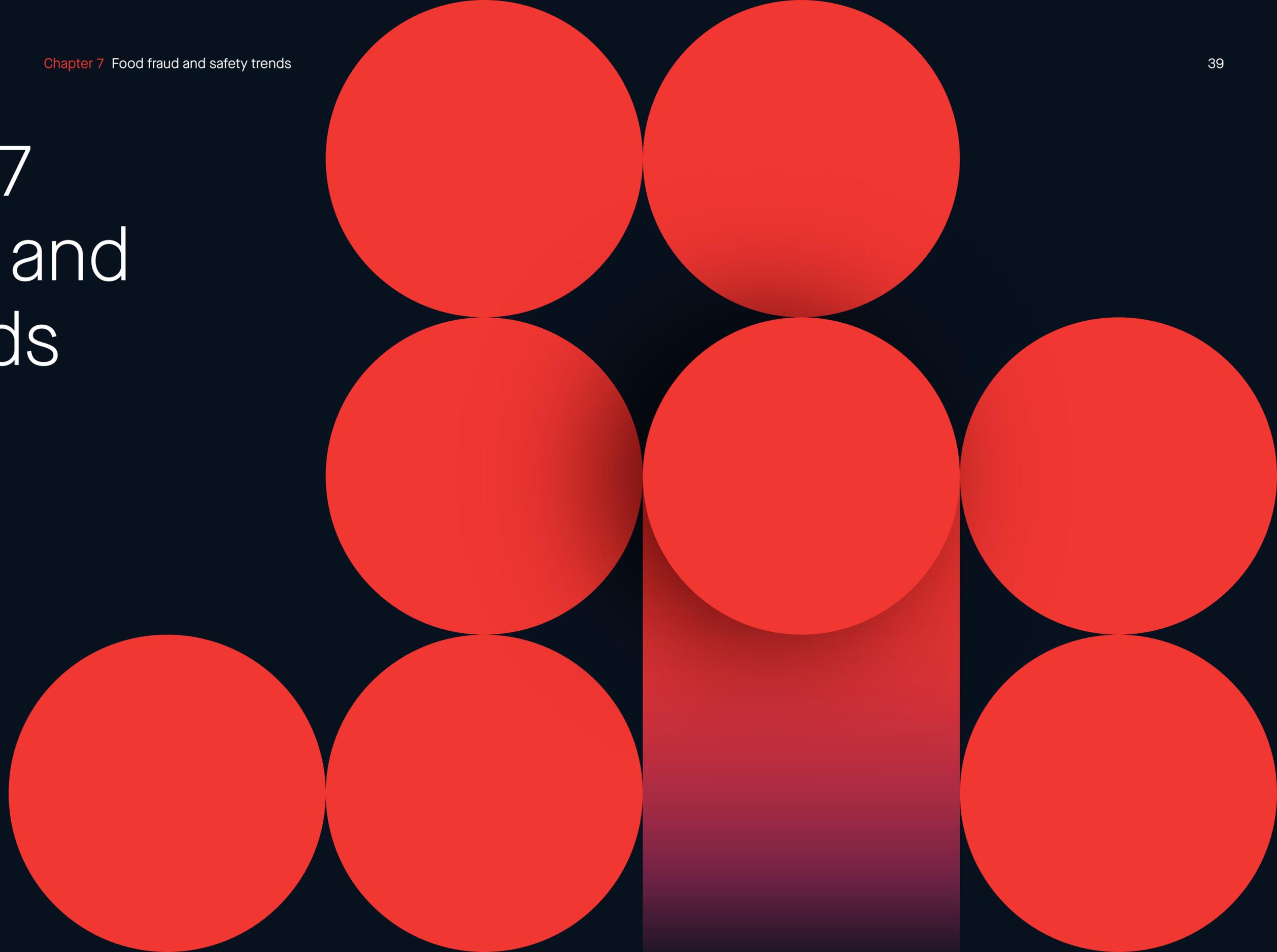
stakeholders can inform all parties of the changing situation, actions taken, and areas of success or failure in the disaster management plan.

For those organizations that embrace the change and seek to identify and satisfy changing needs, 2021 will offer tremendous opportunity. For those unable to adapt to the changing environment, the forecast is less certain.



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Senior Consultant,
Supply Chain
Security, BSI

● Chapter 7 Food fraud and safety trends



Fraudulent and unsafe food to continue to challenge supply chain resilience

- The COVID-19 pandemic initially led to panic buying, stockpiling, and overall disruption to food supply chains in well-developed countries; while these countries were able to manage the problem, it did expose flaws in global food supply chains that criminals could use to introduce fraudulent food into legitimate supplies
- The adoption of alternative sources during a time of reduced ability to audit for best-practices further exacerbate this exposure to food fraud and posed challenges for the safety of products
- Although these challenges came to the forefront during the spread of COVID-19, the same vulnerabilities existed prior to the spread of the virus, suggesting that the globalized food supply chain is susceptible to similar issues of fraud in 2021 and beyond.

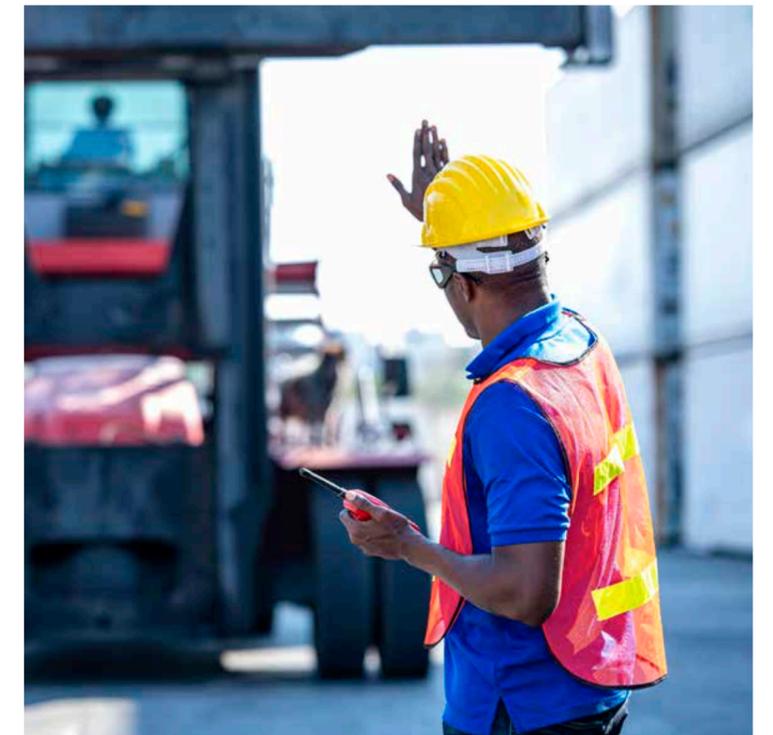
Food fraud is an increasingly difficult challenge to tackle that can have major ramifications for the resilience and integrity of brands. The spread of COVID-19 last year only served to exacerbate this trend, as the spread of the virus highlighted vulnerabilities in food supply chains that criminals could exploit to introduce fraudulent food into legitimate supplies. Due to a range of reasons, including labour shortages and movement restrictions, food organizations were unable to secure supplies needed to meet shifts in demand, particularly during the early stages of the pandemic in which panic-buying and stockpiling were common. However, this adoption of new suppliers took place during a time in which the ability to physically visit and work with these organizations to ensure best practice was limited, exposing supply chains to the potential risk of fraudulent food entering legitimate supplies through disingenuous companies looking to cut corners.

General disruption to food supply chains also contributed to a scarcity of raw materials and products that drove prices slightly higher but nonetheless increased the incentive for criminals to produce and distribute fraudulent food. A decreased government capacity to inspect food shipments during the spread of COVID-19 further increased opportunity for

criminals to produce or supply fraudulent food, as many agencies were either resource-limited or following altered procedures to observe protocols aimed at reducing the spread of the virus.

While these issues above were certainly underscored during the spread of COVID-19, these same vulnerabilities existed in food supply chains prior to 2020 and continue to exist now, indicating that food organizations will continue to be susceptible to fraud in 2021 and beyond. Part of the challenge lies in the globalization of food supply chains, which sources inputs from an array of countries that may or may not have a robust framework and enforcement apparatus available to combat fraudulent practices. According to a 2020 report from the Food and Agriculture Organization of the United Nations, “trade in food and agriculture has more than doubled in real terms since 1995. Emerging and developing countries have become active participants in global markets and they now account for about one third of global trade.”¹⁰ In addition, other factors including the threat of cargo theft and supply chain corruption have correlations with the risk of food fraud and the sourcing of products from a broader range of countries that may be susceptible to these threats further exposes organizations to food fraud.

Part of the challenge lies in the globalization of food supply chains, which sources inputs from an array of countries that may or may not have a robust framework and enforcement apparatus available to combat fraudulent practices.



¹⁰ <http://www.fao.org/3/cb0665en/CB0665EN.pdf>



Food fraud risks highlighted in 2020

Throughout most of 2020, especially between April – September, criminals increasingly stole food, beverage, alcohol, and tobacco commodities. This was likely due to their increased value as a result of panic-buying, stockpiling, and shortages, along with ease of sale on the black market. The increasing value of these items created a greater vulnerability for theft, but also put these commodities at an elevated risk for counterfeiting and food safety violations.

Countries such as India and Mexico experienced large upticks in food fraud during the year, while multiple countries dealt with significant issues tied to counterfeit alcohol production. Between July – September, several food safety incidents occurred in India and the country experienced a prevalence of spurious liquor that killed at least 38 people in the Punjab region. Turkey, Brazil, and Mexico all reported criminals increasingly producing and distributing counterfeit alcoholic beverages. The ramifications from counterfeit and

fraudulent consumable products are severe and highlight the importance of inspections and tight controls within production facilities. The risk of corruption by individuals working in a supply chain tends to correlate with the risk of food fraud. BSI analyzed that approximately 85 per cent of countries with a high risk of supply chain of corruption also have a high risk of food fraud. Recently, the Malaysian halal meat scandal¹¹ epitomized this ongoing issue. Adulterated or mislabeled non-halal goods entered factories without inspections and criminals within the supply chain repacked them with halal-certified meat and fake halal logos. Such incidents of food fraud propagated by insiders in the supply chain can involve lower-level employees as well as executives and underscore the need for vetting suppliers and auditing supply locations to ensure compliance and mitigate corruption.

¹¹ <https://www.bloomberg.com/news/articles/2020-12-30/fake-halal-meat-scandal-in-muslim-majority-malaysia-fuels-anger>

Products at risk of food fraud in countries with issues of supply chain corruption



Food fraud trends intensified by shortages

Countries with a significant population thought to be facing food shortages and the risk of food fraud offer criminals the potential to take advantage of the situation. They can either produce substandard food for distribution in the country, or substitute labeled products with often-harmful alternatives. Using estimates from the US Department of Agriculture Economic Research Service, 89 per cent of assessed countries with 15 per cent or more of their population estimated to be facing food insecurity also have a High or Severe BSI risk rating for food fraud¹².

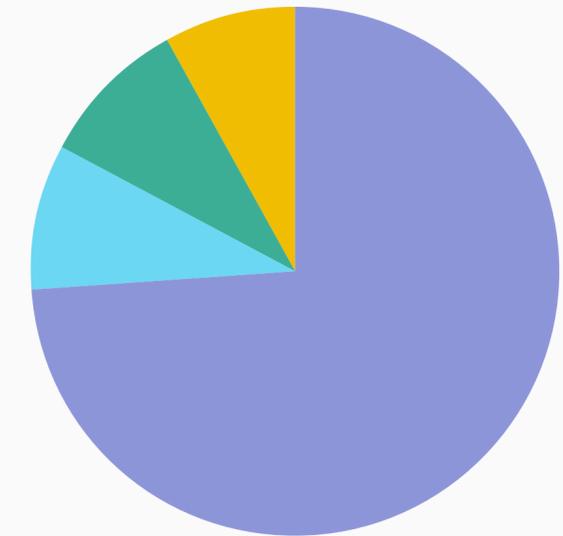
Food fraud becomes a significant issue when supply has decreased, as exemplified by cases of counterfeit alcoholic beverage distribution. However, most countries facing food shortages and subsequent high demand also suffer from fraudulent food production domestically. For example, in India, adulterated dairy products, especially milk, are produced domestically and consistently recorded in incidents that

BSI records of food fraud, with some reports indicating that approximately 89.2 per cent of milk products in the country are adulterated¹³. These countries frequently have gaps in legislation and enforcement that weaken the ability to detect and seize fake food, and this issue is only likely to worsen in 2021.

Other forms of food fraud, in particular smuggling and disguising origin, are most common and are bound to continue in countries where the price of food, due to shortages or general insecurity, rises to the point where it becomes economically viable for criminals to smuggle food across borders to take advantage of higher prices. However, it is also very possible that criminals will benefit from gaps in enforcement that allow other methods, such as adulterating labels or expiration dates or using substandard or alternative ingredients.

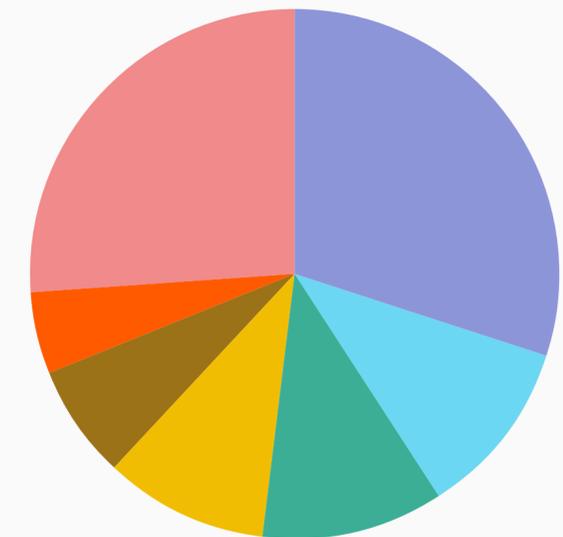
Types of food fraud incidents 2020

● Diversion/Smuggling	74%
● Origin	9%
● Labeling	9%
● Adulteration	8%



Types of food in fraud incidents 2020

● Alcohol	30%
● Seafood	11%
● Meat	11%
● Grains	10%
● Fruit	7%
● Milk and Dairy	5%
● Other	26%



¹² <https://www.ers.usda.gov/webdocs/publications/100426/ap-088.pdf?v=2732.7>

¹³ <https://retail.economicstimes.indiatimes.com/news/food-entertainment/grocery/68-milk-milk-products-in-india-not-as-per-fssai-standard-official/65695094>

Food safety violations as COVID-19 constrains enforcement

The spread of COVID-19 last year significantly affected government capacity to enforce food safety regulations, which means that some foods may not have been checked as thoroughly. This was particularly evident in countries in Europe, such as Germany, Belgium and the Netherlands, where a marked drop in the detention of unsafe food products occurred during the initial spread of COVID-19. At this time, the European Commission granted national authorities a greater amount of flexibility in conducting food safety screenings to minimize supply chain disruption. While some reduced food detention can be explained by the drop in food shipments tied to local restrictions, it may be that inspection resources were constrained, leading to food not being checked as thoroughly.

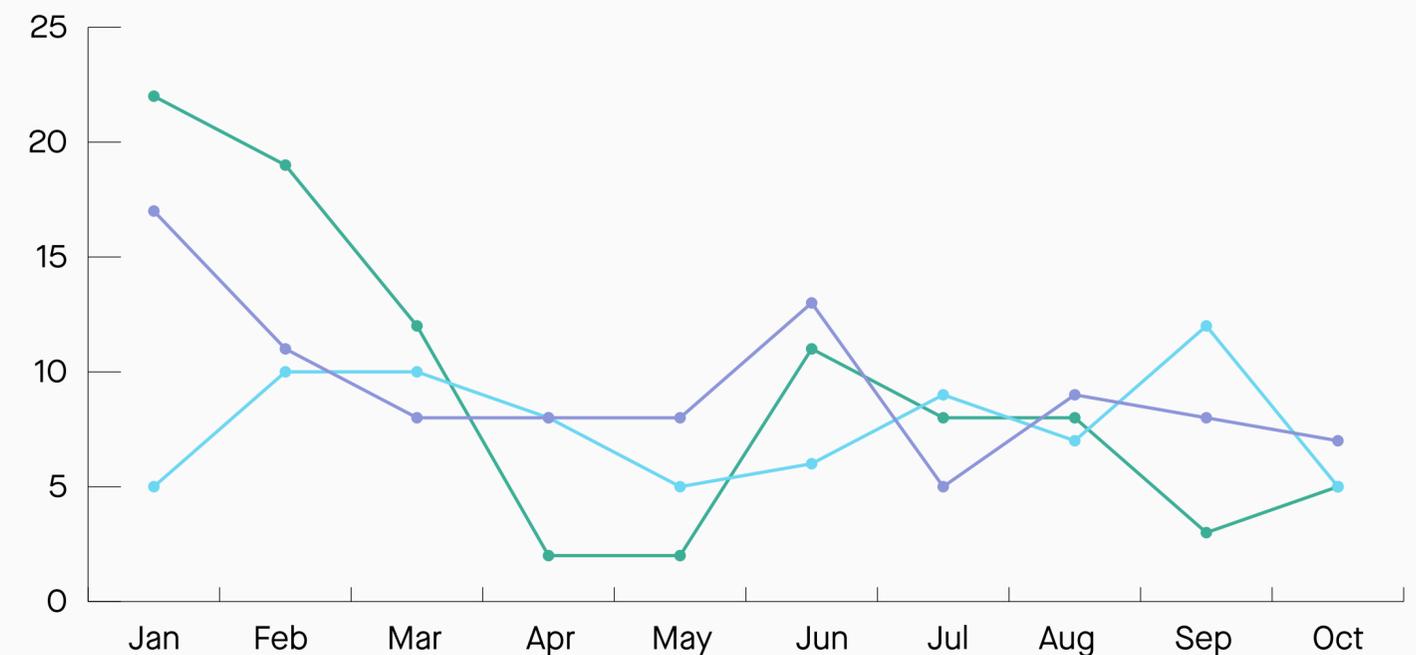
In addition, the spread of COVID-19 likely worsened an existing issue of reduced food safety enforcement in Europe. Third-party analysis¹⁴ released in early 2021 suggests that some countries were already contending with a lack of sufficient resources to perform safety checks on food businesses, partly due to governmental budget cuts and reductions in staffing.

While it is unclear if the COVID-19 impact around the world was similar in terms of disruption to food safety control, there is some evidence that the issue spread beyond the EU. In the UK, for example, the Food Standards Agency indicated that some high-risk organizations could miss an inspection as the agency attempted to clear the backlog of inspections created as COVID-19 spread¹⁵. Elsewhere, in Indonesia, inspectors found that 982 food distribution facilities failed to comply with regulations.

As the spread of COVID-19 lessens in 2021, government resources will be freed to resume food safety controls. However, it is also likely that any further complications from the virus, such as new strains potentially resulting in additional lockdowns, could prevent countries from checking food thoroughly.

Detention of unsafe food shipments 2020

- Germany
- Belgium
- Netherlands



¹⁴ <https://www.foodsafetynews.com/2021/02/eu-countries-battling-lack-of-resources-for-food-controls/>

¹⁵ <https://www.foodsafetynews.com/2020/12/high-risk-firms-may-miss-an-inspection-due-to-covid-19/>

● Chapter 8 Regulatory change trends



Regulatory changes to continue to test organizational adaptability

- Increased regulations are likely to challenge organizational resilience by creating new compliance measures aimed at increasing sustainable sourcing and improving supply chain security
- It is almost certain that organizations will have to increasingly scrutinize the supply chain for susceptibility to labour violations
- Several new regulations pertaining to security could have impacts on the continuity of business operations in 2021

In 2020, governments made a concerted effort to address concerns of forced labour in supply chains. The US government spearheaded this effort through the issuance of Withhold Release Orders (WROs) on shipments of goods that it deemed to be produced by forced labour, blocking entry to products originating from or manufactured by specific organizations.¹⁶ These WROs continued throughout 2020, targeting products manufactured by specific organizations before culminating in a rejection of all cotton and tomato products produced in China's Xinjiang Uyghur Autonomous Region¹⁷. That order differed from past orders in that it targeted an entire class of products produced in a whole region of China, rather than being focused on certain types of goods produced by specific entities operating in the area.



¹⁶ <https://www.cbp.gov/trade/programs-administration/forced-labour/withhold-release-orders-and-findings>

¹⁷ <https://www.cbp.gov/trade/programs-administration/forced-labour/withhold-release-orders-and-findings>

Forced labour violations in Asia sparking global regulations

Ongoing concern over forced labour issues in Asia drove several key regulatory developments last year that are sure to impact supply chains in 2021 and foreshadow the potential for additional legislation and rules.

The release of the region wide, product-class WRO in China earlier this year coincided with the US State Department’s labeling the treatment of Uyghur Muslims in Xinjiang as “genocide”, a stance that the new US presidential administration has upheld¹⁸. More recently, the US House of Representatives reintroduced a bill that would ban imports from the Xinjiang region unless they are certified as being produced without forced labour. The bill also allows for additional sanctions on Chinese officials. While by themselves significant for a range of organizations, these legislative developments could be expanded in 2021, as the current US government has not indicated that it would imminently halt these actions.

The US, UK and Canadian governments each passed measures aimed at eliminating forced labour in the supply chain that have the potential to affect a wide range of organizations. Canada’s measures include import prohibition for goods produced wholly or in part by forced labour, a mechanism made possible under the

legal foundation provided by the US-Mexico-Canada Agreement, which requires all three countries to ban the entry of goods produced by forced labour¹⁹. In the UK’s measures, the eye-catching point is the strengthening of the operation of the Modern Slavery Act, which requires companies to report on how they are countering forced labour in their supply chains and implements fines for those not complying with transparency requirements²⁰.

Both UK and Canadian measures have potential impacts for a range of organizations. However, it is the shared point in the measures issued by both governments to broaden export controls that will likely require a wider range of industries to comply. Each set of measures restricts the export of goods that could contribute to forced labour, a point that brings other types of industries, even those in the electronics sector, into the scope of organizations required to comply. Reports suggest that the Australian and New Zealand governments are considering issuing similar regulations.

Entity	Number of CBP WROs in 2020	BSI Forced Labor Rating
China	9	Severe
Malaysia	3	Severe
Fishing Vessles	3	

Xinjiang Province of China, Location of Uighur Minority

- 1 – Beijing
- 2 – Tianjin
- 3 – Ningxia
- 4 – Chongqing



¹⁸ <https://2017-2021.state.gov/determination-of-the-secretary-of-state-on-atrocities-in-xinjiang/index.html>
¹⁹ <https://www.canada.ca/en/global-affairs/news/2021/01/background-...-measures-related-to-the-human-rights-situation-in-the-xinjiang-uyghur-autonomous-region.html>
²⁰ <https://www.gov.uk/government/speeches/foreign-secretary-on-the-situation-in-xinjiang-and-the-governments-response>

Advisor Insight

Heightened awareness on the topic of forced labour presents a risk to organizations that don't give enough attention to it within their supply chains. This issue has also created an intersection between supply chain security professionals and their peers responsible for sustainable procurement. Perception and response to prohibiting forced labour has evolved from its being solely understood as a fundamental human right to also being treated as a criminal justice issue.

Modern slavery practices sit at the extreme end of a continuum of exploitation ranging from decent work to severe forms of exploitation amounting to slavery. It is distinct from other forms of poor, unlawful, and unethical labour and employment practices, as victims are often unable to refuse or escape exploitative conditions because of threats of violence, coercion, deception, or abuse of power. Employers and other key stakeholders in supply chains have a responsibility to ensure the health, safety, and wellbeing of workers and to provide safe and healthy work environments.

This heightened awareness has grown thanks to efforts by a range of stakeholders. First, importation of goods produced with forced labour has been prohibited in the US for the past 90 years, per the Smoot-Hawley Tariff Act. Loopholes in that law that enabled importers to legally import such goods when there was consumer demand (purchasing more of the good than we can produce domestically in the US) were removed during the Obama administration, calling more attention to the issue for CBP. Next, corporate disclosure laws in California (the California Transparency in Supply Chains Act), the UK (the UK Modern Slavery Act), and other countries called further attention to company due diligence practices.

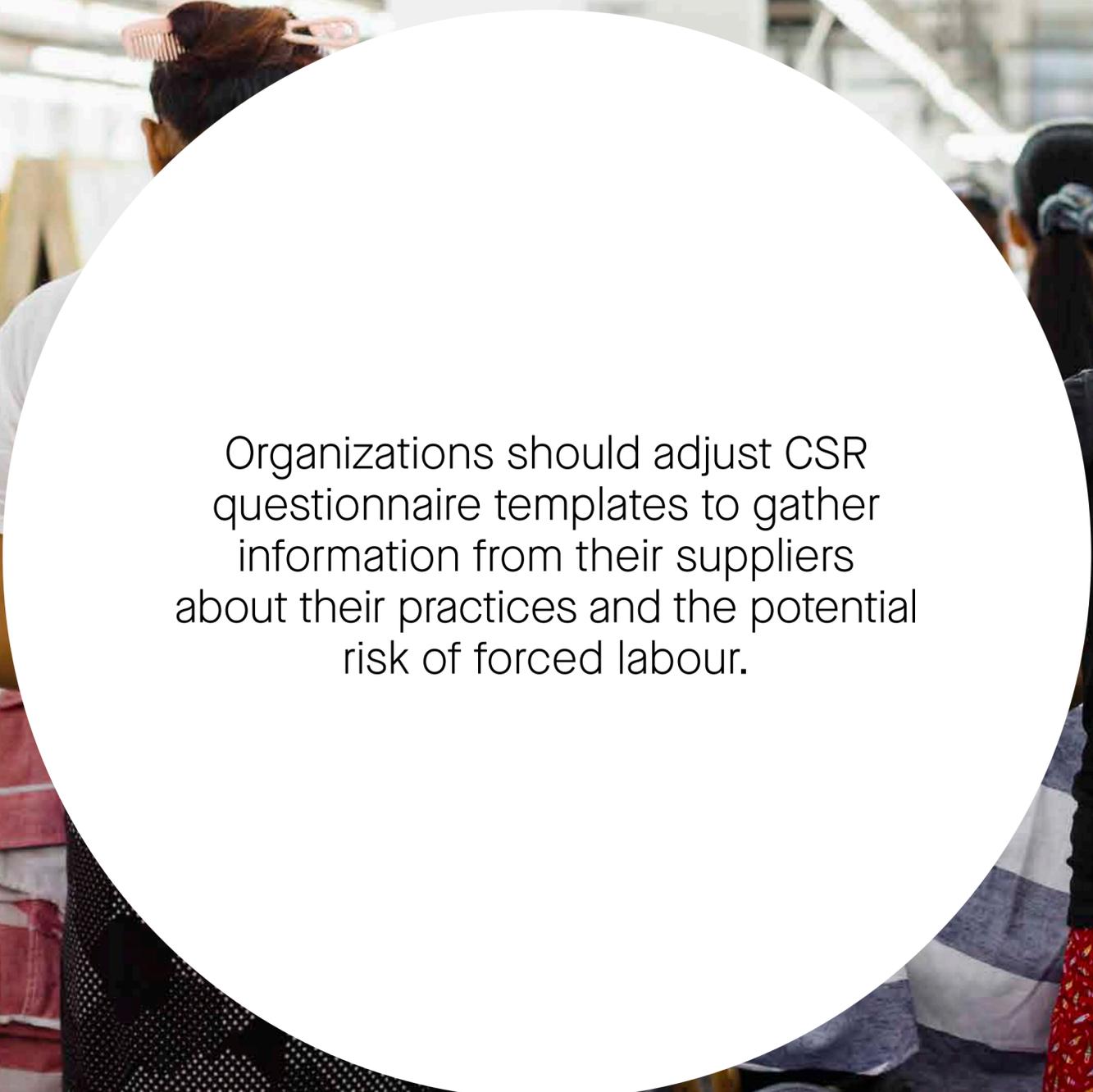
In addition, much attention has been directed at unethical recruitment of migrant workers. They are often trapped in debt bondage by a web of recruitment agencies that don't provide clear employment terms, withhold worker passports, and require workers to pay fees that take years to work off at the supplier site. All these practices are clear indicators of exploitative practices and are treated as analogous to forced labour.

In recognition of these issues, organizations should adjust CSR questionnaire templates to gather information from their suppliers

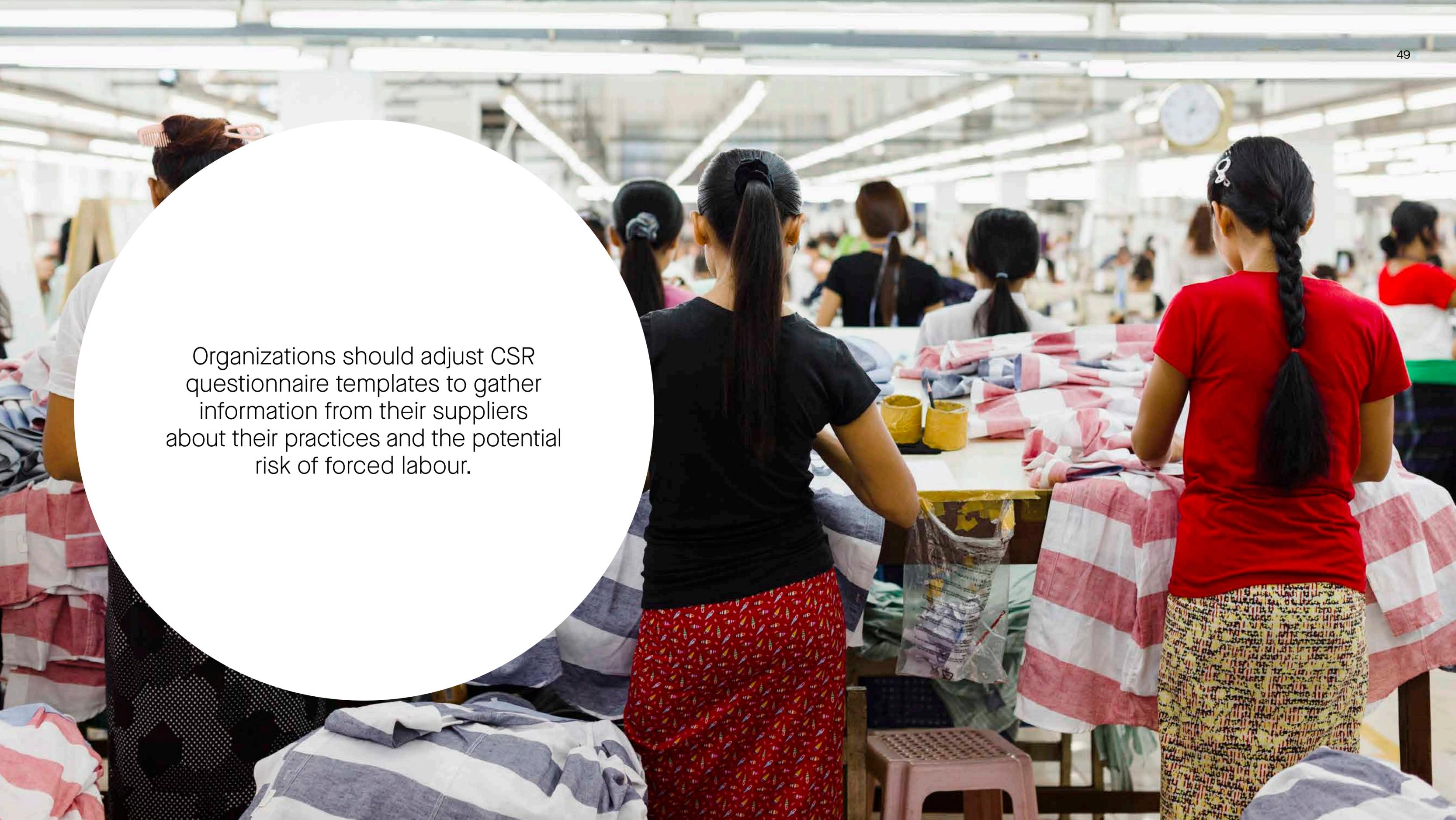
about their practices and the potential risk of forced labour. Using BSI Connect SCREEN intelligence to understand supplier workforces and whether they are composed of migrant workers who may be subject to debt bondage schemes is also key in assessing for the risk of labour exploitation.



Ryan Lynch
Practice Director,
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Organizations should adjust CSR questionnaire templates to gather information from their suppliers about their practices and the potential risk of forced labour.



The EU also adopted a human rights sanctioning regime in late 2020 that has the potential to affect organizations found to be using forced labour²¹. Under the regime, the EU has powers to target individuals and entities for human rights issues including genocide, crimes against humanity, and other violations such as slavery. As a result, it is possible that organizations operating in the EU may face similar requirements to comply with sanctions against entities found to be using forced labour.

Sustainable sourcing and deforestation in supply chains still drives regulatory developments

A challenge that increasingly factored into business' consideration in sourcing last year was deforestation. Brazil is arguably at the forefront of these concerns, as deforestation there continues at a rapid rate. Because of this, in 2020 investors in Brazilian beef firms called upon organizations to provide traceability for cattle from Brazil, as well as to commit to zero deforestation in the Amazon. The potential

for association with a company in Brazil that's contributing to deforestation can be particularly damaging to brand integrity. This issue — both in Brazil and around the world — underscores the need for accurately mapping suppliers to identify and mitigate any potential risks of sourcing from a company contributing to deforestation.

Beyond focusing on Brazil, a separate consultation is underway in the EU²² and the UK²³ on taking substantial action to curb deforestation and stop consumption of deforested products. In the UK, the government sought input on a new law prohibiting businesses from obtaining goods, especially agricultural items, from deforested land. Under this proposed legislation, businesses could face fines if due diligence assuring no deforestation in their supply chains is not conducted.

The EU in 2020 also sought out comments on proposed measures that would help mitigate deforestation²⁴. While deforestation certainly occurs in major exporting countries around the world, issues of environmental degradation were also brought to light in Europe last year, particularly in countries such as Ukraine, Romania, and Serbia. Due to these developments, organizations should be aware

of the implications these negotiations may have on their business operations in 2021.

The issue of deforestation is not the only challenge that organizations must consider in sourcing sustainably. Although the traditional conflict minerals — tantalum, tin, tungsten, and gold — are typically associated with production in Africa, other minerals mined elsewhere also contribute to either conflict or the funding of organized crime. As such, they present risks to brand integrity and, in some cases, organizations encountering sanctioned parties. In addition, minerals mined in other countries may also present the risk of contributing to environmental degradation, and ultimately lead to regulatory restrictions akin to those applied to supply chains to combat labour exploitation.

Another region of concern for sustainable sourcing beyond Africa is Latin America. Mining operations across Latin America are implicated in myriad social and environmental concerns. As world demand for minerals and metals has increased exponentially in recent decades, the profit motive for new mining ventures across Latin America has increased. Governments also benefit from increased revenue from mining operations, and therefore work with mining companies to exploit mineral and metal resources, often through questionable

environmental, social, and labour policies. Environmental degradation from mining often affects individuals and businesses far outside the mining area. Improper management of wastewater and runoff can contaminate waterways, and poorly managed reservoirs can contaminate ground water. Increased exposure to heavy metals and carcinogenic contaminants has clear effects on mining communities found to have elevated incidents of cancer. The same regions that most often suffer the health consequences of mineral exploitation fail to receive sufficient tax revenue to pay for medical interventions.



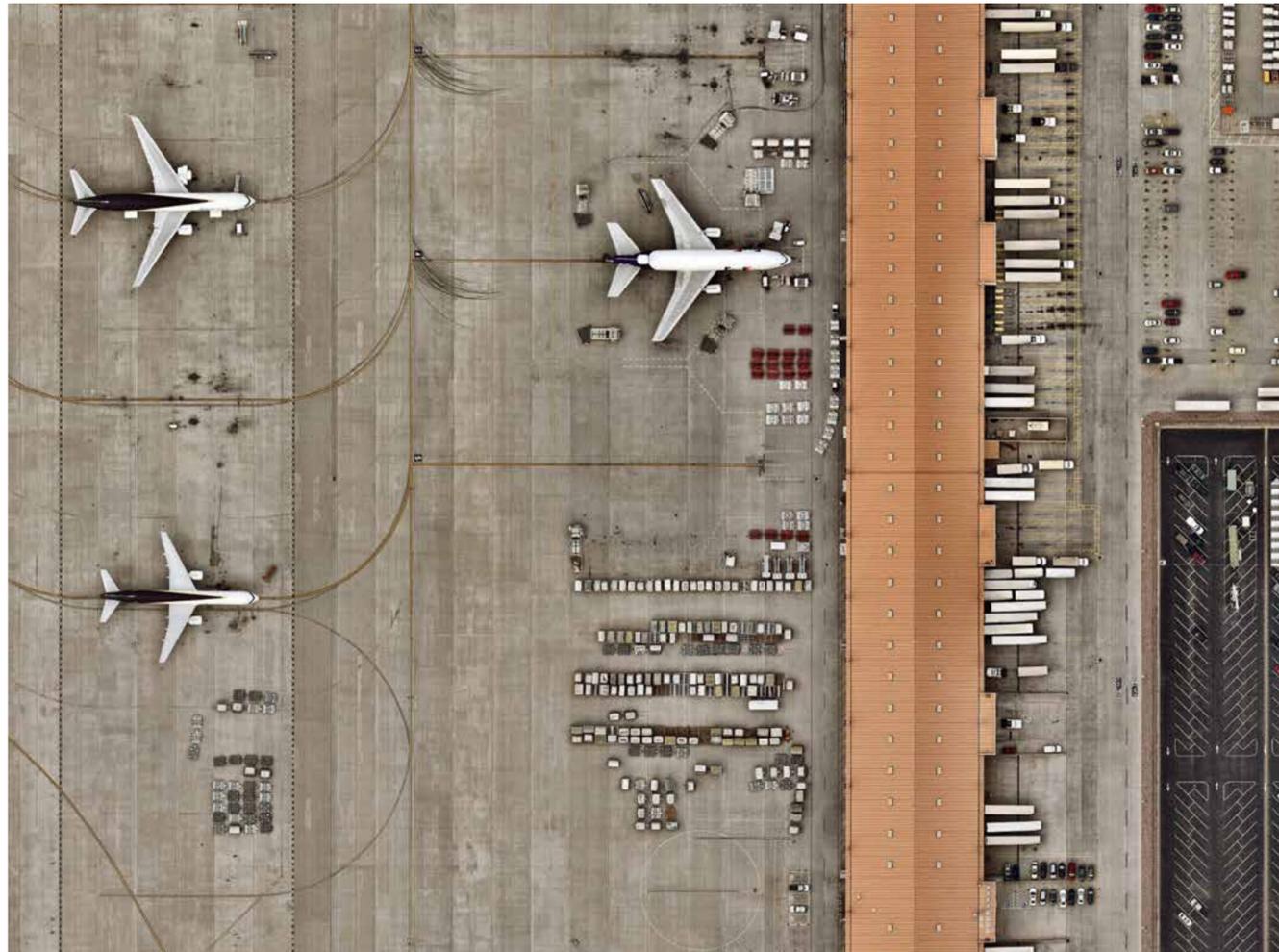
²¹ <https://www.consilium.europa.eu/en/press/press-releases/2020/12/07/eu-adopts-a-global-human-rights-sanctions-regime/>

²² <https://ec.europa.eu/environment/forests/deforestation.htm#:~:text=As%20a%20follow%20Dup%20to,closed%20on%2010%20December%202020.>

²³ <https://www.gov.uk/government/consultations/forests-reducing-deforestation-in-uk-supply-chains>

²⁴ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12137-Minimising-the-risk-of-deforestation-and-forest-degradation-associated-with-products-placed-on-the-EU-market/public-consultation>

In June, countries belonging to the ICAO will be required to comply with 100 per cent cargo screening on cargo-only flights.



Emerging security issues generating new standards

While meeting the challenges caused by the spread of COVID-19 certainly dominated organizations' priorities last year, other types of regulatory changes pertaining to increased supply chain security are sure to become focal points for businesses in 2021.

In June, countries belonging to the ICAO will be required to comply with 100 per cent cargo screening on cargo-only flights. So far, the US Transportation Security Administration (TSA) appears to be moving forward with a plan that would allow manufacturers, retailers, and other entities to prove facilities are secure as a substitute for screening. In general, carriers are already complying with the standard, but the short implementation period suggests that some confusion, and possibly disruption to airfreight could occur.

Another piece of legislation, the Securing America's Ports Act, signed before the previous US presidential administration departed, requires CBP to report to Congress within 180 days of the signing of the law a plan to expand the use of imagery scanning on all land traffic entering the country, both passenger and freight vehicles, as well as rail freight²⁵.

While the goal outlined in the new act is ambitious and potentially unattainable, especially given other mandates requiring full scanning of inbound cargo, the potential for this legislation to move forward is likely to translate into cargo delays when entering the country.

While cargo in Canada probably wouldn't face much additional risk, freight at rest in Mexico, given the extensive threat of cargo theft and smuggling there, would almost certainly incur more.

²⁵ <https://www.congress.gov/bill/116th-congress/house-bill/5273>

Conclusion

Although the main impact of the pandemic has arguably passed for most of the world, organizations are still likely to face a broad range of challenges stemming from COVID-19 in 2021. Supply chain criminals are likely to continue to adapt in novel ways that will force organizations to similarly readjust.

The effect that the pandemic had last year in widening the economic and social divide in many countries is likely to increase the potential for widespread man-made disruption while simultaneously driving migration and exposing a larger portion of the population to the risk of labour exploitation. This trend will force organizations to remain alert to potential situations that could impede the ability to source or deliver goods or could damage brand integrity. On top of these risks is the broadening requirement of organizations to comply with new regulations which, for

example, relate to maintaining a socially responsible supply chain. These government measures are very likely going to test the ability of organizations to further readjust internal procedures to remain compliant.

Although these challenges may be daunting, organizations can take solace in the fact that there are actions that can be implemented to mitigate the impact that these challenges have on resilience. Conducting proper risk management can help to ensure that organizations remain resilient in 2021; however, this process is not without effort, as organizations must map out the supply chain, properly identify critical suppliers and routes and keep abreast of knowledge around geographic risks in order to plan and best apply measures aimed at countering pertinent threats. While 2021 is unlikely to be as challenging as 2020, organizations should take the lessons learned from COVID-19 and understand that the best mitigation plans are adaptable to the ever-evolving threat landscape that is likely to test organizational resilience in the future.

Working alongside BSI can provide you with the knowledge and expertise to avoid the detrimental impacts that these potential risks could have on organizations that are unprepared. BSI's team of intelligence analysts can equip you with the knowledge needed to stay ahead of emerging security, business continuity and sustainability risks around the world, while our team of expert advisors are able to work with organizations in order to develop and implement best practices that will help support a resilient organization.



Christopher Tomas
Lead Intelligence Analyst

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Appendix

References

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