AGILITY EMERGING MARKETS LOGISTICS

index

2023

Agility

Ti

Supply chains battle with higher costs, Covid lows, the Ukraine war and major location shifts

2023 recession: What are the odds?

Production moves out of China

Saudi Arabia *to spend $24.7bn on tech by 2025*

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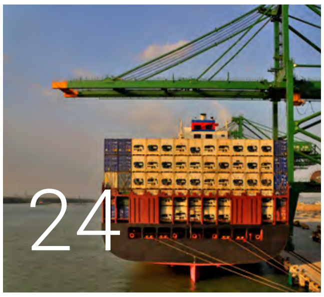
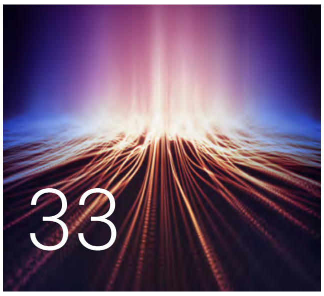




Key Findings

From freight rates to start-up ecosystems, our key findings section offers a brief look at some of the facts and data to emerge from our research.

42.3% of respondents believe that air freight rates will normalise in 2023, although at higher levels than pre-Covid; compared to 46.8% who think that sea freight rates will normalise in 2023, but at higher levels than pre-Covid.

The most important driver of demand is the US economy. Consumer confidence in the US seems weak at present resulting in less vigorous retail spending.

Read more on p.41

Supply chains increasingly bypassing China

From 2023 onward, Southeast Asia, India, Europe and North America will be more attractive production and sourcing destinations than China, according to survey findings.

Southeast Asia followed by India will be the most attractive re-location destinations, with 13.6% and 13.4% of respondents respectively stating their companies will move production or sourcing activities to these destinations.

Read more on p.53

Kenya features one of the most mature start-up ecosystems

Kenya has advanced its structural reform agenda focused on improving governance and has reinforced oversight of state-owned enterprises. The country's progress towards creating a stronger business environment in the last several years has also been evident.

Kenya belongs to the 'big four' African countries that account for about a third of the continent's start-up incubators and accelerators, according to the WEF. GDP growth in Kenya is forecasted to be amongst the strongest in the region in 2023 according to the IMF. The peaceful conclusion of the 2022 presidential vote is a good signal for Kenya's institutional strengthening and political stability.

Read more on p.39

66.4% of respondents says a global recession is certain or likely in 2023.

This number increased by 6 percentage points in December compared to October. The forecast comes amidst sharp growth slowdowns across the largest economies.

Read more on p.37

Reconfiguration challenging for electronics and machinery

Moving production out of China is easier for some industries than others. Supply chains for products like furniture, apparel and household goods will be relatively easy to diversify because the inputs are relatively easy to obtain. The process of supply chain reconfiguration will be more challenging for industries such as electronics and machinery, as they require components which are more difficult to source. More challenging, but not impossible – as many electronics companies have already demonstrated.

Read more on p.54

Green economy provides Thailand with competitive advantage

Thailand has become a beneficiary of the China plus risk mitigation sourcing strategies being increasingly employed by global manufacturers. Whilst other Southeast Asian countries, such as Vietnam, may have lower labour costs, Thailand is more technologically advanced, especially in the 'green economy' including the manufacture of electric vehicles (EVs). This has provided the country with a significant competitive advantage in the region.

Read more on p.21

2/3 of respondents agree or strongly agree that the African Continental Free Trade Area (AfCFTA) will generate new employment opportunities across the continent. Even though the African Continental Free Trade Agreement has in theory been operational since the start of 2021.

Read more on p.57

The Ukraine Russia War triggers costs

The war is having broad implications for global businesses – it has triggered an increase in business costs among 30% of the surveyed companies, whilst 29% saw an increase in logistics costs. Indeed, the war only amplified the economic impact of the pandemic and triggered an increase in the cost of energy, shipping and commodities as well as supply chain disruptions, causing businesses around the world to feel the ripples closer to home.

The war in Ukraine was a reminder for businesses that geopolitical risks should be factored in supply chain risk management. Geopolitical risks are always present, but the range of issues they present is creating extremely significant challenges for businesses to grapple with.

Read more on p.45

Digital forwarders have developed a sound business model

Survey findings show that digital forwarders have been successful at eroding the competitive advantages of forwarders across several areas.

The areas in which digital forwarders perform particularly well include ‘tracking and visibility’, ‘Invoicing and Payment’, and ‘Speed of service’. Respondents suggest that digital forwarders are yet to consistently improve their offering when compared to traditional forwarders in some areas.

Looking ahead to 2027, the volumes shipped and booked through digital forwarders will further increase from the current average of 47.7% to almost 60.1%. The adoption rate is likely to increase over time as the technology matures and the digital forwarders gain scale.

Read more on p.60

18%

Climate-change events are already affecting around 1 in 5 organizations according to survey respondents. 18% of the respondents are already feeling the impact of this type of disruption and state that climate change events are affecting their business.

Read more on p.63

The wave of multinationals announcing ambitious net zero targets made headlines in 2021

Large corporations around the world pledged to cut their greenhouse gas emissions to zero, usually by the distant 2050.

These announcements gave the impression that the corporate world is moving fast to tackle climate change. But the reality is more nuanced. According to our survey findings, more than 50% of respondents have committed to a net zero target, but around a third of respondents haven't set a net zero target deadline.

Read more on p.62

Saudi Arabia has the potential to become a digital and innovation-based economy

Innovation and technological development is the most important driver of economic diversification in the Gulf countries according to survey respondents. Saudi Arabia will spend $24.7bn on technology by 2025. This is reportedly the highest government spending on technology in the world. The country is investing $6.4bn in future technologies and start-ups. By 2025 the digital economy is expected to contribute over 19% GDP of Saudi Arabia.

Read more on p.50

17%

Asia Pacific remains the most attractive global manufacturing hub, with 23.1% of respondents producing their products in the region.

But a certain degree of relocation of international supply chains appears to be under way and global supply chains are on the move. Survey findings show that 17% of the respondents that have already moved production/sourcing activities have chosen China as their alternative destination.

Read more p.52

Wage in Mexico $3.90 per hour compared to $5.58 in China

The Mexican economy will significantly benefit from the deteriorating relationship between US and China. However, this will only occur if the Mexican government is able to build a more attractive business case for foreign investment. According to IHS Markit, the average manufacturing industry wage in 2022 in Mexico is $3.90 per hour, compared with $5.58 in China. The security situation in Mexico is one of the biggest headwinds to economic growth.

Read more on p.22

Technology adoption & e-commerce growth

Technology adoption, including internet and mobile phone usage is the most important digital readiness factor when deciding whether to invest in an emerging market, according to survey findings. Speed and reliability of internet connectivity as well as financial and banking ecosystem to support e-commerce sales are the second and third most important digital readiness factors.

Digitalisation has become one of the most significant growth engines for many emerging economies. For instance, digital readiness and connectivity played a crucial role in overcoming the difficulties of conventional trade during the pandemic and facilitating recovery in Southeast Asia.

Read more on p.49

13.5%

The proportion of businesses that will pass on higher energy prices to customers is not insignificant: 13.5% of the respondents stated that their companies will increase their prices by 6-10%, further contributing to inflationary pressures.

Read more on p.44

West establishes factory network in light of China Taiwan tensions

There is an impending crisis related to China's claims on Taiwan. The escalating tensions between Taiwan's ally, the USA, and China which can, and already is, having an impact of trade flows.

Given the reliance of the global semiconductor industry on Taiwanese manufacturers, especially in terms of the most advanced technologies, the West has taken steps to try to establish its own factories, whilst simultaneously preventing China from gaining access to technology which could be used for military purposes.

Read more on p.13

The impact of multi-nationals on retailers in India

When Prime Minister Modi came to power many in the global community hoped that he would reduce barriers to international trade. However his policy response has been to raise duties further to encourage global suppliers to establish Indian operations.

There are those which fear the impact which the entry of multinational corporations into the Indian market would have on small businesses, in particular retailers.

The risk is, as the world approaches a period of sustained economic downturn, that a neo-protectionist regime will isolate India further from globalized supply chains rather than integrate within them.

Read more on p.14

Introduction from Tarek Sultan, Vice Chairman, Agility

This is the 14th edition of our annual Agility Emerging Markets Logistics Index. If all you did was flip through the overall rankings, you would see little year-to-year change at the top, and you might conclude it had been a period of relative stability for the 50 countries examined in this report.

It was not.

2022 was a year of unprecedented volatility in the logistics industry and in the affairs of the emerging markets countries in our Index. At the outset of the year, shipping rates were at record highs. By year's end, they had plummeted and the industry moved into 2023 with a glut of capacity and ocean containers. China, No. 1 in this Index every year since it was launched, was struggling to cope with shrinking output, falling export demand and, after ending its zero-Covid policies, a huge surge in infections. Spiking energy prices sparked global inflation that sapped recovery efforts in all but a few energy-exporting economies. Meanwhile, Russia and Ukraine were battered by the effects of war and, in Russia's case, economic sanctions and brain drain.

To see evidence of all this volatility, take a look at the rankings for ***International Logistics, Domestic Logistics, Business Fundamentals, and Digital Readiness***. The countries making significant moves up or down in relative competitiveness were almost too numerous to name: India, Ghana, Argentina, Iran, Mexico, Pakistan, Lebanon, Colombia, Jordan, Sri Lanka, Bahrain, Cambodia, South Africa, Bangladesh, Tanzania, Turkey, Ethiopia, Bolivia and Paraguay, among others.

What lies ahead in 2023? There are plenty of clues in the Index survey of nearly 800 logistics industry executives.

- A large majority see the prospect of global recession as certain or likely in 2023.
- More than 90% have been hit by higher logistics costs.
- More than 80% blame the Russia-Ukraine war for at least some of their increased costs and supply chain disruption.

Efforts by companies to strengthen resiliency by diversifying production and sourcing appear to be gathering steam. Nearly 75% of respondents said their companies have reduced supply chain risk by sourcing from more locations or by moving production to their home markets, nearby countries, or countries that are political allies ("friend-shoring"). Another 14.5% took other steps to reduce supply chain risk. The country most directly affected by sourcing diversification is China, but the proportion of respondents with plans to continue expansion in China is roughly equal to those planning to move out or slash investment there. The biggest factors for those leaving: China's strict anti-Covid policies and overall difficulty of doing business.

In spite of the turmoil and uncertainty confronting emerging markets and the industry, most industry leaders are looking through a long lens. Fifty-four percent of respondents say they will be more aggressive with emerging markets investments or leave existing expansion plans in place.

Meanwhile, most foresee strong growth in the use of digital freight forwarding, especially if error management can be improved. Few believe that e-commerce growth has reached a plateau. Most see expanded opportunity for their companies and for small business with the implementation of the African Continental Free Trade Area (AfCTA).

Signals in the area of sustainability and climate change are heartening, too. Only a small minority of respondents – about 20% – are resisting or ignoring the imperative to set net-zero targets and commitments. Sixty-seven percent say their businesses are planning for the effects of climate change or already feeling its impact.

For shippers, carriers, distributors, policymakers, marketers and others focused on the supply chain, the annual Agility Emerging Markets Logistics Index has been a useful guide to the world's emerging markets and an accurate indicator of where the global economy and value chains are headed. I'm confident you will find that to be the case again this year.

Introduction from John Manners-Bell, CEO, Transport Intelligence

It is not possible to overemphasise the challenges which many Emerging Markets have faced in the past year. A tightening post-pandemic fiscal environment in the West has resulted in a downturn in investment as well as constrained global export markets. Russia's invasion of Ukraine has led to sky-high energy bills and food shortages, especially across Africa. China, meanwhile, has suffered its own problems as the economy has struggled with its government's zero tolerance approach to Covid. This has created production bottlenecks, disruption to logistics systems and distorted supply chains right around the world.

Whilst many of these problems will be transient, it would be well to avoid complacency. The previous global crisis in 2008 left many politicians in Emerging Markets feeling badly let down by Western governments and corporations, their economic and societal predicament trumped by domestic pressures. As a result, many turned to China, which was, of course, eager to fill the void left by the West's retreat. The ramification of this failure in Western policy is still being felt keenly to this day. China's 'soft' power now reaches deep into countries in the emerging world, not least into Africa and even the USA's backyard, Latin America.

Combined with tensions over Taiwan and the calls for re-shoring of production to North America and Europe, there is a real risk that supply chains will become fragmented or 'balkanised,' as it has been termed. Political intervention and growing protectionism would not only bring about diseconomies of scale and lead to higher inflation but would also deny access to essential markets, exacerbating an already challenging environment.

It is not all bad news, however, as these same political tensions have created opportunities for Emerging Markets resulting from 'China plus' sourcing strategies as manufacturers look to mitigate risks, avoid US tariffs and comply with new legislation, especially in the electronics sector.

What is clear is that the supply chain environment is set to become increasingly complex, with the prospect of globalized open markets now looking remote. If policy makers are not careful, Emerging Markets could be denied previously promised benefits as they find themselves caught in a power play between China and the West. Even well-meaning carbon reduction legislation such as the EU's Carbon Border Adjustment Mechanism risks further disaffection as Emerging Markets are made to shoulder the cost of climate change.

Geo-political tensions have combined with financial uncertainty to create an ever more challenging business and investment environment. The role the Agility Emerging Market Logistics Index plays in providing insight into these complexities is more critical than ever.

Key Measures

To assess and understand these trends and their effects on 50 of the world's most promising emerging logistics markets, the Agility Emerging Markets Logistics Index 2023 examines four key areas for logistics market development:

- Domestic Logistics Opportunities
- International Logistics Opportunities
- Business Fundamentals
- Digital Readiness

It presents a data-driven analysis of 50 of the world's most promising emerging logistics markets, reflecting the complexity, connectedness and opportunities each market provides.

As data visibility increases, the Ti Data Team is able to improve the accuracy of the models for each Index which, along with unprecedented volatility in the industry, instability in the global economy and effect of digital acceleration post Covid-19 has led to more movement in some areas of the Index than we are used to seeing.

Domestic Logistics Opportunities – measures the performance of each emerging market and its potential to sustain and develop domestic demand that requires competitive logistics markets:

- Domestic logistics markets – size & growth
- Economy – size & growth
- Population – size & growth
- Income equality
- Urbanisation
- Development of business clusters

International Logistics Opportunities – measures internal and external demand for trade intensive logistics services and the capacity of individual emerging markets to facilitate cross-border logistics operations:

- International logistics markets – size & growth
- Logistics intensive trade – size & growth
- Infrastructure quality and connectedness
- Border procedures – time & cost

Business Fundamentals – measures the openness, robustness, fairness and strength of each emerging market's business environment, rule of law and market independence:

- Regulatory environment
- Credit rating
- Contract enforcement & anti-corruption frameworks
- Inflation & price stability
- Cost of crime & violence
- Market accessibility & domestic stability

Digital Readiness – measures the potential and progress of an emerging market in becoming a digitally-led, skills rich, innovation-oriented and sustainable economy for the future:

- Emissions intensity
- Renewable energy mix
- Digital business models & online commerce
- Entrepreneurial risk
- Digital skills & human capital
- Availability of enterprise financing

Each year, the Agility Emerging Markets Logistics Index utilises a unique set of variables that measure current, short-and medium-term performance across structural and cyclical factors in each country's logistics markets and key vertical sectors. As a result, the Index provides a snapshot of each country's current performance and future potential as a globally significant logistics market and investment destination. To determine the ranking of the 50 leading global emerging logistics markets, current and forecast data from world-leading institutions including Transport Intelligence (Ti), the World Bank, the International Monetary Fund (IMF), the World Economic Forum (WEF) and others are used.

By combining current and forecast data, this 2023 edition of the Index continues to assess each market's recovery from the impact of the Covid-19 pandemic, as well as its ability to survive or thrive in a period of unprecedented volatility.

With the addition of the Digital Readiness ranking introduced in 2022, and the subsequent enhancements of this model through more data visibility, the Agility Emerging Markets Logistics Index 2023 also provides a unique perspective on the suitability and preparedness of each emerging market to participate in the still challenging, post-pandemic global economy. It is within this sub-Index that we have seen the most change, often due to the significant adoption of e-commerce resulting from the Covid-19 pandemic.

In addition, by ranking each emerging market against the 49 others, the Index highlights strong performers and demonstrates where markets have developed enduring advantages. It also reveals those markets which have seen performance and potential erode.

The Agility Emerging Markets Logistics Index 2022 – Overall Ranking

Rank	Rank Change	Country	Overall Score	Last Year's Score	Domestic Opportunities	International Opportunities	Business Fundamentals	Digital Readiness
1	0	**China**	8.31	9.75	8.47	9.75	7.11	6.63
2	0	**India**	7.43	7.23	8.04	7.45	5.94	7.61
3	0	**UAE**	6.59	5.73	5.60	5.89	9.10	7.37
4	0	**Malaysia**	6.16	5.92	5.29	5.88	7.85	6.72
5	0	**Indonesia**	6.08	5.51	6.34	5.89	5.77	6.21
6	0	**Saudi Arabia**	6.07	5.95	5.38	5.74	7.86	6.30
7	0	**Qatar**	6.02	4.89	5.91	4.96	7.92	6.38
8	0	**Thailand**	5.67	6.01	5.11	5.98	5.77	6.04
9	0	**Mexico**	5.55	6.40	5.37	6.32	4.93	5.11
10	1	**Vietnam**	5.52	5.87	5.02	6.03	5.61	5.43
11	-1	**Turkey**	5.49	6.01	5.14	5.70	5.80	5.50
12	2	**Oman**	5.46	4.89	4.95	4.88	7.24	5.81
13	-1	**Chile**	5.43	5.17	4.83	5.18	7.01	5.55
14	1	**Bahrain**	5.31	4.68	4.99	4.70	7.15	5.34
15	2	**Kuwait**	5.25	4.57	5.07	4.64	6.23	5.76
16	3	**Jordan**	5.19	5.67	4.88	4.75	6.72	5.14
17	-4	**Russia**	5.18	5.25	5.01	5.41	5.13	5.14
18	0	**Philippines**	5.18	5.43	5.02	5.28	4.31	5.99
19	-3	**Brazil**	5.17	4.73	5.42	5.42	4.13	5.19
20	0	**Morocco**	5.08	4.65	4.64	5.09	6.45	4.69
21	0	**Egypt**	5.06	5.00	5.15	4.72	5.62	5.00
22	0	**Kazakhstan**	4.99	4.41	4.66	4.66	6.19	5.10
23	0	**Uruguay**	4.98	4.70	4.78	4.45	6.14	5.22
24	0	**South Africa**	4.94	4.95	4.81	5.00	4.99	5.01
25	3	**Kenya**	4.86	4.61	4.60	4.65	4.97	5.56
26	1	**Pakistan**	4.81	4.58	5.16	4.63	4.13	5.06
27	-1	**Peru**	4.78	5.10	4.72	5.12	4.48	4.58
28	-3	**Colombia**	4.75	5.02	4.67	5.08	4.55	4.53
29	3	**Ghana**	4.72	4.23	4.61	4.44	5.00	5.14
30	3	**Sri Lanka**	4.66	4.72	4.49	4.73	4.32	5.12
31	0	**Argentina**	4.66	4.61	4.87	4.63	4.24	4.68
32	4	**Tunisia**	4.60	4.60	4.61	4.48	5.06	4.39
33	2	**Lebanon**	4.58	4.42	4.81	4.61	3.79	4.80
34	0	**Nigeria**	4.55	4.48	5.15	4.39	3.62	4.61
35	4	**Bangladesh**	4.53	4.38	5.02	4.48	3.53	4.63
36	-6	**Iran**	4.50	4.47	4.57	4.11	4.38	5.15
37	5	**Tanzania**	4.47	4.35	4.62	4.14	4.70	4.58
38	2	**Cambodia**	4.46	4.28	4.45	4.48	4.16	4.73
39	-1	**Ecuador**	4.46	4.46	4.50	4.65	4.49	4.03
40	1	**Paraguay**	4.46	4.22	4.45	4.38	4.30	4.72
41	-4	**Algeria**	4.45	4.63	4.88	4.24	4.61	3.91
42	-13	**Ukraine**	4.40	4.97	4.34	4.38	3.95	4.91
43	0	**Uganda**	4.29	4.39	4.41	4.38	3.91	4.24
44	0	**Bolivia**	4.14	4.46	4.44	4.46	3.74	3.45
45	0	**Ethiopia**	4.07	4.36	4.42	4.40	3.21	3.64
46	0	**Mozambique**	3.76	4.40	4.25	4.39	2.17	3.22
47	1	**Venezuela**	3.75	4.26	4.48	3.96	1.56	3.99
48	-1	**Angola**	3.71	3.48	4.37	4.30	1.90	3.11
49	0	**Myanmar**	3.68	4.25	4.44	4.27	2.04	2.79
50	0	**Libya**	3.35	2.59	4.48	3.81	1.96	1.84

Overall Index

China

Whilst China has once more retained its position at the top of the Agility Emerging Markets Logistics Index, the past year has been one characterized by political, economic and social upheaval, a new and worrying state of affairs for a government which prides itself on continuity and 'advancement'. At the root of its problems is the effect of the Covid pandemic and the zero tolerance policy it has adopted to prevent the spread of the disease throughout the population. This has had severe consequences for the economy which is forecast to grow only weakly (by China's standards) in 2022. Its prospects for 2023 will be influenced by whether the government loosens its regulations. If it does (and there are positive signs of this) then considerable pent up demand could be released, driving forward once again the Chinese and global economy. There is also the risk, however, that a return to normality will precipitate the spread of the disease – overwhelming healthcare systems and throwing the government's policy response into confusion.

Geo-political tensions

Domestic concerns are only part of the country's problems. Whilst the fall out from the government's Covid response may be transient, albeit costly to domestic and worldwide supply chains, there are more strategic global challenges ahead. At the top of these is the impending crisis related to China's claims on Taiwan. There is already a pathway of escalating tension between Taiwan's ally, the USA, and China which can, and already is, having an impact on trade flows. The breakdown of relations started with the tariffs imposed on China by President Trump and continued under President Biden. Specifically regarding Taiwan, the visit of the Speaker of the US House of Representatives, Nancy Pelosi, to Taiwan in August 2022 prompted China's military to undertake 'live firing' exercises in the waters around the island, disrupting air and shipping lanes. This was a clear signal to the international community that a blockade of Taiwan could be used as a diplomatic and economic lever.

Given the reliance of the global semiconductor industry on Taiwanese manufacturers, especially in terms of the most advanced technologies, the West has taken steps to try to establish its own factories, whilst simultaneously preventing China from gaining access to technology which could be used for military purposes.

Capturing supply chain value

A further pillar of Chinese government policy has been the 'capture' of supply chain value by increasing the domestically-sourced proportion of intermediate goods. In the 'Factory Asia' model, intermediates produced across the region have typically been transported to China for final assembly. This means that Chinese manufacturers lose out on much of the value adding process, the final assembly being a low cost and commoditized undertaking dependent on cheap labour. The government has recognized that for its industry to ascend the value chain it has to invest in the know how and facilities which would obviate the need to import components from competitors throughout the region – a calculated, strategic and successful move.

A so-called 'In China, for China' production strategy has also been developed. Encouraged by the country's political leaders, consumers are purchasing Chinese-made rather than foreign goods in increasing volumes, a significant shift in behaviour from only a few years ago. This trend is particularly evident in the younger demographic which takes pride in buying domestically produced goods. These trends will result in China both becoming more self-sufficient in intermediate goods as well as finished products.

Supply chain de-coupling

Whether zero-tolerance Covid policy, the establishment of dual technology supply chains, 'Made In China' value capture or the fall out from its treatment of the Uighur community, China is slowly becoming de-coupled from global supply chains. This will be a very long process given the importance of the market to the rest of the world but it is a trend which cannot be ignored. This will create massive tension between the world's largest military and economic powers but it will also bring opportunities for smaller countries in the region – so-called 'China plus' sourcing locations. These include many of the countries in the Index's Top Ten which will expect to close the gap on China in the coming years.

India

At number two in the ranking, India has made significant progress in the last decade to modernize its logistics and supply chain industry and, by doing so, deliver strong economic growth. This has included introducing a Goods & Services Tax (GST) as well as an electronic waybill for transportation providers crossing state borders which has reduced corruption and transit times. At the same time, the government has looked at ways of making logistics more efficient by addressing bottlenecks, introducing technology and streamlining major transport infrastructure projects, often plagued by delays and mismanagement.

In 2022 the government introduced a National Logistics Policy which has been developed to build on this progress to date. This will include the creation of a unified digital platform that will provide end-to-end visibility for importers and exporters as well as the creation of a multi-modal network that will leverage an under-utilized rail system.

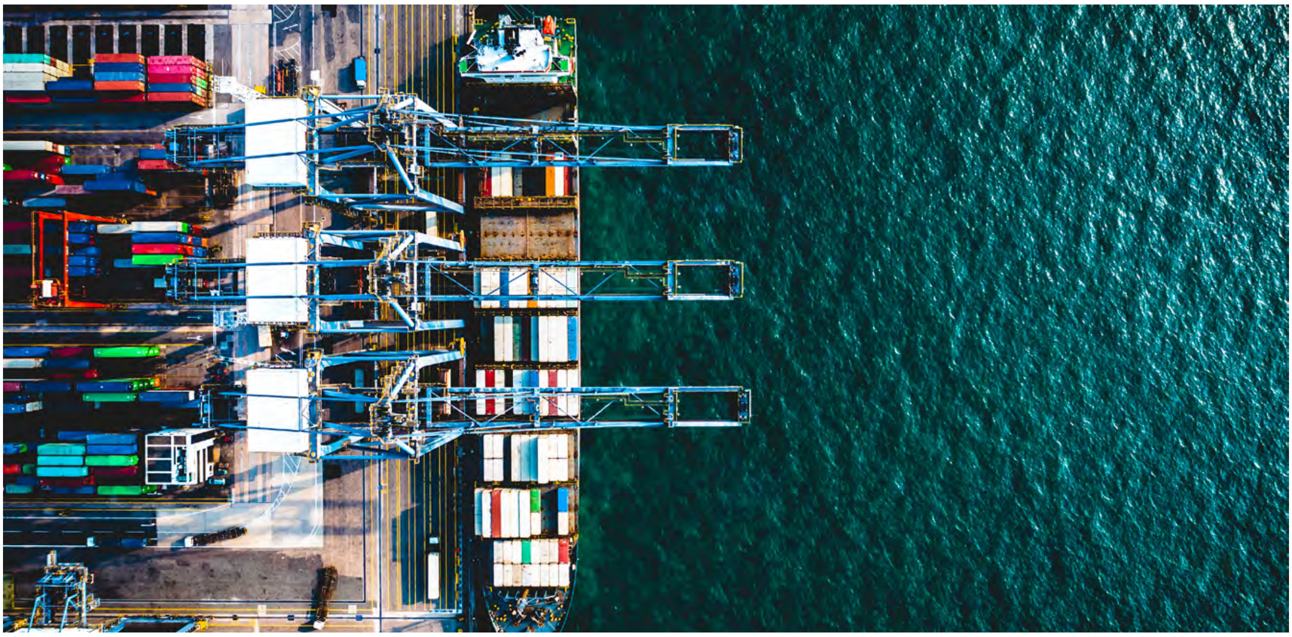
However, there is much to do if India is to attract more manufacturing from China – although the country has made a good start (see feature on Apple's decision to move some production to India on page 29). In terms of logistics, for example, the average turnaround time at an Indian port is 20-40 hours higher than the global average and considerable investment is required in India's port, airport, road and rail infrastructure. While most developed countries have a single digit logistics cost to GDP ratio, the Indian costs have been in the 14 to 18% range for years.

Raising barriers to capture supply chain value

Historically, protectionist policies have meant that India has excluded itself from many Global Value Chains, thereby losing the economic benefits which these can bring. When Prime Minister Modi came to power many in the global community hoped that he would reduce barriers to international trade, opening up the market to foreign competition. However, in fact his policy response has been to raise duties further (up to 25%) on many imported intermediate products in order to encourage global suppliers to establish Indian operations and hence increase domestic value add. The so-called Phased Manufacturing Programme (PMP) started raising duties on specific components used in mobile phones in 2016 and rapidly expanded this list in subsequent years. The ambition of the PMP was to ensure that up to 50% of the value of a mobile phone assembled in India was generated by Indian-based suppliers (rather than imports), thereby establishing an eco-system for foreign investment and (although it may sound counter-intuitive) allow Indian high tech companies to better participate in Global Value Chains. This forms part of a broader 'Make in India' policy discussed in more detail later in this document.

The stance of the Indian government towards trade policy is complicated by internal politics. There are those which fear the impact which the entry of multinational corporations into the Indian market would have on small businesses, in particular retailers. Regulations have consequently constrained the ambitions of international retailers such as Walmart and e-commerce players such as Amazon. There are also those who believe that China provides the greater threat, dumping cheap, subsidized exports on the Indian market to destabilize the economy and support its political goals of expansionism. It is worth noting that Prime Minister Modi has ensured that India is one of the few countries in the Asian region to oppose China's Belt & Road Initiative, unlike its major rival and neighbour, Pakistan.

Either way, foreign companies are finding it increasingly difficult to navigate the regulatory framework in India. The risk is, as the world approaches a period of sustained economic downturn, that a neo-protectionist regime will isolate India further from globalized supply chains rather than integrate within them. This could counteract the impressive progress which India has made under Modi's leadership towards becoming an advanced, Industry 4.0 enabled economy.



United Arab Emirates

Whilst the investments made by the UAE over the last few decades in its transport and logistics infrastructure have propelled the country to the top echelons of the Agility Emerging Markets Logistics Index, there is no sign of any complacency, despite signs of global recession and deglobalization.

Digitalization, the foundation of progress

Whilst the development of ports, airports, road and rail networks are on-going, the government is also prioritizing its digital capabilities. It sees the growth of the e-commerce market as a major opportunity, facilitated by its already developed internet capabilities and advanced digital payment systems.

Digitalization is regarded as being key to address many of the inefficiencies which exist in the UAE's international logistics and supply chain sector. A significant proportion of air and sea freight bookings are still undertaken by phone or fax; containers are often lost; 20% of boxes do not turn up for their booked departure time; terminals are often congested; ships depart later due to problems with Customs or paperwork and there is poor visibility of ship arrival times. Many of these issues were laid bare by the Covid pandemic and this has created an imperative for investment in new Port Community Systems (PCS). However, there are also projects to develop disruptive technologies such as the Internet of Things, autonomous trucks and ships, artificial intelligence as well as cybersecurity tools, all with the aim of creating high levels of supply chain visibility and resilience.

Embracing trade liberalization

Whilst many countries have taken the political decision to turn their back on globalization, the UAE has doubled down on its long standing commitment to free international trade. This is hardly surprising given that its economy has benefited so much from the government's decision to develop the country as a major international hub serving Europe, the Middle East, India and parts of Africa.

To this end the UAE has signed several significant trade deals with major emerging markets across the region and elsewhere. Amongst these include a wide-reaching deal with India, the UAE-India Comprehensive Economic Partnership Agreement (CEPA), which is hoped will increase trade from $60 billion to $100 billion over the next five years. The agreement will remove 10,000 tariff lines from goods and commodities including oil & gas, textiles, agriculture and jewellery. In addition, a number of initiatives to facilitate cross-border trade between the two markets will be adopted; data will be shared with the goal of adopting Authorised Economic Operator (AEO) mutual recognition; there will be greater access to each other's pharmaceutical markets; enhanced transparency on government procurement and a shared commitment to digital trade. The agreement will also allow the UAE's partners in the Gulf Cooperation Council (GCC) to join if their own negotiations with India which commenced in 2022 are delayed.

Additionally the UAE has made, or is in the process of making deals with Turkey, Israel, Indonesia and even Colombia, demonstrating the political priority which is being given to ensuring the UAE's position in world trade.

Malaysia

Malaysia has retained its fourth place ranking in this year's Index. The country has not been immune to the fall out from the global pandemic and many manufacturers were impacted by the 'whiplash' effect of supply and demand sourcing decisions by their overseas customers. This has resulted in a policy decision by the Malaysian government to place resilience at the heart of its next five year supply chain plan. This involves a focus on what it calls 'local sourcing facilitation', that is, encouraging and facilitating major manufacturers in the country to use domestic suppliers, often SMEs, rather than those located in other countries. The government believes that 'buy local' policy will reduce supply chain disruptions such as export bans, border closures or, indeed, the impact of China's zero tolerance approach to Covid which has been so damaging to GVCs across Asia. This will not only increase resilience, but the government believes that it will also create 'spillover' benefits cascading down to local businesses in the country.

At the same time as this, investment in transport and digital infrastructure is on-going from a wide-range of sources including government, non-governmental and commercial financial institutions and foreign businesses. The Port of Tanjung Pelepas (PTP) provides a good example of this with the announcement in 2022 that it was expanding its capacity by a million twenty-foot equivalent units (TEUs) through a joint investment by its owners, Malaysia's MMC group and the Netherlands' APM Terminals.

A significant proportion of Malaysia's foreign investment has also come from China's Belt & Road Initiative (BRI). This has attracted considerable controversy with fears that Malaysia would fall into a 'debt-trap' leaving it beholden to China. Indeed these fears resulted in a change of government. Nevertheless, since the programme's creation, national and local governments in Malaysia have looked to the BRI for investment in critical infrastructure including ports, rail lines and industrial parks.

As is the case with many of the top ranking countries in the Index, Malaysia has developed an 'Industry 4.0' policy to focus its future supply chain strategy. This involves using digital technologies to increase productivity ('by 30% by 2030') whilst improving what it calls its ecological integrity and the quality of life of its people. This will involve:

- Equipping the workforce with Industry 4.0 skill sets
- Developing enhanced digitalized logistics systems to promote interoperability
- Increasing the robustness of the regulatory framework to support adoption of transportation and logistics-related technologies
- Improving mobility through development and adoption of centralized and open transport-related database, including traffic management
- Support R&D for Industry 4.0 technologies to develop low carbon mobility solutions
- Enhance efficiency in cyber security management to mitigate cyber risks

Indonesia

Whilst offering impressive opportunities, Indonesia has many supply chain and logistics challenges, a fact illustrated by its high proportion of logistics costs to GDP. Despite its strong position in the top ten of the rankings, many in the country believe that progress is not being made as quickly as might be expected, especially given the government's aim to reduce the logistics cost ratio to 17% from 24% by 2024.

In order to provide the basis for an economy-wide transformation, the Indonesian government has adopted a 'Making Indonesia 4.0' programme. This will focus innovation and development on five key sectors comprising electronics, chemicals, automotive, food and beverage and textiles, all underpinned by enhanced logistics and supply chain processes. However, whilst the intention may be very sound, considerable progress will need to be made before companies in the market will have Industry 4.0 capabilities. One way to facilitate this would be to remove many of the regulations relating to foreign investment. The easier entry of international companies into Indonesia would allow local businesses to benefit from the transfer of advanced technologies, especially those in the logistics sector which would gain from the introduction of digital platforms, GPS and IoT sensor technology, robotics and automation to name just a few.

Indonesia has recently adopted a digital National Logistics Ecosystem (NLE) plan which is designed to improve the flow of logistics data and goods, domestically and internationally. Its aim is to simplify business and government processes; enhance public and private collaboration as well as creating a digital payment service. Two of its major goals are to reduce transit times from arrival at port to arrival at warehouse and reduce congestion on Indonesia's roads through better planning. However, according to reports, take up has been slow and connectivity with other platforms low, showing the progress that still has to be made if the government is to fulfill its ambitions.

Indonesia has very close links with China which is its largest trading partner (both in terms of imports and exports) and second largest provider of foreign direct investment. China's zero tolerance approach to Covid and the disruption this caused for its manufacturing and supply chain industry has had a significant impact on Indonesia's economy. Whilst China plus sourcing strategies may have mitigated the effects of the policy to some extent, the renewed growth of the Chinese economy; the relaxation on mobility restrictions for Chinese business travelers; increased investment activity and the cessation of 'stop-start' production would far outweigh these benefits.

Saudi Arabia

The high oil prices caused by Russia's invasion of Ukraine and the positive impact which this has for the Saudi economy suggests that the country will make considerable progress up the rankings over the coming years.

However, despite the short term gains, the Saudi government has been mindful of the prospect that at some stage its oil reserves will run out (although not for many decades) and that there is a political imperative in the global economy to transition to non-fossil fuels. Consequently there have been significant moves to diversify into alternative sectors. Logistics has been one of these priority areas which has attracted considerable government and foreign investment.

Planning for the future

To achieve its ambition of economic diversification, in 2016 the country adopted what it called the 'Saudi Vision 2030' programme. As part of that effort, Saudi Arabia has spent more than $100billion on infrastructure and related projects intended to position it as a global logistics hub at the crossroads of Asia, Europe and emerging Africa. Its targets include developing 60 logistics zones to support exports, e-commerce and re-exports, in addition to encouraging trade through land ports; the growth of re-export revenues from SAR 42 billion to SAR 520 billion riyals; export growth from SAR 185 billion to SAR 507 billion; and the expansion of the e-commerce sector from 6% to 23% of retail sales.

In October 2022, a further initiative, 'Global Supply Chain Resilience', was launched which included the promise of a SAR 10 billion package of inducements to attract foreign investment of up to SAR 40 billion to the market. According to a statement by the Saudi government, 'The [Covid-19] pandemic, trade disputes and the geopolitical landscape have broken or weakened global supply chains, driving up commodity prices and disrupting production and distribution. This initiative aims to strengthen the position of the Kingdom of Saudi Arabia in the global economy, and to mitigate the impact of global disruptions. The Global Supply Chain Resilience Initiative will leverage the Kingdom's resources, infrastructure and location to bring greater resilience to economies and companies across Europe, the Americas and Asia.'

In effect, Saudi is positioning itself as a low risk, low cost and low carbon economy which would enable investors to access a large domestic market as well as reaching regional and global customers through its transport and logistics infrastructure links. Oil will obviously be a major factor in the economy's development for many years to come. But the government wants to increase its level of value add (in a similar way, perhaps, to China and India) by using this resource to supply home-grown processing industries such as chemicals, pharmaceuticals, plastics and rubber.

Building regional and global links

As well as encouraging FDI, Saudi has also been an active investor in other emerging countries creating and developing strategic 'trade corridors'. For instance, trade with India is expected to grow threefold by 2030. Whilst exports of crude petroleum will be an important element of this growth (Saudi is looking to invest $100 billion in India's refining, energy and petrochemical industry) it will also target infrastructure and agriculture sectors.

Likewise, the government also intends to develop its relationship with China, with trade expected to double by 2030. Its national oil company, Saudi Aramco, already has long term agreements to supply China's refineries and chemical plants. However, it intends to align its own 2030 Vision with the aims of China's Belt and Road Initiative and has signed deals in a range of sectors including logistics and transport, energy, manufacturing, e-commerce and petrochemicals, mining and housing.

There is no doubt that Western markets will continue to be critical to the success of Saudi Arabia's strategic vision. It is still heavily reliant on the price of oil for economic growth and a recession in Europe and the USA will inevitably depress oil revenues. However, in the medium term, emerging economies in Latin America, Africa and of course Asia will become increasingly important for Saudi's economy as they will become relatively more important customers for oil. The decarbonizing West will still require an array of petrochemical products, including plastics, chemicals and pharmaceuticals which Saudi will also be able to supply.

In summary, Saudi Arabia has the resources and ambition to become a major regional and global hub over the next decade, becoming a conduit for trade between some of the fastest growing markets in Asia and Africa, as well as serving the rest of the Middle East and parts of Europe. Its large domestic and export market will give it an advantage over other hub ports in the region which focus largely of transshipments. Its manufacturers will benefit from access to low cost oil and energy although investors should be cognizant of security risks, especially if relations with Iran deteriorate further.

Agility's Take
on Saudi Arabia

The most exciting logistics markets in the world for logistics investment today is the Kingdom of Saudi Arabia (KSA). With the government investing heavily in the sector as one of the key pillars of its Vision 2030 plan, Saudi Arabia's ambition and execution are both helping the country make rapid progress. In 2021, the government announced that more than SAR 500 billion will be spent in the next decade on the development of airports, seaports, rail and other infrastructure. In 2022, Saudi launched the Global Supply Chain Initiative, with the aim of attracting $10 billion from investors to position the country as a global supply chain hub. The initiative included SAR 10 billion ($2.66B) worth of financial incentives. KSA's new Special Integrated Logistics Zones, as well as the development of 40 industrial clusters and five economic zones, are expected to further help position the country as a leader in the region and beyond. Agility is investing heavily in developing high-quality supply chain infrastructure in the Kingdom, and has developed more than 1 million sqm of logistics parks across Riyadh and Damam. (Agility's Riyadh warehousing complex was the first in the GCC to receive EDGE Advanced green building certification; the complex had to be 40%+ more energy efficient than others in the market in order to earn the designation.) In 2022, Agility announced that it would invest $163 million to further develop a warehousing complex on a 576,760 SQM parcel south of Jeddah, with construction starting in Q1 2023.

Qatar

Although Qatar has recently been thrust into the glare of the world's media by the global energy crisis and its hosting of the 2022 FIFA World Cup, its development as an important regional and global supply chain and logistics hub has been many years in the making. As with many countries in the region, it has made efforts to diversify from its dependence on hydrocarbon based revenues and, perhaps paradoxically, the present high price of Liquid Natural Gas (LNG) will provide the government with more resources to pursue this ambition. The development of the Qatar Freight Master Plan was due for completion by the end of 2022 as part of the country's '2030 Vision' policy. This sets out a long term transition to sustainable logistics, balancing population growth and urban development with the demand for transport and logistics services. Encouraging more manufacturers to base their operations in the country will also be critical in order to rebalance trade which is presently heavily weighted in favour of imports.

A priority for the country is investment in Cold Chain facilities and services, catering for food and pharmaceuticals. Qatar has become a major hub for the region, with the majority of its temperature controlled warehouses based in Free Zones and distributed internationally by land.

Qatar's government has recognized the importance of digitalization to its economy and the supply chain sector in particular. It has entered into strategic partnership with major global technology players such as Google and Microsoft to develop cloud services which will allow customers to run workloads locally, creating a regional digital hub. This will be important as the country adopts a range of Industry 4.0 initiatives to digitalize and automate its supply chains.

In the shorter term the World Cup has provided a major boost to the country's logistics industry. Not only was Qatar's population expected to rise by 1.8 million people throughout the tournament, translating into demand for hotel, food and medical requirements, but billions of dollars were spent in the run up on the construction of football stadia, transport infrastructure and hospitality facilities. This has resulted in a huge surge in demand for domestic and international transport services, warehousing and distribution as well as freight management and border processes.

Obviously, hydrocarbons continue to play the dominant role in Qatar's economy and intense competition for LNG on a global basis has led to significant new investment in gas fields and the transport infrastructure required to move the gas to global markets. For example, Qatar's liquefaction capacity will increase from 77 million tonnes per year in 2022 to 126 million tonnes per year by 2027. As well as investment at home, the government has been keen to invest in port infrastructure around the world targeting the UK, US, Egypt and Germany, amongst others. This will provide the country with exclusive long term markets for its gas products, with commensurate economic and political leverage.

Thailand

Categorized as a Southeast Asian Lost Cost Country (LCC), Thailand's economy has over the past two decades become increasingly integrated within Global Value Chains (GVCs) as companies have increasingly unbundled and out-sourced parts of their production. Although this has created many opportunities, the trend has meant that its economy has also become highly vulnerable to rising costs and supply chain disruption, such as that resulting from the Covid-19 pandemic. It was particularly affected by the capacity challenges faced by the shipping industry on the transpacific lanes and the resultant high rates.

However, the country has also become a beneficiary of the China plus risk mitigation sourcing strategies being increasingly employed by global manufacturers. Its high value production ecosystems, especially important in the electronic manufacturing services (EMS), medical equipment and agritech sectors, have provided a ready alternative for companies wishing to migrate away from or complement their Chinese suppliers. Whilst other Southeast Asian countries, such as Vietnam, may have lower labour costs, Thailand is more technologically advanced, especially in the 'green economy' including the manufacture of electric vehicles (EVs). This has provided the country with a significant competitive advantage in the region.

For Thailand to continue its development as a major supply chain hub in the region the government recognizes that it will need to promote further investment in its transport and digital infrastructure at the same time as ensuring inclusive and sustainable growth. The government also believes that small and medium-sized enterprises (SMEs) can play a major role in the growth of the economy if it is able to integrate them within GVCs.

The government has developed what it calls 'Thailand 4.0' strategy which has the goal of creating a high-income status country by 2036. This includes prioritizing 12 sectors, not least those of logistics and digital, as well as focusing investment on infrastructure in the Eastern Economic Corridor (EEC) area which it intends will become a gateway to both Southeast Asia and the Asia Pacific region.

Internationally, Thailand's membership of the ASEAN group of countries and its signing of the Regional Comprehensive Economic Partnership (RCEP) Agreement (which includes ASEAN members, Australia, China, Japan, Republic of Korea and New Zealand) will liberalize market access. As a result, Thai exporters will see lower or zero rate tariffs on tens of thousands of products and they will also benefit from more advantageous rules of origin regulations which will encourage global manufacturers to source within the region.

Mexico

Mexico is at number nine in the Agility Emerging Market Logistics Index. However, given its location, scale and proximity to the world's largest consumer market, USA, there is plenty of potential for it to move higher in the rankings. Due to the growing interest in near-sourcing as a result of the challenging conditions and relationship with China, it has often been said that this should be a 'golden era for investment' in Mexico.

For years, large parts of the Mexican economy have been integrated within US supply chains leading to economic growth in border cities and states. The Covid pandemic has encouraged a new wave of investment in cross-border factories as manufacturers have sought to avoid the problems on transpacific routes caused by congestion, delays and exceptionally high freight rates. With around 88% of exports to the US routed by road and rail, land-based logistics networks were not as badly affected as those reliant on movements of containers through the West Coast ports, although Mexican shippers were certainly not immune from the wider supply chain chaos caused by bottlenecks and congestion across the region.

Setting aside the short term disruption which had largely subsided by the end of 2022, it would seem evident that the Mexican economy will significantly benefit from the deteriorating relationship between US and China. However, this will only occur if the Mexican government is able to build a more attractive business case for foreign investment. Despite being the 15th largest recipient of FDI in 2019, its record in this respect is mixed, as indicated by the stagnating of exports to the USA even prior to the Covid pandemic.

Opportunities and challenges for Mexico

Mexico's proximity and access to the US market through the United States-Mexico-Canada Agreement (USMCA) (the successor to the North America Free Trade Agreement (NAFTA)) has long made it a near-sourcing location for manufacturers looking to supply the US market cheaply, quickly and with easier oversight of production processes and quality control. Moving goods from Mexico to the USA takes only weeks compared with several months spent in transit from China. Recent duty increases on goods imported to the USA from China have reinforced Mexico's position as an attractive alternative: the composite tariff rate imposed on Mexican goods is just 0.04% compared with 19.2% on Chinese imports.

However, the market is far from straightforward and Mexico has challenges to overcome if it is to maximize the opportunities which China plus sourcing strategies offer.

- Labour

The low cost of labour in Mexico is one of the main reasons why foreign manufacturers have chosen to base their production operations in the country. According to IHS Markit, the average manufacturing industry wage in 2022 in Mexico is $3.90 per hour, compared with $5.58 in China. The comparable wage in the USA is $30 per hour. Mexico also has an abundant and growing resource of labour with an estimated 7 million people available for work. However, wages are rising both as a result of market forces and government policy. The statutory minimum wage jumped by 20% in 2022 and pension reforms will increase employer contributions.

The government will have an important role to play in creating a well-educated and skilled workforce. This will help employers as well as workers who will benefit from longer term and better remunerated positions within the formal jobs market. Growth is presently being constrained by a lack of managerial calibre candidates with manufacturers competing to hire from a small top-talent pool. The market also lacks skills which would allow the economy to break into high tech, advanced manufacturing such as semi-conductors.

- Security & Corruption

The security situation in Mexico is one of the biggest headwinds to economic growth. One of the greatest risks related to supply chain involves the theft of cargo from trucks en route to the border with the US. Drug cartels also target legitimate shipments in which to infiltrate illicit goods.

Corruption is also a major problem. Government officials, including Customs officers and law enforcement agents, can work in collaboration with organized crime. Mexico's position in Transparency International's Corruption Perception Index has fallen every year since 2012 and it is now ranked 124th out of 180 countries.

Government investment policy

The Mexican government is prioritizing investment in transport infrastructure, with a financial package of $38.6 billion planned in 2022 to improve roads, bridges and railways. In addition, the US government has committed to invest $1.4 billion to build and modernize land ports on the US-Mexican border, matching that promised by President Obrador.

However, the criticism has been levelled that Mexico has the lowest level of public investment amongst Organization for Economic Cooperation and Development (OECD) countries. The government also intends to spread its investment across the country, not just on the regions which already have a focus on manufacturing and logistics, but poorer areas especially to the south. Although politically popular, this has meant a misalignment between industry needs and the infrastructure development which may not be in the long term economic interests of the country given its limited resources.

Vietnam

In 2022, Vietnam moved into the Top Ten of the Index, illustrating the success which the country has had at developing its supply chain industry as well as showing how it has been able to benefit from 'China plus' sourcing strategies of major multinational manufacturers. It has been able to attract many of the world's most prestigious companies to its market, particularly those in the high tech sector. Electronics and consumer electricals accounted for 42% of exports in 2020, soaring from just 13% in 2010.

Apple has been at the forefront of moving production to the market. In 2020 it began planning to expand assembly operations in Vietnam, asking Foxconn to expand its assembly operations in the country. Sony, Samsung and LG have also expanded production in Vietnam, building airfreight infrastructure in Hanoi to support their assembly of mobile phones.

Certainly, Vietnam is at the front of the queue for the relocation of electronics production from China. However, whilst the country is exploiting these opportunities, it faces a major challenge to move up the value chain. For example, whilst Apple has created a production eco-system in the market, sourcing from 21 different companies, none of these is Vietnamese. Whilst China and India have focused their industrial policy on the creation of national champions, building brands instead of providing services to global OEMs, the Vietnamese market can be characterized as a low-cost assembly location. This may suit global manufacturers, looking for cheap labour in the region as wages and risk rises in China, but it means that it is not able to create value which would enable its manufacturing industry to develop. This will mean that it risks becoming stuck in a cycle of decline, faced with:

- High energy usage
- Low labour productivity
- Low efficiency
- High levels of pollution
- Low investment

However, there is also the risk that the market would get stuck in the 'middle income gap', where rising labour costs force foreign manufacturers to look elsewhere. If Vietnam is to move further up the rankings it will have to provide investors with a complete package of production eco-systems comprising multiple suppliers, strong ICT links, well trained workers and good logistics. The latter will be critical to its success with logistics costs presently running at 20% of GDP, 7 percentage points higher than the average in Asia. Transport infrastructure projects are often slow to come to fruition plagued by delays, bureaucracy, mismanagement and a culture which penalizes risk taking.

Even though Vietnam is exceptionally well placed to benefit from China's difficulties, the government has much work to do if it is to create a robust industrial environment which will attract high quality manufacturers and create value adding local suppliers.

Domestic Logistics Opportunities

Domestic Logistics Opportunities			
1	**China**	8.47	0
2	**India**	8.04	0
3	**Indonesia**	6.34	0
4	**Qatar**	5.91	0
5	**UAE**	5.60	0
6	**Brazil**	5.42	1
7	**Saudi Arabia**	5.38	1
8	**Mexico**	5.37	-2
9	**Malaysia**	5.29	0
10	**Pakistan**	5.16	6
11	**Nigeria**	5.15	1
12	**Egypt**	5.15	2
13	**Turkey**	5.14	-3
14	**Thailand**	5.11	-1
15	**Kuwait**	5.07	3
16	**Vietnam**	5.02	1
17	**Bangladesh**	5.02	4
18	**Philippines**	5.02	1
19	**Russia**	5.01	-8
20	**Bahrain**	4.99	0
21	**Oman**	4.95	1
22	**Jordan**	4.88	2
23	**Algeria**	4.88	3
24	**Argentina**	4.87	1
25	**Chile**	4.83	-2
26	**Lebanon**	4.81	3
27	**South Africa**	4.81	4
28	**Uruguay**	4.78	0
29	**Peru**	4.72	1
30	**Colombia**	4.67	2
31	**Kazakhstan**	4.66	2
32	**Morocco**	4.64	2
33	**Tanzania**	4.62	4
34	**Tunisia**	4.61	1
35	**Ghana**	4.61	1
36	**Kenya**	4.60	2
37	**Iran**	4.57	-22
38	**Ecuador**	4.50	2
39	**Sri Lanka**	4.49	0
40	**Venezuela**	4.48	1
41	**Libya**	4.48	4
42	**Paraguay**	4.45	4
43	**Cambodia**	4.45	0
44	**Myanmar**	4.44	0
45	**Bolivia**	4.44	-3
46	**Ethiopia**	4.42	2
47	**Uganda**	4.41	0
48	**Angola**	4.37	1
49	**Ukraine**	4.34	-22
50	**Mozambique**	4.25	0

China top again but storm clouds gather

Once again the top three ranking in the Domestic Opportunities sub-Index remain unchanged with China, India and Indonesia retaining their positions. Despite the well documented problems faced by China, the Index shows how important the market is in terms of size of economy, population and growth prospects. Other attributes such as urbanization, distribution of income and the size of the contract logistics and parcels delivery sector make the market impossible to ignore. The sheer scale of the country will mean that it will remain an investment priority in terms of logistics and supply chain for many years to come, especially once the government's zero tolerance Covid policy has been removed.

However, the impact of intermittent 'lockdowns' of various Chinese cities is inflicting considerable pain on the economy with many manufacturers reporting falls in output of up to 40% in affected regions. Economist Global Data believes that China's GDP will reach just 4.5% in 2022, well below the government's target. Its share of the world export market is also likely to decline. Global fashion brands, such as Nike, have faced the double hit that, as well as closing factories, they have also been forced to shut their retail outlets for the duration of each lockdown. One estimate suggests that sales have dropped by more than 50% in affected areas.

Looking ahead, there are a range of other headwinds facing the country, including not least the recent societal unrest, its stance on Taiwan and security concerns in the West as it flexes its economic, political and military muscles on the global stage. This has led to other markets benefiting from so-called 'China plus' sourcing strategies which have been implemented by manufacturers and retailers in an attempt to avoid US tariffs, legislation on the export of advanced technologies to China from the West and the ethical fall out from the treatment of the Uyghur community in the Xinjiang region.

'Make in India' policy brings rewards – and costs

India has retained its position at number two in the rankings. The 'Make in India' policy, initiated by Prime Minister Modi in 2014 as a way of encouraging investment in advanced manufacturing as well as fostering innovation and skill development, has been highly successful at promoting advanced manufacturing capabilities. In much the same way as China, India has prioritised the capture of higher levels of supply chain value by encouraging the development of Indian-based suppliers rather than relying on other Asian countries for the import of intermediate goods. The aim of the policy has been to propel double digit economic growth, create 100 million additional manufacturing jobs and increase manufacturing's share of the economy to 25% by 2022 (a target now pushed back to 2025).

At the same time as encouraging Indian industry to become more integrated with Global Value Chains, the policy has been designed to protect local manufacturers and retailers by putting up barriers to market entry and increasing tariffs. At the very least, this sends out mixed messages to potential investors which will not be conducive to economic development. As we highlight below, Amazon is pulling out of the market partly due to protectionism, whilst in the section on International Logistics Opportunities, we show that paradoxically Apple is increasing its investment.

Amazon retreats from India

Global e-tailing platform, Amazon, announced in November 2022 that it was intending to discontinue its 'Amazon Distribution' business which serves retail customers in Bengaluru, Mysore and Hubli with e-commerce wholesaling services. The service was largely aimed at kiranas, neighbourhood nanostores based in urban areas.

Part of Amazon's problems in the market come from well-resourced local competitors, such as Reliance Retail, Meesho and DealShare. However, the government has also put many barriers in its way including legislation which bans foreign retailers from holding inventory. This means that multinational retailers can only do business in India if they do so through stakes in local companies. Proposed legislation may even remove this loophole.

India is an example of how many countries in the Emerging World view globalization. Many want to reap the undoubted rewards of integrating with global markets, but at the same time they want to protect their own markets from global competition. Whilst China has successfully blazed this trail, it is unclear if other markets, such as India, will have the economic and political heft to 'have it both ways'.

Brazil falls but Egypt soars

Brazil saw its ranking fall by three places as it undergoes a period of economic and political upheaval. According to foreign affairs think tank, Chatham House, the country is experiencing rising poverty and food insecurity with more than 33 million Brazilians in famine conditions and 63 million below the World Bank poverty threshold. The country is also split following a narrow victory in the polls by leftist Luiz Inácio Lula da Silva over the conservative Jair Bolsonaro. GDP is expected to be very weak in the coming years whilst inflation has already taken hold. Domestic investment in infrastructure will be difficult to maintain with the country's fiscal position so precarious.

One of the biggest movers in Domestic Logistics Opportunities was Egypt, which climbed two spots to No. 12, ahead of Turkey. Egypt has been one of Africa's success stories over the past decade, outperforming most markets in the Middle East, North Africa and Sub-Saharan region, despite the impact which Covid has had upon its economy, especially tourism. The country now accounts for over a fifth of the continent's manufacturing value add and the government's business friendly approach has been particularly successful at attracting international investors, not least in the high tech sector. The government has identified that embracing Industry 4.0 will be critical to the future success of its economy and its efforts so far have been focused on modernizing business processes fostering technological expertise to achieve this goal.

Egypt prioritises port investment

Egypt's government has initiated a $4 billion investment programme aimed at modernizing and increasing the capacity of the country's ports on the Red Sea and the Mediterranean. This will not only aid the throughput of container traffic but is also designed to turn the country into an energy hub, including Liquid Natural Gas (LNG) terminals. The development of industrial parks, both public and private, will play an important role in the country's economic growth. Many of these parks form part of specialized sector clusters, such as furniture or technology, helping to develop an eco-system of relevant competences and foster co-ordination between companies. The government hopes that they will facilitate the development of continental value chains.

Agility's Take

The Gender Gap: 132 Years to Close?

How big is the gap between men and women when it comes to economic opportunity, education, health and survival, and political empowerment? Big enough that it would take 132 years to erase at current rates.

That is the sobering news in the World Economic Forum's 2022 Gender Gap Report. It is especially alarming at a time when developed and developing countries alike are looking for ways to unlock their potential and spur sustainable, inclusive growth.

Global gender parity in labor force participation is actually moving backwards, widening sharply since the pandemic struck in 2020. That's when unemployment spiked in most countries. Across the board, jobless rates among women have been higher as millions had to prioritize child care and other care-giving roles that often left them homebound.

The report says women are occupying a growing percentage of leadership roles. But that good news is tempered by the fact that female leaders are overrepresented in a small handful of sectors such as Non-Governmental Organization (NGO) and education while being almost absent from others, such as infrastructure and manufacturing.

With the possibility of a global slowdown looming, emerging markets would do well to remember that there's a powerful correlation between the prosperity and stability of a society and the equality of opportunity it affords women.

International Logistics Opportunities

International Logistics Opportunities			
1	**China**	9.75	0
2	**India**	7.45	0
3	**Mexico**	6.32	0
4	**Vietnam**	6.03	1
5	**Thailand**	5.98	-1
6	**Indonesia**	5.89	0
7	**UAE**	5.89	2
8	**Malaysia**	5.88	-1
9	**Saudi Arabia**	5.74	2
10	**Turkey**	5.70	-2
11	**Brazil**	5.42	1
12	**Russia**	5.41	-2
13	**Philippines**	5.28	0
14	**Chile**	5.18	0
15	**Peru**	5.12	0
16	**Morocco**	5.09	1
17	**Colombia**	5.08	-1
18	**South Africa**	5.00	1
19	**Qatar**	4.96	1
20	**Oman**	4.88	1
21	**Jordan**	4.75	1
22	**Sri Lanka**	4.73	1
23	**Egypt**	4.72	3
24	**Bahrain**	4.70	1
25	**Kazakhstan**	4.66	-1
26	**Ecuador**	4.65	1
27	**Kenya**	4.65	1
28	**Kuwait**	4.64	4
29	**Pakistan**	4.63	2
30	**Argentina**	4.63	-1
31	**Lebanon**	4.61	-1
32	**Tunisia**	4.48	1
33	**Bangladesh**	4.48	8
34	**Cambodia**	4.48	0
35	**Bolivia**	4.46	1
36	**Uruguay**	4.45	2
37	**Ghana**	4.44	0
38	**Ethiopia**	4.40	4
39	**Mozambique**	4.39	0
40	**Nigeria**	4.39	3
41	**Uganda**	4.38	-1
42	**Paraguay**	4.38	-7
43	**Ukraine**	4.38	-25
44	**Angola**	4.30	0
45	**Myanmar**	4.27	0
46	**Algeria**	4.24	1
47	**Tanzania**	4.14	1
48	**Iran**	4.11	-2
49	**Venezuela**	3.96	0
50	**Libya**	3.81	0

Unsurprisingly given its dominant position in world trade, China heads up the rankings for International Logistics Opportunities. It has an unassailable position in terms of its trade; air and sea freight forwarding and international express markets; its level of air cargo and shipping ‘connectedness’ with other countries around the world and the efficiency of its border processes. However, there is no room for complacency as this year has shown. Political priorities in the shape of zero tolerance of Covid have had a disastrous effect on China’s reputation as a reliable sourcing location for global manufacturers and retailers and this is leading to the rebalancing of global value chains across the region.

China’s zero Covid policy still causing supply chains chaos

In October 2022, disturbing pictures emerged from China showing workers at Foxconn’s Zhengzhou plant – responsible for making around 60% of Apple’s iPhones – staging a ‘break out’ by scaling walls in order to avoid being locked down within the factory. A report in the Financial Times suggested that although production would be switched to alternative facilities, up to 10% of Apple’s global output was likely to be affected.

Lockdowns are having disastrous consequences for international logistics. A reduction in trucking capacity in Shanghai of 45% in spring 2022 resulted in 80% of vessels being delayed, compared with just 20% two years earlier. Imports were also affected with containers waiting for up to 12 days for collection compared with pre-lockdown 4-5 days, according to digital forwarding platform, Freightos.

Most recently in October authorities locked down the north eastern port city of Ningbo resulting in the closure of terminals and warehouses. They also instituted a whitelist of ‘Covid-clear’ truck drivers although this did not prevent a subsequent outbreak amongst the driving community. Such disruptions and capacity constraints as these have led to falling export volumes which have combined with weaker demand in the US and Europe to put downward pressure on shipping rates. Air cargo volumes and rates also remain weak for the same reasons.

Asian countries to benefit from 'China plus'

These problems have resulted in significant volatility and uncertainty for global manufacturers and retailers and this in turn has led to increasing levels of inventory; orders being placed earlier and – most critically for China's economy – the use of suppliers based in neighbouring countries. Vietnam has been a key beneficiary of this trend, its furniture industry, for example, grew its share of global exports from 11% in 2019 to 17% in 2022 at the same time as China's has fallen from 61% to 53% (source: MDS Transmodal). Although rising Chinese labour costs, the imposition of Trump's tariffs and a whole host of risk mitigation measures taken by manufacturers have also been responsible for 'China plus' sourcing strategies, lockdowns for many are proving to be the final straw. Perhaps the most high profile company to look elsewhere has been Apple – for so long synonymous in many people's minds with the trend of low cost out-sourcing from China.

Apple ramps up production in India

Apple has announced that it is to manufacture its latest iPhone 14 in India, marking a significant evolution in its production strategy with implications for its – and its competitors'– supply chains. The move is part of the global tech giant's plans to diversify its production base from China, a market which has seen considerable disruption over the past two years due to zero-Covid lockdown policies. Tensions between the US and China have also cast doubts over the longer term prospects of US high tech companies manufacturing products in China. For instance, new US legislation has allowed for the banning of the export of advanced semi-conductor chip technology to China.

It is believed that as well as assembly operations, Apple will use more Indian suppliers (presently many intermediate components are sourced from China) helping to develop a production eco-system and reduce input costs. This will, in turn, encourage other high tech manufacturers to the country as levels of know-how, a skilled work force, technology and transport infrastructure improve. Many competitors, such as Samsung, may also follow, keen not to lose competitive advantage in a fast growing market.

Apple's move shows a high degree of confidence in the Indian market both as a design and production hub as well as a consumer market. It also forms part of an industry-wide trend of increasing resilience through 'optionalization' or 'China plus' supply chain strategies. It is not clear what proportion, if any, of Apple's iPhones will be exported to the global market. However, it certainly gives the company more options should manufacturing in China become more difficult or, indeed, impossible.

Highest climbers

The stand out climber in this year's top ten of the International Logistics Opportunities rankings is the United Arab Emirates (UAE). The UAE has embraced trade liberalisation measures at a time when many other countries are once again embracing protectionist policies. For instance, the India-UAE Comprehensive Economic Partnership Agreement (CEPA) entered into force in May 2022, which is steadily boosting the volumes of trade between the two countries. The main commodities between these two countries benefiting from the trade agreement include electronics, perishables, retail goods (including textile and apparel), and chemicals. This is driving increased shipping and air cargo services, such as Maersk's 'Shaheen Express' which will rotate throughout the India-UAE-Saudi Arabia corridor.

Outside of the top ten, one of the biggest movers is Egypt, which rose three places to No. 23. Despite being one of Africa's largest markets, its focus lies very much on trade with Europe, Asia and North America. Links with the rest of the continent, with the exception of its North African neighbours, are weak and only 15% of its exports overall are shipped to African destinations. However, its membership of the African Continental Free Trade Area (AfCFTA), which will reinforce its connections with 32 new trade partners, could be the catalyst for a change in emphasis in trade policy and deliver a host of new opportunities.

Business Fundamentals

Business Fundamentals			
1	**UAE**	9.10	0
2	**Qatar**	7.92	2
3	**Saudi Arabia**	7.86	0
4	**Malaysia**	7.85	-2
5	**Oman**	7.24	1
6	**Bahrain**	7.15	-1
7	**China**	7.11	1
8	**Chile**	7.01	-1
9	**Jordan**	6.72	1
10	**Morocco**	6.45	-1
11	**Kuwait**	6.23	1
12	**Kazakhstan**	6.19	-1
13	**Uruguay**	6.14	0
14	**India**	5.94	0
15	**Turkey**	5.80	1
16	**Indonesia**	5.77	-1
17	**Thailand**	5.77	0
18	**Egypt**	5.62	1
19	**Vietnam**	5.61	1
20	**Russia**	5.13	-2
21	**Tunisia**	5.06	1
22	**Ghana**	5.00	6
23	**South Africa**	4.99	0
24	**Kenya**	4.97	1
25	**Mexico**	4.93	-4
26	**Tanzania**	4.70	0
27	**Algeria**	4.61	-3
28	**Colombia**	4.55	2
29	**Ecuador**	4.49	-2
30	**Peru**	4.48	-1
31	**Iran**	4.38	4
32	**Sri Lanka**	4.32	1
33	**Philippines**	4.31	-1
34	**Paraguay**	4.30	2
35	**Argentina**	4.24	5
36	**Cambodia**	4.16	1
37	**Brazil**	4.13	2
38	**Pakistan**	4.13	-4
39	**Ukraine**	3.95	-8
40	**Uganda**	3.91	1
41	**Lebanon**	3.79	-3
42	**Bolivia**	3.74	0
43	**Nigeria**	3.62	0
44	**Bangladesh**	3.53	0
45	**Ethiopia**	3.21	0
46	**Mozambique**	2.17	0
47	**Myanmar**	2.04	1
48	**Libya**	1.96	1
49	**Angola**	1.90	-2
50	**Venezuela**	1.56	0

As opposed to scale and prospects, the Business Fundamentals Index measures how easy it is do business in a particular market from a regulatory, operational and commercial perspective. Therefore, it takes into account such metrics as the burden of governmental regulations, the robustness of legislation pertaining to property rights, the ability to enforce contracts as well as levels of crime and violence, corruption, quality of infrastructure and access to credit.

Consequently, whilst the two previous sub-indices were dominated by large markets such as China and India, smaller but well run countries make up a large part of the top ten. The UAE once again can claim to provide the most robust framework in which to do business, followed this year by Qatar and Saudi Arabia. Other Middle East/North African countries in the top ten include Oman, Bahrain, Morocco and Jordan.

Rule of law essential

One of the reasons for the preponderance of Middle Eastern countries in the top ten is the stability provided to companies by a robust legal system. The application of international law is a prerequisite for business confidence and the UAE has received a boost in this regard from increased cooperation with English courts. Abu Dhabi and Dubai courts will be recognised by their English counterparts, upholding principles of reciprocity. Although this agreement will have specific legal implications, more generally it provides international businesses with trust in the processes of the UAE legal system, something which cannot be said for all emerging markets. Saudi Arabia has also passed a new Companies Law which it is claimed will boost investment in the market in line with 'Saudi Vision 2030'. The new law will provide investors greater flexibility and protection of their business interests as well as allowing some forms of companies to raise finance through the issue of bonds.

At the other end of the scale, 6 of the bottom 10 emerging markets are located in Africa, including Angola, Mozambique, Libya, Ethiopia, Nigeria and Uganda.
This highlights the lack of governance, the incidence of crime, the fragile security environment as well as weak infrastructure throughout the region. However, there are shining examples of more successful African countries, not least Ghana which rose 6 places in the index to 22nd position just ahead of South Africa in 23rd and Kenya in 24th. Unlike many of its neighbours, Ghana has been

able to create an attractive economic and regulatory environment for investors and domestic companies not least due to its stable government and liberalising policies. However, there are still high levels of bureaucracy in the market which stifle innovation and which will prevent businesses from benefiting from greater integration with the world's economy.

Smuggling and counterfeiting risks

A lack of governance and the absence of a policing or security framework can lead to a rise in criminality which compromises supply chains, both from the perspective of cargo crime and theft as well as from smuggling and counterfeiting. Even global logistics hubs in best-in-class markets such as the UAE and Saudi Arabia are vulnerable to these risks.

Spotlight: Emerging Market hub vulnerability to illicit trade

One of the major challenges faced by many logistics hubs is how to deal with the high levels of smuggling which can occur at such locations. Some countries are particularly vulnerable not only due to the high volumes of cargo flows which are concentrated at their ports and airports but also due to the number of Free Trade Zones (FTZs) located in their markets. FTZs, by their very nature, have lower administrative oversight as well as simplified customs procedures which can facilitate illegal activity by criminal gangs such as trafficking contraband. High level of re-exports make busy shipping hubs particularly attractive for criminals as locations to infiltrate counterfeit goods or drugs into shipping containers in order to hide their true point of origin.

In much the same way as they function for legitimate trade, ports and airports in emerging markets can act as transit points for the movement of illicit goods to Western countries. In this respect the growth of small parcel volumes driven by the importance of e-commerce is clearly of significance. The Organization for Economic Cooperation and Development (OECD) estimates that 84% of seized shipments of counterfeit footwear and two thirds of electronic devices involved postal parcels or express shipments. As parcels volumes climb, this problem will only become worse unless the root cause is addressed.

Overall, it can be concluded that counterfeiters prosper in markets where there is poor governance; little oversight of free trade areas and high levels of corruption. Once they have accessed the global logistics networks through sea, air and then injected fake goods into post and parcels networks there is little that the authorities in developed markets can do. Their own agencies are being overwhelmed by the sheer volume of parcels which are being generated.

In order to help address the problem, the UAE has put in place a range of measures including better physical security; training security professionals and comprehensive screening standards. Through Dubai Customs, it is working alongside the European Anti-Fraud Office (OLAF) to investigate incidences of counterfeiting and implement robust systems which reduce their probability.

It is noticeable that of the Latin American countries in the Index, Mexico has fallen the fastest, by 4 positions to 25th. The security situation in Mexico is one of the greatest headwinds to its economic growth. One of the greatest risks related to supply chain involves the theft of cargo from trucks en route to the border with the US. Drug cartels also target legitimate shipments in which to infiltrate illicit goods. Corruption is also a major problem. Government officials, including Customs officers and law enforcement agents, often work in collaboration with organized crime. Given that Mexico appears in the top ranks of both domestic and international logistics opportunities, the country is clearly being held back by its challenging security and governance environment.

Agility's Take
Kenya

Kenya has been a trailblazer in African start-up initiatives. As a result, it accounts for about a third of the continent's start-up incubators and accelerators, according to the World Economic Forum. The Kenyan government has been quick to enable and implement new legislation when required to encourage development, and this has resulted in faster start-up execution. The leading example is the legal framework put in place to allow for the widely adopted payment platform M-Pesa. M-Pesa transformed the mobile banking service sector initially in Kenya, but has now grown to Tanzania, Mozambique, DRC, Lesotho, Ghana, Egypt and South Africa.

Kenya has also been very entrepreneurial and embraced an incubator hub ecosystem, where start-ups can access knowledge, advice and funding helping to support the growth and implementation of innovative solutions.

GDP growth in Kenya is forecasted to be amongst the strongest in the region in 2023, according to the IMF. Kenya continues to develop as the regional centre for trade, and the gateway for the East Africa's landlocked markets. The expansion of the EAC to include the Eastern DRC is a further step in Kenya's dominance in regional trade.

The peaceful conclusion of the 2022 presidential vote is a good signal for Kenya's institutional strengthening and political stability.

Digital Readiness

Digital Readiness			
1	**India**	7.61	4
2	**UAE**	7.37	-1
3	**Malaysia**	6.72	-1
4	**China**	6.63	-1
5	**Qatar**	6.38	2
6	**Saudi Arabia**	6.30	-2
7	**Indonesia**	6.21	1
8	**Thailand**	6.04	-2
9	**Philippines**	5.99	1
10	**Oman**	5.81	5
11	**Kuwait**	5.76	1
12	**Kenya**	5.56	5
13	**Chile**	5.55	-4
14	**Turkey**	5.50	-3
15	**Vietnam**	5.43	-1
16	**Bahrain**	5.34	6
17	**Uruguay**	5.22	2
18	**Brazil**	5.19	-2
19	**Iran**	5.15	1
20	**Jordan**	5.14	7
21	**Ghana**	5.14	2
22	**Russia**	5.14	-9
23	**Sri Lanka**	5.12	7
24	**Mexico**	5.11	-6
25	**Kazakhstan**	5.10	3
26	**Pakistan**	5.06	-2
27	**South Africa**	5.01	-6
28	**Egypt**	5.00	-2
29	**Ukraine**	4.91	3
30	**Lebanon**	4.80	8
31	**Cambodia**	4.73	6
32	**Paraguay**	4.72	3
33	**Morocco**	4.69	3
34	**Argentina**	4.68	-9
35	**Bangladesh**	4.63	-1
36	**Nigeria**	4.61	-5
37	**Peru**	4.58	-4
38	**Tanzania**	4.58	1
39	**Colombia**	4.53	-10
40	**Tunisia**	4.39	1
41	**Uganda**	4.24	-1
42	**Ecuador**	4.03	1
43	**Venezuela**	3.99	1
44	**Algeria**	3.91	-2
45	**Ethiopia**	3.64	0
46	**Bolivia**	3.45	0
47	**Mozambique**	3.22	0
48	**Angola**	3.11	0
49	**Myanmar**	2.79	0
50	**Libya**	1.84	0

Adopting Industry 4.0

This category, introduced for the first time last year, looks at a range of what could be termed 'Industry 4.0' measures to assess how equipped a country is to face the challenges of a digital yet more sustainable future. It uses metrics which provide an insight into how well a country fosters entrepreneurs and start ups; access to banking amongst the population; levels of adoption of renewable energies; digital skills and the importance of e-commerce to its economy.

This year India tops the ranking for digital readiness, moving up four places. Its rise to the top has largely been driven by the increasing importance of e-commerce in the country at a time when adoption has slowed in other emerging markets. Six Indian e-commerce companies became 'unicorns' in 2022 with a total valuation of $7.9 billion and three went public, Ethos, Delhivery and Fone4.

Spotlight: India's double edged sword

Since the election of Prime Minister Narendra Modi, the Indian government has been committed to a 'Make in India' policy and to achieve these goals ensuring that the economy becomes 'digitally ready' is critical. Creating manufacturing ecosystems which support advanced manufacturing is part of its strategy, and this involves the encouragement of a vibrant start up and Micro, Small and Medium Enterprises (MSME) sector. To this end a specialist ministry has been established, coordinating a range of schemes and support packages which includes financing such as the 'Startup India Seed Fund'.

Whilst encouraging technology start ups, the government is also pursuing a protectionist policy to discourage global platforms – and more specifically ban 59 Chinese apps from the market. These have included ByteDance's TikTok, Tencent Holdings' WeChat and Alibaba's UC Browser. In addition, Modi has imposed a tax on digital services affecting global platforms. This policy has been enthusiastically embraced by Mukesh Ambani, the chairman of Indian conglomerate Reliance Industries and a supporter of Modi. He is quoted as saying, "We have to collectively launch a new movement against data colonization. For India to succeed in this data-driven revolution, we will have to migrate the control and ownership of Indian data back to India — in other words, Indian wealth back to every Indian."

Whilst it is positive that India is fostering local talent and supporting the development of home grown industries, building barriers to foreign technology carries its own risk. The market will be denied efficiencies and capabilities which are available to companies in other parts of the world as India seeks to build its own alternatives. Whilst justified on the basis of national sovereignty and protecting nascent Indian start ups, this policy is likely to be counterproductive.

Digital finance and broadband penetration key to e-commerce adoption

The adoption of e-commerce is not just related to the technology which underpins the platforms. Other factors, measured by the sub-index, are just as critical, such as the number of people who have access to bank accounts. Although Cash On Delivery (COD) is frequently used in many parts of the world where buyers do not have accounts, this is costly and inefficient. The buyer often refuses the delivery which nevertheless is paid for by the retailer and even if the delivery is successfully made, the cash then needs to be repatriated up the supply chain. Additionally, no access to a bank account prevents micro-retailers from engaging with platforms which could allow them access to world markets.

Despite the traditional prevalence of cash in many emerging market societies, the Covid pandemic has been a catalyst for change in the use of COD in the e-commerce supply chain. Governments such as Indonesia's (7th in digital readiness index and rising one place) introduced countermeasures to prevent the spread of germs on notes and coins and, consequently, the COD rate is expected to drop from 16% to 11% by 2025. In contrast, use of 'mobile wallets' has grown from 23% in 2019 to 28% in 2022. 58% of e-commerce transactions in Indonesia are carried out on a mobile device.

Of course, access to Broadband is also essential for the growth of the e-commerce market. Nine out of ten of the leading countries in the Index have 4G penetration rates of 80% or over (Saudi Arabia being the exception with a rate of 79.2%). At the other end of the scale, the penetration rate of many of the lowest ranked countries is in the mid-50% range. Clearly investment in ICT infrastructure will be essential if these markets are to reap the economic rewards of Industry 4.0.

Education and skills lay foundations

'Digital skills' in the work force will also be a major factor in the ability of emerging markets to leverage future opportunities. This is reflected in the sub-index by the high ranking of many of the richer Middle Eastern countries (e.g. UAE (2nd), Qatar (5th), Saudi Arabia (6th), Oman (10th) and Kuwait (11th)) which have in the last two decades invested heavily in their 'human capital'. This includes the establishment of universities; increasing years of schooling; a focus of maths literacy and STEM subjects and staff training in the work place. A survey undertaken by publisher, Wiley, revealed that governments in the UAE, Qatar and Saudi Arabia had a particularly strong understanding of the digital skills landscape and the engagement which was required between government, industry and academia.

Digital readiness critical to social cohesion

Industry is evolving at a fast pace and it is clear that those countries which are not 'digitally ready' to embrace the new market environment risk falling even further behind their competitors. This is a huge problem, not just for the 'digital have nots' but for the international community as a whole. At a time of global food shortages and increasing levels of poverty, the gap between those digitally connected and unconnected can create and amplify social and economic inequality leading to unrest and the risk of failed states. It will also delay adoption of 'green' technologies, essential to the arrest of climate change which is of critical importance to many countries in the Emerging World.

Agility's Take

The Path to Recovery Runs through Small Business

Smaller enterprises are critical to the world's two most pressing challenges. The first of those is how to spur broad-based, equitable and sustainable economic growth, especially in emerging markets. The second is how to decarbonize to meet net-zero climate goals.

When the pandemic struck in 2020, small and medium-sized businesses were quickly targeted with direct government assistance, public loan guarantees, tax relief and other aid intended to keep them afloat and provide them with incentives to avoid shedding workers. Despite the help, a look at SMEs in 32 countries found that most lost 30% to 50% of their revenue between February 2020 and April 2021.

Small businesses represent 90% of all companies and generate nearly 70% of jobs and GDP globally. They are the bedrock of developed and developing economies alike, and at the heart of economic growth strategies for most emerging markets looking to climb the development curve.

The long-term viability of many micro-enterprises, startups, entrepreneur-led organizations and other SMEs will be determined by their ability to 1.) go digital and 2.) plug into global value chains by selling to domestic market customers engaged in cross-border trade.

Digital transformation remains underway in businesses of all sizes, and in all sectors and geographies. But small enterprises are generally less digitalized than medium-sized companies, which in turn are less digitalized than big corporations. One reason, of course, is that so many digital tools and solutions are priced and tailored to the needs of larger organizations. In the case of small businesses, the challenge of going digital is especially difficult but the need to do so is increasingly apparent. Research shows that the largest 10% of companies in digital channels reap 60% to 95% of digital revenues. If we want a future with shared prosperity and sustainable growth, we must make sure small businesses are part of digital transformation.

On the trade front, the deck is stacked against smaller enterprises. Half of all free trade agreements contain at least one provision explicitly mentioning small businesses, "but all of them will reflect the priorities of larger companies who are often seen as national champions," says the European Centre for International Political Economy.

For smaller companies that can't easily absorb the costs and risks entailed in exporting, what's important is to look at their potential as "indirect" exporters – producers whose goods reach international markets through sales in their home markets.

The Agility Emerging Markets Logistics Index 2023 Survey

Introduction

2022 was meant to be the year that global trade and supply chains recover and return to normality, but instead the world has faced a series of 'black swan' events, including:

- The war in Ukraine, which has impacted global trade flows and oil and energy prices
- A zero-Covid policy in China that has caused port congestion and delays
- More extreme climate events

These factors have caused prolonged issues along global supply chains. Add to the pressure pot the urgent need to invest in decarbonisation, digitalisation and technology, as well as a looming global recession, the challenge for logistics supply chain executives will be to brace for more challenging times ahead.

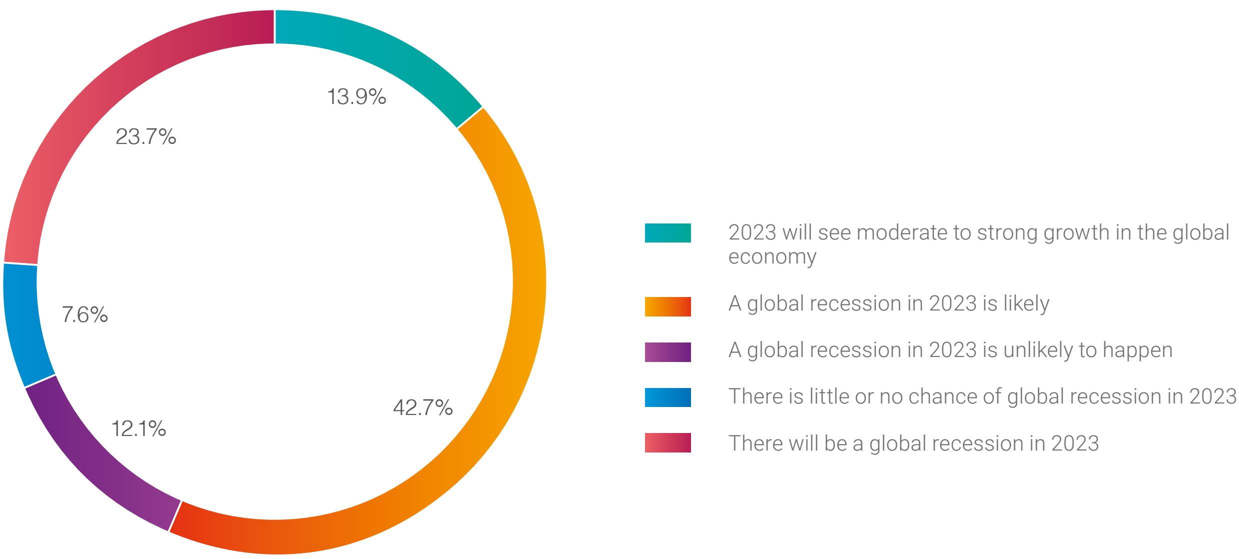
Note: Transport Intelligence and Agility surveyed 750 logistics industry professionals between November and December 2022, with an additional 503 surveyed specifically on global economic prospects in October, November and December 2022.

Recovery

To measure logistics executives' sentiment on the state of the global economy, respondents were asked whether they anticipate a global recession in 2023.

Combining all responses that predict a recession shows that two thirds of respondents expect a global recession in the year ahead. This highlights the intensity of the uncertainty gripping the global economy.

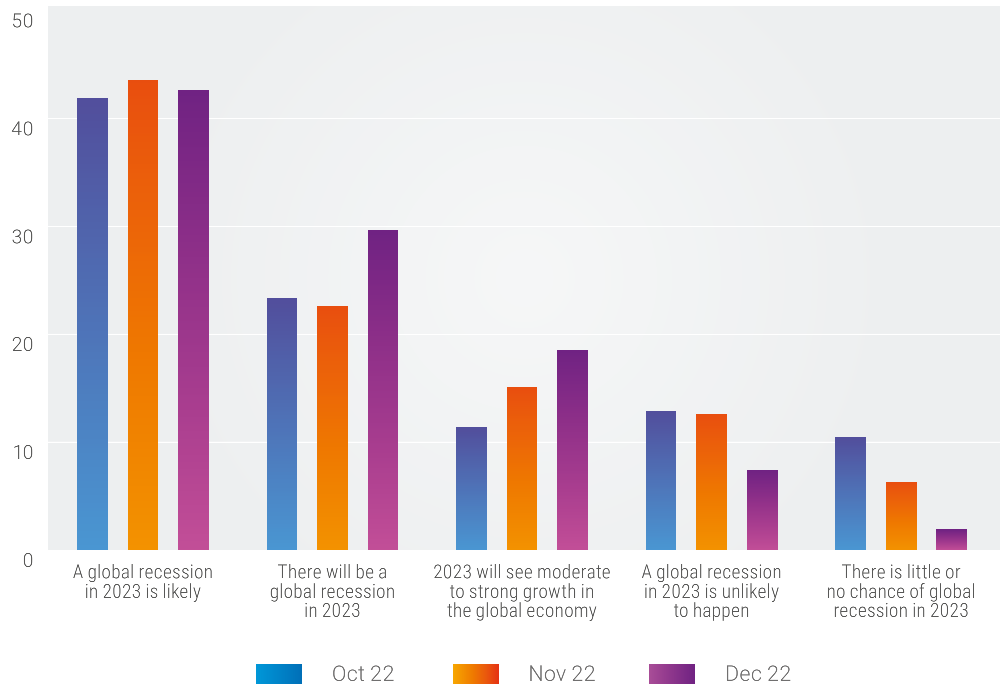
Which of the following statements most closely matches your opinion on global economic prospects for 2023?



The results also show that economic sentiment has worsened between October and December 2022, with the proportion of respondents that are certain a global recession in 2023 is inevitable increasing by 6 percentage points in December compared to October.

Worsening economic sentiment between October and December 2022

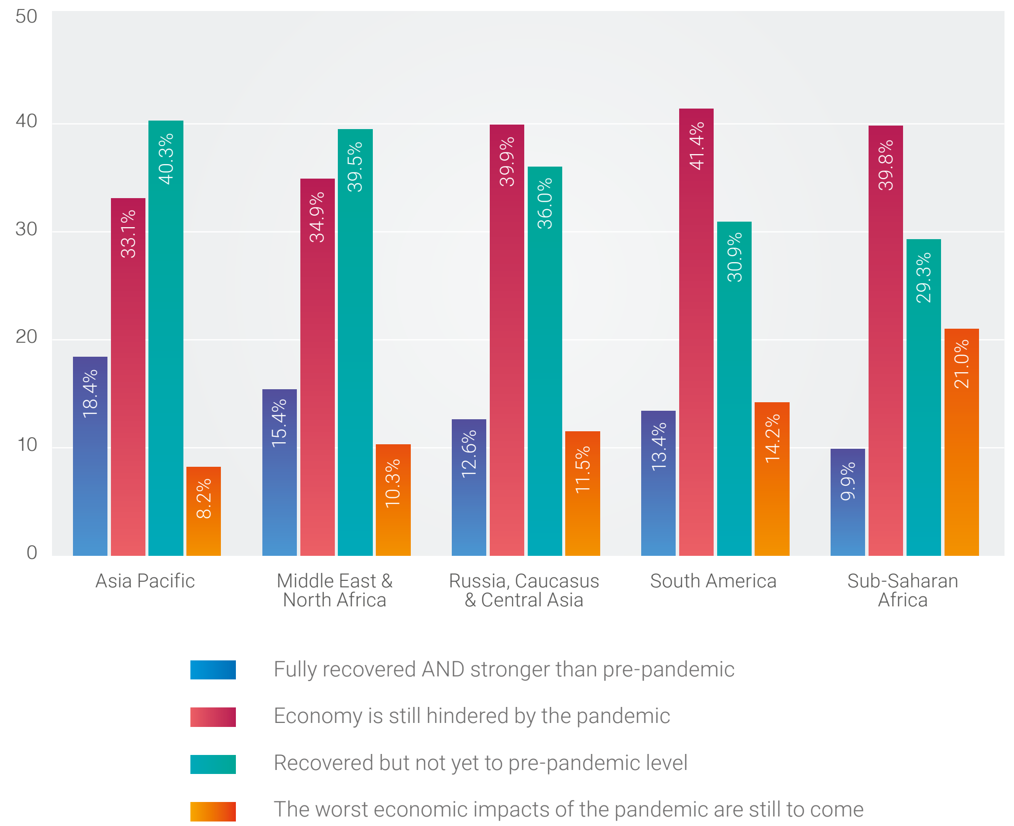
Which of the following statements most closely matches your opinion on global economic prospects for 2023?



The forecast of a recession from 66.4% of respondents comes amidst sharp growth slowdowns across the largest economies. The global economy has been characterized by strong demand at the start of 2022 with the re-opening effect resulting from the end of Covid-19 measures, and the stimulus packages working at full speed. Overall, a generally firm but incomplete recovery from Covid-19 was shaping the global economies before the war in Ukraine. However, demand started to soften as early as Q2 2022 and the global economy entered the slow lane. The war acted as a major setback to recovery, causing a global slowdown.

In October 2022, the IMF marked GDP growth down for 2023 to 2.7%, the "weakest growth profile" since 2001, excluding the acute phase of Covid-19 pandemic and the global financial crisis. Downward forces will gain more of an upper hand across the world in 2023 and a confluence of headwinds will halt the recovery and growth momentum of global economies - the war in Ukraine, an energy crisis, high inflation, and the possibility of further pandemic-related supply-side disruptions.

Which of the following statements best describes each region's current stage of economic recovery from the Covid-19 pandemic?



Of the five regions examined, Asia Pacific's regional economy exhibits the strongest economic recovery from the Covid-19 pandemic, but is still below the pre-pandemic level, according to survey respondents.

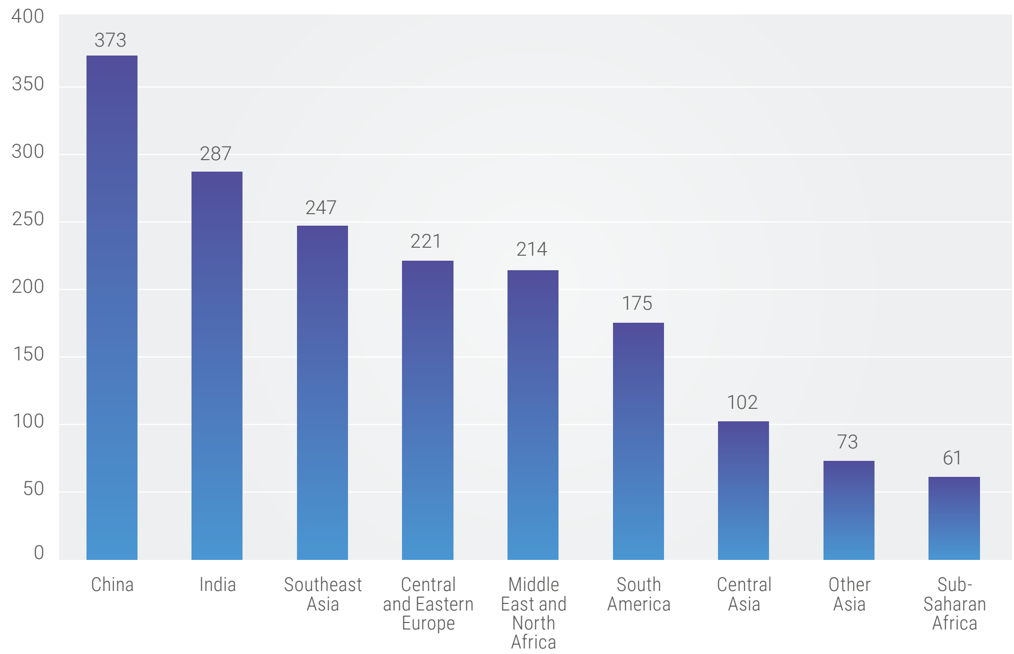
Growth in most countries in Asia Pacific rebounded in the first half of 2022, on the back of a revived domestic demand after the Covid-19 Delta wave. However, China lost momentum and the public health measures to contain outbreaks of Covid reduced consumption. Most of the region was projected to grow faster and have lower inflation in 2022 than other regions according to the World Bank.

This resilience of the region very much stems from its positioning along global value chains and in particular its prominent role in high-value industries such as electronics, where the region has gradually upgraded its global value chain participation by doing the higher value-added stages like design and production. Recent increases in China's production costs have created opportunities for other countries in the region, including Malaysia, Singapore, Thailand, and Vietnam, to increase their participation in the electronics' sector global value chain.

A third of respondents believe that Asia Pacific economy is still hindered by the pandemic, highlighting the considerable heterogeneity across the region and the varying rates at which individual economies are recovering from the pandemic. Growth in the region's advanced economies remains above potential at 2.3% in 2022 and is expected to fall to 2.0% in 2023 and to 1.9% in 2024 according to the IMF. By contrast, Asia Pacific's developing economies will see a drop in growth to 4.4% in 2022—largely due to the slowdown in China—and will rise to 4.9% in 2023 and 5.2% in 2024, according to the IMF.

Beyond 2022, global deceleration and the resulting slowdown of external demand, as well as rising debt could drag on growth in Asia Pacific. Measures aimed at containing inflation and debt could also inhibit growth. While Asia Pacific remains a relative bright spot in an increasingly sluggish global economy, its growth rate will be well below the average rate of 5.5% seen over the preceding two decades, according to the IMF.

Which emerging regions do you think will see the STRONGEST economic growth in the year ahead?



Looking at the year ahead, China is expected to see the strongest economic growth of all the emerging regions examined. The expectations of survey respondents match those of the IMF which has forecasted a 4.4% expansion for China in 2023, compared to a 2.7% global growth forecast. This comes despite multiple headwinds facing the world's second-largest economy, such as the government's strict adherence to zero-Covid policy and the subsequent dismantling of the same policy, turmoil in China's property sector and trade war with the US, all of which have affected parts of the economy.

China's zero-Covid policy has caused severe economic damage, with many manufacturers reporting falls in output of up to 40% in affected regions. The significant volatility and uncertainty for global manufacturers and retailers has led to increasing levels of inventory; orders being placed earlier and – most critically for China's economy – the use of suppliers based in neighbouring countries. Vietnam has been a key beneficiary of this trend. Its furniture industry, for example, has grown its share of global exports from 11% in 2019 to 17% in 2022 at the same time as China's has fallen from 61% to 53% according to MDS Transmodal.

Despite all of this, survey respondents believe that China will shrug off headwinds. Overall, the optimism for China's outlook might have been driven by the conviction that the country will gradually exit from its zero-Covid policy which eventually happened in December 2022 following protests against the policy. Lastly, despite all the headwinds, China remains the 'world's factory' and one of the most important manufacturing and innovation bases in the world; its manufacturers remain key to global supply chains.

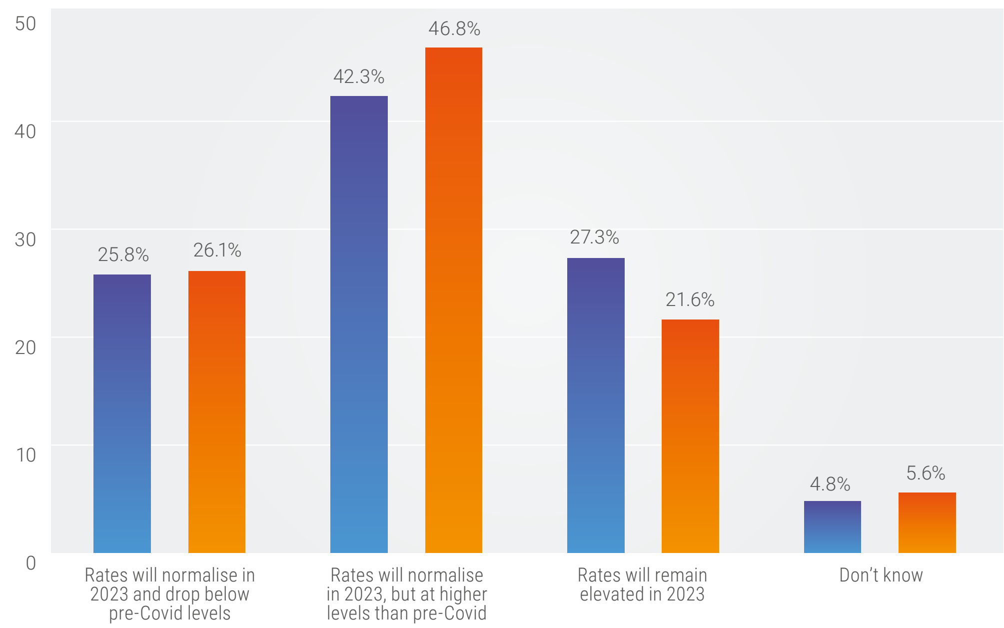
Sub-Saharan Africa is expected to recover at the slowest rate, according to survey respondents. The outlook for Sub-Saharan Africa is extremely uncertain as the region's prospects are tied to developments in the global economy. The region will face turbulent times as a combination of internal and external shocks subdue its growth prospects. The war in Ukraine is taking a toll on the region and its economic recovery, triggering a sharp rise in commodity prices and putting a pressure on commodity-importing countries. Growth in the region is expected to slow to 3.7% in 2023 as a global slowdown and high inflation spill into the region, according to the IMF. The difficulties experienced by major trading partners, particularly Europe, also limits the recovery prospects for the region. Overall, the global economic slowdown will weigh on growth in major commodity exporters in the region.

That said, there are still positive developments to be found and structural reforms in certain Sub-Saharan African countries are likely to contribute to a faster recovery of the respective nations. Kenya, for example, has advanced its structural reform agenda focused on improving governance and has reinforced oversight of state-owned enterprises. The country's progress towards creating a stronger business environment in the last several years has also been evident. Kenya also features one of the most mature start-up ecosystems which has shown impressive growth over the years. Along with

Nigeria, Egypt and South Africa, Kenya belongs to the ‘big four’ African countries that account for about a third of the continent’s start-up incubators and accelerators, according to the WEF. After experiencing the fastest economic growth in more than a decade in 2021, GDP growth in Kenya is forecasted to be amongst the strongest in the region in 2023 according to the IMF. The peaceful conclusion of the 2022 presidential vote is a good signal for Kenya’s institutional strengthening and political stability.

Freight Rates

What are your expectations for air and sea freight rates?



The pandemic disrupted global trade, driving up freight rates to historic levels. Inflated rates should be seen as an exceptional response to exceptional conditions. What is happening now seems to be a return to normality. 42.3% of respondents believe that air freight rates will normalise in 2023, although at higher levels than pre-Covid; compared to 46.8% who think that sea freight rates will normalise in 2023, but at higher levels than pre-Covid.

The economic forces that drive demand for logistics services are unusually unpredictable at present. But overall, inflation, slowing consumer spending and economic uncertainty will most likely result in freight rates heading back to normality in 2023.

The most important driver of demand is the US economy. Consumer confidence in the US seems weak at present resulting in less vigorous retail spending. This is reflected in the emergence of higher inventory levels in retail which weigh down on the container shipping market. The situation in Europe is worse, with Germany seeing retail demand falling month on month whilst spending in the UK is also muted, resulting in a poorer demands picture in Europe than in North America.

Looking at the supply side factors, congestion also contributed to inflated rates over the past two years. Evidence suggests that congestion has eased somewhat as demand falls, which should also put downward pressure on rates.

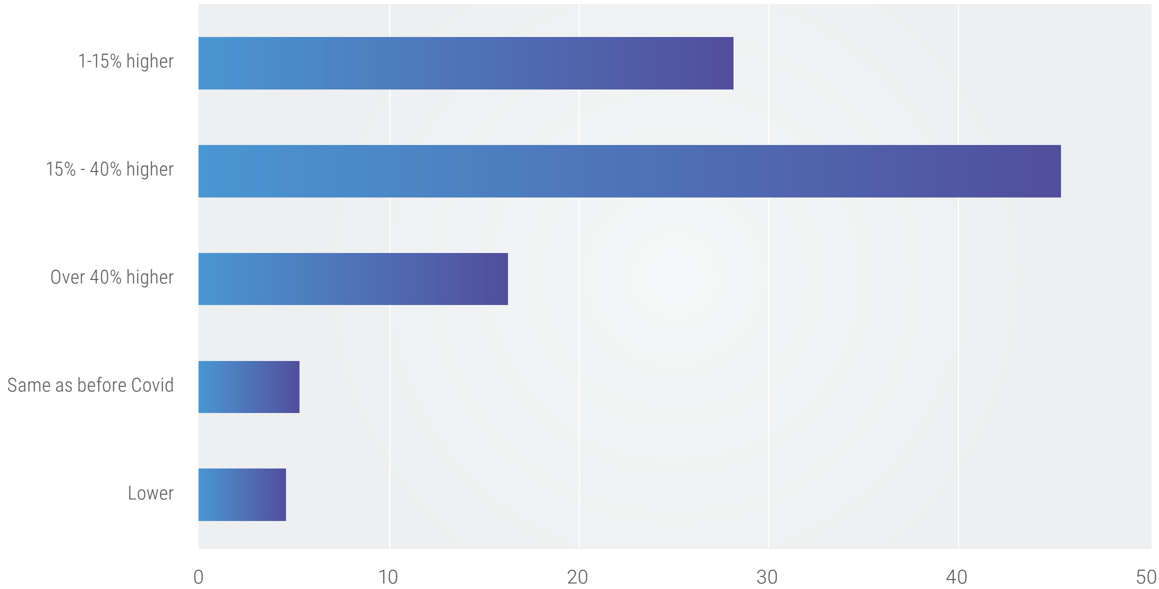
The remarkable shifts in trade patterns could also affect the direction of freight rates and might even lead to differing prices on different trade lanes. This particularly applies to China. For instance, evidence suggests that production of electronic consumer durables is shifting away from China. There has also been a remarkable shift of the production of apparel and furniture from China to Vietnam over the past two years.

These developments might change the balance of demand on certain routes. For instance, routes out of China could change in terms of composition and destination; and Southeast Asia and South Asia (notably Bangladesh) are likely to see an increase in their proportion of the global market.

In summary, the signs of falling rates are clearly being acknowledged by the market with experts in the logistics industry expecting rate normalisation in 2023.

Logistics Costs

How do your company's logistics costs compare to pre-Covid levels for this time of the year?



46% of respondents state that their logistics costs are 15%-40% higher compared to pre-pandemic averages, acknowledging the sharp increase in freight rates that the logistics industry has seen in the past two years.

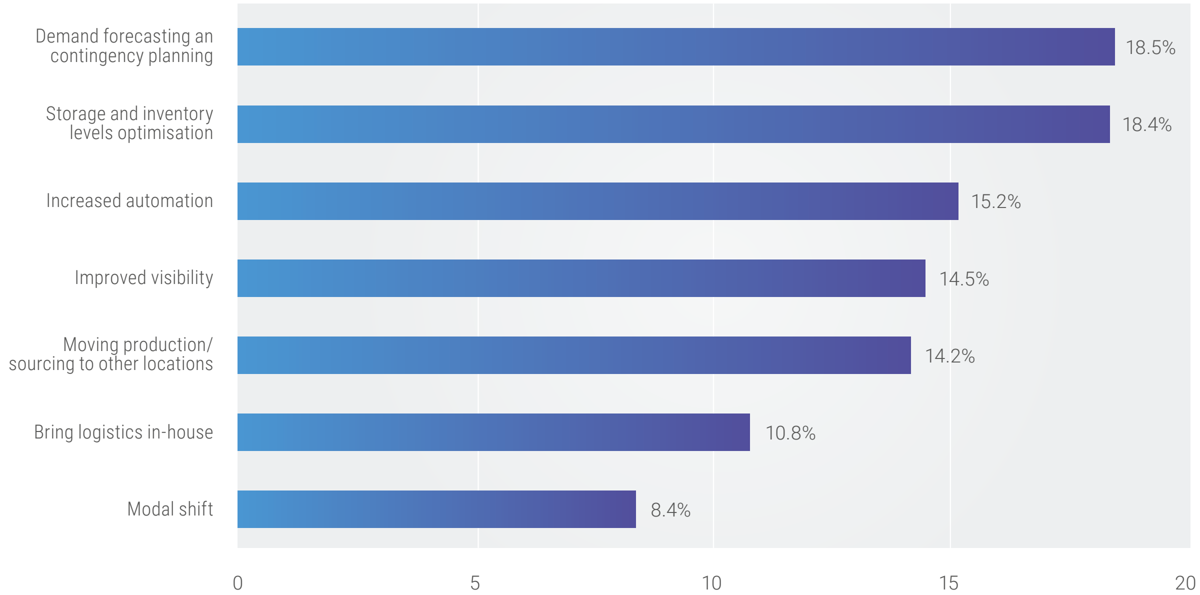
Pricing in the logistics sector is determined by relatively stable long-term contract rates and spot-market pricing which is more volatile and sensitive to shifts in demand and the availability of capacity. Spot market prices in the sea freight market escalated sharply over the past two years - in most spot markets, rates at present are around one-third of the highs seen in Q4 2021. A similar situation was seen in the contract market - when contract rates rise, it is usually the result of a trend in rising freight rates in the spot market. This was mainly due to the fact that transportation capacities were squeezed because of rising demand, the shortage of containers, and congested ports.

In addition to the imbalance of supply and demand driving up rates and logistics costs, an escalation of costs among logistics companies is also putting an upward pressure on rates. Road freight companies are faced with higher costs due to rising salaries as a means to attract drivers in a tight labour market. 3PL providers are faced with rising labour costs as competition for warehouse workers is causing wages to rise. The express and parcel companies are also pointing to inflationary pressures as one of the reasons behind the rate increase. For instance, both FedEx and UPS recently announced that their delivery rates will go up an average of 6.9% across most of their services.

The inflated freight rates are creating significant business pressures, leading to lower margins for retailers, and ultimately, higher prices for consumer products. High logistics costs put a strain on the profit margin of retailers and manufacturers if they decide to absorb the higher costs or see a decline in sales if they decide to pass on higher costs onto to the customer.

With logistics companies passing higher costs on to their customers and with carriers having the upper hand in contract rate negotiations due to high demand, shippers are trying various ways to keep logistics costs down, whilst grappling with a difficult macroeconomic environment. Absorbing the increased logistics costs or passing them along to customers are the main options available to shippers, both of which, as already mentioned, come with risks. However, increasing signs of a weakening demand might suggest that the pricing pendulum may be swinging back in shippers' favour.

Which of the following actions does your company take to reduce logistics costs?



Demand forecasting and contingency planning as well as storage and inventory level optimisation are the two most common measures taken by companies to reduce their logistics costs, according to survey findings.

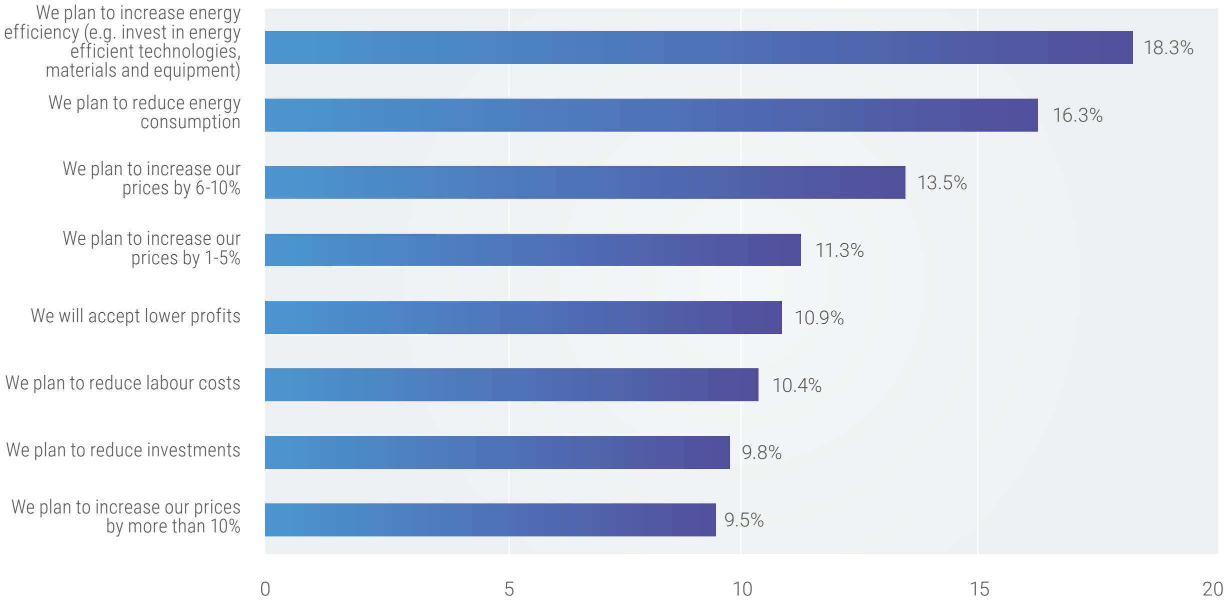
Post-Covid planning complexity and forecasting consumer expectations amid fluctuating demand and markets is even more multi-layered and challenging than before. But shippers have emerged from the pandemic with a strong focus on resilience and building more dynamic supply chains that can react quickly to disruptions and better match supply to demand.

Storage and inventory optimization is more essential than ever, and survey findings acknowledge the importance of this strategy to keep costs down. On the one hand, consumer expectations have changed, and 'fast and free' delivery is no longer simply a fulfilment option that is nice to have. On the other hand, supply chain disruptions have become so common and continue to cause delays due to supply constraints. With this far-reaching uncertainty, implementing storage and inventory level optimisation is becoming one of the most critical elements of the supply chain strategy.

The proportion of respondents that have moved production and sourcing to other locations to reduce logistics costs is not insignificant (14.2%) and points to remarkable shifts taking place in trade patterns as a result of, among other things, rising logistics costs.

Energy Prices

What measures will your company take in the next 12 months to respond to escalating energy prices?



The effects of soaring energy prices are being felt by almost all businesses and corporate decision-makers have several tools available to mitigate the impact.

Survey findings reveal that businesses will resort to a combination of measures to respond to escalating energy prices. Increasing energy efficiency and reducing energy consumption will be the two most common responses to escalating energy prices according to survey findings.

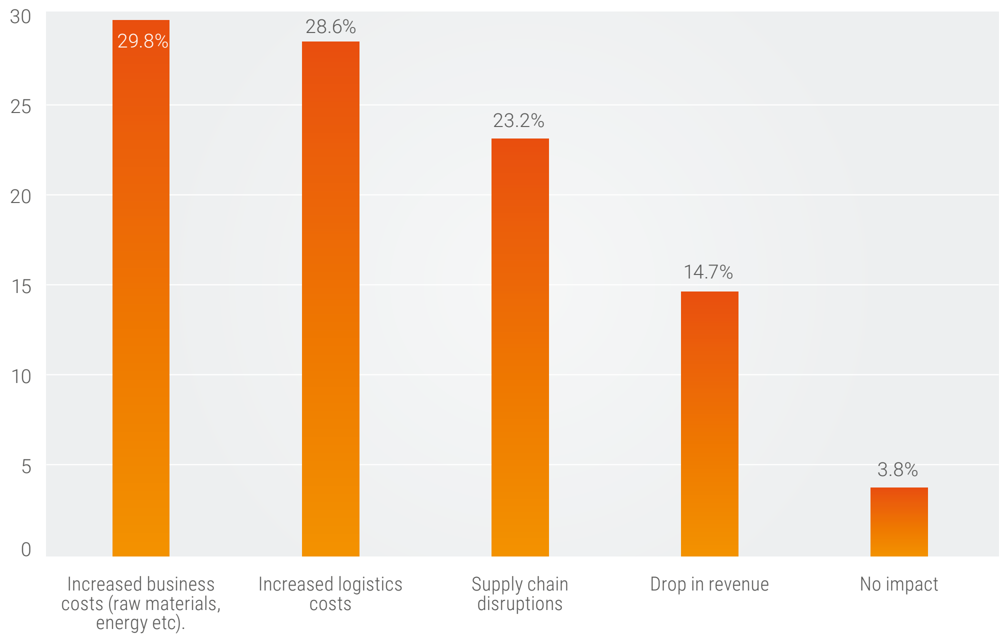
By increasing energy efficiency businesses hope to diminish the vulnerability to energy price hikes. However, implementing this strategy takes time and as such will be less suitable to offset the immediate impact of the inflated energy prices.

The proportion of businesses that will pass on higher energy prices to customers is not insignificant: 13.5% of the respondents stated that their companies will increase their prices by 6-10%, further contributing to inflationary pressures.

Various sectors will be impacted differently by the escalating energy prices, depending on their energy intensity and the type of energy they use. For instance, aviation and shipping, as well as industrial sectors are some of the most energy-intensive sectors, and as such will be mostly affected. In particular, small businesses are at risk as escalating energy costs take their toll on these businesses just as they try to recover from Covid restrictions.

Russia-Ukraine War

How do you assess the impact of the Russia-Ukraine war on your company?



The Russia-Ukraine war is weighing heavily on businesses, and it seems that almost no one is immune from its impact, with 96% of the surveyed respondents stating their company has been affected by the war.

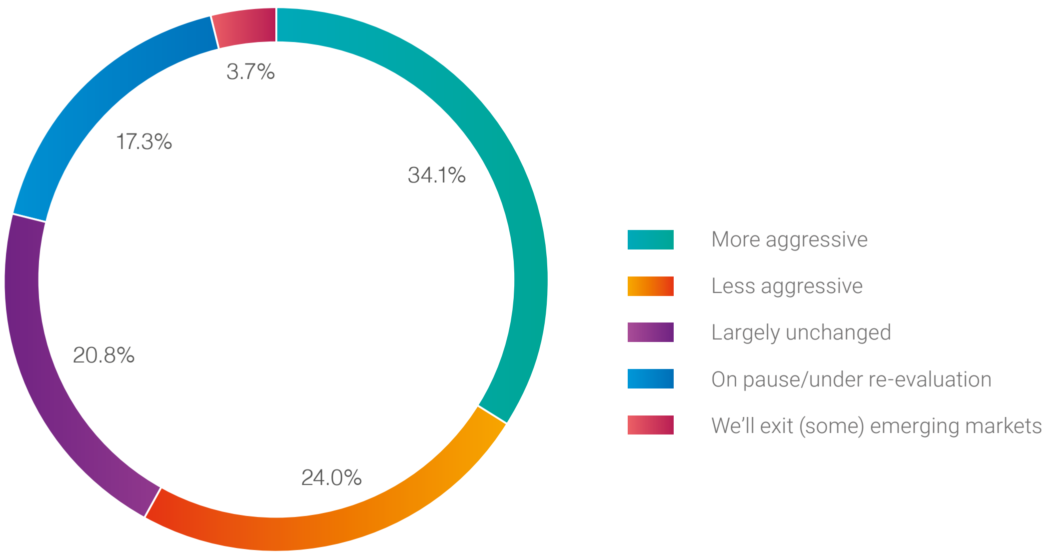
The war is having broad implications for global businesses – it has triggered an increase in business costs among 30% of the surveyed companies, whilst 29% saw an increase in logistics costs. Indeed, the war only amplified the economic impact of the pandemic and triggered an increase in the cost of energy, shipping and commodities as well as supply chain disruptions, causing businesses around the world to feel the ripples closer to home.

The war in Ukraine was a reminder for businesses that geopolitical risks should be factored in supply chain risk management. Geopolitical risks are always present, but the range of issues they present is creating extremely significant challenges for businesses to grapple with.

The war has dimmed prospects of a post-pandemic economic recovery for emerging economies too. For instance, the war seemed to have derailed Sub-Saharan Africa's slow recovery from Covid, strained commodity-importing countries and increased food-security concerns and financial instability across the region. As a result, policymakers in Sub-Saharan Africa find themselves in a pressure pot comprised of greater risks, and fewer options whilst trying to address socioeconomic crises, building resilience and creating growth.

Investments in Emerging Markets

How would you describe your company's post-Covid investment and expansion strategy in emerging markets?



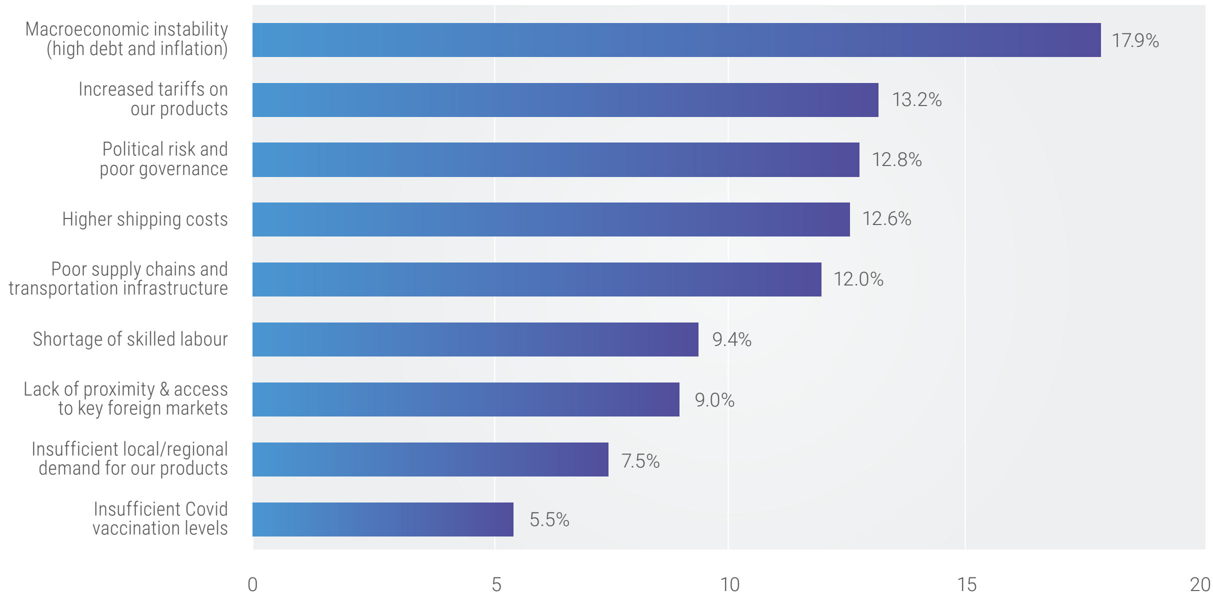
There is a lack of consensus among survey respondents when it comes to companies' post-Covid investment and expansion strategy in emerging markets. While 34.1% of respondents stated their investment and expansion strategy has become more aggressive, a significant proportion of 24.0% stated the opposite and claim their strategy has become less aggressive.

The varying rates at which individual emerging economies are recovering from the Covid-19 pandemic and the wide gap between various emerging markets could explain the lack of consensus.

With regards to China, for instance, various reports are highlighting that investors are reassessing their investments as the combination of political and business risks make the world's second biggest economy a less attractive place to invest. FDI data seems to confirm the claims that China is quickly losing its allure as an investment destination. In 2020, investment from the EU dropped 11.8% from the previous year, and its proportion of overall FDI fell to 3.8% from a high of 11.1% in 1999.

The situation is quite different across the rest of Asia where strong FDI flows paint a picture of resilience and growth. FDI flows to South-East Asia saw a rise of 44% in 2021, with the region resuming its role as an engine of growth for FDI in developing Asia and globally, with increases across most countries in the region. The rise was underpinned by strong investment in manufacturing, the digital economy and infrastructure, according to UNCTAD's World Investment Report 2022.

What do you consider to be the main barriers to increased investments in emerging markets?



Macroeconomic instability is the biggest deterrent to increased investments in emerging markets according to survey respondents, followed by increased tariffs and political risk and poor governance.

Being plagued by macroeconomic instability, Sub-Saharan Africa is the region that will most likely feel the pain of reduced investor interest. One of the most urgent issues confronting the region is decade-high levels of inflation and high levels of public debt while promoting growth. The pandemic pushed up government debt and Russia's invasion of Ukraine added further pressure, inflating the price of imported goods. Surging energy and food prices have led to sharply increasing interest rates as central banks struggle to contain inflation. The implication for Africa is that the cost of borrowing is rapidly increasing, and many African countries might not be able to finance their debt. Restoring macroeconomic stability will therefore be challenging for the region's economies as there is not enough fiscal space to respond.

Increased tariffs are the second major obstacle to increased investments in emerging markets according to survey findings. The forces of global trade are changing and the pandemic and the war in Ukraine has certainly made the problem worse, with countries turning to protectionism as their own industries feel the impact of the weakened global economy.

Trade barriers can be detrimental for emerging economies and stifle trade growth, in fact, no economy can escape the negative impact that trade barriers cause. In the case of China, bilateral tariffs have increased on average to 17% between the US and China according to WTO. The US imposed tariffs on Chinese goods and the subsequent trade war helped to slow the Chinese economy and China's retaliatory tariffs on U.S. goods ended up hurting the Chinese economy.

The negative impact of tariffs and the role they play in diverting trade flows away from the affected country was also acknowledged by survey respondents, who consider the trade war with the USA to be the third most common reason behind the decision to move production or sourcing out of China / reduce investments in China.

Agility's Take

The PPP: Still an Underused Infrastructure Lever

The World Bank reported in May 2022 that private investment in emerging markets infrastructure had bounced back, rising 49% from the historic lows seen in 2020. Much of the new investment came through public-private partnerships (PPPs) – an effective risk-sharing mechanism that deserves a fresh look by governments and investors alike.

Too many emerging markets countries are coming out of the pandemic with heavy debt burdens. In 2023, they confront an atmosphere of slowing or negative growth, high inflation, and rising interest rates. They simply can't afford to invest in the transportation, energy and digital projects that are critical to their future, and they need to conserve scarce public resources for investment in education, healthcare and human capital development.

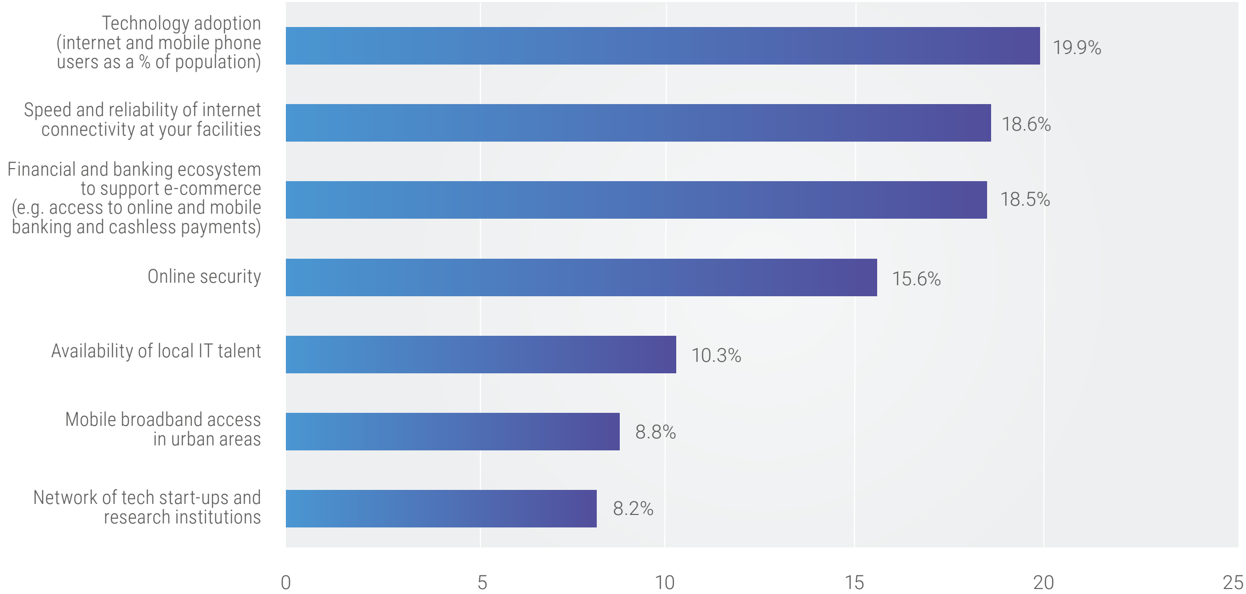
PPPs merit strong consideration.

"There is a significant opportunity to forge ahead with quality investments in green, resilient and inclusive infrastructure in 2022. But as economic stimulus slows, credit conditions tighten and uncertainty from overlapping crises intensifies, there will be even greater need for private investment in infrastructure. This will require working collectively to enable private sector solutions and putting in place stronger foundations for a post-crises recovery," says Imad Fakhoury, the World Bank's Global Director for Infrastructure Finance, PPPs & Guarantees.

McKinsey, the consulting firm, says PPPs give policymakers a chance to move decisively to address pressing infrastructure and climate change needs. "The need for private-sector involvement has grown. In considering and pricing risk in a comprehensive and transparent way, governments can tap into the true expertise of private players. Setting the optimal level of private-sector participation and risk transfer should result in more projects being completed on time and on budget, better use of government resources, and benefits to the constituency of end users for these projects: society at large."

Digital Readiness

Which of the following digital readiness factors are important to your business when deciding whether to invest in an emerging market?



Technology adoption, including internet and mobile phone usage is the most important digital readiness factor when deciding whether to invest in an emerging market, according to survey findings. Speed and reliability of internet connectivity as well as financial and banking ecosystem to support e-commerce sales are the second and third most important digital readiness factors.

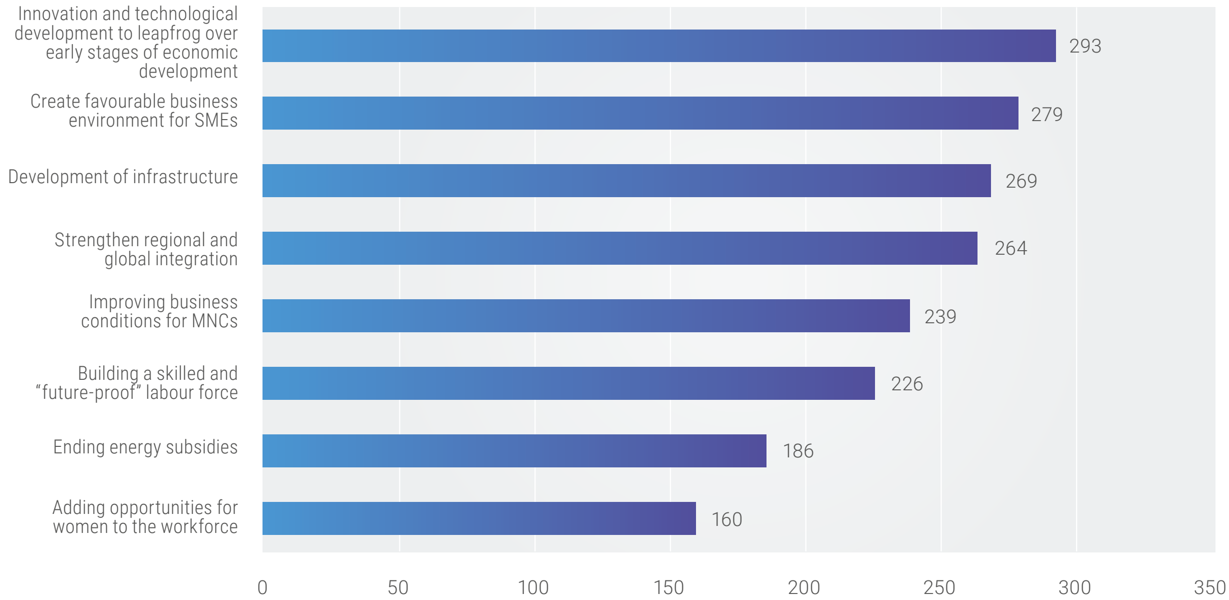
Technology adoption is being perceived by respondents as being more important than technology infrastructure. Indeed, even the best technology infrastructure provides little value if the population cannot take advantage of it. According to the World Economic Forum for each additional 10 percentage points of internet penetration, a country can add 1.2 percentage points to per capita GDP. And adding 10 percentage points of the population to broadband can boost per capita GDP by almost 1.4%.

Digitalisation has become one of the most significant growth engines for many emerging economies. For instance, digital readiness and connectivity played a crucial role in overcoming the difficulties of conventional trade during the pandemic and facilitating recovery in Southeast Asia. Nikkei Asia reported that since the pandemic began, 60m Southeast Asians have become digital consumers. There are now 350m digital consumers across Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam. This significant uptake of technology contributed to increased e-commerce sales during the pandemic. For example, the Philippines and Malaysia have become the top two countries in e-commerce retail growth, increasing by 25% and 23% per year respectively, according to eMarketer.

But despite the obvious opportunities, there are major challenges in connecting emerging economies to the internet and realising the digital potential. Greater investment in digital infrastructure is the most obvious one and is necessary in order to improve the speed and reliability of internet connectivity, the second most important digital readiness factor according to survey respondents. Emerging economies need to continue to invest in digital infrastructure to increase connectivity and ensure everyone, including women, can fully access the digital economy. Closing digital skills gaps is another challenge for emerging economies- as the world becomes better connected, the need for skills to navigate it digitally has never been more urgent.

Economic Diversification in the Gulf Countries

What are the three most important key drivers of economic diversification in the Gulf countries?



*First preference was given 3 points, second preference 2 points and third preference 1 point

Innovation and technological development to leapfrog over early stages of economic development is the most important driver of economic diversification in the Gulf countries according to survey respondents.

Economic diversification in the Gulf countries gained a renewed sense of urgency during the pandemic as the global slowdown pushed oil prices down. In the medium term, higher demand for renewable energy will cause revenues from oil for these countries to decline, making the economic diversification of the region away from oil even more pressing.

There has been no shortage of policy advice on what the Gulf countries can do to diversify their economies away from oil. Despite this, the Gulf economies remain stubbornly reliant on earnings from oil and natural gas. While some states have made some progress over the past decade, oil and gas production continues to represent over 40% of GDP in most Gulf countries, except for the UAE (30%) and Bahrain (18%).

As they implement their economic diversification strategies, the GCC countries should rely on digitization to speed up innovation, transformation and competitiveness and leapfrog into innovation-led economies.

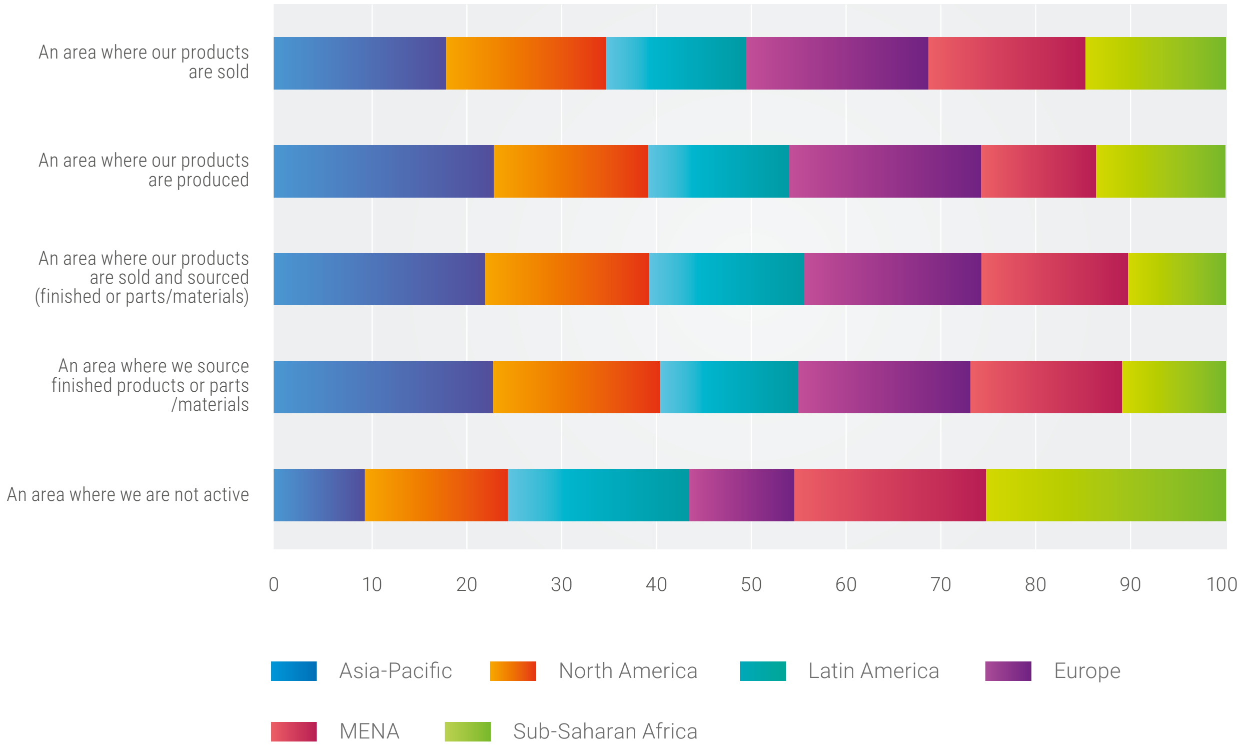
Saudi Arabia is one of the Gulf countries that has the conviction and the resources to become a digital and innovation-based economy and is pouring unprecedented amounts of capital into diversifying its economy. $24.7 billion – that's how much Saudi Arabia will spend on technology by 2025. This is reportedly the highest government spending on technology in the world. The country is investing $6.4 billion in future technologies and start-ups. In executing its Digital Economy Policy, Saudi Arabia aims to raise the contribution of the digital economy as a share of total GDP to be on par with other leading global economies. By 2025 the digital economy is expected to contribute over 19% GDP of Saudi Arabia. This compares to less than 10% digital contributions to GDP in the economies of Europe and the US.

Creating favourable business environment for SMEs is the second most important driver of economic diversification in the Gulf countries according to survey respondents.

SMEs are recognised as the backbone of economic growth, employment, and innovation in many developed economies, but they have become a segment of increasing importance for emerging economies too. The UAE for instance emerges as the frontrunner in supporting the growth of SMEs. The country considers SMEs vital for its economic diversification and growth and is therefore actively creating a myriad of opportunities for SMEs. With this in mind, 2022 saw the UAE launch the Entrepreneurial Nation 2.0 initiative which seeks to develop more than 8,000 SMEs and start-ups by 2030. SMEs in Dubai alone make up 95% of all businesses, produce 42% of the UAE's employment opportunities, and contribute 40% of the UAE's GDP.

Supply Chain Reconfiguration

Which of the following statements best describe your business activities in each region?

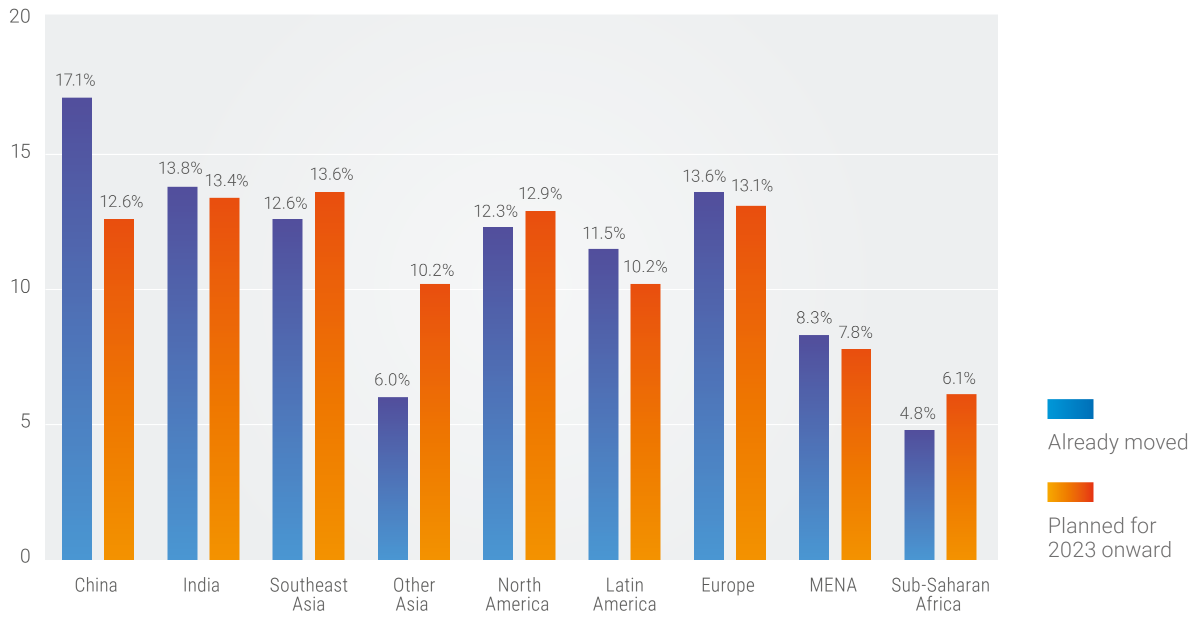


Asia Pacific remains the most attractive global manufacturing hub, with 23.1% of respondents producing their products in the region.

Asia Pacific has become a major international hub for manufacturing over the past decades, driven by steadily increasing investment flows and GDP growth. Central to the region's attractiveness as a manufacturing hub has been its cost competitiveness and more specifically its favourable production costs, along with the region's favourable operating conditions and business environment.

But a certain degree of relocation of international supply chains appears to be under way and global supply chains are on the move. Survey findings show that 17% of the respondents that have already moved production/ sourcing activities have chosen China as their alternative destination.

Do you plan to move production/sourcing activities TO any of the following regions?



However, while China appears to have been the most attractive destination to move production and sourcing activities thus far, future plans of businesses paint a picture of reconfigured supply chains that are increasingly bypassing China. From 2023 onward, Southeast Asia, India, Europe and North America will be more attractive production and sourcing destinations than China, according to survey findings.

Southeast Asia followed by India will be the most attractive re-location destinations, with 13.6% and 13.4% of respondents respectively stating their companies will move production or sourcing activities to these destinations.

That China is quickly losing its allure as an investment destination isn't just talk. A number of manufacturers have started moving at least some manufacturing out of China. Apple for instance has accelerated its shift out of China, advising suppliers to assemble products in markets including India and Vietnam to diversify their supply chains, according to the Wall Street Journal. Apple has been moving assembly of certain products, such as the iPad, out of China for a couple of years. Other companies, such as South Korean manufacturing giants Samsung Display and LG Electronics have also closed some factories in China, pressured by uncertainty caused by China's ongoing lockdowns and cheaper local rivals.

A combination of favourable factors including geographic, regulatory, economic and demographic advantages, present myriad opportunities for businesses to move their manufacturing operations to Southeast Asia.

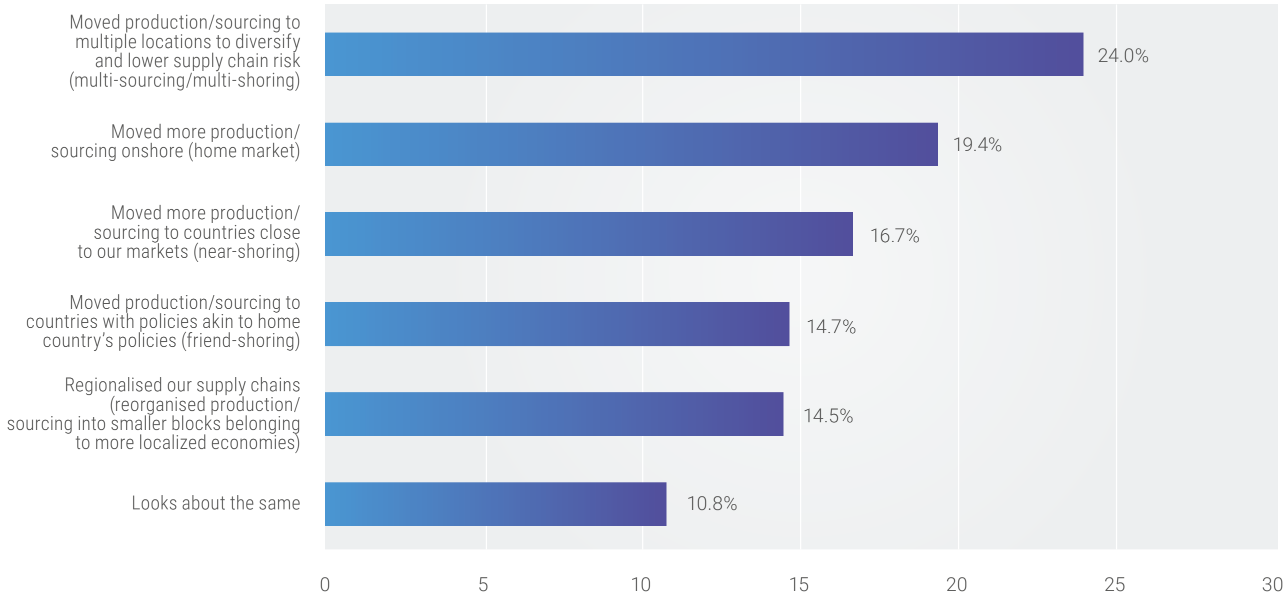
Since 2000, Vietnam's GDP has grown faster than that of any Asian country apart from China. The country has lured big foreign firms including Nike, HP, Apple, Google and Samsung, to name a few. What started with apparel manufacturers such as Nike and Adidas seeking low labour costs has quickly turned into an electronics manufacturing boom. Between 2010 and 2020, exports of electronics, computers and components from Vietnam grew at an average annual rate of 28.6% – in 2020 electronics made up 38% of Vietnam's exports, up from just 14% in 2010.

A large part of South Korean manufacturers success in developing Vietnamese assembly operations has been their investment in air freight facilities in Saigon. In other areas of consumer electronics, Thailand has proven to be a good location because it has well developed logistics infrastructure linking it to other areas of Southeast Asia as well as North Asia.

India's manufacturing is certainly considered by many as a viable alternative to China. However, one of the weaknesses of India as an alternative production location is its weaker logistics provision and the lack of developed transport infrastructure and ports, which only adds to lead times and risks.

Further reinforcing the supply chain reconfiguration pattern seen in this survey, almost 90% of respondents stated that they are reshaping their post-Covid supply chains. Survey results show that many businesses have made structural changes to their supply chain networks, including implementing multi-shoring, on-shoring, near-shoring or friend-shoring strategies, in order to increase network resilience.

Which of the following statements best describe your company's post-Covid supply chain?



For example, almost one quarter of respondents have moved production or sourcing to multiple locations to diversify and lower supply chain risk. 19% of respondents have moved more production/sourcing to their home market.

With the war in Ukraine the latest event to destabilise global supply chains, it is unsurprising that businesses have begun diversifying their supplier base and are turning away from single-supplier sourcing. Survey findings suggest that sourcing from the cheapest locations or dominant suppliers is increasingly being perceived a high-risk decision. When manufacturers are so dependent on suppliers from across the globe, a major shock in one area of the world can have ripple effects on the entire supply chain. Indeed, the whole supply chain is only as strong as its weakest link.

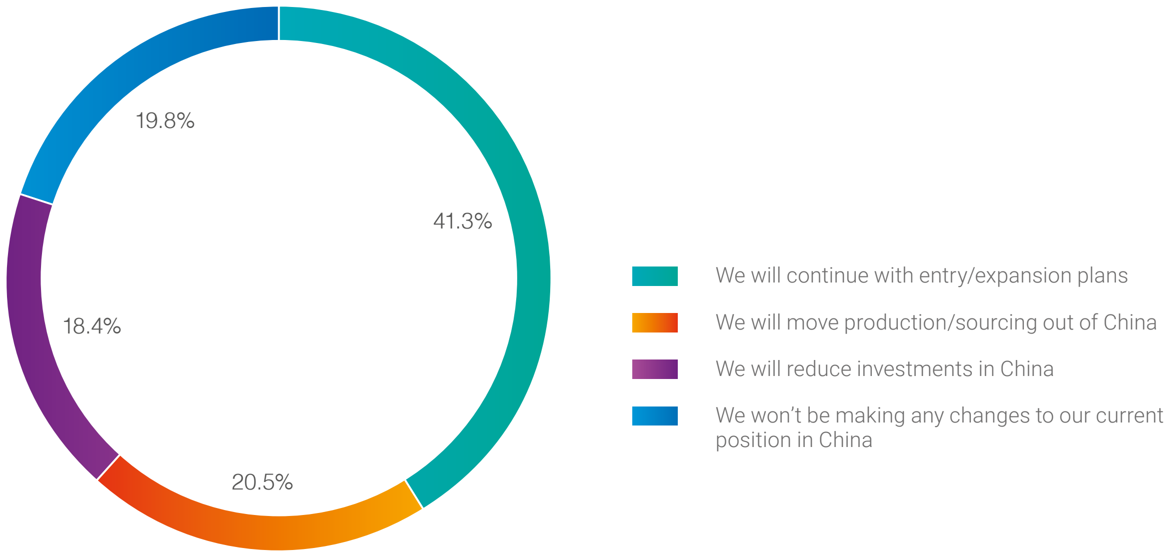
As already mentioned, businesses with more vertically integrated operations, such as electronics manufacturers, have over time reduced concentration in certain regions such as China and diversified their supply chains by spreading more of their supply chain across Asia. The crisis brought on by the pandemic has made the need to reduce dependencies on particular countries even more obvious. Geopolitical tensions and government incentives from other manufacturing countries will only accelerate supply chain diversification.

Having said that, moving production out of China will be easier for some industries than others. Supply chains for products like furniture, apparel and household goods will be relatively easy to diversify because the inputs are relatively easy to obtain. The process of supply chain reconfiguration will be more challenging for industries such as electronics and machinery, as they require components which are more difficult to source. More challenging, but not impossible – as many electronics companies have already demonstrated.

However, it is likely that this reconfiguration of supply chains will result in companies diversifying their supply chains away from China, rather than completely exiting the country, according to survey findings. While 39% of respondents stated they will move production/sourcing out of China or reduce investments in China, a similar proportion of respondents (41%) will continue with entry/ expansion plans in China.

Indeed, despite evidence of supply chains undergoing structural changes, one should not expect a mass exodus of manufacturers, but only certain parts of supply chains to be relocated out of China or Asia. This is because some of the supply chains are so complex and fine-tuned that moving them would be prohibitively expensive and risky. Supply chains are very difficult to set up and even more difficult to move. The outcome of this reconfiguration is likely to be an Asian network that is less focused on China and more diverse. As companies seek to build resilience into their supply chains, relocation and building regionalised supply chains in the Americas and Europe is a likely outcome in order to provide a hedge against future shocks.

Which statement best reflects your plans for the Chinese market over the next 5 years?



China's strict anti-Covid policies are the main reason why companies have moved production/sourcing out of China or reduce investments in China, according to survey respondents. The business environment and the fact that doing business in China has become more difficult is the second most significant driver behind the decision to move out of China or reduce investments.

Lockdowns of various Chinese cities have been on-going since the start of the pandemic, despite restrictions now being lifted in most other parts of the world. The zero-Covid policy has inflicted considerable pain on the economy with many manufacturers reporting falls in output of up to 40% in affected regions. Global fashion brands, such as Nike, have faced the double hit that, as well as closing factories, they have also been forced to shutter their retail outlets for the duration of each lockdown. One estimate suggests that sales have dropped by more than 50% in affected areas.

Even if staff are allowed to go to work, lockdowns are having disastrous consequences for inbound and outbound logistics. A reduction in trucking capacity in Shanghai of 45% in spring 2022 resulted in 80% of vessels being delayed, compared with just 20% two years earlier. Imports were also affected with containers waiting for up to 12 days for collection compared with pre-lockdown 4-5 days, according to digital forwarding platform, Freightos.

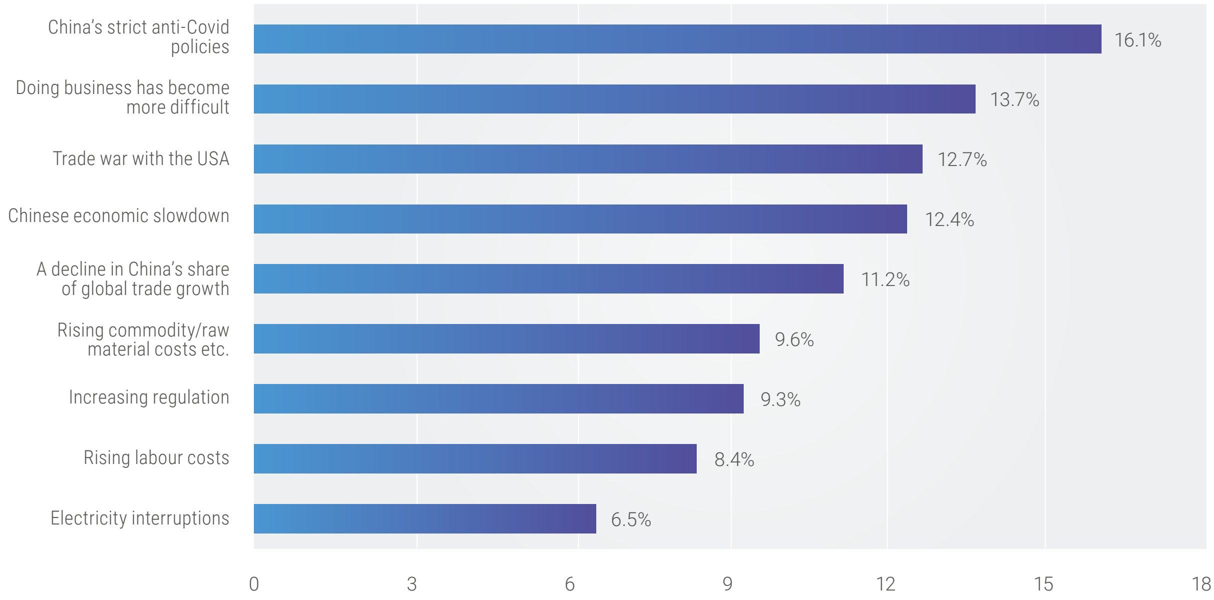
In October 2022, authorities locked down the north-eastern port city of Ningbo, resulting in the closure of terminals and warehouses. They also instituted a whitelist of 'Covid-clear' truck drivers although this did not prevent a subsequent outbreak amongst the driving community. Such disruptions and capacity constraints have led to falling export volumes which have combined with weaker demand in the US and Europe to put downward pressure on shipping rates. Air cargo volumes and rates also remain weak for the same reasons.

Recently, the city of Shanghai, which is the location for China's largest container port, embarked on a further round of restrictions, with mass testing, business closures and movement restrictions. In the past such measures have led to serious disruption at both ports and airports, with truck-traffic in particular unable to drive through the city. Similar measures were reported to be applied in Chengdu and Wuhan, with both production and logistics activities being disrupted. Wuhan is a significant river port on the Yangtse and a key feeder location for Shanghai.

These problems have resulted in significant volatility and uncertainty for global manufacturers and retailers and this in turn has led to increasing levels of inventory; orders being placed earlier and – most critically for China's economy – the use of suppliers based in neighbouring countries. Although rising Chinese labour costs, the imposition of US tariffs and a number of risk mitigation measures taken by manufacturers have also been responsible for 'China plus' sourcing strategies, lockdowns for many have proven to be the final straw.

This slowdown of the economy coupled with recent protest against zero-Covid in several Chinese cities have prompted the government to ease its economically damaging zero-Covid policy, after nearly three years of a growth stifling strategy that has led to lockdowns and border closures. In the short-term, the transition might prove difficult due to surging Covid cases and could result in a growth dip.

Why have you decided to move production/sourcing out of China / reduce investments in China?



The African Continental Free Trade Area (AfCFTA)

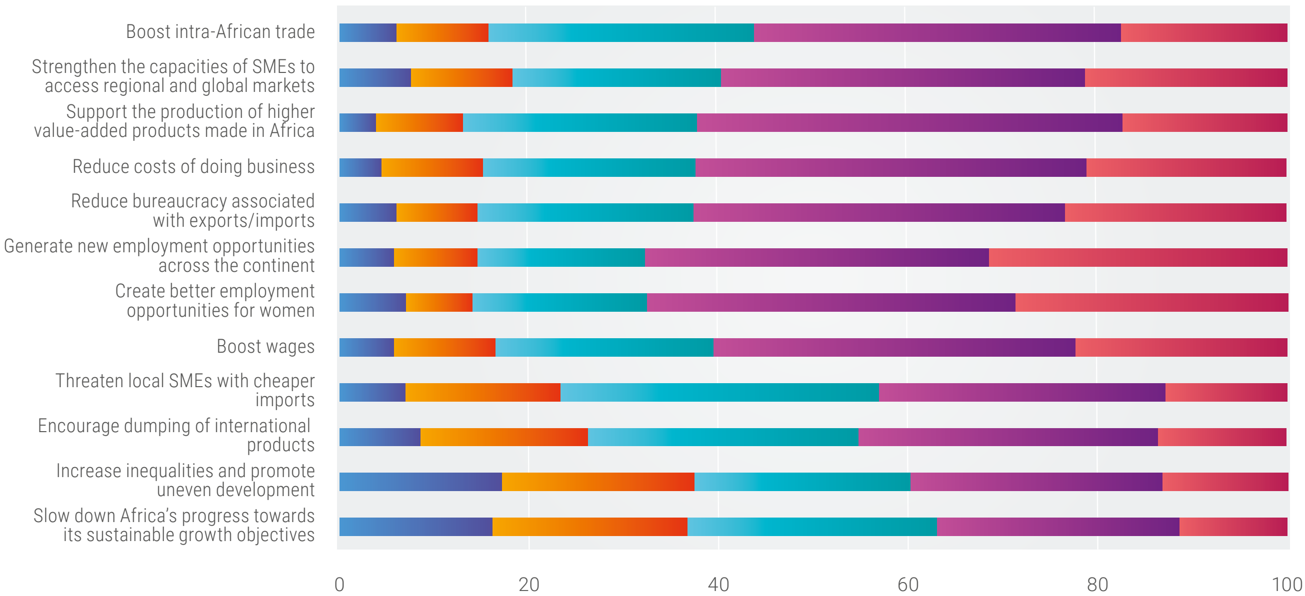
More than two thirds of respondents agree or strongly agree that the African Continental Free Trade Area (AfCFTA) will generate new employment opportunities across the continent. The second most likely outcome of the AfCFTA according to respondents is the creation of better employment opportunities for women.

According to World Bank estimates, energy-intensive manufacturing could see the highest increase in employment as a result of AfCFTA, followed by construction and hospitality services. Wages of female workers are expected to grow faster under the World Bank's AfCFTA FDI deep scenario. At the continent level, wages for both male and female workers grow significantly under the AfCFTA trade scenario compared with the baseline by 2035. Additionally, the World Bank estimates that by 2035 the AfCFTA could increase intra-African exports by 81% and boost wages by 10%.

However, even though the AfCFTA has in theory been operational since the start of 2021, no trade has taken place under its terms apart from some pilot initiatives. This is because some of the largest economies in the region, such as Egypt, Kenya, Nigeria and South Africa, are not embracing the trade deal. What is more, apart from tariffs acting as major barriers to trade across the continent, logistics provision is another major obstacle. Three-quarters of Africa's goods are transported on roads, which are often poorly built. According to the African Development Bank, this poor transport infrastructure increases the cost of logistics in the region, which can add 75% to the price of African goods.

Moving forward, political will and a commitment to implement the free trade area agreement will be necessary. At a time when protectionist measures are becoming more common, a commitment to create a single market will send a strong message to the rest of the world.

The African Continental Free Trade Area (AfCFTA) will:



Agility's Take

AfCFTA

The African Continental Free Trade Agreement (AfCFTA) became operational at the start of 2021 with the aim of creating the world's largest single market, one with 1.3 billion people. The UN Economic Commission for Africa estimates that the AfCFTA will increase regional trade by 52 percent. The World Bank anticipates that the agreement will stimulate an additional $450 billion in income by 2035.

Fifty-four African countries have signed the agreement, (only Eritrea has not) and 44 have, so far, ratified the agreement. Progress on implementation was slowed by the pandemic, and only limited trade has taken place under its terms via some pilot initiatives. However, momentum continues and progress is being made. An important step achieved in 2022 was the establishment of the Pan-African Payments and Settlements System (PAPSS), which allows payments among companies operating in Africa to be done cross border in any local currency.

The challenge to pan-African trade remains not only the digitisation and simplification of systems for the movement of goods, but also the improvement of the physical infrastructure connecting the Continent to enable goods to be moved at commercially viable rates. Three-quarters of Africa's goods are transported on roads, many of which are poor quality and inefficient. According to the African Development Bank, poor transport infrastructure increases the cost of logistics in the region, which can add up to 75% to the price of delivered African goods.

e-commerce

Have consumer shopping habits changed for good as a result of the Covid-19 pandemic? It appears so. Over half of respondents believe that online shopping will continue to grow as a share of consumer activity, and in-store shopping and spending will decline.

The pandemic has pushed more shoppers online, with e-commerce now accounting for 19.0% of all global retail sales, up from 13.8% in 2019 according to eMarketer. Survey findings suggest this trend is likely to stick, even as brick-and-mortar stores have opened their doors again, and that the retail industry will look much different following the pandemic. Indeed, sales at physical stores have been declining for some time, but the pandemic only accelerated the explosion of e-commerce sales as consumers did most of their shopping from home.

e-commerce will remain a key growth driver in emerging markets, driven by growing middle classes, increased internet penetration, and the expansion of mobile commerce. Developing e-commerce logistics capabilities remains a key priority for LSPs, with companies such as Maersk, FedEx, DPDHL, CEVA and DSV expanding their e-commerce network and services in emerging markets, and in particular Asia Pacific and Latin America.

The Covid pandemic accelerated e-commerce adoption. However, the momentum that carried e-commerce during Covid has since slowed down. How will consumer shopping and spending habits evolve post-Covid?

Digital forwarding

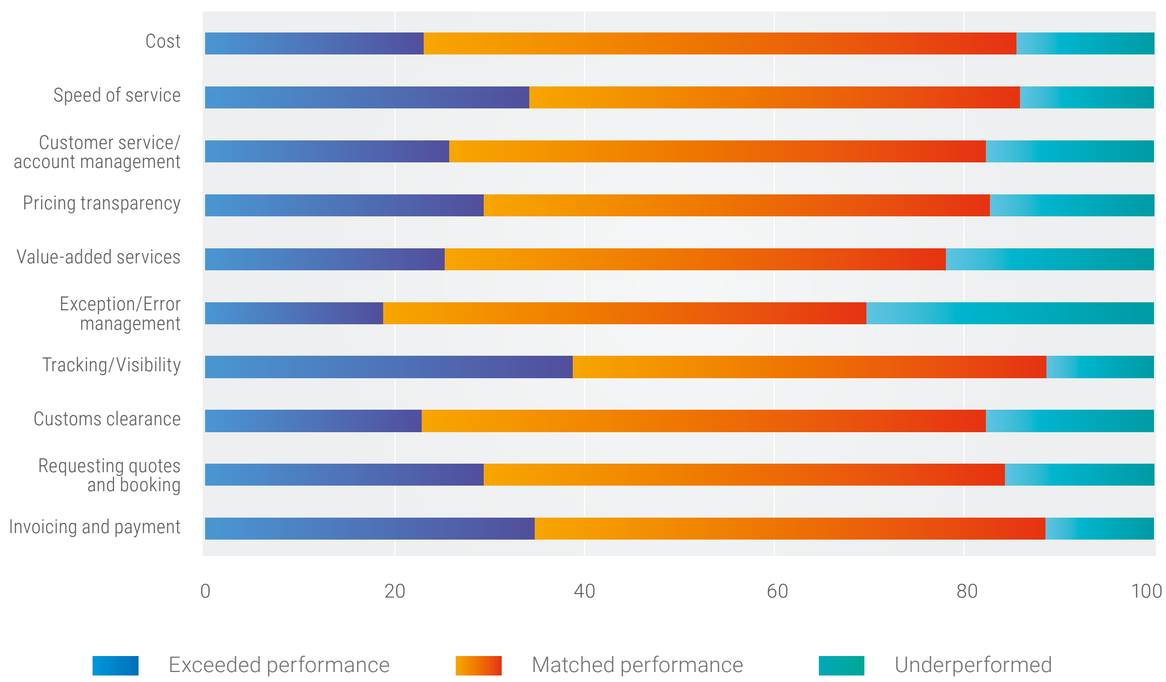
Survey findings show that digital forwarders have been successful at eroding the competitive advantages of forwarders across several areas. The majority of respondents believe that the performance of digital forwarders matches the performance of incumbent forwarders against ten different criteria, including cost, customer service and speed of service. These results suggest that the differences between the digital and traditional freight forwarding business models are gradually fading, to the benefit of the entire industry.

The areas in which digital forwarders perform particularly well include 'Tracking and visibility', 'Invoicing and Payment', and 'Speed of service'. These are all core areas of functionality that will create stickiness with those platforms.

However, even though digital forwarders have come a long way since entering the forwarding market, respondents suggest that digital forwarders are yet to consistently improve their offering when compared to traditional forwarders in some areas. These include 'Exception management' and 'Value-added services'.

The disruptions brought on by the pandemic certainly have a part to play in this. When freight rates keep rising and there is a lack of capacity to move goods, it is difficult for shippers to put faith in what they are seeing on a screen. They want to rely on an account representative who will make sure things progress along smoothly and find a solution when exceptions happen. The implication for all forwarders is that while IT capabilities matter greatly, matching it with expertise in managing complex processes is also essential.

In your experience, how have digital forwarders performed in comparison to forwarders you have used previously against the following criteria?

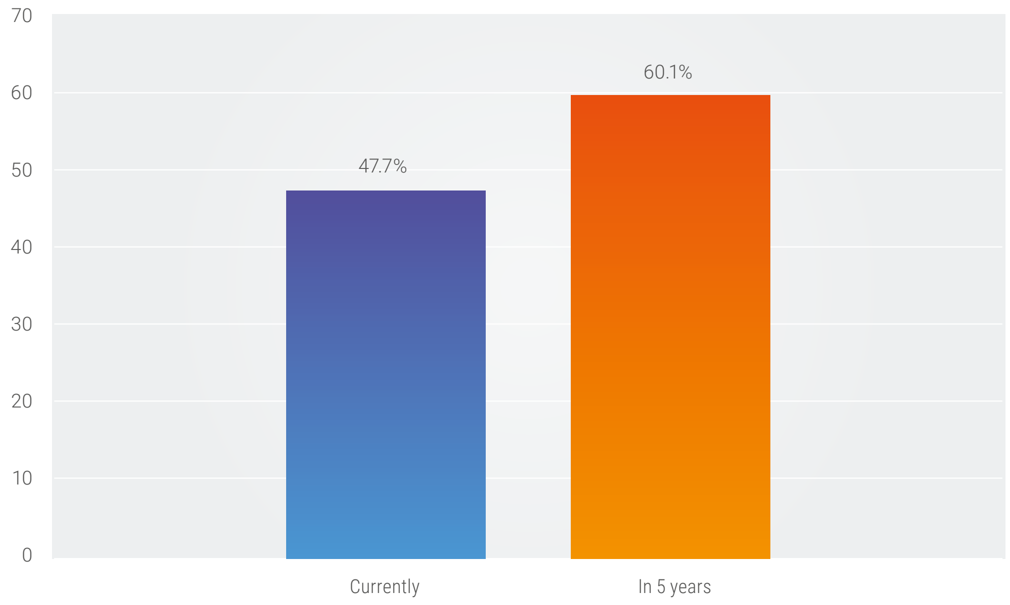


The volume of goods that goes through digital freight platforms is a good indicator of the market penetration of digital forwarders. Survey findings show that the adoption rate is very sound and presently 47.7% volumes are shipped via these platforms. This suggests that the digitalization trend in the forwarding industry, which was already gathering pace before the pandemic, has been further accelerated by the crisis.

Looking ahead to 2027, the volumes shipped and booked through digital forwarders will further increase from the current average of 47.7% to almost 60.1%. The adoption rate is likely to increase over time as the technology matures and the digital forwarders gain scale.

The findings also indicate that digital forwarders have developed a sound business model. Indeed, the evidence from the most prominent digital forwarders acknowledges this rapid growth. The likes of Flexport, Zencargo, sennder and Forto have all grown their customer base from small and medium-sized shippers, a segment that has been largely overlooked by traditional forwarders, to enterprise shippers that typically gravitate towards big traditional players. This provides an opportunity for digital forwarders to deal with more complex supply chains and get access to more data.

What proportion of your company's volumes are shipped/booked through a digital forwarder?



Sustainability

The wave of multinationals announcing ambitious net zero targets made headlines in 2021. Large corporations around the world pledged to cut their greenhouse gas emissions to zero, usually by the distant 2050.

These announcements gave the impression that the corporate world is moving fast to tackle climate change. But the reality is more nuanced. According to our survey findings, more than half of respondents have committed to a net zero target, but around a third of respondents haven't set a net zero target deadline.

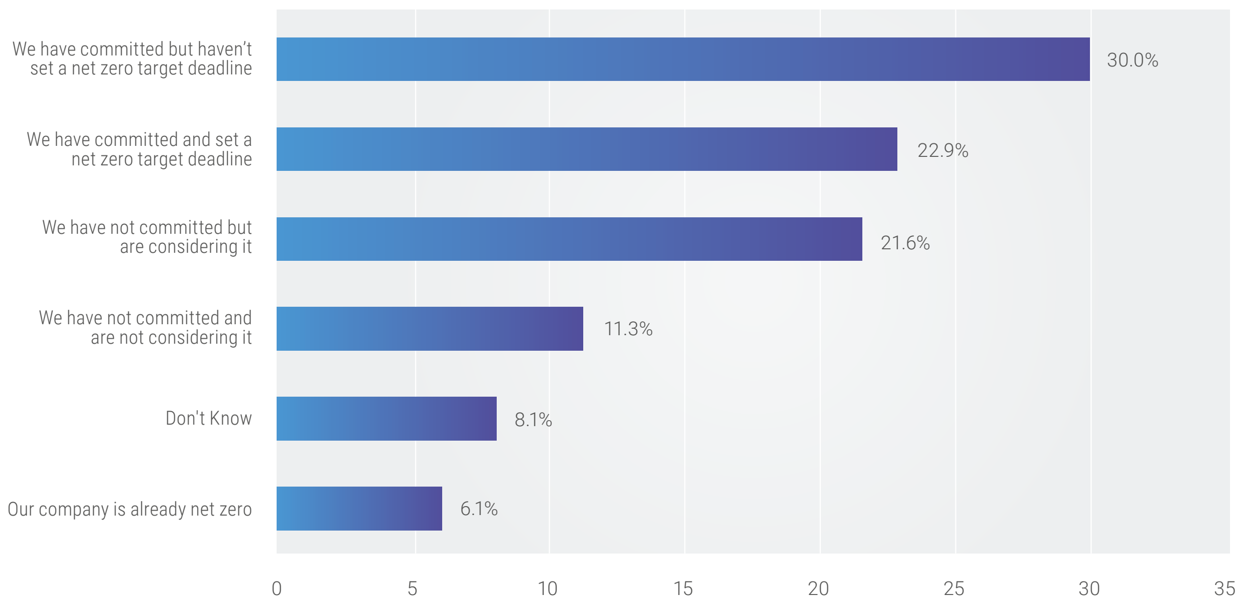
Pressure on companies to set targets and deadlines will only increase in the future in order to ensure they can achieve their longer-term goals. Businesses will most likely come under pressure from investors, governments and the public not only to set targets and deadlines but also to establish interim emissions goals and demonstrate progress toward them.

As sustainability increasingly becomes a pressing global matter, Logistics Service Providers (LSPs) disclose more information about their carbon footprint and enhance strategies to reduce their environmental impact. The largest LSPs have introduced targets to mitigate climate damages created by their operations and tactics to combat emissions. Having said that, LSPs sustainability investments in emerging economies remain scarce. Some most recent investments include Kuehne+Nagel's rolling out of electric vehicles in Thailand and the launch of an electric vehicle service for airport transfers in India, as well as DB Schenker's renewable-powered mega hub in Dubai.

The limited investments in environmental practices in emerging markets is partly driven by location-specific targets which typically determine LSPs target investments at certain locations. The lack of clear frameworks, insufficient uptake of enabling policies as well as difficulties harmonising Environmental, social and governance (ESG) regulations and reporting standards are some of the additional issues that stifle the emergence of a steady and large pipeline of investment projects in emerging markets.

Africa, Asia and the Middle East are among the most vulnerable regions to the effects of climate change. They find themselves at an earlier stage of the industrialization journey and have growing populations, so many are still heavily reliant on fossil fuels. As a result, these regions will have to undertake the most significant commitments and credible actions to facilitate the transition towards net-zero targets. Climate finance commitments by developed countries to emerging markets will play an important role in funding the shift towards a low-carbon future in emerging markets.

Has your company committed to a net zero target?



The pressure on companies to commit to net zero targets and set target dates will only grow over time as the global emissions accumulate and the costs of climate-related disruptions and disasters escalate. Around half of respondents believe that disruptions caused by climate change are a concern that their business must plan for.

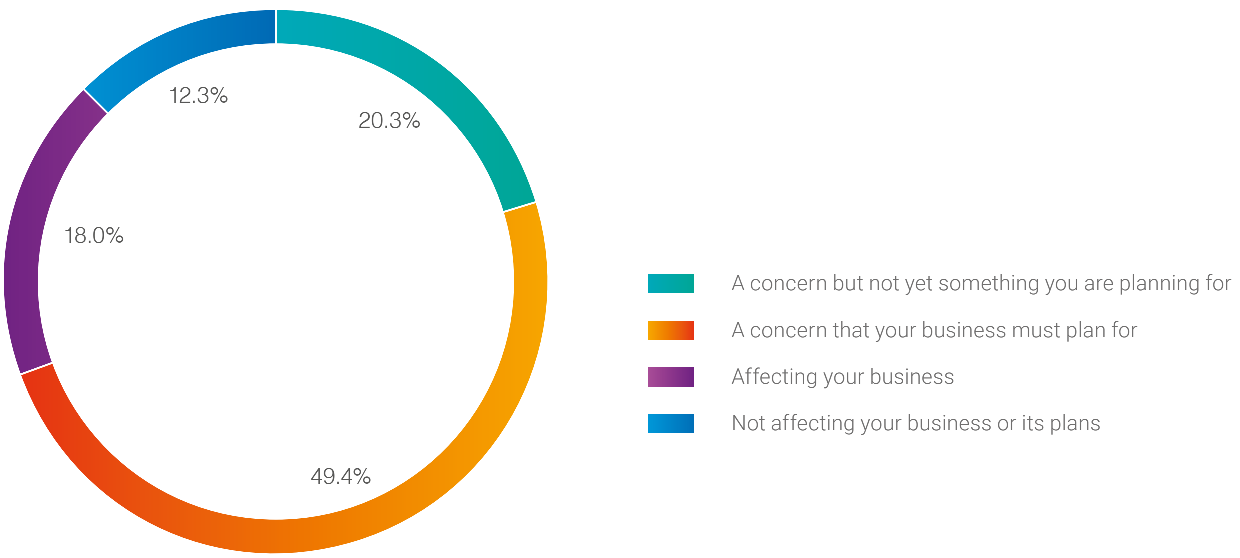
Climate-change events are already affecting around 1 in 5 organizations according to survey respondents – 18% of the respondents are already feeling the impact of this type of disruptions and state that climate change events are affecting their business.

Indeed, it is impossible to ignore the increasing number of climate-related events affecting nations and geographies – floods, droughts, fires, hurricanes and extreme winter conditions pose existential threats for populations all over the world and hence for businesses.

The impact of extreme weather events on emerging markets transport infrastructure is already visible. For instance, the floods in Kerala, India laid bare the vulnerability of India's transportation infrastructure to extreme weather events. Being one of the world's most vulnerable countries to climate change, India's economic losses from climate and natural disaster-related events have increased by 45% in the last two decades, according to the World Bank. The country's road sector is particularly exposed to these risks. In Kerala, approximately 25% of the highways and major district roads were damaged by flooding, landslides, earth slips and rock falls in 2018, according to the World Bank. During 2022, Kerala once again stared at the risk of flood with rain triggered by strong monsoon winds, further highlighting the threat that climate changes events have on the country's economy and infrastructure.

Climate change will only accelerate with knock-on effects on global supply chains and global economies and hence companies should brace for an acceleration in the climate-driven impacts on their businesses. Operational impacts on businesses are likely to become more visible moving forward, including damage of facilities as well as workforce disruptions and limited availability of resources.

Disruptions caused by climate change are:



Agility's Take

Who Will Capture the Green Opportunity

Faster and bolder efforts to decarbonize the global economy raise the stakes for emerging markets countries, which must invest in economic and environmental transition in order to avoid being left behind.

Several GCC economies are pursuing a clear two-track strategy: managing their hydrocarbon resources for maximum long-term export income while at the same time investing in hydrogen, solar and wind energy and reducing dependence on fossil fuels for their own power generation. Other emerging markets countries – including many in Africa that have large untapped reserves of oil and gas -- can't afford to postpone their own green transitions in a world that is determined to kick the carbon habit.

Emerging economies need green growth and transition strategies and sustainable investment. They also need to understand that getting greener does not mean abandoning commitments to raise living standards. "There is no inherent long run trade-off between emissions reductions, economic growth, and poverty alleviation," the World Bank says.

The fossil fuel industry employs less than 1% of the global workforce. A clean energy transition promises creation of 85 million new jobs by 2030 with most – 60 million – in energy efficiency, power grids, clean hydrogen and energy flexibility. The remaining 25 million will be in renewables. "By 2050 the total number of jobs created is estimated to be as high as 380 million, more than sufficient to offset the estimated 12 million jobs that will be lost in the fossil fuel industry," the World Bank says.

Meeting the human resource needs will require scaling up of education and training programs. Beyond that, there is much to be done: reducing emissions in every sector; creating incentives for private sector investment in clean energy and mass transit; building out electric vehicle charging networks; greening building codes and standards; reducing waste; upgrading housing and commercial buildings for increased efficiency; and developing a green jobs and investment strategy.

Appendix 1 Sources & Methodology

Sources

The Agility Emerging Markets Logistics Index has three main components.

- First is the Overall Index: a look at the composite scores of the 50 Index emerging markets based on a combination of their domestic and international logistics markets, and their business environment.
- Second are the 4 sub-indices: Domestic Logistics Opportunities, International Logistics Opportunities, Business Fundamentals and Digital Readiness.
- Third is a survey of +750 trade and logistics industry professionals.

The Index country rankings are underpinned by data from:

- The International Monetary Fund, Organisation of Economic Cooperation and Development, World Bank, government statistical agencies, Transparency International, United Nations and UN agencies, World Economic Forum, International Trade Centre and International Air Transport Association, International Renewable Energy Agency and credit ratings agencies.
- In addition, Ti's proprietary market size and forecast data is used.

Definition

Definition of 'Emerging Markets' The term 'emerging markets' was first coined by the World Bank's International Finance Corporation (IFC) in 1981. According to its definition, an emerging market is a country making an effort to improve its economy, to reach the same level of sophistication as nations defined as 'developed'.

An emerging market is further characterized by the IFC as meeting at least one of the two following criteria: 1. It is a low or middle-income economy, as defined by the World Bank. 2. Its investable market capitalisation (IMC) is low relative to its most recent Gross Domestic Product (GDP).

Methodology

The Agility Emerging Markets Logistics Index uses four metrics to assess and rank 50 emerging markets. The metrics measure the countries':

Domestic Logistics Opportunities (25%)

International Logistics Opportunities (25%)

Business Fundamentals (25%)

Digital Readiness (25%)

Domestic Logistics Opportunities rates the performance, potential and drivers of a country's domestic logistics market. This includes measures that assess each individual emerging market's economic strength, development and growth forecasts, as well as:

- Urbanisation of the population – a driver of manufacturers' centralized distribution strategies and the likely consolidation of retailing.
- Distribution of wealth throughout the population – indicative of widespread demand for higher-value goods.
- Cluster development – an assessment of the depth and economic development of business clusters within a market.

In addition, Ti's proprietary market sizing and forecast data is used to assess the strength of performance and potential growth opportunities within a country's domestic contract logistics and express markets.

International Logistics Opportunities rates the performance, potential and drivers of a country's international logistics market. This includes measures that assess each individual emerging market's trade volumes and tariff regimes, as well as:

- The frequency and range of destinations of its international connections across air and sea

- A rating of the efficiency of its customs and border controls.
- The value of logistics-intensive trade by a country, that is goods that account for the vast majority of volumes handled by traditional LSPs, discounting product groups such as oil and bulk items. Ti has developed a proprietary method for calculating logistics-intensive trade.

In addition, Ti's proprietary market size and forecast data is used to assess the strength of performance and growth opportunities within a country's air and sea forwarding markets, as well as each country's international express market.

Business Fundamentals assesses factors that either aid or hinder the operations of business in a country. This determines the market's regulatory and financial health, whilst also assessing the overall state of the wider business environment. Specifically, this measures:

- Market accessibility – how easy it is for foreign companies to enter and compete effectively in the market, including measures that assess their ability to deal with existing bureaucracy and regulation.
- Security – the risk to companies' operations from threats such as theft, corruption and terrorism.
- Domestic stability – wider financial health and a market's capacity to ensure property rights, enforce contracts and minimize corruption.
- Infrastructure – to what extent does underlying transport and technological infrastructure aid or hinder the growth of business.

Digital Readiness measures each market's potential to emerge as a digitally-led, skills rich, innovation-oriented and sustainable economy for the future. Specifically, this includes:

- Digital business – the spread and depth of digital skills, the strength and diversity of digital business models and the adoption of and access to online commerce.
- Business ecosystem development – systems and support for investment, innovation, value-adding commercial enterprises and the growth of new ventures.
- Sustainability – the emissions intensity and renewable energy mix powering economic development.

About Ti

Transport Intelligence (Ti) is one of the world's leading providers of expert research and analysis dedicated to the global logistics industry. Utilizing the expertise of professionals with many years of experience in the express, road freight and logistics industries, Transport Intelligence has developed a range of market-leading web-based products, reports, profiles and services used by many of the world's leading logistics suppliers, consultancies, banks and users of logistics services.

For further information, please contact Michael Clover, Ti's Head of Commercial Development, mclover@ti-insight.com

Telephone: +44 (0)1666 519907

Web: ti-insight.com

Twitter: @Ti_insight

Linkedin: Transport Intelligence

About Agility

Agility is a global supply chain company, and a leader and investor in technology to enhance supply chain efficiency and sustainability. It is a pioneer in emerging markets and one of the largest private owners and developers of warehousing and light industrial parks in the Middle East, Africa and Asia. Agility's subsidiary companies offer airport services, e-commerce enablement and digital logistics, customs digitization, remote infrastructure services, fuel logistics, commercial real estate and facilities management.

For further information, please contact Jim Cox, VP Communications & Content, Agility: jcox@agility.com

Web: agility.com

Twitter: twitter.com/agility

LinkedIn: Agility

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