



2021

index



Emerging market turmoil

follows once
in a generation
Covid-19
disruption

**Pandemic
suppression
powers Vietnam's
upward trajectory**

No global recovery in 2021 survey respondents look
years into the future for post-pandemic world

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FOREWORD



John Manners-Bell, CEO, Transport Intelligence

Since the Agility Emerging Market Logistics Index was established 12 years ago, the markets which it has covered have endured some tough times including economic downturns, trade wars, political upheaval and societal change. However, the shock to the world's economy caused by the Covid-19 pandemic has undeniably had a far more profound impact on emerging markets than even the global recession of 2008-9 and has resulted in a shock from which they will take even longer to recover.

Whilst Western economies have been able to mitigate the worst impact of the pandemic through vast fiscal stimulus packages and 'quantitative easing' (QE), many emerging markets have had far fewer options, afflicted by inflation, currency volatility and debt repayments. Although many – especially China – have been able to rebalance their economies around domestic industrial and consumer demand, the majority are still highly dependent on international markets and investment. A lack of global demand combined with the breakdown of air and sea logistics networks have had severe consequences for these economies and societies.

However, the situation is not completely negative. The strength of the AEMLI has always been to differentiate between those emerging markets which demonstrate resilience in the face of adversity and those which are more 'fragile'. This year is no exception.

We can see from the findings of the Index that once again China has performed best across the board. Despite being the source of the pandemic, its effects were short lived, at least on a local basis.

Throughout periods of 'lumpy' international demand, the government has had the resources to spend billions on stimulating its economy.

However, China has not been the only strong performer. The Index shows that Vietnam has moved up the rankings. It has emerged as a very popular manufacturing location, especially for global companies determined to reduce the risk of producing exclusively in China. Increasing levels of 'optionalization', as the trend has been termed, will continue to benefit Asian countries which are able to build out the necessary industrial eco-systems.

Whilst it would be easy to focus completely on the impact of Covid-19, the effects of many longer term trends must not be ignored. At a political level, the approach of the new US administration to trade with China and the rest of the world will be critical. For the shipping and air cargo sector, the challenge will be to unblock global trading networks, allowing exporters and importers to take advantage of opportunities such as those presented by cross-border e-commerce.

Once again, this year's Agility Emerging Markets Logistics Index reveals that not all emerging markets offer the same potential for investors, manufacturers, retailers and logistics service providers. As the Covid-19 crisis finally unwinds over the next two years, those which are the most resilient will bounce back the fastest. Inevitably those which have failed to embrace market, trade, governmental and social reforms will be hardest hit by the fallout from the pandemic.

Chris Price, CEO, Agility Global Integrated Logistics



Agility created this report with our research partners Transport Intelligence (Ti) 12 years ago to look at the competitiveness of countries that were capturing foreign investment, expanding the global middle class, joining the knowledge economy, and becoming indispensable as suppliers, markets and innovators.

Then as now, the Agility Emerging Markets Logistics Index offers a way to compare the world's 50 leading emerging economies in ways that are useful to shippers, carriers, distributors and others in the supply chain.

That's going to be especially important in 2021 as we work to overcome the greatest economic and social disruption of our time. As of this writing, the World Bank estimates that the global economy shrunk by 4.3% in 2020 as a result of the Covid-19 outbreak.

We won't know the full impact of the pandemic for years. But the 2021 Index and our survey of 1,200 supply chain executives offer a few clues. Among them:

- Industry executives don't foresee a full global recovery until 2022 or beyond, despite a surprising rebound in key Asia-Pacific markets such as China and Vietnam. (While the Eurozone economy was shrinking 7.4% in 2020 and the U.S. economy contracted 3.6%, China overcame a disastrous first quarter to post year-on-year GDP growth of 2.3% in 2020. Vietnam grew 2.9%.)
- By a two-to-one ratio, companies are choosing to build supply chain resilience by speeding their adoption of digital technology and moving more of their business online vs. moving production to markets that they feel are somehow safer.
- China, India and Indonesia are the world's top emerging markets. Vietnam and Nigeria were two of the countries that climbed the rankings and became more competitive, the Index shows. Notably, eight countries in Latin America took steps to become more business friendly, a category that Gulf countries as a group continue to dominate.
- Nineteen percent of executives surveyed say 2020 sales decreased as a result of the pandemic. But only 10% say Covid-related employee safety measures have decreased efficiency.

- Total cost is driving emerging markets investment and globalization, but low-cost labor is barely a consideration today. After total cost, the executives we surveyed say the most important factors are government bureaucracy and regulation; infrastructure quality; and supply of skilled labor. As companies examine new production locations, they say their biggest concerns are inadequate infrastructure and additional cost.
- The pandemic accelerated the e-commerce revolution in every region of the world. Online sales growth eclipsed pre-Covid forecasts, and digital purchases gained a larger share of wallet. What we don't know – because there is little reliable data – is how small and medium-sized companies have weathered the storm.

A number of factors continue to cloud the emerging markets outlook for 2021. Most worrisome is the slow, uneven rollout of Covid vaccines and the prospect that populations in many emerging markets could be the last to get access.

Another factor is ongoing instability in ocean shipping, which is seeing rates at historic highs, container shortages, port congestion, shipping delays and other disruption. In air freight, capacity won't return to pre-Covid levels until passengers return to the skies and bring wide-body belly capacity back onto the market to augment air cargo.

A worry of mine is creeping trade protectionism and, with it, the increasingly costly and complex burden of compliance. Countries are erecting new barriers – subsidies, tariffs, quotas, licensing requirements and other obstacles – at three and four times the rate they are liberalizing, according to Global Trade Alert. Add to that the growing number of sanctions and trade penalties imposed by the United States, China and others – a huge burden on shippers, forwarders and others in the supply chain.

Protectionism was resurgent even before the Covid crisis. Here's hoping we keep it from choking off trade, the lifeblood we need to speed the global economy and emerging markets toward recovery.

KEY FINDINGS

Covid-19 is a once in a generation event which has profoundly altered the course of development in emerging markets, with economic damage worse now than that caused by the Great Recession of 2008-2009.

The impact has been felt across the 50 emerging markets that make up the Agility Emerging Markets Logistics Index. The 50 countries will have seen an average GDP decline of 6.5% in 2020. When compared with the 2008/2009 recession, the damage done by the Covid-19 pandemic is even more stark. Despite significant global economic challenges, the 50 emerging markets recorded an average GDP expansion of 1.8% in 2009 and went on to drive the global recovery by recording growth of 6.1% in 2010. In contrast, average growth in the 50 emerging markets is forecast to tail off after 2021, dipping below 5% over the medium-term, according to the IMF.

Recovery from the Covid-19 pandemic in emerging markets will be hampered by rising inflation and looming debt payments, that has limited the stimulus and support payments these countries can extend to households and businesses.

In many of these markets, finances are stretched. Emerging markets countries have limited capacity and flexibility to continue economic stimulus packages because of growing inflation, currency volatility and debt repayments. Few markets have escaped sharp downturns unseen in a generation. Indonesia, for example, entered its first recession since the Asian financial crisis of 1998; while Malaysia is also witnessing its sharpest contraction since that time. Ghana, meanwhile, entered its first recession in over four decades as the Covid-19 pandemic took hold.

The recovery of many emerging markets is dependent on the revival of global demand.

With limited fiscal flexibility at home, recovery for many emerging markets could be heavily dependent on the revival of global demand. Many of these countries, especially in Asia, have become more balanced in recent years as consumer spending has become a growth engine

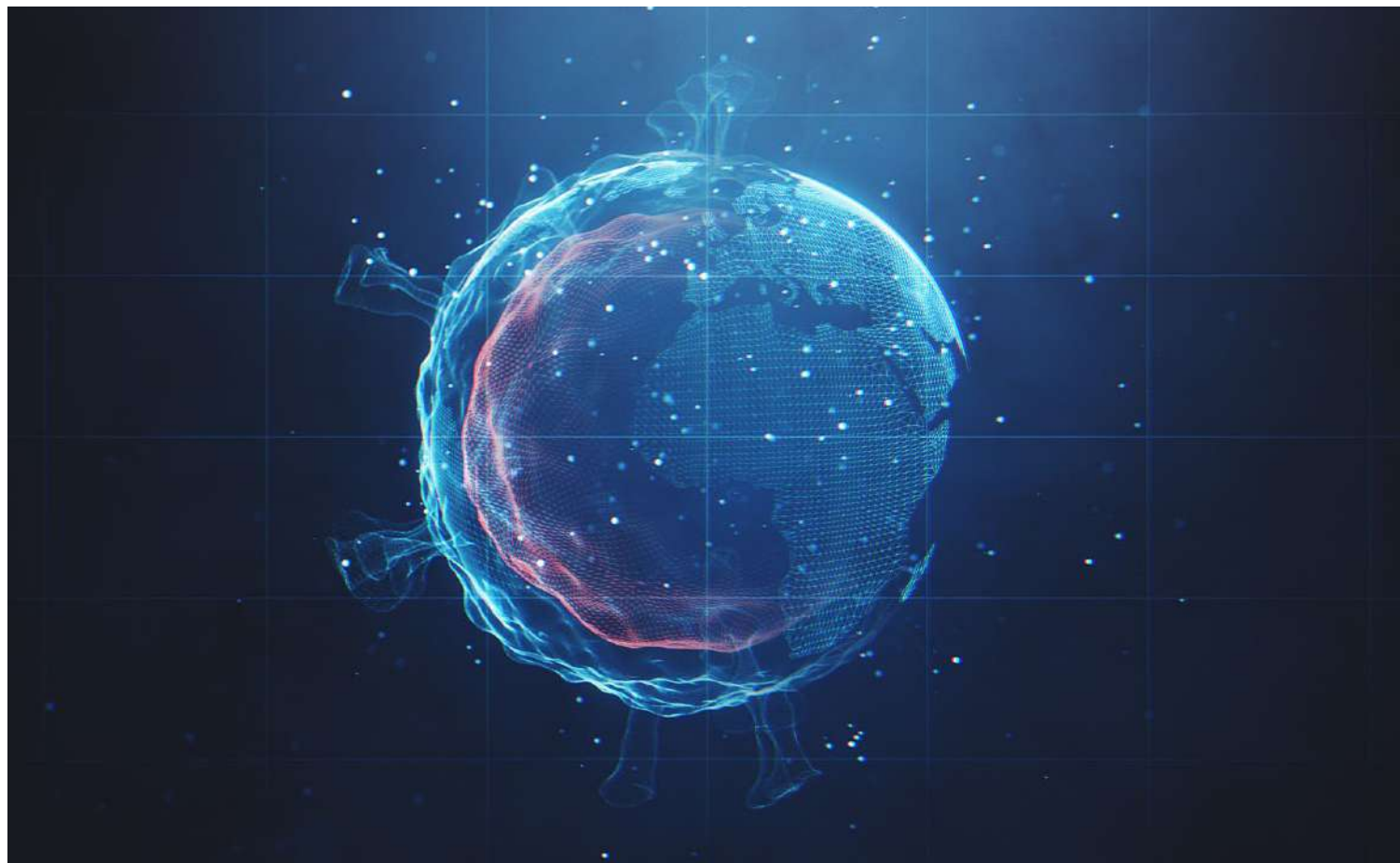
alongside exports. But their ability to rebound from the pandemic is likely to be closely tied to demand from North America, China and Europe.

A handful of emerging markets countries, particularly China and Vietnam, look to be emerging from the early pandemic downturn in positions of strength.

Both will show GDP gains in 2020, although their economic growth slowed as a result of Covid-19. China retains its 1st overall ranking position in the Index and remains atop the ranking for both Domestic and International Logistics Opportunities. China restarted its economy quickly and has benefitted from strong demand for the goods it produces. China's position at the center of global value and supply chains provides it with an advantageous position and a robust platform on which it can develop and shift focus to stimulating internal demand. Vietnam, meanwhile, has made strides as a manufacturing destination as a small number of companies has looked to ease dependence on Chinese production as a result of US-China trade friction, rising costs, and the pandemic. Vietnam has seen an influx of foreign investment and has emerged as a popular manufacturing location. Vietnam moved aggressively and effectively to prevent spread of Covid-19. It possesses cost advantages and proximity to supply networks. As a result, it jumped into the Top 10 of the Index this year and looks set to show strength for years to come.

2020 piles pressure on long-suffering Argentina and Lebanon.

Both countries struggled with multiple, overlapping crises. The pandemic forced Argentina to implement one of the world's longest and strictest lockdowns as it limped through a third consecutive year of recession, faced further currency devaluation, and again renegotiated private and institutional debt. Lebanon, meanwhile, entered 2020 amid a period of protests and civil unrest triggered by economic and political mismanagement. The country's economy collapsed in 2020 under the weight of ongoing government dysfunction, poor public health response to Covid-19 and a massive and catastrophic explosion at the port of Beirut.



Deep diversification has been a key strength of emerging markets that have best weathered the pandemic fallout.

Emerging markets overly reliant on oil and other commodity exports or with heavy concentration of their manufacturing sectors have less room for maneuver as demand from consumer markets has diminished. Diversification programs, such as Saudi Arabia's Vision 2030, have also come under pressure with many projects and infrastructure development plans either scrapped, paused or scaled back.

Mexico's Index performance shows that, even with millions of Covid-19 cases, strong fundamentals can still drive growth.

Moving into 2021, the Covid-19 pandemic will continue to generate uncertainty, meaning recovery will be uneven for regions and individual markets alike. A market's ability to contain Covid-19 and bring manufacturing, retail spending and logistics activity back to pre-pandemic levels is not the sole factor in the strength of its 2021 Index performance. Vietnam and China met all of those criteria and performed well. However, countries such as India and Mexico still recorded strong overall Index scores, despite high infection

rates and halting efforts to contain the spread of Covid-19. This is because, while the immediate and medium-term impact of the pandemic can be severe, structural advantages, long-term investment and deep integration into global value and supply chains have provided those countries with enough resilience to preserve performance.

Pandemic responses and recovery plans will shape emerging market logistics opportunities over the next few years but won't be the only determinants.

While the pandemic will continue to cause large-scale disruption and dampen economic prospects in many countries in 2021, long-term trends are worth watching. The shift to online retail and acceleration of digital commerce; the effects of US-China trade friction; the renewed spread of protectionism will all weigh on global value and supply chains, as will domestic policies and regulatory environments. Over the medium-term, Index survey respondents indicated, the markets that perform best will be those most able to preserve open trade policies, improve their business and regulatory environments, develop physical and digital infrastructure, and attract FDI.

AGILITY EMERGING MARKET LOGISTICS INDEX 2021 MOVEMENTS

Despite the depth and intensity of the Covid-19 pandemic, the effects of trade wars, increased protectionism, and the quickening adoption of technology in the logistics sector, the overall rankings for the 2021 Agility Emerging Markets Logistics Index display a remarkable degree of stability. However, there are signs of powerful undercurrents.

- Firstly, the impact of the Covid-19 pandemic has been universal, and no single emerging market has been left undamaged. The global economic, social and commercial fallout has been seismic. All 50 emerging markets in the Index have felt the brunt of the pandemic directly and indirectly. For most, the impact has dampened growth and threatened competitiveness, although a handful, such as China and Vietnam, have been able to exploit opportunities arising both before and during the pandemic. Vietnam is a prime example; it improved its Index position by three rankings, jumping 8th overall as a result of its position as a viable, cost-effective and proximate alternative to China for manufacturers looking to escape the growing costs of sourcing in China or fearing over-reliance on production there. Vietnam also has been among the countries most successful in containing Covid-19, which allowed it to rapidly bring production and export capability back online.
- Secondly, more than any other year, the 2021 results reward stability in the face of hugely challenging conditions. The Agility Emerging Markets Logistics Index ranks the performance of each individual market relative to the 49 others, and in 2021 a market is rewarded as much for secular improvement as it is for faring better than others, even if it saw decline in absolute terms. This is perhaps most apparent in the Business Fundamental Sub-Index where sound macroeconomic management and control of inflation have seen markets rise as others have been more vulnerable. Meanwhile, at the top of this ranking, the leading GCC states retain their positions not through significant progress, but through protection of strength which has been deliberately and consistently reinforced over the last decade.

- Finally, the impact of the pandemic on the Agility Emerging Markets Logistics Index ranking is not over. The once-in-a-generation fallout means the pandemic's effects will be felt for years, with particular intensity over the short- and medium-term. Each edition of the Agility Emerging Markets Logistics Index makes use of current year data, as well as one-, three- and five-year forecasts. This means that optimism for recovery is baked into this year's rankings. An example is Nigeria, which rose five positions overall to 30th while also becoming a top 10 market for Domestic Logistics Opportunities. Sub-Saharan Africa's largest economy has not escaped a downturn during the pandemic, but in Nigeria there is a growing and increasingly middle class population; a vibrant and expanding online retail market; and an evolving FinTech ecosystem that is bringing formal banking services to millions. As a result, Nigeria is the first Sub-Saharan African market to ever gain top 10 status in any segment of the Agility Emerging Markets Logistics Index, now in its 12th year. The Covid-19 pandemic will continue to influence Index rankings for years to come. As markets deal with the aftermath of the pandemic with varying degrees of success, ranking positions will continue to fluctuate as conditions, and perhaps more significantly, prospects for future growth are enhanced or diminished.



THE 2021 AGILITY EMERGING MARKETS LOGISTICS INDEX SURVEY

Emerging Markets after Covid

In the survey of 1,206 logistics industry executives, 51.5% believe the global economy will not fully recover from the Covid-19 pandemic until at least 2022. However, many are more optimistic for the recovery prospects of Asia Pacific, Europe and North America ahead of that timeline. While this will clearly benefit Asia Pacific's emerging markets, recovery in the key consumer markets of North America and Europe will drive demand for commodities and goods produced in emerging markets globally, powering a wider recovery. Latin America and Sub-Saharan Africa are likely to be the last regions to recover, according to survey respondents.

Reinforcing the caution over recovery prospects, 49% of survey respondents say the International Monetary Fund's 2021 forecast of 5.9% GDP growth for emerging markets is too optimistic; 42% say it's about right.

Despite the caution, the global downturn has the logistics industry feeling opportunistic – if not optimistic – about emerging markets. Fifty-two percent of respondents say they plan to increase business activity in emerging markets or are expressing more confidence in those markets. Only 19.5% say they are less confident in emerging markets.

There has been a considerable shift in the factors driving emerging markets investment. Nearly half (45.5%) of survey respondents indicate that overall cost is a top consideration – but only 2.2% assert that low-cost labor is a key factor in assessing emerging market investment opportunities. After total cost, industry executives say the most important factors are government bureaucracy and regulation (25.8%), infrastructure quality (14.1%), and supply of skilled labor (8%). Moreover, as companies examine new production locations, their biggest concerns are insufficient infrastructure and additional cost.

The impact of Covid-19

The duration of the COVID-19 pandemic is the leading global factor determining how long it will take to see a recovering in emerging markets supply chains. U.S.-China trade friction, protectionism, the change in U.S. administrations, Brexit and other factors are secondary, according to those surveyed.

Logistics executives felt disruption across the entire supply chain in 2020. Significant percentages say they have struggled to cope with port congestion, transportation capacity, supplies of parts and inputs, distribution and delivery, maintaining international operations, and storage.

In their own operations, industry executives say the most acute pain points in 2020 were planning and forecasting for both supply and demand. Managing orders and cash flow were the areas next most affected by the pandemic.

Nineteen percent of executives surveyed say 2020 sales decreased as a result of the pandemic. But only 10% say COVID-related employee safety measures have decreased efficiency.

Sixty percent of logistics executives in the survey say the pandemic has resulted in permanent changes to the way their businesses operate globally or regionally. About 25% said it's too soon to tell.

2021 and beyond

How are logistics executives trying to build more resilient supply chains? By a two-to-one margin, they favor accelerated adoption and integration of technology plus enhanced digital business (40.3%) over movement of production through multi-shoring, near-shoring or reshoring strategies (20.9%).

Logistics executives plan to harden their operations and build supply chain resilience in 2021 by focusing on business-continuity planning; tech and automation improvements; and strengthening their financial viability. Shifting production to other manufacturing locales is a low priority for them.

The online retail and healthcare/pharma sectors are expected to see extremely strong growth in 2021. The automotive, store-based retail and industrial sectors will struggle. No one type of business is seen as powering the recovery: small and medium-sized businesses, multi-nationals, and large regional players in emerging markets are expected to play roles.

China and India are executives' choices as the top future logistics markets, although the two countries flipped positions with China on top and India now No. 2. Saudi Arabia and Kuwait gained the most ground. Logistics

executives rank Saudi Arabia No. 7 among countries with the most potential to grow as logistics hubs, a leap from No. 10 a year ago; Kuwait climbs three spots to No. 20. Egypt and Qatar both rise two spots, to No. 15 and No. 19, respectively.

Only 7.8% of companies relocating production from China would consider reshoring to their home countries. Vietnam, India and Indonesia are the leading alternatives for

relocation, followed by Thailand and Malaysia, according to logistics executives surveyed.

The sustainability movement is proving to be durable. Twenty-seven percent of executives surveyed say their companies are boosting implementation of environmentally sustainable practices in the wake of the pandemic. Another 45.9% say their plans are unchanged, suggesting they have no plans to retreat from sustainability commitments.



THE AGILITY EMERGING MARKETS LOGISTICS INDEX 2021

There is no doubt that the Covid-19 pandemic is the most significant event to hit emerging markets in at least a generation. The pandemic shapes the Index in 2021 and it will continue to do so for years to come. Across the 50 markets analysed in the Agility Emerging Markets Logistics Index, GDP fell some 6.5% in 2020 according to the IMF. When compared with the 2008/2009 recession, the damage done by the Covid-19 pandemic is even more stark. Despite significant global economic challenges, the 50 emerging markets recorded an average GDP expansion of 1.8% in 2009.

Across the 50 leading emerging logistics markets analysed, there has been a mix of challenges and opportunities as well as growth and decline. The pandemic has accelerated trends, catapulting development forward at a rapid pace but also exposing weaknesses and forcing leaders of troubled economies to take tough decisions. The Index results are equally as mixed. Some emerging markets find themselves at new highs in the Index rankings, buoyed by healthy sentiment from more than 1,200 survey respondents. Others have not fared so well. **In 2021, the Agility Emerging Markets Logistics Index rewards markets that have built strengths and improved regulatory oversight in a decade of unmatched growth and development for emerging markets globally. However, the results show lost years ahead for markets that did not take the opportunities to ride a wave of investment and instil regulatory and economic fundamentals in the years since the 2008/2009 recession.**

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 2021 examines three key areas for logistics market development:

- Domestic Logistics Opportunities
- International Logistics Opportunities
- Business Fundamentals.

Key measures used in the Agility Emerging Markets Logistics Index 2020

The 2021 Agility Emerging Markets Logistics Index 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.

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 individual emerging market's business environment, rule of law and market independence

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

The Agility Emerging Markets Logistics Index 2021 – Overall Ranking

Ranking	Country	Overall Scores and Ranking	Domestic Logistics Opportunities	International Logistics Opportunities	Business Fundamentals	YoY Change
1	China	8.86	8.81	9.72	7.14	0
2	India	7.33	8.19	7.16	5.95	0
3	Indonesia	6.30	6.61	6.11	6.05	1
4	UAE	6.29	5.63	5.59	9.06	-1
5	Malaysia	6.15	5.41	5.87	8.24	0
6	Saudi Arabia	5.95	5.35	5.53	8.04	0
7	Mexico	5.91	5.33	6.70	5.46	1
8	Vietnam	5.67	5.04	6.41	5.44	3
9	Qatar	5.67	5.38	4.84	7.97	-2
10	Turkey	5.61	5.22	6.06	5.50	0
11	Thailand	5.55	5.18	5.69	6.04	-2
12	Chile	5.51	4.86	5.19	7.50	0
13	Russia	5.40	5.13	5.56	5.64	0
14	Oman	5.29	4.96	4.86	6.85	0
15	Bahrain	5.26	4.99	4.69	6.97	0
16	Brazil	5.21	5.34	5.59	4.15	0
17	Morocco	5.17	4.59	5.00	6.70	1
18	Jordan	5.13	4.88	4.70	6.54	-1
19	Kuwait	5.10	5.09	4.50	6.37	0
20	Egypt	5.05	5.21	4.69	5.50	0
21	Philippines	5.04	5.05	5.17	4.76	1
22	Kazakhstan	5.01	4.69	4.73	6.24	-1
23	Uruguay	4.95	4.87	4.40	6.25	1
24	South Africa	4.90	4.60	4.97	5.38	-1
25	Peru	4.89	4.70	4.99	5.09	0
26	Ukraine	4.82	4.81	4.98	4.49	1
27	Colombia	4.79	4.64	4.91	4.86	-1
28	Pakistan	4.68	5.09	4.58	4.04	0
29	Kenya	4.68	4.54	4.66	4.98	0
30	Nigeria	4.64	5.23	4.34	4.05	5
31	Tunisia	4.59	4.58	4.45	4.89	2
32	Algeria	4.57	4.88	4.21	4.68	0
33	Lebanon	4.56	4.83	4.56	3.99	-3
34	Sri Lanka	4.54	4.48	4.73	4.24	0
35	Ecuador	4.53	4.45	4.49	4.79	1
36	Argentina	4.49	4.87	4.63	3.43	-5
37	Tanzania	4.46	4.54	4.08	5.10	0
38	Bangladesh	4.44	5.03	4.36	3.40	0
39	Iran	4.42	4.95	4.24	3.74	1
40	Ghana	4.42	4.54	4.28	4.46	-1
41	Cambodia	4.40	4.40	4.48	4.25	0
42	Uganda	4.31	4.34	4.34	4.21	0
43	Paraguay	4.29	4.35	4.43	3.90	2
44	Bolivia	4.29	4.39	4.42	3.82	0
45	Ethiopia	4.22	4.47	4.36	3.43	-2
46	Myanmar	3.88	4.42	4.56	1.35	1
47	Mozambique	3.79	4.11	4.33	2.01	1
48	Angola	3.79	4.23	4.24	1.94	-2
49	Libya	3.57	4.41	4.34	0.25	0
50	Venezuela	3.42	4.30	3.85	0.76	0

Each year, the Agility Emerging Markets Logistics Index utilizes 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 in key vertical sectors. **As a result, the Index provides a snapshot of each individual 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 institution including Transport Intelligence (Ti), the World Bank, the International Monetary Fund, the World Economic Forum and others is used. By mixing current and forecast data, this 2021 edition of the Index not only produces an assessment of each market's handling of the Covid-19 pandemic and its effects on logistics market development, but also the capacity of markets to recover over the next five years. Vietnam's climb of three ranking positions to 8th overall demonstrates this – the Southeast Asian country effectively limited the spread of the virus, positioned itself deftly to absorb manufacturers seeking to leave China and possesses an enviable investment pipeline across a number of sectors, including fashion and electronics, which could see its rise continue in 2022.

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 eroded. An example of this can be seen in the ranking of Business Fundamentals performance, where the purposeful development of deep and robust regulatory oversight and economic management has again ensured that the UAE, Saudi Arabia and Qatar take three of the top

four ranking positions, with their GCC neighbors all placed in the top 11.

In 2021, the overall Agility Emerging Markets Logistics Index shows a perhaps higher than expected degree of continuity. China and India once again top the overall Index. China's role in global supply chains has come under increasing scrutiny in recent years, but the scale, sophistication and depth of its domestic and international logistics market opportunities is unrivalled amongst emerging markets. In India, a mix of strict lockdowns, internal migration and reticence to commit to international trade deals presented headwinds but were not able to diminish the potential of a market that saw continued investment and remains home to an increasingly educated, wealthy and urbanized population.

There is, however, much more volatility to be found in the Index rankings for Domestic Logistics Opportunities, International Logistics Opportunities and Business Fundamentals. **Change in the underlying drivers of performance has been a constant in 2020, and as the legacy of the Covid-19 pandemic becomes clearer, winners and losers will be brought into ever sharper focus. The Covid-19 pandemic is a once-in-a-generation event that has plunged global emerging markets into recession, with some experiencing their first economic contraction in decades. The events of 2020 will change the course of emerging market development deeply and irrevocably.** The sum of results throughout the 2021 Agility Emerging Markets Logistics Index and survey shows the disruption, painful as it is, will usher in a new beginning. Manufacturers, retailers and logistics providers must become smarter, faster, more adaptable and more resilient than ever before.

THE TOP 10

1/ China

China once again retains its position atop the Agility Emerging Markets Logistics Index. In a year when it implemented strict social and economic restrictions to prevent the spread of Covid-19 – witnessing its first quarter of GDP decline in decades – the depth, sophistication and scale of China's manufacturing, export and growing domestic market preserved its place as the highest ranked emerging market in the 2021 Index.

The effects of the Covid-19 pandemic have had significant effects on China. Having seen the virus take hold in Wuhan in early 2020, China imposed strict lockdowns that coincided with New Year celebrations. While this created challenges domestically and globally as factories shut and export supply chains ground to a halt, it set the ground well for China's economy to weather the storm. At 1.9% in 2020, according to the IMF, growth in 2020 is well below China's average over the last several decades but is one of few positive expansions globally.

Indeed, as early as the second quarter of 2020, China's economy roared back into expansionary territory after a 6.8% contraction in the first three months of the year. By November, official data showed consumer spending and private investment were gaining momentum, while industrial output was 7.0% higher than a year earlier. The industrial sector has been the success story of the year.

The reopening of production capacity in the second quarter ensured a quick rebound, while investments have also pushed growth higher. China's fixed-asset investments, which take in spending on manufacturing, property and infrastructure projects rose 2.6% in the first 11 months of 2020 compared with the same period in 2019 according to data from China's National Statistics Bureau. Such was the growth in the sector, it has played a role in propping up commodity exporting nations globally.

Job creation in China has also been a driver of China's recovery. Unemployment rates fell in each month of

Q3 2020 when GDP rose 4.9% year-on-year. Global demand for consumer electronics and personal protective equipment in reaction to pandemic control measures helped to boost China's manufacturing and export sector during the year, seeing China replace the US as the EU's largest trading partner in Q3 2020. China's growth in 2020 is not only a story of exports, however. Its consumer sector continues to grow as the country's middle class population expands. The annual Singles Day online shopping event saw some 350,000 local and international merchants take part in 2020. Alibaba data shows that Chinese consumers placed orders over the 11-day event totaling \$75.8 billion, a 26% rise over 2019, although overall retail spending in 2020 was down year-on-year.

The Covid-19 pandemic capped several challenging years for China which has seen its role in the global economy change as a result of its trade war with the US. To further promote domestic growth, Beijing introduced a "dual circulation" strategy that will further emphasize the role of domestic demand in economic growth, as well as catalyze technological innovation. The strategy will see economic liberalization domestically, including the lowering of barriers to investors and increased motivation to secure bilateral and regional trade agreements such as the Regional Comprehensive Economic Partnership, with the aim of increasing China's attractiveness to foreign technology, industries, capital and talent. It also seeks to reduce China's reliance on external demand to keep its vast manufacturing and production capacity running. The shift within may occur soon. Morgan Stanley expects private consumption to overtake exports and infrastructure spending as the main driver of economic growth in 2021, with Goldman Sachs estimating a rise in household consumption of 13% during the year as pent up demand is released and higher than usual private savings rates in 2020 disperse.

2/ India

India holds on to 2nd position overall for the third consecutive year. The country has been deeply impacted by the Covid-19 pandemic having recorded more than 10 million cases during 2020, according to data from Johns Hopkins University. The human and economic impacts have been severe. Social lockdowns to prevent the spread of the virus across India were some of the strictest

imposed globally – virtually overnight, Indian authorities shutdown businesses at the cost of up to 140 million jobs, leading to a 23.9% fall in GDP during Q2 2020. A second contractionary GDP reading in Q3 2020 saw India enter a recession and the IMF forecasts the country's economy will end the year 10.3% smaller. Perhaps more concerning, IMF data also shows a significant hit to per capita GDP in

the country, and forecasts that it will be 2022 before the 11% fall will be recovered.

The effects of the pandemic threaten to undermine several of the pillars on which India's growth prospects are built. Alongside the sharp economic contraction and job losses, millions of workers have left cities and returned to rural areas. The vision of a rapidly urbanizing and increasingly middle class population faded as an estimated 30% of migrant laborers in India's cities left as jobs were eliminated, according to India's Centre for Development Studies.

Perhaps as concerning for India's prospects, the effects of the pandemic come after a four year period in which the country saw consecutive years of slowing GDP growth. At a headline level, the depth of the challenges facing India are apparent. However, Asia's third largest economy is showing signs of resilience. Activity in retail locations, while still 25% down compared to pre-pandemic levels in Q3 2020, has been steadily improving, according to Google mobility data. The country's manufacturing and industrial sectors are also seeing higher demand, with the purchase of consumer durables and two- and four-wheel vehicles rising sharply over the second half of 2020. The early signs of a recovery gaining momentum led S&P Global, the Asian Development Bank and the Reserve Bank of India to revise growth projections for 2021 upwards.

Foreign investment in India has continued, too. Salcomp, the world's largest manufacturer of cell phone chargers, began operations at a site in Sriperumbudur during 2020. The company, which already produces around 8 million

phone chargers per month in India, plans to rapidly expand operations, adding one thousand to its already 7,500 strong headcount. In addition, Wistron, Foxconn and Pegatron – all manufacturers for Apple along with Salcomp – are seeking to expand Indian operations and take advantage of the government's production linked incentives (PLI) scheme, which provides as much as \$6 billion over five years in subsidies for Indian-made cell phones and accessories. At least 20 electronics manufacturers have expressed interest following the announcement of the scheme, which may be extended to other consumer electronics products.

However, critics including Arvind Subramanian, India's former Chief Economic Advisor, argue that policymakers lean too heavily on domestic demand, and have erred in withdrawing from the Regional Comprehensive Economic Partnership and by increasing trade restrictions – in 2018 alone, there were around 2,500 tariff increases in India.

Such policy choices are reflected in India's rank of 16th for Business Fundamentals, as are restrictive foreign investment rules in e-commerce, which limit overseas investors in online marketplaces, such as Amazon and Walmart, to providing a platform for third-party merchants only. India must also address issues such as low productivity, particularly in rural areas, and increase the value-add of its manufacturing sector – although the investments made and the PLI scheme are positive developments, the operations are still dependent on critical components, circuits and batteries manufactured in China and elsewhere.



3/ Indonesia

The Indonesian economy, the largest in Southeast Asia, rises one ranking position to displace the UAE in 3rd overall for the 2021 Agility Emerging Markets Logistics Index 2021. There were challenges for Indonesia in 2020. The country fell into its first recession since the Asian financial crisis in 1998 as the Covid-19 pandemic took hold. GDP declines of 5.3% and 3.5% in the second and third quarters of 2020 respectively were partially a result of the highest infection rate in the region. The pandemic has strained key sectors of Indonesia's economy including household spending and investment as some 3 million jobs have been put at risk. However, while 2020 has certainly been a challenging year for Indonesia, prospects for recovery in 2021 are much stronger. The IMF forecasts the Indonesian economy will expand 6.1% in 2021, following a 1.5% contraction in 2020, as consumer spending recovers and positive signs begin to emerge from Indonesia's manufacturing sector.

A recovery in manufacturing will be vital to Indonesia's prospects. The sector accounts for around 25% of the country's GDP and employs nearly 20% of its 120 million working population. **The development of the sector is led by the Making Indonesia 4.0 initiative which aims to integrate advanced technologies including artificial intelligence and the Internet of Things into supply chain and logistics operations to increase efficiency. The initiative is also part of a wider**

plan to make Indonesia a hub for electric vehicle manufacturing. In December 2020, Chinese battery cell manufacturer CATL announced its plans to invest \$5 billion in a production facility that would become operational in 2024. The announcements followed Hyundai's deal with the Indonesian government to invest \$1.5 billion to build a plant in Kota Deltamas, east of Jakarta, and Toyota's \$2 billion investment which will see it produce 10 vehicle models in the country.

Outside of manufacturing, Indonesia's e-commerce sector is also attracting foreign investment. Indonesia is the largest e-commerce market in Southeast Asia and its population spends around \$30 billion online each year. It is expected to account for 50% of Southeast Asia's online transaction by 2025. The development of logistics infrastructure must sit alongside online retail's growth, however, with costs remaining high, especially on more remote islands outside of Java. With the market opened to foreign investment in 2016, competition is healthy with Alibaba, Lazada, JD.com, and Shopee all active in the country, while recent investment from Google and Temasek will help e-commerce platform Tokopedia fund its expansion. The Covid-19 pandemic has further spurred e-commerce growth, with average daily transaction volumes doubling in 2020.

4/ UAE

Like many oil producing nations, the UAE had to contend not only with the spread of Covid-19 within their populations in 2020, but also with the collapse in oil prices as demand collapsed. The IMF expects the UAE's GDP to fall 6.6%, while Oxford Economics forecasts its non-oil economy will shrink some 7.4% during the year and not return to pre-pandemic levels until mid-2022, as a result. Clearly the impact of the Covid-19 pandemic has been harsh in the Emirates, but the expectations are for a recovery to take hold in 2021 as social restrictions ease and the country's other dominant sector – tourism – sees greater levels of activity. The UAE's central bank forecasts a 3.6% expansion, while the country has financial reserves to provide fiscal support throughout the year which may provide a boost to recovery prospects via funding for new projects. The delayed Expo 2021 will provide a boost to non-oil recovery.

The disruption to its economic performance saw the Emirates slip to 4th in the overall ranking. The fall is limited though, as the UAE's position in the Top 10 remains a

result of its leadership in Business Fundamentals, where it has been ranked first in all iterations of this Index methodology. New policy initiatives announced during the year show the UAE is set to continue developing this strength. There are amendments to bankruptcy laws, allocation of grants and incentives to tourism businesses, changes to commercial transaction laws and a targeted economic support plan aiming to enhance liquidity in financial services already progressing under the Emirates' Covid-19 economic recovery plan.

Other reforms have also taken place. Visas for foreign workers can now be granted for up to 10 years for certain types of investors and those with specialized degrees in fields including artificial intelligence. Foreign ownership rules have also been relaxed, scrapping the requirement that boards be majority Emirati and chaired by a national, thereby effectively allowing for full foreign ownership. While the moves significantly open up investment opportunities, removing the need for Emirati representation within onshore companies will challenge the business models of

the UAE's network of free trade zones which have been so successful in creating the current business environment. The reforms are further supported by an investment program from the Abu Dhabi National Oil Company (ADNOC) to boost economic growth after the pandemic. ADNOC will spend \$43.6 billion over the next five years, including \$1.36 billion for investments in over 400 local micro, small and medium sized businesses. The program is an extension of investments that have seen \$20.7 billion ADNOC has pushed into the UAE's economy.

Infrastructure development is not being neglected either.

Work is underway on the UAE's first national rail network, although no completion date has been announced. The realization of a domestic rail network has the potential to improve domestic logistics opportunities in the Emirates, particularly as the first stages focus on introducing freight capacity linking Jebel Ali Port, Khalifa Port and the Port of Fujairah to industrial hubs in Abu Dhabi, Dubai and Ras Al Khaimah. The development could see as much as 60 million tons of freight move from sea and road to the rail network annually.

5/ Malaysia

Malaysia's diversified economy means the country has dealt well with the impact of the Covid-19 pandemic. Despite the IMF asserting that GDP fell 6%, Malaysia's high-tech, manufacturing and services sectors all played a role in limiting the depth of the impact made by the Covid-19 pandemic. The country was also able to respond to the pandemic by deploying spending and stimulus packages equivalent to 21% of GDP. These factors combined to see Southeast Asia's best performing market for business Fundamentals retain its 5th overall rank for a third year.

Malaysia imposed strict social restrictions early in the pandemic. Easing for certain economic activities followed from May onwards and saw manufacturing, production and sales growth turn positive in June. The recovery was uneven, however, and new restrictions were imposed as Covid-19 cases spiked again towards the end of 2020. The result is captured in Malaysia's manufacturing PMI data, which entered contractionary territory in July 2020 and steadily declined over the five months to a November reading of 48.4. The trajectory played into a third quarter GDP decline of 2.7%, when the services sector also contracted by 4%. As the Covid-19 pandemic retreats, rising global demand for the output of Malaysia's manufacturing sector underpins optimism for 2021. Since June 2020, Malaysian manufacturers have recorded improving sentiment about the 12 months ahead, according to IHS Markit.

Online retail has performed well in Malaysia during the Covid-19 pandemic. According to data from E-Commerce Analytics, the Malaysian e-commerce market will grow 24.7% in 2020, recording total sales of around \$7.5 billion. The market is expected to reach \$12.6 billion by 2024. The development of online sales in Malaysia is supported by one of Southeast Asia's most digitally engaged populations

– data from 2019 shows 84.2% have internet access, a higher proportion than all other ASEAN-5 states. The country also has a healthy online services ecosystem which has fostered the development of online banking and payment services in recent years. This has helped to increase the value-added by e-commerce to the Malaysian economy to around \$42.5 billion in 2020, according to the Malaysia Digital Economy Corporation. Leading e-commerce players Lazada and Shopee saw strong sales in 2020 as a result – Lazada's 12.12 shopping event saw total 2019 sales exceeded in less than 12 hours in 2020, with 80% more brands and SMEs participating. Shopee recorded some 875,000 orders in the first hour of 12.12 sales.



6/ Saudi Arabia

Saudi Arabia faced a number of challenges in 2020 as it fought to contain both the Covid-19 pandemic and oil market turmoil. The Kingdom entered 2020 in an already vulnerable economic situation with data from Saudi Arabia's General Authority for Statistics showing GDP contractions beginning in Q3 2019. The IMF expected the Saudi economy to shrink 5.4% in 2020, while its Ministry of Finance forecasted a 12% budget deficit. Like its GCC neighbors, however, the strength of Saudi Arabia's business and regulatory environment drives its performance in the Agility Emerging Markets Logistics Index, which sees the Kingdom retain its overall ranking of 6th.

As social restrictions were introduced to suppress the pandemic globally, demand for oil dropped significantly. The lower demand for oil saw prices collapse and changed the spending options available to the Saudi administration. Despite some success in efforts to diversify its economy, Saudi Arabia's prospects in the medium-term are still linked to a wider global recovery and rising oil demand, according to the World Bank. Oil revenues account for around two thirds of the Kingdom's exports, however data from Capital Economics illustrates that Saudi Arabia's share of global exports fell to around 12% in 2020 from 30% a few years previously. The challenges facing Saudi Arabia's oil economy run deeper than pricing, and the expectation is that as spending is reduced due to lower state revenues and social restrictions are only gradually lifted, activity in the non-oil economy will remain depressed.

The Kingdom, however, took steps to address the shortfall in hydrocarbon revenues by introducing and amending new and existing taxes during 2020. VAT was raised to 15%, significantly up from the 5% it was set at upon introduction in 2018. A living allowance offered to all public sectors workers was also scrapped, saving the

Kingdom around \$4.8 billion per year. Both moves are likely to weigh on private household spending but demonstrate the ongoing process of reforms in the Saudi state as it attempts to lessen its dependence on oil and expand other areas of its economy. Government spending will also be reduced to address the budget deficit following spending in 2020 equivalent to 12% of GDP.

The year ahead will be challenging for Saudi Arabia as it seeks to continue its reform agenda. The Kingdom's recovery will be linked to global recovery and an increased demand for oil. The Kingdom's \$300 billion sovereign-wealth fund will pump \$40 billion into the domestic economy in each of 2021 and 2022, primarily to support real estate development in the tourism sector, a key component of the Vision 2030 plan. While there remains financial support for Vision 2030, certain projects are likely to be delayed, scaled back or even abandoned. Indeed, the plan to boost non-oil revenue to 1 trillion riyals in 2030, from 163 billion riyals in 2016, may now be out of reach. Many of the regulatory reforms and liberalization in the Vision 2030 plans though could be unaffected, potentially securing the Kingdom's ability to continue improving Business Fundamentals.

In many ways, the year ahead may be decisive for the Kingdom's transition and its pursuit of the Vision 2030 strategy. Job creation will be tested – unemployment and underemployment remain significant issues in a country where two thirds of the population are under 30 years old. The Kingdom's "Saudization" plans could see up to 1.2 million foreign workers leave, opening up employment opportunities, although only provided businesses can weather the pandemic and its economic consequences and also pay the higher wages the local population would demand.

7/ Mexico

Mexico maintains a Top 10 position in 2021 despite seeing significant challenges raised by the Covid-19 pandemic. It does however slide one position to 7th in the overall ranking. The country's economy has been battered with a contraction of 9% expected in 2020, according to IMF data. Mexico has the fifteenth largest economy globally, but it has not seen the high growth rates of other emerging markets and fellow G20 members India, China and Indonesia over the last several decades. Indeed, World Bank data shows the average expansion of Mexican GDP between 1980 and 2018 was just 2%. While the country



is open to international trade and has strong institutional oversight, it has not seen the type of convergence other high income economies have experienced – in 2020, 45.5% of Mexico’s 130 million population lived below the poverty line.

Business activity in Mexico effectively ground to a halt during April and May, when an estimated 1 million jobs were lost. During the second quarter, the economy contracted 17.1% against the first three months of 2020. Activity gathered pace in the mining and manufacturing sectors during Q3, but still an annual contraction of 8.6% was recorded. Analysts point to the President Andres Manuel Lopez Obrador’s decision to favor budgetary discipline and austerity over stimulus packages as one cause of the economic turmoil. Mexico’s spending is equivalent to 0.6% of GDP. By comparison, stimulus packages in China and South Africa equate to 4.6% and 5.3% of GDP respectively, according to IMF estimates. The lower spending has consequences, despite a lockdown similar in terms of stringency and length to Brazil, domestic demand in Mexico fell more significantly than in its Latin American partner where payments to stimulus spending were much higher.

Mexico had economic and investment weaknesses before the pandemic that, along with the damage caused to its labor market, will remain in place after Covid-19 fades. **Despite the challenges, Mexico retains**

several significant advantages as it plans a pathway through recovery. Its close ties to the US remain a primary source of growth, and as the US saw its economy weather the most severe pandemic-related disruptions, Mexico saw its export volume rise. This was particularly the case in the automotive sector, while remittances also gathered pace. Prior to the pandemic Mexico’s external trade contributed close to 80% of GDP, as the logistics operations helped maintain Mexico’s International Logistics Opportunities ranking of 3rd. In recent years, Mexico has built strategic alliances with trading partners, including the UK and EU. However, some 40% of its economy relies on trade with its American and Canadian partners in the USMCA agreement which replaced officially NAFTA in July 2020.

It is clear then that the USMCA must be successfully implemented – indeed, failure would threaten a significant proportion of a Mexican economy that has little room for manoeuvre. Mexico’s relations with the US may see a step change under the Biden presidency, helping the implementation process, while the trade pact’s provisions that improve labor conditions, could see Mexico’s Business Fundamentals rank of 20th improve. Commitment to the USMCA from Mexico’s leadership would also help boost investment confidence at a time when supply chain resilience and diversification are high on the agenda.

Agility’s Take

Mexico: Which Way is it Headed?



The strength of Mexico’s performance in the 2021 Agility Emerging Markets Logistics Index comes as a surprise because the country has been in recession since 2019 and, in 2020, lapsed into its steepest decline since the 1930s. Moody’s Investor’s Service says Mexico is not likely to reach pre-pandemic levels of economic output until at least 2023.

The government has resisted calls to provide economic stimulus by boosting public spending, unwilling to take on additional public debt. At the same time, it has pursued pet infrastructure projects through big bets with questionable return, including the \$8 billion Dos Bocas refinery, a 913-mile Mayan tourist train, and the new \$3.5 billion Santa Lucia airport, along with continued support for the state-owned Pemex oil company.

Decisions to cancel other projects prompted economic consultancy firm Eurasia Group to warn that policies hostile to private investors are likely to restrict growth.

Mexico would benefit indirectly if the incoming Biden administration injects fresh stimulus into the economy of the United States, Mexico’s biggest trading partner. Mexico is also best positioned to benefit from decisions by multi-nationals to move production out of Asia in order to be closer to the U.S. market. The country’s central bank chief predicts Mexico’s GDP will grow 5.3% in 2021.

8/ Vietnam

Vietnam's handling of the Covid-19 pandemic has been one of the most successful globally. Data from Johns Hopkins University shows less than 1,500 reported cases of the virus in Vietnam in 2020. The country's economy has performed well as a result of the minimal domestic disruptions and is set to be one of the best performing globally in 2020. The IMF expects growth of 2.4% and cited Vietnam's "decisive steps to contain the health and economic fallout from Covid-19" as the reason for the success. **The combination of social and economic restrictions in combination with a strict and comprehensive test and trace system, saw lockdowns last less than three months, and by June many factories were reopened and domestic operations were recovering quickly. The foundation provided by the strong performance in 2020 is expected to underpin a 2021 expansion of 6.5% as domestic and international conditions normalize and the Covid-19 pandemic recedes. The steps taken by Vietnam in 2020 propel it into the top 10 ranking in 2021 – its rise of three ranking positions to 8th overall is the fastest rise in the top half of the Index and displaces regional partner Thailand in the top 10.**

Vietnam has taken advantage of opportunities that have presented themselves in the last several years. It has seen an influx of foreign investment, partially as a result of the US-China trade war but also as its capacity remained open and functional during the pandemic. Early in 2020 as the threat of Covid-19 became apparent there were concerns for Vietnam as demand for clothing, footwear and some electronics slumped in the EU, Japan and South Korea, some of Vietnam's largest trade partners. Since foreign investment began to accelerate in the late 2000s as low-end garment manufacturers sought an alternative to China's rising costs, Vietnam has successfully developed a diversified export market. In the first nine months of 2020, exports to China grew 15% year-on-year, offsetting the decline in demand for lower value exports to the West.

In recent years, Vietnam has added significant high-tech manufacturing capacity, helping to attract investment from producers higher up the value chain as costs in China increased. The option to avoid additional costs associated with the US-China trade war has added further motivation for manufacturers to choose Vietnam. Samsung, which alone contributes a quarter of Vietnam's exports through smartphone manufacturing activity in the country, will shift PC manufacturing to Vietnam after it shut down a Chinese



factory in 2020. Apple is also reported to have requested that Foxconn open a Vietnam production location to add production capacity for iPads and MacBooks. When the production lines become active in the first half of 2021, it will be the first time iPad manufacture will have taken place outside China. In addition, chip manufacturer Intel will operate its largest assembly plant in the country and South Korea's LG electronics announced investment plans during 2020. With Covid-19 further exposing the risks of overreliance on China, Vietnam will be an attractive option for relocation – indeed, when asked, 19.2% of survey respondents cited Vietnam as the number one location for those seeking to diversify production locations outside of China.

However, so rapid has the investment and arrival of new businesses been that it is creating challenges of its own. As illustrated above, investment in Vietnam's technology manufacturing sector is high, but there is a shortage of skills and knowledge to produce the highest value goods – Navigos Group, which owns the country's largest jobs site, reports that 71% of employers cite a lack of IT skills as their most significant challenge. Property company Savills also reports challenges, stating that industrial zone occupancy rates in 2020 had reached 74% nationally, while in Binh Duong and Dong Nai, on the outskirts of Ho Chi Minh City, occupancy was at 99% and 94% respectively. Meanwhile, a lack of local suppliers of components forces Vietnam to import materials, predominantly from China. Research from Harvard University suggests Vietnam adds an average of 55% of a products value, lower than similar Asian markets. Addressing the skills, capacity and ecosystem challenges Vietnam faces will be vital or each threatens to arrest the country's growth.

9/ Qatar

Qatar maintains a Top 10 position due in large part to its business environment, although a two ranking position fall sees it rank 8th overall in 2021. The GCC state has faced challenges in recent years, including the Covid-19 pandemic as well as a dispute with neighboring states that isolated the nation from regional trade. Its economy is expected to contract by 4.5% in 2020 according to IMF data, while the 6.1% fall it experienced in Q2 2020 was the worst since 2012. Qatar's ongoing economic challenges have hobbled growth in recent years – GDP expansion in 2019 was just 0.8%. Qatar's relations with its neighbors remain strained but are normalizing with the blockade implemented by neighboring states lifted in January 2021. Qatar proved somewhat successful in mitigating the effective end of trade between it and the UAE, Saudi Arabia, Bahrain and Egypt. The normalization of relations is likely to be a gradual process, but is expected to further support economic diversification, bolstering the country's non-oil GDP growth over the coming years.

Qatar's economy remains heavily exposed to the hydrocarbon sector. Commissioning of the Barzan natural gas facility is expected to positively impact growth in the coming years, while the expansion of the North Field gas project will boost gas output when it comes online in 2024. Qatar has left OPEC to allow it to focus efforts on natural gas, as well as lower tensions with its neighbors. It has also enacted diversification plans to lessen the dependence on hydrocarbon exports. The country's non-oil economy now contributes a little more than half of all GDP, with Qatar directing investment towards manufacturing and construction. The construction sector in particular has

seen strong growth, particularly in support of projects related to the 2022 World Cup, and there are further plans for development projects in telecoms and infrastructure.

Qatar has the highest per capita GDP of all 50 emerging markets measured in the Index, and positive signs from its manufacturing sector in the second half of 2020 suggest it is on a pathway to growth in 2021. The country's PMI rose from 51.5 in October to 52.5 in November 2020 to suggest growing momentum in the manufacturing sector as Covid-19 restrictions eased. Qatar's Free Zones, including the Airport Free Zone at Ras Bufontas, directly linked to Hamad International Airport, and the Port Free Zone at Umm Alhoul, connected to the Hamad Port, reported rising interest from logistics providers and companies operating in advanced technology, light manufacturing and the aviation sector during 2020. It was also announced that Volkswagen will deploy its first autonomous vehicle project in Qatar.

There remain some challenges to navigate, however. In June, falling hydrocarbon revenues and the effects of the Covid-19 pandemic led Qatar's Finance Ministry to instruct state funded government departments and institutions to reduce wage bills for foreign workers by 30%. This resulted in a combination of wage cuts and layoffs. Qatar's population is made up of around 85% foreign workers. While initial fears that some Gulf nations could see populations fall by 10% as a result of such programs in 2020, Qatar's population shrank by a more modest 2.8% between March and November 2020.



10/ Turkey



Turkey came close to achieving high income status in 2014 after years of solid growth. In the subsequent years however, regression has been consistent. This year, Turkey sees both its Domestic Logistics Opportunities and Business Fundamentals scores decline, although it did record an improved Business Fundamentals ranking position, rising two spots to 6th. **Turkey stays in 10th overall, but its place amongst the world's top 10 emerging logistics markets is increasingly more vulnerable each year.**

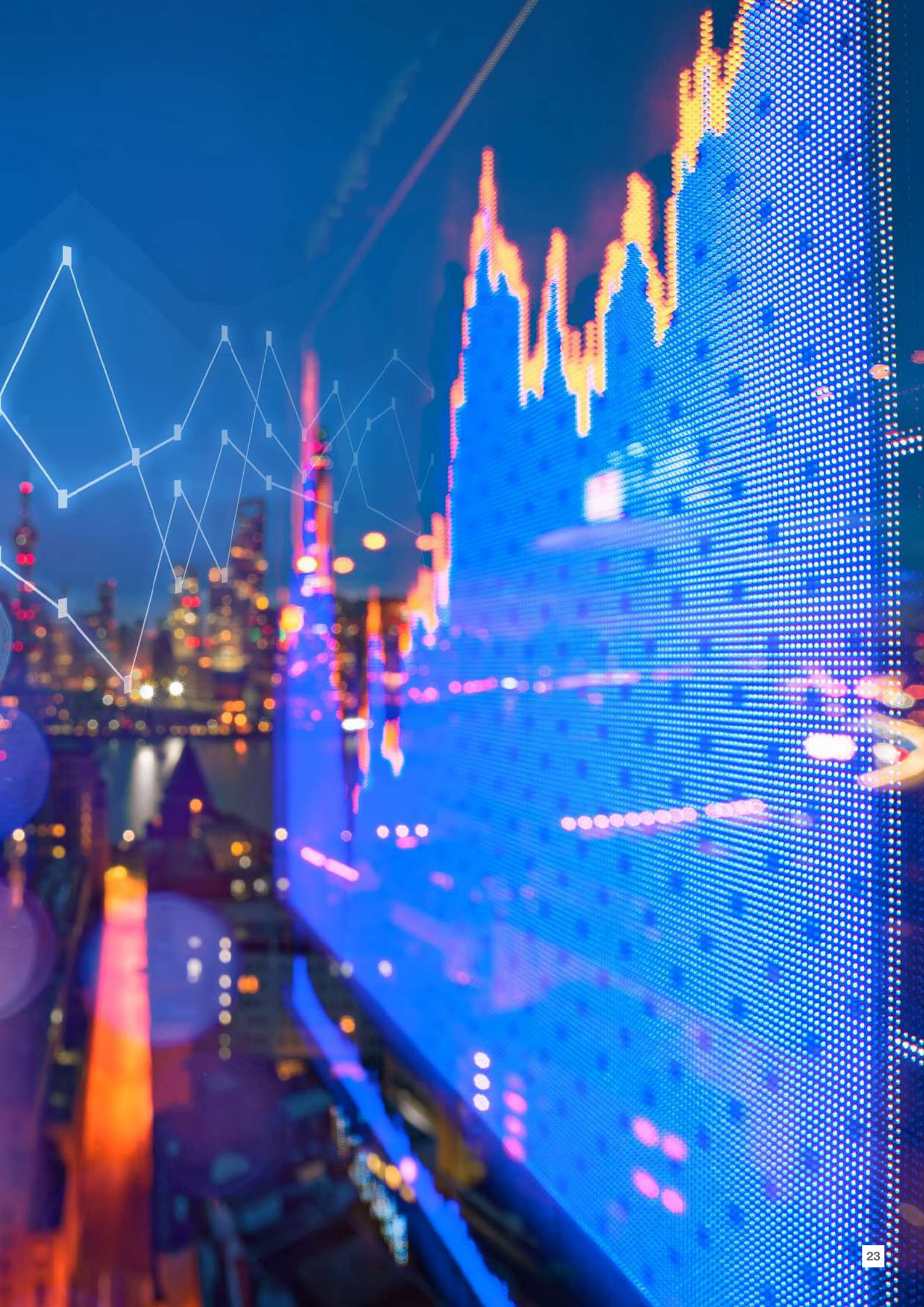
Starting in 2000, Turkey pursued a long-term reform agenda that saw poverty halve by 2015 as its population urbanized and foreign trade policy frameworks were harmonized with the EU. The progress allowed Turkey to weather the 2008/09 global financial crisis well. However, as the Covid-19 pandemic recedes Turkey will not be as well placed to deal with economic upheaval. Recent years have seen the foundations of the Turkish economy eroded, leaving it on shaky ground. There is distinct uncertainty amid rising inflation, growing unemployment and vulnerabilities in corporate and financial sectors, while instability in its neighborhood has led to rising political tensions. The impact of the Covid-19 pandemic has added to these uncertainties. Structural reforms are needed if the market is to return to the high growth rates of the early 21st century.

To combat the pandemic, Turkey implemented social restrictions and testing procedures and expanded healthcare capacity which helped to contain the spread of the virus. While the economy saw deep contractions in the second quarter as a result of shutdowns, fiscal and monetary stimulus eased the impact. Turkey's underlying weaknesses were exposed, however, as macroeconomic imbalances caused monetary support to be withdrawn.

This happened as supply and demand returned, with GDP in Q3 2020 rising 6.7% year-on-year with household consumption up 9% and imports 16% higher, according to official statistics. Exports, however, dropped 22% during the quarter, becoming a major drag on growth while the Turkish lira lost around 12% of its value against the US dollar, effectively raising the cost of imports, primarily as a result of capital outflows.

Returning Turkey to the growth trajectory it enjoyed a decade ago will require significant change. The need for economic reform is recognized and in November 2020, Turkey introduced a New Economic Plan. President Erdogan, facing pressure as living costs and unemployment rose while the value of the lira fell, enacted changes that will emphasize stability and long-term investment. Reforms to Turkey's relationship with the US could also boost its growth prospects in coming years. Turkey is one of several major emerging markets which has the opportunity to reset relations as the Biden administration takes power in 2021. The country's business environment also needs improving to enhance investment opportunities and strengthen the rule of law.

Goods exports are likely to play a central role in Turkey's recovery an expected 5% GDP contraction in 2020, as external demand returns. Domestic demand is also expected to be stronger following a boost in household spending after a large credit stimulus in Q3 2020, although if the lira does not return to a more competitive exchange rate, interest rates may be increased, potentially derailing recovery. There was also lower demand for Turkey's exports from key trading partners in the eurozone during Q4 2020, which presents a risk to recovery plans in the year ahead if volumes remain weak.



DOMESTIC LOGISTICS OPPORTUNITIES

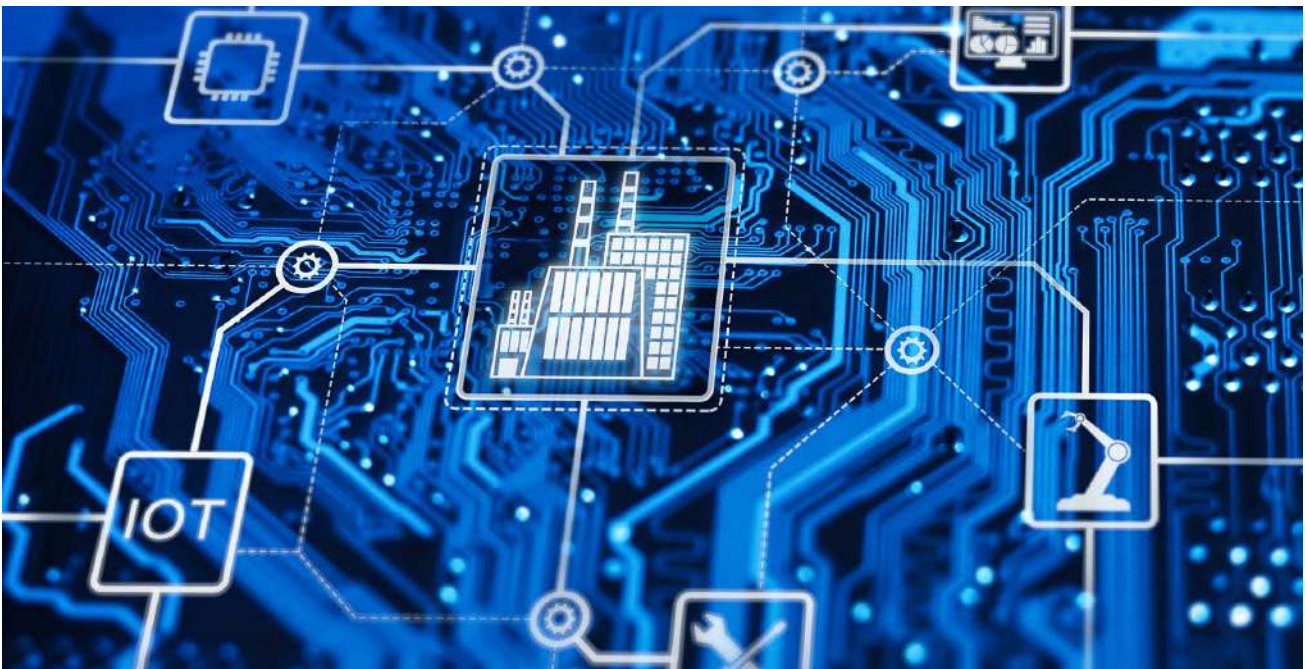
Domestic Logistics Opportunities

Rank	Market	Score	Change
1	China	8.81	0
2	India	8.19	0
3	Indonesia	6.61	0
4	UAE	5.63	0
5	Malaysia	5.41	4
6	Qatar	5.38	1
7	Saudi Arabia	5.35	-1
8	Brazil	5.34	-3
9	Mexico	5.33	-1
10	Nigeria	5.23	6
11	Turkey	5.22	-1
12	Egypt	5.21	1
13	Thailand	5.18	1
14	Russia	5.13	-3
15	Pakistan	5.09	0
16	Kuwait	5.09	-4
17	Philippines	5.05	2
18	Vietnam	5.04	3
19	Bangladesh	5.03	1
20	Bahrain	4.99	-3
21	Oman	4.96	-3
22	Iran	4.95	5
23	Jordan	4.88	1
24	Algeria	4.88	-1
25	Uruguay	4.87	3
26	Argentina	4.87	-4
27	Chile	4.86	-1
28	Lebanon	4.83	-3
29	Ukraine	4.81	0
30	Peru	4.70	1
31	Kazakhstan	4.69	-1
32	Colombia	4.64	0
33	South Africa	4.60	0
34	Morocco	4.59	1
35	Tunisia	4.58	-1
36	Tanzania	4.54	0
37	Kenya	4.54	0
38	Ghana	4.54	0
39	Sri Lanka	4.48	0
40	Ethiopia	4.47	1
41	Ecuador	4.45	-1
42	Myanmar	4.42	6
43	Libya	4.41	-1
44	Cambodia	4.40	5
45	Bolivia	4.39	-1
46	Paraguay	4.35	0
47	Uganda	4.34	-2
48	Venezuela	4.30	-1
49	Angola	4.23	-6
50	Mozambique	4.11	0

The top 2021 Domestic Logistics Opportunities ranking offers a degree of continuity with the four highest ranking markets unchanged. China, India and Indonesia hold on to the top three positions for a third straight year. Despite its lead, China continues to see its ranking score fall and this year it records a total lower than in 2019, the first year of this Index methodology. The rest of the top 5 all saw their scores rise, narrowing the gap at the top, while Nigeria leapt six positions to gain a top 10 rank – the first time a sub-Saharan African market has ever featured so highly. Yet China remains a firm leader due to its size and economic development, as well as the significant logistics opportunities offered by its domestic markets. Ti market size data shows China is home to both the second largest contract logistics and domestic express markets in the world, trailing only the United States, both of which have forecast growth rates in the double digits.

India, meanwhile, remains 2nd for Domestic Logistics Opportunities. Like China, its position is maintained by several structural advantages, including the size of its population and domestic logistics markets. E-commerce has grown rapidly over the last several years in India, helping to drive domestic express and parcel operations forwards. Research from Deloitte also shows India's digital payments ecosystem to be the largest in Asia, valued at \$69 billion annually and growing at around 20% per year. This is helping to bring millions into the formal online retail market and quickly expanding sales.

E-commerce plays a significant role in several other high performing Domestic Logistics Opportunities markets. Each of the ASEAN-5 features in the top 20, highlighting the region's potential as well as its current performance. In Vietnam, e-commerce is growing at a rapid 46% according to a report from Google, Temasek, and Bain & Company, while McKinsey estimates that Indonesia's market will top \$40 billion in sales by 2022. But domestic logistics markets in the ASEAN-5 have also benefitted from expansions in the size and value of manufacturing sectors in the region. Despite challenges related to the Covid-19 pandemic during 2020, there remains significant potential in the markets. Preparing for the future, Thailand is developing the skills base in its labor market by offering vocational training to ensure it has the estimated 200,000 workers it will need to work alongside and maintain factory robotics by 2024. Thailand's Vocational Education Commission is investing \$20 million in the training program to ensure the country is ready to receive manufacturers relocating from China.



More widely in Southeast Asia, Cambodia and Myanmar are amongst the fastest rising markets for Domestic Logistics Opportunities. With both remaining in the bottom 10 ranking positions it should be noted that these nations have made progress from a low base.

Myanmar's rise of six ranking positions is an impressive leap, but at 42nd should be viewed as the signs of nascent development. **Since the country's reforms in 2011 it has made progress in reducing poverty and spurring economic growth, although the reforms have not been as broad based as initially hoped with inequality and conflict curtailing participation. The country's manufacturing sectors is making progress, however. Automotive manufacturing in the country has steadily grown.** Nissan established production operations in the country in 2013, while Toyota broke ground at a manufacturing plant in the Thilawa Special Economic Zone in November 2019, that will produce 2,500 vehicles per year when it comes online in 2021. Renewed political uncertainty at the start of 2021 however, will raise questions as to how and if Myanmar's can preserve the progress of recent years.

Cambodia's five position rise to 44th comes despite some difficulties during 2020, with garment exports to the EU dropping by around \$1 billion in the first nine months of 2020. The fall is partially as a result of the Covid-19 pandemic which has seen demand for lower-end garments collapse, but also a result of the partial suspension of Cambodia preferential access to the EU. There has been more positive development in Cambodia's non-garment manufacturing sectors, with World Bank data showing

that exports of bicycles, electrical parts and vehicle parts and accessories manufactured in Cambodia have risen. Domestic logistics support for quickly growing rice and other agricultural exports has also been in higher demand.

Nigeria's continued rise through the Domestic Logistics Opportunities ranking is by far the quickest seen amongst the 50 markets covered by the Index. **Africa's largest economy ranked 25th in 2019, the first**

Nigeria leapt six positions to gain a top 10 rank – the first time a sub-Saharan African market has ever featured so highly.

year of the current AEMLI methodology, before rising nine positions to 16th in 2021. Nigeria is now a top 10 market for domestic logistics opportunities, the first time it or any Sub-Saharan Africa nation has reached such a high. The progress comes despite the

fall in Nigeria's GDP during Q3 2020 which saw the economy enter its first recession since 2016. The impact of Covid-19 pandemic restriction is a key driver of the recession, as is the global slump in oil demand and pricing. However, over the medium term, Nigeria's economic fundamentals are sound – while the IMF predicts a 4.3% GDP decline in 2020, the Fund's data shows a 9% CAGR expansion through 2024. By June 2020, internet usage in the country hit 140 million, close to 70% of Nigeria's population, while a growing start-up scene has fostered FinTech start-ups aiming to bring the country's 40 million unbanked inhabitants into the formal economy. Over time this is expected to push e-commerce growth forward, boosting the demand for e-fulfilment and last mile express services. There remain risks to the Nigerian economy and its domestic logistics markets, however. In combatting the latest recession, the World Bank stresses, it must also tackle fundamental

challenges that have curtailed growth in the past, including the introduction of a market-driven exchange rate, the reopening of land borders, an easing of foreign exchange restrictions on business and wider tax system reform.

Results in Sub-Saharan Africa's other emerging markets were less positive. While a number do not lose any ranking positions this year, all show a decline in ranking points suggesting they have moderately fallen away from the leaders. Ethiopia, which has maintained economic growth of more than 10% each year for nearly two decades up to 2019, rises one position to 40th despite a lower ranking score. The years of rapid growth have transformed the country's prospects, improving infrastructure, education and healthcare as well increasing foreign investment interest. Investment rules for the logistics sector have been liberalized in recent years, and in December 2020, a highway linking the south of Ethiopia with Kenya's port of Mombasa on the Indian ocean was opened. Both developments should provide faster and better links to

export markets for Ethiopia's growing manufacturing base.

There were some significant falls amongst Sub-Saharan Africa's emerging markets too, including Uganda which slipped two positions to 47th, and Angola, which falls six ranking places to 49th. In Uganda, GDP is expected to contract by 1% in 2020, a marked downturn from a 7.5% expansion in 2019, as the Covid-19 pandemic has disrupted trade and production activities, lowering household incomes declined as a result of business closures and job losses in both the formal and informal sectors. In Angola, the costs of debt repayments and falling demand for oil from China have sapped momentum. Angola's economy is highly dependent on Chinese demand, with China accounting for a higher share of Angola's exports than all other trading partners combined. Angola has been pursuing a privatization program in recent years to spur foreign investment and increase the competitiveness of its manufacturing sector.

Agility's Take

Sub-Saharan Africa: Will Covid-19 Stall Momentum?



Many forecasts at the start of the pandemic assumed that Sub-Saharan Africa would be devastated by Covid-19, predictions were as high as 10 million deaths and came with the expectation that the continent's development and growth would be derailed.

In 2020, the pandemic had a more muted effect on the region except for South Africa, which mirrored European Covid-19 numbers. The rest of Sub-Saharan Africa was able to contain case numbers and experienced relatively low mortality rates. Whether this is due to cross immunity from other diseases, or the low median age of 20 – or other factors -- remains unclear. At the start of 2021, a second, more worrisome and severe wave looked to be taking hold in some African countries.

Most Sub-Saharan economies are forecast to return to positive growth in 2021, even if they will not reach pre-pandemic levels of economic activity. One factor that could slow development is that several countries have large levels of debt. They could struggle to manage that debt while trying to fund economic stimulus and public health initiatives at the same time.

The fallout from the pandemic is also slowing the implementation of the African Continental Free Trade Area (AfCFTA), which is intended to establish a new 1.3 billion-person free trade zone. If executed successfully, the new trade union is a game changer for economic growth on the continent.

In the 2021 Agility Emerging Markets Logistics Index, Nigeria jumped 5 places to No. 30 in the index, demonstrating the underlying momentum of the burgeoning 200+ million consumer economy; the progress in adding new infrastructure; and the increasing maturity of the economy. The pandemic-related decline in oil prices created a double whammy for the country, but the steady progress on medium-term projects such as the Dangote refinery, Lekki port and free trade zone, and improving highway networks are, step by step, slowly delivering results.

Kenya jumped 5 places in the international logistics section of the Index to 27. Kenya continues to develop logistics capacity, outpacing its neighbors. Mombasa remains a key import and export terminal, and the pending additional capacity at Lamu firmly establishes Kenya as the dominant logistics gateway serving East Africa.

INTERNATIONAL LOGISTICS OPPORTUNITIES

International Logistics Opportunities

Rank	Market	Score	Change
1	China	9.72	0
2	India	7.16	0
3	Mexico	6.70	0
4	Vietnam	6.41	0
5	Indonesia	6.11	0
6	Turkey	6.06	2
7	Malaysia	5.87	0
8	Thailand	5.69	-2
9	Brazil	5.59	2
10	UAE	5.59	-1
11	Russia	5.56	-1
12	Saudi Arabia	5.53	0
13	Chile	5.19	1
14	Philippines	5.17	-1
15	Morocco	5.00	3
16	Peru	4.99	-1
17	Ukraine	4.98	4
18	South Africa	4.97	-1
19	Colombia	4.91	-3
20	Oman	4.86	-1
21	Qatar	4.84	-1
22	Kazakhstan	4.73	2
23	Sri Lanka	4.73	2
24	Jordan	4.70	-2
25	Bahrain	4.69	2
26	Egypt	4.69	-3
27	Kenya	4.66	5
28	Argentina	4.63	-2
29	Pakistan	4.58	1
30	Myanmar	4.56	4
31	Lebanon	4.56	-3
32	Kuwait	4.50	-3
33	Ecuador	4.49	-2
34	Cambodia	4.48	-1
35	Tunisia	4.45	0
36	Paraguay	4.43	7
37	Bolivia	4.42	-1
38	Uruguay	4.40	-1
39	Ethiopia	4.36	-1
40	Bangladesh	4.36	-1
41	Libya	4.34	-1
42	Uganda	4.34	-1
43	Nigeria	4.34	2
44	Mozambique	4.33	-2
45	Ghana	4.28	1
46	Iran	4.24	2
47	Angola	4.24	-3
48	Algeria	4.21	-1
49	Tanzania	4.08	0
50	Venezuela	3.85	0

The top five countries for International Logistics Opportunities remained unchanged despite significant upheaval during the year. Overall, just 10 markets retained ranking positions year-on-year, including the top 5, while five others rose at least three ranking positions to displace those around them.

China retained its leading position by some distance – even though the Covid-19 pandemic originated there, it successfully suppressed the virus and ended social restrictions earlier than many other markets. During the year it also saw high demand for exports related to the pandemic, including personal protective equipment and consumer electronics as many began to work from home offices. India, maintaining second position, saw more disruption domestically from the Covid-19 pandemic, however it has trade value, air and sea forwarding and international express markets second in size only to China, according to Ti data. Meanwhile, Mexico, which retains its 3rd position in the ranking is able to lean on international trade with its North American neighbors. Provisions to improve working conditions and pay for laborers under the USMCA pact may erode some of the cost advantages Mexican firms provide over US and Canadian competitors. If Mexico cannot adjust, or develop a wider net of trading partners, it may see its ranking position under threat.

More widely, Latin American markets showed improved International Logistics Opportunities. Brazil improved its ranking position to re-enter the Top 10, however its score declined suggesting the rise came as a result of the markets around it falling more quickly. Brazil itself saw exports fall 7% in the first half of 2020, although sales to China, its largest trading partner accounting for 33.7% of exports, rose over the period, even as the value of goods shipped to the US and Brazil's fellow Mercosur countries declined 32% and 29% respectively. **China's demand for commodities to fuel its own recovery has benefitted Brazil, helping to support activity in the manufacturing sector. Similarly, Chile has benefitted from strong Chinese demand for copper, helping it to inch up the International Logistics Opportunities ranking. Other Chilean commodity exports such as lithium, used in battery productions for electric vehicles as well as consumer electronics also had a high demand.** Chilean miner SQM reported lithium exports up 56% in Q3 2020 compared with 2019 and expected full year 2020 sales to rise by around 30%. Not all of Chile's exports fared so well during the year, however, with shipments of avocados down nearly 50%, for example.



In Colombia, however, the story was different. GDP contractions have been sharp – a fall of 15.8% in Q2 2020, the country’s worst in decades, was followed by a decline of 9% year-on-year in the third quarter. The IMF expects a full year contraction of 8.2%. Falling exports are behind the economic trajectory. In Q2 2020, exports were down 70% when oil, Colombia’s largest export is included. The dependency on oil exports spurred action, however, and Colombia’s government announced a series of tax incentives and regulatory changes to boost non-hydrocarbon foreign direct investment to \$11.5 billion per year. With the program, Colombia is seeking to take advantage of its location which provides access to the US in five days by sea and become an alternative to Asia for manufacturers seeking access to the world’s largest economy.

Paraguay is the fastest rising emerging market for

Volatility in the International Logistics Opportunities ranking should be expected to continue in the years to come. Global trade has been deeply impacted by the Covid-19 pandemic, the effects of which will result in changing trade patterns and new trading relationships.

International Logistics Opportunities in 2021, rising an impressive seven ranking positions to 36th. The leap up the ranking was enabled by a fast and effective response to the Covid-19 pandemic, as well as a targeted reopening of the country’s economy in May 2020 under conditions Paraguay’s administration termed ‘smart quarantine’. The country’s real GDP is expected to have fallen by 1.1% in 2020, according to Fitch Ratings, less than regional peers and helped by a rebound in soy and beef production, both key exports, as well as better conditions during the year following a drought in

2019. Rising global prices of another export commodity, copper, are also behind Paraguay’s climb through the rankings. Looking ahead, Paraguay looks set to continue developing its international logistics markets. In early 2021, the country entered into talks with Chile to establish a Free trade Agreement. Any deal would complete Chile’s efforts

to establish free trade regimes with all Mercosur partners. Trade between the two countries totals more than \$1 billion annually, and the deal will look to extend the range of goods traded as Paraguay's economy diversifies with also boosting market access for SME manufacturers. However, despite a history of sound macroeconomic management, Paraguay's local capital and financing markets are shallow and constrain growth of domestic manufactures and producers.

Elsewhere there were other notable movements. Kenya, which rose five ranking positions to 27th, signed a bilateral trade agreement with the UK in December 2020 which will preserve its access to the market after Brexit. The deal mirrors the arrangements East African nations had with the UK as part of a wider trade deal with the EU, meaning exports to one of Kenya's most important trading partners can be preserved without additional costs. The UK is one of Kenya's most important export destinations for commodities including tea, cut flowers and fresh vegetables, with trade between the two nations valued at around \$1.8 billion. Moving in the other direction was Egypt, which lost three ranking positions. In December 2020, a World Bank report on Egypt's progress cited the positive development of legislative frameworks, fiscal consolidation and public investment in infrastructure improvements as part of a wider reform agenda in providing much needed stability to the country's economy which has experienced a turbulent decade. The Bank, however, also pointed to two critical issues which undermine Egypt's International Logistics Opportunities – private investment remains below historical level and the low level of private sector participation in exports, indeed, just 9% of Egypt's manufacturing businesses directly export products.

A rise of four ranking positions put Ukraine in 17th, seeing it enter the top 20 markets for International Logistics Opportunities as it regained stability after several years of political and economic turmoil. Amid restrictions on

economic activity resulting from the Covid-19 pandemic, Ukraine saw industrial production fall 16% in April 2020. However, activity picked up and by December declines for the year were closer to 5% against 2019. Industrial activity is important for Ukraine's exports which are dominated by primary exports including agricultural goods, iron ore and steel, all of which saw price improvements in 2020. During the year, Ukraine's trade deficit more than halved, from \$10.2 billion to \$4.9 billion, according to state figures. While part of the reduction was due to falling imports, growth in exports was the driver – in December 2020 alone exports were up some \$760 million year-on-year. Future export growth is vital if Ukraine is to retain its top 20 ranking for International Logistics Opportunities, and infrastructure improvements are needed to facilitate this. In 2020, concessions for ports at Kherson and Olvia (Mykolaiv) were transferred to new operators in 2020, with significant investment in upgrades scheduled in the coming years. At Kherson, a \$10.5 million upgrade program will be enacted while Qatar-based QTerminal will invest around \$120 million over the next five years at Olvia.

Volatility in the International Logistics Opportunities ranking should be expected to continue in the years to come. Global trade has been deeply impacted by the Covid-19 pandemic, the effects of which will result in changing trade patterns and new trading relationships. Fiscal, monetary and wider secular trends within many industry sectors, globally, will have a huge role in determining both the flow of goods and the demand for services such as air and sea freight. The trade frictions experienced in recent years are unlikely to disappear quickly as the underlying reasons for disputes over trade imbalances remain. Meanwhile, as China aims to reorient its growth model and promote the expansion of its domestic market, intra-Asian trade will take on a new character, driven further by demand growth from fast rising Southeast Asian markets.

BUSINESS FUNDAMENTALS

Business Fundamentals

Rank	Market	Score	Change
1	UAE	9.06	0
2	Malaysia	8.24	0
3	Saudi Arabia	8.04	0
4	Qatar	7.97	0
5	Chile	7.50	1
6	China	7.14	2
7	Bahrain	6.97	-2
8	Oman	6.85	-1
9	Morocco	6.70	1
10	Jordan	6.54	-1
11	Kuwait	6.37	1
12	Uruguay	6.25	1
13	Kazakhstan	6.24	-2
14	Indonesia	6.05	1
15	Thailand	6.04	-1
16	India	5.95	2
17	Russia	5.64	2
18	Turkey	5.50	-2
19	Egypt	5.50	-2
20	Mexico	5.46	4
21	Vietnam	5.44	-1
22	South Africa	5.38	-1
23	Tanzania	5.10	-1
24	Peru	5.09	7
25	Kenya	4.98	-2
26	Tunisia	4.89	-1
27	Colombia	4.86	1
28	Ecuador	4.79	5
29	Philippines	4.76	1
30	Algeria	4.68	-4
31	Ukraine	4.49	-4
32	Ghana	4.46	0
33	Cambodia	4.25	3
34	Sri Lanka	4.24	-5
35	Uganda	4.21	-1
36	Brazil	4.15	5
37	Nigeria	4.05	2
38	Pakistan	4.04	-3
39	Lebanon	3.99	-2
40	Paraguay	3.90	2
41	Bolivia	3.82	3
42	Iran	3.74	-4
43	Argentina	3.43	-3
44	Ethiopia	3.43	1
45	Bangladesh	3.40	-2
46	Mozambique	2.01	0
47	Angola	1.94	0
48	Myanmar	1.35	0
49	Venezuela	0.76	1
50	Libya	0.25	-1

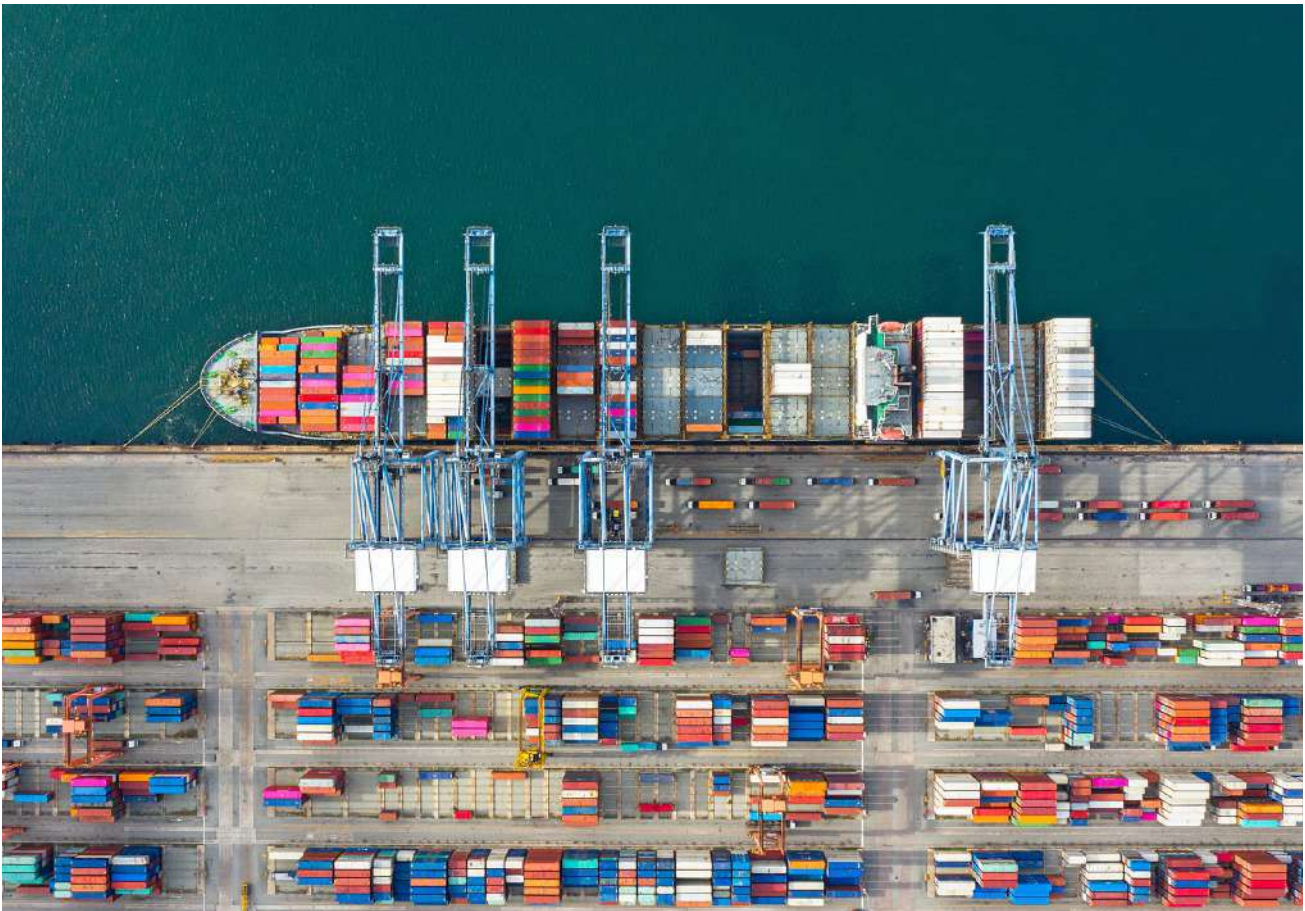
There is continuity amongst the highest ranking markets for Business Fundamentals in 2021. Just eight markets retain their Business Fundamentals ranking positions year-on-year, highlighting both the volatility seen in 2020 amid the Covid-19 pandemic as well as the embedded strength of the leading emerging markets.

The GGC remains a dominant region for Business Fundamentals performance, taking five of the Top 10 spots, while Kuwait edged closer to the elite grouping by rising to 11th. The UAE, Saudi and Qatar retain top 5 rankings, and while each saw a slight dip in score this year, the normalization of ties between Qatar and its neighbors as well as Egypt may stem some of the losses as relations warm in the coming years.

Proactive trade and regulatory liberalization across the GCC over the last decade have paid dividends, positioning the region and the UAE and Saudi Arabia in particular, as a vital link in east-west trade. While not unassailable, the leading GCC nations have such an advantage in providing a business environment conducive to foreign investment, trade and logistics operations that even minor improvements and refinements are enough to preserve their leadership position in the ranking.

In the UAE, visas for foreign workers can now be granted for up to 10 years for certain types of investors, students and professionals, including those with specialized degrees in artificial intelligence, in a move the UAE hopes will help it both attract and retain talented people from across the world. **Foreign ownership rules have also been relaxed, with the requirement that boards be majority Emirati and chaired by a national removed along with the elimination of the need to have Emirati shareholders. Instead, local authorities will set specific targets for Emiratis in capital allocation and boards. The changes mean that foreign investors can own 100% of local businesses, however, removing the need for Emirati representation within onshore companies will challenge the business models of the UAE's network of free trade zones which have been so successful in creating the current business environment.**

In neighboring Saudi Arabia, the Kingdom's Ministry of Human Resources and Social Development launched a Labor Reform Initiative, replacing the existing sponsorship system which governs foreign worker mobility in favor of a set of rules which place greater emphasis on the



contractual relationship between employers and foreign employees. Saudi Arabia's Interior ministry has also set out plans to ease restrictions obtaining visas to increase transparency in employment process and streamline immigration rules as the Kingdom continues to push diversification in its oil-dependent economy. Bahrain, though, was the only GCC market to lose ranking position, falling to 8th. Bahrain introduced nine reforms during 2019 that increased compliance and strengthened contract enforcement. Further reforms in 2020, meanwhile, sought to simplify the regulation of private companies and bring Bahrain's corporate governance closer to international standards, suggesting the slip in rankings is temporary as the new rules take effect.

Elsewhere in the Business Fundamentals ranking, however, there is much more volatility with 41 emerging markets moving position. At first glance this may seem counterintuitive as many of the legislative and regulatory measures of private sector regulation and business governance, including foreign investment rules and property rights, are somewhat isolated from short-term stress such as those brought about by the Covid-19 pandemic. **However, in 2020, the capacity of some emerging markets to maintain oversight has been stretched at a time when regulatory frameworks have**

been put under extreme pressure. Markets with vulnerable corporate sectors have found insolvency frameworks inadequate, impeding restructurings and write-downs and leading to a surge in bankruptcies of cash-strapped but otherwise viable businesses. The challenges are exacerbated by pandemic disruptions to legal processes, with the operations of courts and insolvency agencies, amongst many other regulatory institutions, operating at reduced capacity at a time when such oversight is most in demand. Alongside the challenges to private sector governance, currency volatility and inflation have provided hampered public spending and debt repayments.

Latin America's emerging markets collectively recorded strong performance in Business Fundamentals during 2020, despite the headwinds. Chile nudges up one position to 5th. Chile's ranking here is much stronger than its ranking for both Domestic and International Logistics Opportunities, where it sits 27th and 13th respectively. On a regional basis, Chile has set its business environment apart from other Latin American nations, mixing strong economic freedom, easy access to capital and ready labor supply with a conducive tax environment – it has the region's second lowest corporate tax rate as well as

Agility's Take

Gulf Economies: Time to Hit the Gas



Saudi Arabia lifted a three-year blockade of Qatar in the first weeks of 2021, effectively ending Doha's diplomatic and economic isolation from its Gulf neighbors. That should allow for deeper regional integration in an area where cross-border trade, trucking and e-commerce have grown dramatically in the months since the outbreak of the pandemic.

After the Saudi-Qatar agreement was announced, Qatar unveiled plans to seek \$25 billion in fresh FDI by 2022, an effort to build a regional financial center to rival Dubai. It's an ambitious objective in a region brimming with big plans such as Saudi Arabia's Vision 2030 and Kuwait's "New Kuwait" Vision 2035 diversification scheme.

The aspirations of the Gulf's new generation of leaders have been stymied, in many instances, by years of low energy prices, deficit spending, and opposition to tough choices that would shift the burden of growth and job creation from bloated public sectors to the private sector.

To recover quickly from the economic fallout from the pandemic, Gulf countries need to be bold. Is 2021 the year they finally break through and surge toward their goals?

the lowest tax rate as a percentage of profit. Chile also performs consistently well in anti-corruption efforts.

Brazil rises five ranking positions to 36th. Pandemic stimulus measures, including spending equivalent to 18% of GDP in the country across cash injections and tax and credit deferrals, prodded a jump in economic activity as well as investment during the second half of 2020. Brazil's Law of Economic Freedom, passed in late 2019 and which reinforced freedom of negotiation amongst private sector companies and strengthened provisions for contract and risk frameworks, also helped it rise. Mexico, meanwhile, rose four ranking positions to gain a top 20 spot, partly as a result of protections and improvements for workers, foreign investors and increased transparency under new USMCA regulation.

Peru passed a number of reforms to promote private investment in its strategic oil & gas, energy, telecommunications, water and sewerage sectors which had previously been limited to state ownership or management. The country's private investment policy now emphasizes unrestricted and free access and competition in all economic sectors, while private property rights are fully guaranteed. Foreign investors also experienced increased protections, afforded both the same rights and duties as domestic investors and the ability to remit foreign currency and access local sources of credit.

Argentina, however, was the exception to otherwise strong Business Fundamentals gains across Latin America. Down in all three sub-indexes, Argentina saw the continuation of many long-standing economic problems in 2020 as it restructured nearly \$65 billion in debt owed to private investors, which should have been an end to its

ninth sovereign debt default. Argentina then attempted to find a new repayment deal for a \$44 billion loan from the IMF, but resolution has not been achieved. The IMF loan came amid a currency devaluation in 2018. Argentina has been in recession since that time, and the Covid-19 pandemic worsened conditions with the country facing one of the world's longest and strictest lockdowns. Argentina plans to target public spending at high-impact areas to drive a recovery, but currency volatility makes it tough for South America's second largest economy to borrow in foreign currency, while its printing of new money has raised inflation rates. A deal with the IMF could be in place by April, however analysts have concerns about the medium and long-term without a coherent macroeconomic plan in place as yet.

There were other notable declines in rankings too. The collapse in oil prices hampered Algeria's pandemic response, while it also saw unprecedented grassroots protests following presidential elections in late 2019 translate into a constitutional review in 2020. Ukraine required some €600 million in funding from the EU Commission in 2020 to support the strengthening of public finance management, governance and rule of law, reform its judiciary, spur competition in the gas market, instigate improvements in its business climate and governance of state-owned enterprises. Meanwhile, Sri Lanka, down five positions to 34th was the biggest tumbler. The country's sluggish economy, external and domestic vulnerabilities, weakened private credit growth and public credit profile all combined in 2020 degrade its operating environment. Sri Lanka also has foreign debt obligations of around \$4 billion per year until 2025.





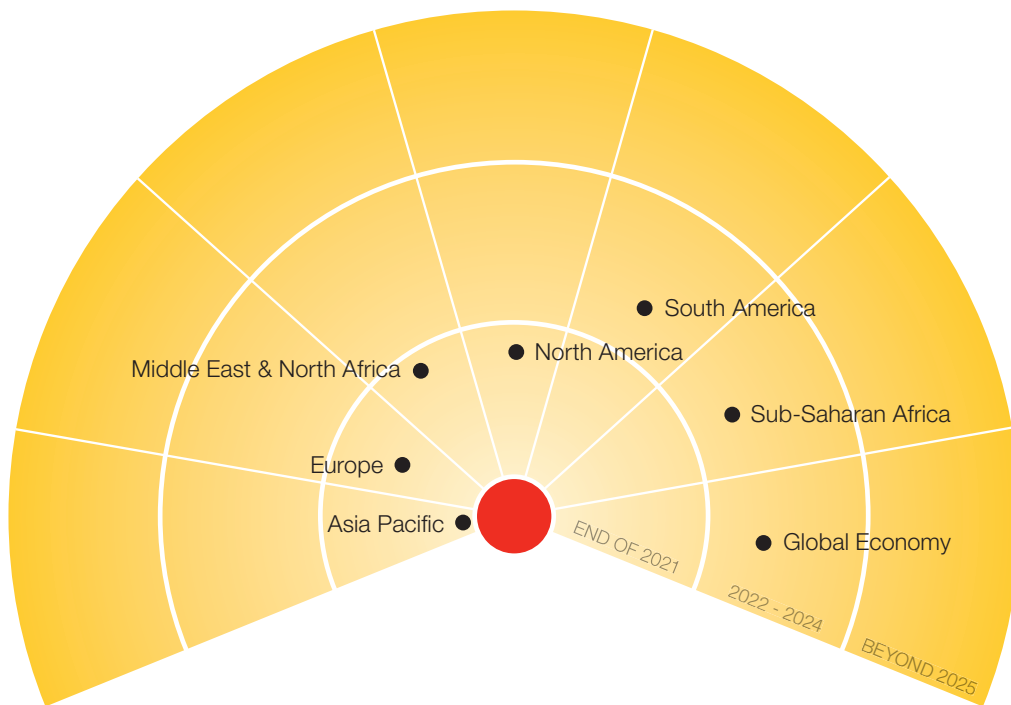
THE AGILITY EMERGING MARKETS LOGISTICS INDEX SURVEY 2021

Between September and December 2020, Transport Intelligence surveyed 1,206 logistics industry professionals to gather their opinions on the prospects and challenges facing emerging markets in the year ahead. In a year when the Covid-19 pandemic catalysed faster change and brought greater disruption to the world's emerging logistics markets, more logistics industry professionals than ever before contributed their experiences and expectations to the survey, ensuring it once again provides a benchmark for the logistics industry.

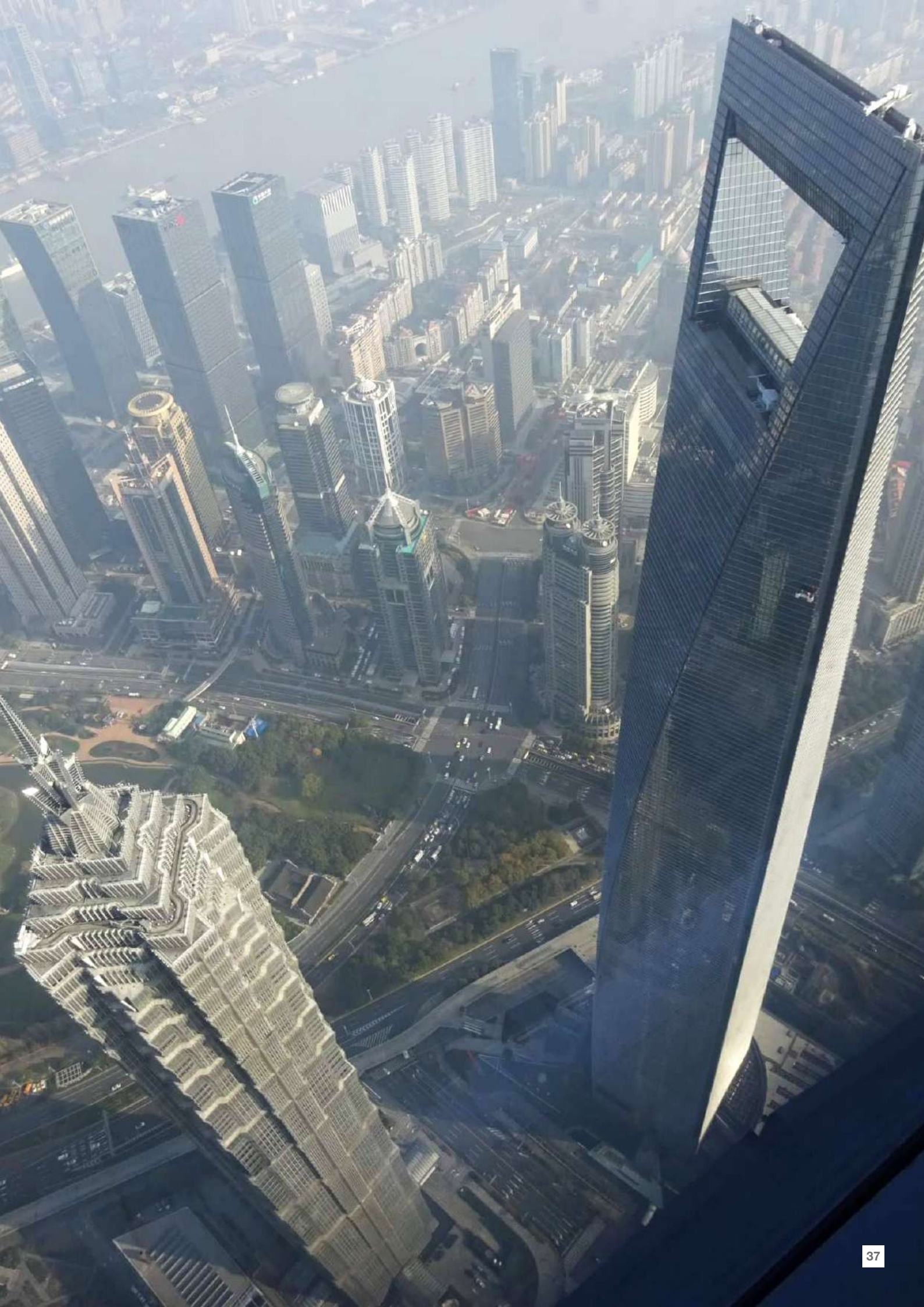
In the year ahead, survey respondents expect emerging markets to reinforce the significance of their position in global supply chains. They show a willingness to continue, expand and diversify investment and operations in the world's fastest growing emerging logistics markets, provided conditions are right and governments offer safety and security. The responses also show a cautious expectation for the pace of recovery globally. Many do not expect global recovery from the Covid-19 pandemic until at least 2022, and the majority of respondents say plans to add technology and management systems to operations will be their focus in the coming year. In 2021, recovery and progress are expected to be uneven, survey respondents are confident opportunities will arise, but stop short of offering widespread optimism for emerging market growth.

THE EFFECT OF COVID-19 ON EMERGING MARKETS

WHEN WILL EACH REGION RECOVER FROM THE COVID-19 CRISIS?



The majority of survey respondents expect Asia Pacific's regional economy to recover in 2021, matching the IMF's forecasts of an 8% expansion for emerging and developing Asia during the year. Slightly more than one fifth of respondents thought the region's economy would recover during 2020, no doubt influenced by headline expansions in China, Vietnam, Bangladesh and Myanmar, amongst several others. Most survey respondents also expect recovery in the Middle East & North Africa region, as well as the key consumer markets of Europe and North America, during 2021, although the consensus is slightly weaker. According to survey respondents, it will be at least 2022 before the global economy recovers from the Covid-19 pandemic.



A number of Asia Pacific markets have effectively managed and suppressed the Covid-19 virus domestically in 2020.

This has been central to growth in both China and Vietnam, for example, where production facilities and domestic consumer markets reopened to varying degrees during Q2 2020 and have been gathering momentum since. China's early recovery has not only powered its own positive economic developments in 2020. It has also been a point around which other emerging markets have focused growth.

Vietnam, for example, relies on Chinese exports of higher value components for certain electronics manufacturing including smartphones, meaning the reopening of China's production capacity has helped to fuel Vietnam's own growth. The same is true for a number of commodity exporting markets – China's recovery has leaned heavily on construction and property development, with the world's second largest economy importing materials to support this growth. Copper imports to China over the first 11 months of 2020 were some 38.7% higher than a year earlier, providing a boost for major exporting nations like Chile and Peru. Over the same 11 months, iron ore imports to China were up more than 10%.

Further driving Asia's recovery trajectory are its increasingly important middle tier economies, notably the ASEAN-5. Amongst these nations, economic growth has been rapid in recent years as they have moved up manufacturing value chains, become wealthier consumer markets and started to absorb foreign investment at a quicker rate. In 2020, Asian growth potential was enhanced with the signing of the Regional Comprehensive Economic Partnership (RCEP), which some hail as the largest free trade agreement in history. The agreement was signed by 15 countries from the region and collectively represent nearly one-third of the global population and contribute around 29% of global GDP. The notable absence in the deal is India, which pulled out of negotiations amid fears local producers would be disadvantaged by lowering tariffs while China also resisted Indian ambitions to widen the scope of the deal to include trade in services and deepen economic ties in the pact further. The RCEP aims to reduce tariffs on merchandise trade between the member states over the next 20 years and marks the first regional multilateral trade deal China has signed up to, potentially extending China's influence in the region and creating

According to survey respondents, it will be at least 2022 before the global economy recovers from the Covid-19 pandemic.

supply chains that are likely to have distinctly intra-Asian-leaning orientation in the future.

A majority of survey respondents also expect the Middle East & North Africa region to recover from the pandemic in 2021. The region is wide and diverse, although a common theme for many is a dependence on hydrocarbon exports. The collapse of oil prices in 2020 hit many of the region's producing nations hard, while some were able to deal with the lower revenues more effectively. **The GCC states in particular have been able to draw on sovereign wealth funds as well as foreign reserves to inject stimulus into their economies, while diversification plans have also lessened dependence in recent years. The region also sits at the heart of east-west trade lanes, meaning volumes passed through**

the region's major ports and transshipment points such as Jebel Ali in Dubai and at Jeddah in Saudi Arabia will see increased volumes as global trade recovers.

The region has also benefitted from a decade of purposeful development of business environments that attracted and entrenched foreign investment.

The region is also represented by six countries in the 'markets with the most potential' ranking, underlining the sentiment and optimism surrounding recovery. These six markets are made up of the four largest GCC countries along with Egypt and Turkey.

Prospects for recovery are more mixed across North Africa. The World Bank forecasts North Africa's economy will grow by 2.1% in 2021, below its expectation of a 4% rise in global GDP. Leading North Africa's economic growth prospect is Egypt, where structural reforms have been backed by \$12 billion in IMF loans and \$1.7 billion in Covid-19 related financial support that helped to ease the pandemic's impacts. Although Egypt saw disruption, it saw a rise in e-commerce sales and aims to utilize its proximity to Europe to boost its manufacturing sector as producers shift from China in the coming years. The IMF expects Egypt to be one of the world's best performing economies in 2020, recording a 3.5% expansion. In spite of the continued growth, however, more than one third of Egypt's population remains below the poverty line.

Elsewhere in North Africa, pandemic responses have faced more challenges. After a strong and proactive initial response to Covid-19 in Morocco, the virus spread during the summer of 2020 and again in November, as lockdown measures were eased and the virus went unchecked in urban slums, rural areas, agricultural sites, and factories.

Despite spending measures that were effective in several areas, including loan deferrals for SMEs, support for much of Morocco's population did not meet basic needs. Supply chain breakdowns hampered exports sectors and Morocco saw a 17% fall in volumes over the first seven months of 2020. Elsewhere across North Africa, the fall in oil prices hindered Algeria's development, while Tunisia's border closures dampened tourism revenues, leading to

5.5% and 7% GDP contractions, respectively.

Expectations of a recovery in Latin America are weaker amongst survey respondents who expect the region to need between two and four years to fully overcome the impact of the Covid-19 pandemic. Analysts agree – forecasts from S&P Global show that while the region's economy is expected to experience nearly 4% growth in 2021, that will still leave the region's GDP about 3% below

Agility's Take

China: Roaring Back from Pandemic



The Chinese economy performed an astonishing feat in 2020.

In the first quarter, as China emerged as the global epicenter of the frightening new Covid-19 virus, its economy screeched to a halt. Chinese GDP contracted by 6.8% as factories emptied, cities went into lockdowns, and export flows dried up.

By year's end, China had roared back to life, its production facilities straining to keep up with global demand for Chinese goods. The economy grew 2.3% in 2020 – the only major economy to show growth – and posted a sizzling 6.5% increase in fourth-quarter GDP.

Compared with most western countries, China took an aggressive, top-down approach to controlling the virus. Its economic response also differed. It chose to focus on factory restarts rather than slashing interest rates or bolstering household incomes with stimulus payments. Its factories kicked back to life in April -- when many producers elsewhere were still offline or struggling – and went into overdrive making medical equipment such as PPE and work-from-home gear that included laptops and monitors.

When China was ground zero for the virus early in 2020, surveys showed that significant percentages of multi-nationals were considering alternative production hubs or diversification through "China + One" strategies. But there has been no large exodus from China, and in the survey for this Index, supply chain industry executives indicated by a 2-to-1 ratio that they are looking to build resilience through faster adoption of technology and digital commerce than through production relocation.

China's share of global manufacturing, about 28% before the pandemic, has grown rather than shrinking. The most immediate concern for companies sourcing from China is how to cope with the port congestion and chaos that have delayed cargo movements and driven up shipping costs for months. We expect disruptions, delays and high rates to persist through the first half of 2021. One obvious question is whether the United States, the biggest market for Chinese goods, will roll back tariffs that were imposed during the Trump administration and look to ease trade tensions overall.

Looking beyond Covid-19, China's economy has been transitioning from one dominated by manufacturing and investment to a more balanced economy propelled by services and consumption. Unless China is able to increase productivity through innovation and reskilling, growth could tail off as the population ages, debt levels increase, and the pace of urbanization slows.

In the meantime, the world's reliance on China is only likely to grow. Forty years after it began modernizing, China today holds advantages available nowhere else: unmatched scale; abundant skilled and unskilled labor; sophisticated automation, engineering and sciences; world-class infrastructure and logistics; closely synchronized and integrated supplier networks both in-country and across Asia.

Twenty-five years ago, leaving China meant leaving a low-cost manufacturing center. Today, for some multi-nationals, it would mean giving up on the world's largest consumer market and an economy growing at twice the rate of the United States before the Covid-19 crisis.

Willy Shih, a Harvard Business School professor, says: "There's a lot of impatience about this supply chain resilience and reshoring. I like to remind people that it took 20 to 25 years for China to capture the supply chain for many products. And if you want to move the supply chain, we're not talking about something that will happen in a year, or in a couple of years."

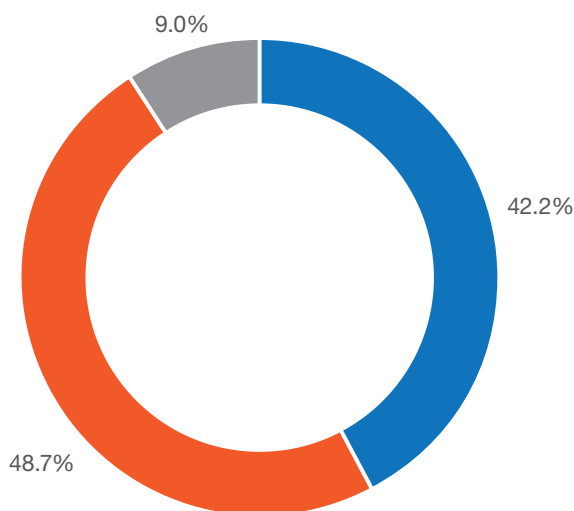
its pre-pandemic level. Many of the region's markets are expected to remain below 2019 GDP levels until mid-2022, although Mexico and Argentina will need longer time. Mexico has put forward one of the smallest pandemic recovery packages as a proportion of GDP amid capital constraints. It is not expected to recover to pre-pandemic levels until 2023 as weak investment and troubles in its labor market linger beyond the end of the pandemic. Argentina's economy, plagued by an ongoing recession and debt woes, is not expected to recover until at least 2024.

Survey respondents also expect that Sub-Saharan Africa's recovery will be complete between 2022 and 2024. The region experienced a challenging 2020, with limited healthcare infrastructure common across its low-income nations. The picture was complicated by the fall in oil prices and decreased demand, reducing revenues for exporters such as Nigeria and Angola. **The vast region, however, had a number of options at its disposal. With 60% of its population under the age of 25, Sub-Saharan Africa's population has a lower proportion of high-risk groups, while previous health emergencies such as Ebola outbreaks had prepared nations to deal with the Covid-19 pandemic. Analysis for the Bill and Melinda Gates Foundation, however, shows average state stimulus funding in Sub-Saharan Africa was around 3% of GDP.** The impact will be significant, with GDP in South Africa expected to fall 8% in 2020 according to the IMF, while in Nigeria a 4.3% decline is expected. The region is home to a number of economies that saw growth

in 2020, however, including Tanzania (1.9%), Kenya (1%) and Ghana (0.9%), among others.

In terms of recovery options, the region again has several options. Nigeria and Côte d'Ivoire, for example, had relatively low levels of public debt leading into the pandemic, at around 30% of GDP each, leaving room to fund recovery plans, while in South Africa and Kenya, the development of digital infrastructure will enable a shift to online retail and payments in the years ahead. In addition, the move towards regional trade integration has been bolstered by the African Continental Free Trade Agreement (AfCFTA), which came in effect on January 1, 2021. The deal aims to create a single market across 54 African countries, with members removing 90% of tariffs on goods, facilitating the movement of capital and people, and in the future, establishing an Africa-wide customs union. Regional trade, as well as the recovery from the pandemic, are expected to benefit from the deal. When AfCFTA is fully operational in 2030, it will cover a market of some 1.2 billion people, and a combined GDP of \$2.5 trillion.

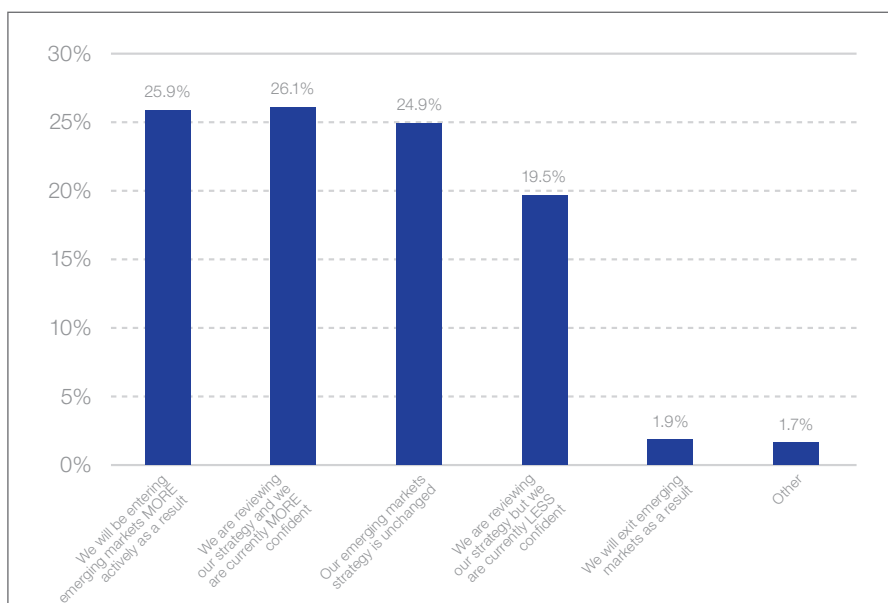
It is clear that survey respondents have some reservations over the pace and timing of recovery within emerging regions. With recovery in the more developed consumer regions of North America and Europe expected by the end of 2021, the signal is that demand will return over the course of 2021 to help drive recovery. Globally, the IMF's forecast of 5.9% growth in emerging markets finds agreement from survey respondents. It should be noted however, that 91% of those surveyed set this as a ceiling on expectations for 2021.



THE IMF PROJECTS 2021 EMERGING MARKET GDP GROWTH AT 5.9%. DO YOU THINK THIS IS:

- ABOUT RIGHT
- TOO OPTIMISTIC
- TOO PESSIMISTIC

WHICH MOST CLOSELY MATCHES YOUR STRATEGY ON OPERATING/INVESTING IN EMERGING MARKETS AFTER THE COVID-19 CRISIS?



Despite some hesitation surrounding growth prospects in the year ahead, survey respondents offer an opportunistic – if not optimistic – outlook on emerging market investments and opportunities as the covid-19 pandemic recedes. At 52%, more than half of respondents say they plan to increase business activity in emerging markets or are expressing more confidence in those markets. Only 19.5% say they are less confident in emerging markets.

There are a number of reasons why respondents may be confident in emerging markets in the coming years. At a macro-level, emerging markets will offer faster growth opportunities in the years after the pandemic. IMF data puts the fall in advanced economies in 2020 at 5.8%, while for emerging and developing economies the contraction is expected to be less, at 3.3%. Between 2021 and 2025, however, emerging market growth is expected to be faster, with expansion at 1.5x the pace of advanced economies in 2021 and rising to nearly 3x quicker by 2025.

Emerging market populations are also becoming wealthier, and despite a contraction in the global consumer class in 2020, the first for half a century, data from the Brookings Institute shows that it is only a temporary setback. By 2027, the global consumer class will number 5 billion, with the fastest recoveries from pandemic impacts to be found in emerging markets including China, Egypt, Vietnam, Taiwan, Bangladesh, and India as well as across much of Southeast Asia. While not all emerging market populations will recover as quickly, the shift in global retail growing towards emerging markets will gather speed as a result

At 52%, more than half of respondents say they plan to increase business activity in emerging markets or are expressing more confidence in those markets. Only 19.5% say they are less confident in emerging markets.

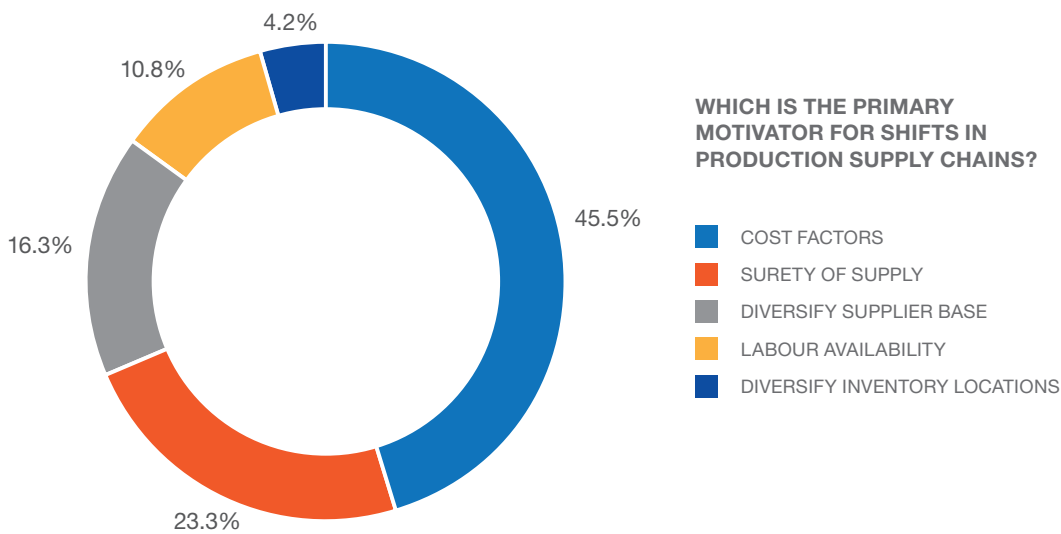
of the pandemic, creating a wider selection of consumer markets to operate and invest in. The evidence, therefore, supports survey respondents' opinions that emerging markets are set to continue their role as manufacturing

locations as well as continuing to develop into dynamic consumer markets.

Moreover, despite the pandemic, foreign direct investment in emerging markets remained resilient, although there were declines across all major forms of FDI, according to UNCTAD data. Globally there was a 16% decline in FDI inflows to emerging markets in the first half of 2020, with healthy flows to China meant FDI in Asia Pacific's emerging markets fell just

12%. During this period, the region accounted for more than half of global FDI. Inflows were markedly lower over the period in Africa, however, where they fell 28% and in Latin America and the Caribbean, where FDI was down 25%.

A note of caution is sounded by respondents, however. At the start of 2021, nearly one fifth (19.5%) are less confident in emerging market operations and investments. This undoubtedly reflects the reality that the recovery from the Covid-19 pandemic will be uneven and proceed to an unknown timeline. It is certainly true that several emerging markets have seen accelerated growth leading into and during the pandemic. However, for every market that performed strongly and saw investments rise, such as Vietnam, others with underlying weakness and structural vulnerabilities saw their prospects diminish. Overall, survey respondents appear keenly aware of the risks in emerging market investments and operations in the years ahead but remain bullish should the right opportunities be presented.



The question of how to best assess and how to locate emerging market operations has always been complex. While emerging markets are often grouped together as a single entity or on a regional basis, the reality is that each has a unique set of attributes and advantages as well as drawbacks. Location (re)assessments have gained significance and speed since the start of the US-China trade war, which created additional costs, both direct as well as via added compliance requirements and other red tape. In early 2020, as the spread of Covid-19 in China shuttered factories, the reliance of supply chains in the vast majority of sectors on Chinese capacity became even more apparent. And so, while the need to relocate production capacity has become more prominent on boardroom agendas, survey respondents highlight the potentially vast costs and risks associated with doing so.

The lessons from the trade war and Covid-19 pandemic have also shown an urgent need to remove bottlenecks from supply chains. Survey respondents are clear in acknowledging this with surety of supply (23.3%) and diversifying supplier bases (16.3%) also positioned as prominent motivators in relocation decisions. In sum, the findings strongly suggest that while the case for relocation may be clear, the reality is more challenging. The Covid-19 pandemic has placed significant strain on businesses throughout the supply chain, lessening the prospects for near-term change. At a time when companies are looking to preserve cash, migration costs may be an option some cannot afford or prioritize.

However, for 45.5% of survey respondents, costs are the dominant factor in assessing operational and production locations. In this regard, cost takes on several facets, including not only the cost

of establishing a new or additional operational location, but also the subsequent ongoing costs of doing business over the long-term. Cost as a motivator to assess relocation options also relates to rising costs in established operations. This is particularly the case in more established emerging markets, with China again perhaps the best example. Costs have risen as development in the market has progressed, raising living standards and subsequently labor costs in the country. Several provisions in the USMCA trade deal also mandate wage growth in Mexico's manufacturing sector. These provisions are intended to prevent Mexican manufacturers undercutting counterparts in the US and Canada, but they may also present additional costs in Mexican operations in the coming years.

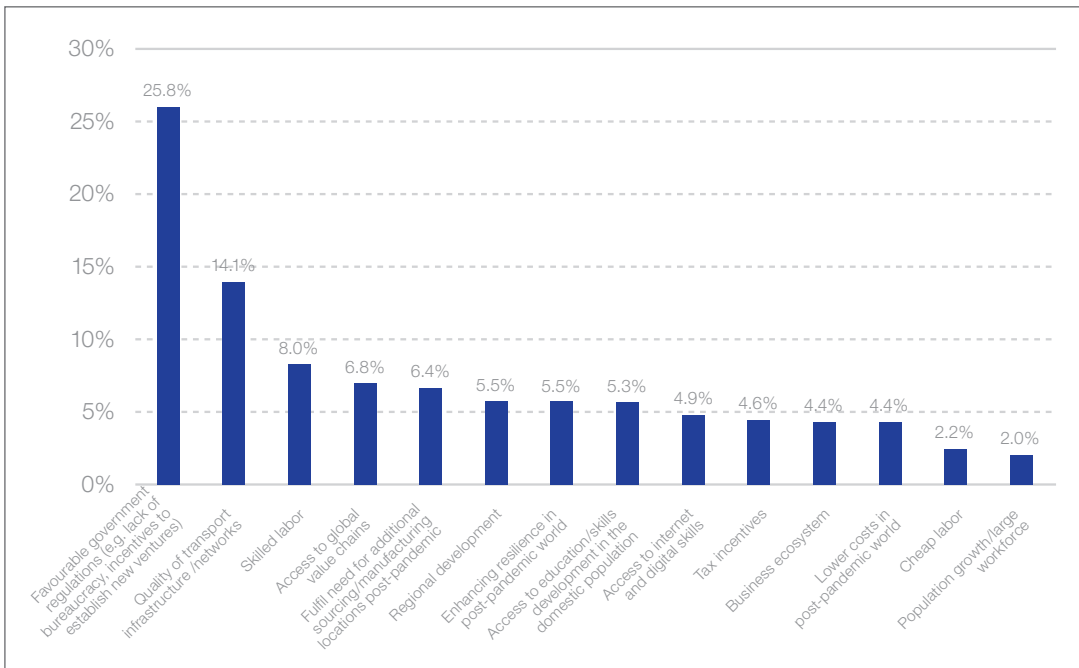
Finally, when considering costs as a motivator for relocation, long-term costs are a vital part of that assessment. While leaving China dominates the discussion, it is by no means the only emerging market in which producers are reassessing options. Perhaps more importantly, it certainly is not the case that investment in China is drying up. Indeed, China's development continues at pace, with the state and domestic industry making strategic investments in advanced technologies including artificial intelligence, blockchain and robotics at vastly higher sums than in alternative locations. As such, China's capacity to manufacture high quality, value-added products continues to grow.

The picture from survey respondents is again one of opportunistic and pragmatic approaches to complex challenges. It may well be prohibitively costly to relocate operations, and the complexity of doing so while enhancing surety of supply and diversifying supplier bases

means its highly likely that relocations will be of production stages rather than whole operations. Indeed, such is the capacity, capability and quality of China's manufacturing

sector, it is almost certain that core of Asian and perhaps global supply chains will still include some stages of production in the country.

PLEASE SELECT THE TOP 3 MOST IMPORTANT FACTORS WHEN ASSESSING EMERGING MARKETS AS INVESTMENT OPPORTUNITIES:

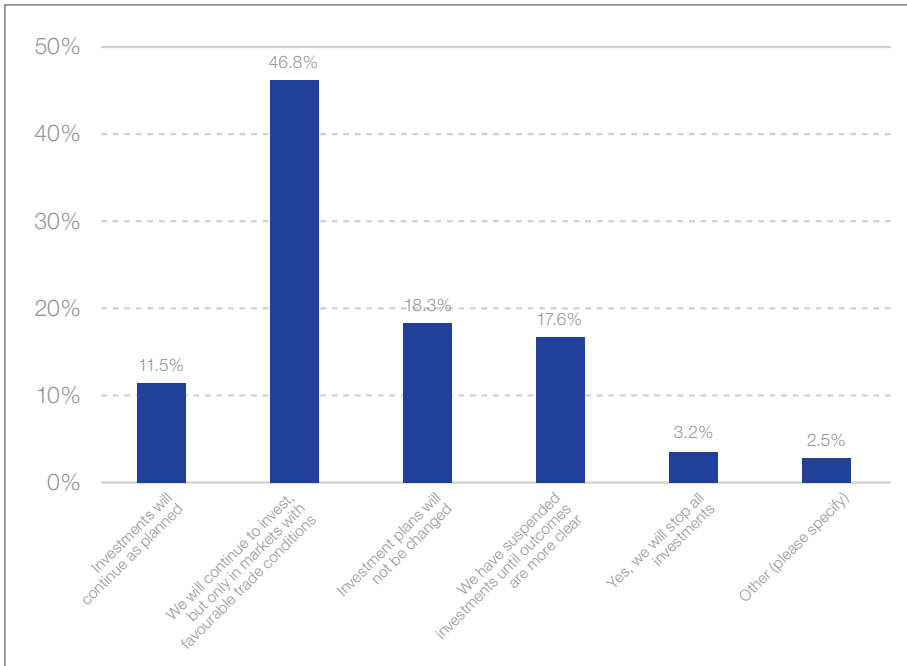


Identifying alternative locations for investment is also a complex process, and here survey respondents offer insight into a wider scope of assessment. Survey respondents place favorable government regulation and quality of infrastructure as the most important factors in investment decisions. The prominence of favorable government regulations is perhaps unsurprising, firstly as it greatly improves cost efficiency, but also such considerations will have taken on increased significance in recent years as barriers to trade have proliferated. Survey respondents state a clear need for regulatory and trade compliance standards that are conducive to efficient operations. Emerging markets have a high degree of control in this regard, and many states have purposefully built welcoming investment and business environments – both in terms of regulatory environments, but also through the establishment of free trade and special economic zones, for example – to enhance their attractiveness.

A high degree of importance is also placed on the quality of logistics infrastructure in assessing emerging markets for investment. This is firstly a practical decision

– the quality of infrastructure has a direct impact on the efficiency and cost effectiveness of logistics operations. Survey respondents are clear in their assertion that infrastructure quality is a central criterion in the assessment of emerging market investment decisions. At a time of stretched public finances, however, governments will need to invest strategically in infrastructure development.

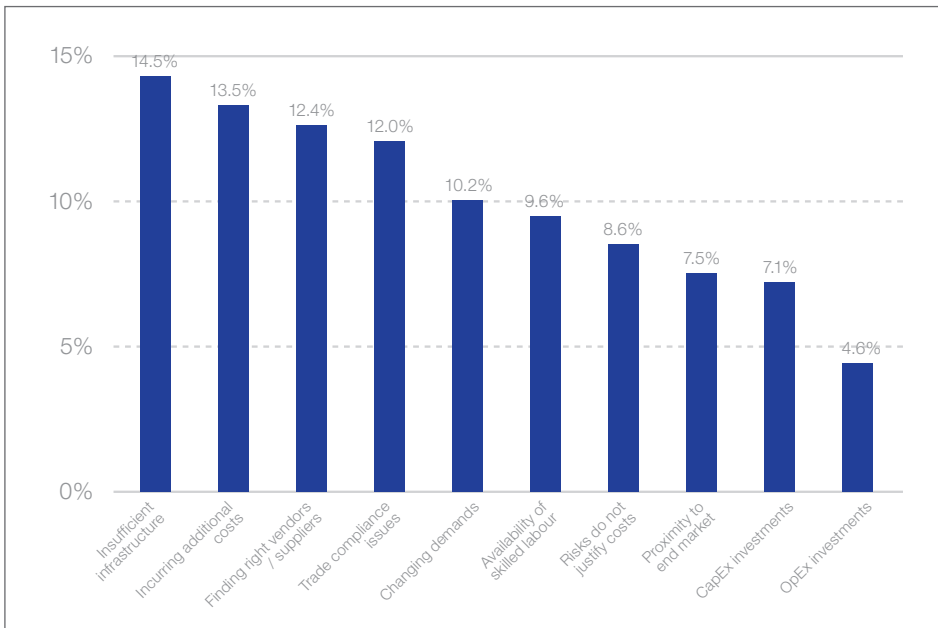
The third most important factor, the availability of skilled labor, also points to the need for emerging markets to make investments for the future. Over the last decade emerging markets' role in global supply chains has evolved, especially for those that are targeting moves up manufacturing value chains. While respondents still cite cost as a key measure in attractiveness, the complexity of cost decisions has increased. **With manufacturing processes also becoming more complex, and business increasingly driven by automation and data-based decision-making and insights, the skill possessed by emerging market labor forces will become ever more important in ensuring cost efficiency.**



WILL INCREASING TRADE PROTECTIONISM PROMPT YOU TO RETHINK INVESTMENTS IN EMERGING MARKETS?

Examining the effect of trade protectionism on survey respondents' appetite for emerging market investments shows that it is not prohibitive in isolation. At 46.8%, nearly half will continue to invest, working around prohibitive barriers and finding regulatory systems which suit their

requirements. A not insignificant minority (11.5%) will continue despite the increase in trade barriers, while around a fifth of those surveyed have made no adjustments to future investment plans.



WHAT ARE YOUR MAIN CONCERNS IN CHANGING SUPPLY CHAIN GEOGRAPHY? (TICK ALL THAT APPLY)

At some point, hopefully soon, the unprecedented global response to Covid-19 will reduce it to a manageable threat that allows a gradual return to normal. When that occurs, the greatest immediate and long-term risk to supply chains won't be a virus. It will be trade protectionism, which was resurgent even before the Covid-19 crisis, and now threatens to choke off the lifeblood needed for a recovery.

As recently as 2016, trading nations were erecting fresh barriers – subsidies, tariffs, quotas, licensing requirements and other obstacles – at twice the rate they were adopting measures to liberalize trade, according to Global Trade Alert. By 2018, new obstacles outpaced liberalizing steps by three to one. In 2019, the ratio was four to one, and the value of global merchandise trade fell by 3%, the first decline since 2015. In 2020, “harmful” interventions outnumbered “liberalizing” measures 1,901 to 630.

Since the start of the Covid-19 crisis, we have seen protectionism intensify. Some emergency moves are clearly temporary, put in place by governments to ensure access to the medicines, machines and protective equipment required to contain or treat the virus. In other cases, the aim was to guarantee adequate food supplies for local populations.

Yet these new measures and others were taken against a backdrop of simmering trade tensions between the world's two largest economies, the US and China, and a growing chorus of voices in the US, Germany and other countries calling to re-shore, nationalize or find alternative sources for key products and industries such as 5G wireless equipment, semiconductors, steel, electrical power gear, mobile cranes, rare earth minerals and other goods.

The 164-nation World Trade Organization (WTO), normally the body that would quell trade wars and bolster the global consensus for free trade, has been weakened, perhaps fatally, by a loss of faith in its dispute resolution system and the apparent withdrawal of US support. It remains to be seen how the incoming Biden administration intends to approach the WTO or trade relations with China.

As economies around the world emerge, unevenly, from the pandemic, we can expect demand to begin to strengthen. As it does, trade flows, carrier schedules and inventory levels will start to normalize, and supply and demand will find a new equilibrium.

But normalization won't mean a return to normal without a big boost for trade. Trade has accounted for 54% to 60% of global economic activity in recent years, and is set to retreat even further than overall GDP, according to the WTO and UNCTAD.

A new wave of protectionism, which includes a sharp rise in the use of international economic sanctions and penalties, will significantly increase the cost of goods at a time when we are experiencing historic levels of joblessness, poverty, and business failures on every continent. It threatens global recovery.

When assessing risk factors in reconfiguring supply chains, the relative evenness of responses displays the complexity of decision-making. Survey respondents reinforce how vital quality infrastructure is to establishing operations in a market, while also again citing the prominence of cost as a determining factor. **The wider suggestion from survey respondents is that the supply chain ecosystem a market can offer is vital – no one factor scores highly enough to suggest it is a decision-making point alone, while most factors score highly enough to suggest that it will at least influence decision-making.**

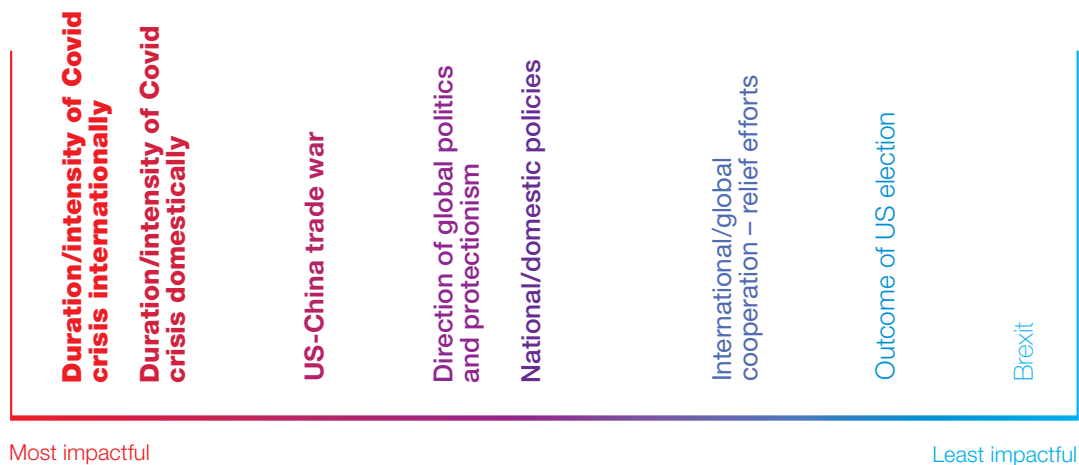
At 12.4%, finding the right partners is the third most important factor. The complexity of the process should not be underestimated, nor should the significance of a local network of suppliers and partners. It is not uncommon that the selection of suppliers can take years as manufacturers assess the skills and procedures in place needed to create reliable and repeatable products and components of the required quality. This is particularly the case as emerging markets aim to progress up manufacturing value chains.

As product complexity increases, so must standards, even more so if safety standards and compliance with regulation on quality must be met. The process can also be expensive. Whether the change in supply chain geography is motivated by a relocation or an additional location to diversify supply locations, it is highly likely that multiple suppliers will be vetted, increasing costs and time needed to find the best partners.

Emerging markets face notable challenges in developing such supply networks, and in reality, it is far more often the case that supply networks span regional and even global value chains. Analysis from PredictiveAnalyticsToday, for example, shows that iPhone manufacturing requires components sourced from the United States, South Korea, Japan, Italy, Germany and Taiwan centred around a manufacturing and assembly operation in Shenzhen, China. When survey respondents cite finding the right vendors and suppliers in emerging markets, therefore, they are not only considering domestic capability, but also the capacity of local suppliers to integrate with global partners.

COVID-19 AND OPERATING IN EMERGING MARKETS

HOW IMPACTFUL WILL THE FOLLOWING FACTORS BE IN THE RECOVERY OF EMERGING MARKET SUPPLY CHAINS?



The Covid-19 pandemic is a once-in-a-generation event that has profoundly impacted industries, economies and livelihoods globally. It has ushered in the deepest global recession in decades, spurred governments and central banks to implement spending and stimulus packages of record levels and accelerated the development or decline of economic sectors irreversibly. It should come as no surprise then that survey respondents display a clear consensus that the end duration and intensity of the Covid-19 pandemic is the most important factor in the recovery of emerging market supply chains. It should also be noted how closely respondents rank the end of the pandemic both domestically and internationally for the near-term prospects of emerging market supply chains. This illustrates how important the end of the pandemic globally is for a balanced emerging market recovery.

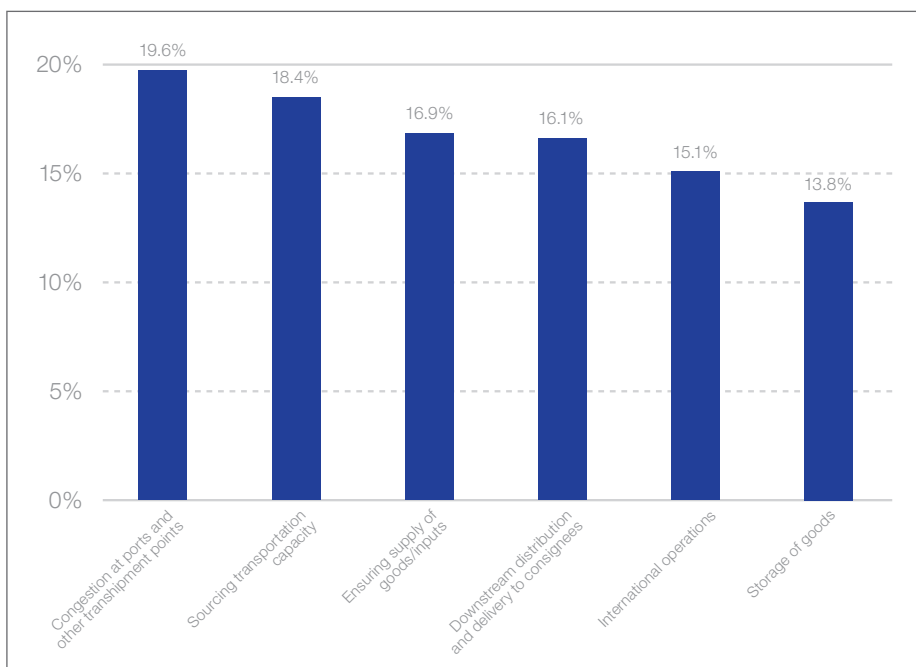


Vietnam, one of the markets that has seen a rapid acceleration of development as a result of the pandemic, is one of several examples of effective domestic control of the Covid-19 virus. Early social restrictions and border controls in the country were effective in constraining the spread of the virus and allowed Vietnam's manufacturing sector to resume operations in the second quarter of 2020, as many markets, emerging and developed, were still coming to terms with outbreaks. For Vietnam, the results have been highly positive. The IMF expects GDP growth in the country to be 1.6% in 2020 supported by a manufacturing sector that grew 4% during the year, according to Vietnam's General Statistics Office.

The results also illustrate how important a global recovery is to the recovery of emerging market supply chains. Some emerging markets have made great strides in developing domestic consumer markets in recent years, but the majority remain export oriented, supplying commodities, components and finished goods to manufacturing and consumer markets globally. This makes a global recovery vital for demand to return and for emerging market supply chains to resume supplying goods to consumer markets. Elsewhere in the survey, respondents show a belief that the major consumer markets in Europe and North America will return to growth in 2021, which bodes well for emerging market recovery.

As has been highlighted elsewhere in the survey and Index however, this recovery will not be even.

The unevenness in emerging market recovery is perhaps behind the high proportion of respondents that say national and domestic policies will have an important role in recovery. Throughout the Index, it can be seen that markets which have been able to deploy stimulus packages effectively have been best in dealing with the pandemic in the short-term and are likely to be best positioned to gain momentum over the coming years. It is, however, also evident that markets which have had fewer resources available to combat the pandemic face a much tougher challenge over the coming years. This includes some markets which still perform well in the Index, including Mexico where pre-existing economic conditions and the government's retention of austerity saw pandemic-related stimulus equal just 0.6% of GDP. In Brazil, Jair Bolsonaro's administration introduced additional pandemic funding as Latin America's largest economy struggled in mid-2020. Analysts credit the spending for preventing a collapse in the economy, however, the decision Brazil now faces highlights the importance of national policies in aiding, or not, the recovery. Brazil has been one of the fastest recovering economies globally, due in large part to the stimulus spend. Continuing stimulus payments, though, will put Brazil on an unsustainable debt trajectory. The challenges faced by domestic policy makers in emerging markets the world over are complex.



WHICH POINTS IN YOUR SUPPLY CHAIN HAVE EXPERIENCED SIGNIFICANT DISRUPTION?

In late December, the UK and European Union reached agreement intended to avoid a “hard Brexit,” but Transport Intelligence and others say problems are emerging in UK-EU supply chains. A number of big retail names in the UK and in EU countries have halted e-commerce sales and shipments as they struggle to cope with unfamiliar requirements.

Of particular concern have been requirements involving Rules of Origin and EU VAT payments; documentation for parcels and other freight; new administrative costs; and general uncertainty about post-Brexit trade rules.

Agility has been working with shippers to help them understand requirements for declarations, duties and taxes, VAT payments, Rules of Origin, and necessary paperwork such as health and food-safety certificates for certain products. It has been urging them to get U.K. Economic Registration and Identification (EORI) numbers; agree on Incoterms with their customers; and understand how to ensure that accurate, complete invoices, packing lists and other paperwork are in order for every shipment.

Goods movement has been complicated by lengthy delays at customs and France’s decision in early January to stiffen Covid-19 testing requirements for truckers hauling from the UK. Spot rates to book truck transport from EU countries to the UK have risen sharply.

Compounding the new logistic, regulatory and administrative burden is the fact that the UK-EU trade deal – more than 1,200 pages long – was not published until Dec. 26, two days after the agreement was reached and four days before it went into effect. UK officials acknowledge it will be months before things are working smoothly.

Respondents laid bare the almost universal effect the pandemic has had on supply chains, with disruption felt at each stage of the supply chain. The scale of the pandemic’s effects cannot be overestimated – across all industries, globally, demand patterns for products and services, manufacturing capacity, transportation capability and order fulfilment flows slowed, stalled or disintegrated. Operations required rapid reconfiguration as facilities closed, capacity on transportation lanes was vastly reduced, borders were closed and working practices were socially distanced.

Of all supply chain disruptions, respondents cite congestion at port and transshipment points as the most significant, albeit by a slim majority. Pressure on port capacity began mounting at the start of the Covid-19 pandemic. Global trade rapidly contracted as, first, production capacity in the east ground to a halt, and then as demand in the west collapsed as the virus spread. In response, shipping lines blanked hundreds of sailings globally. As supply and then demand returned and accelerated, ports struggled to deal with volumes, citing staff illness, quarantining and social distancing measures as constraints on capacity, while shipping lines returned to nearly full shipping schedules. The traditional sea freight peak season usually occurs in October, however retailers delayed placing orders, the peak moved later in the year, worsening the congestion.

The scale of the pandemic’s effects cannot be overestimated – across all industries, globally, demand patterns for products and services, manufacturing capacity, transportation capability and order fulfilment flows slowed, stalled or disintegrated.

With ports struggling to clear containers, capacity became further constrained, slowing the rate at which vessels can be unloaded and loaded. This extended docking period for the vessel damaged the economics of the shipping lines and blocked the berth for the next ship to arrive.

The effects also spread inland as containers couldn’t subsequently be processed and collected for onward road or rail transportation.

Compounding the problem still further is a shortage in TEU container availability. Shortages in China were particularly acute at the start of 2021. The demand for Chinese exports was very high over the second half of 2020, so even though China’s import demand is growing, there are simply too few containers returning to China to be refilled and sent out again.

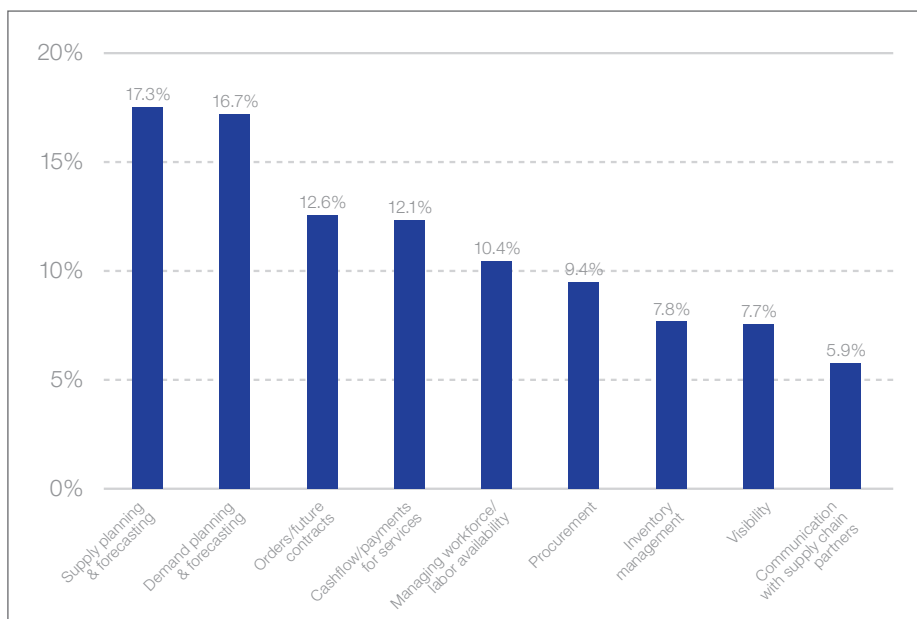
The repercussions are being felt across Asia, with container shortages in Japan, South Korea, India and Southeast Asia expected to last until at least mid-2021, with shipping rates over the period reflecting the supply-demand imbalance.

A wider challenge in sourcing transportation capacity is the second most significant supply chain disruption, according to survey respondents. While the congestion at ports has had knock-on effects for road and rail transportation, so too has the suspension of many passenger flights for air cargo transportation. Around half of all air cargo globally was transported in belly hold freight

capacity on passenger aircraft prior to the pandemic. IATA data for November 2020 shows belly hold cargo capacity down 53% year-on-year, while overall available cargo tonne kilometres were 20% down over the same period. The effect on rates has been marked, and on some lanes staggering increases have been seen. Paul Molinaro, the WHO's Chief of Operations Support and Logistics, commented to the news agency Reuters that "across the board" increases in airfreight rates were threatening to make the movement of vaccines to emerging nations more difficult. In particular, he cited rates for the movement of dry

ice, citing a quote for a consignment between Texas, USA to Freetown, Sierra Leone, at "\$105 per kilo". Molinaro was quoted as saying the 'normal price' would be "\$4-\$6 per kilo."

Respondents also cite challenges in maintaining supplies of goods and inputs as a key disruption. While as the year progressed and pandemic responses became more targeted, allowing 'essential' sectors to remain operational, many found that essential products contained many non-essential components, further hobbling production and transportation capabilities.



WHICH PROCESSES IN YOUR SUPPLY CHAIN WERE MOST IMPACTED? (TICK ALL THAT APPLY)

Supply and demand planning were the two most affected supply chain processes, according to survey respondents. This is an understandable result; the impacts of the Covid-19 pandemic have been far reaching with little historical precedent to inform planning measures.

The spread of Covid-19 and its effects on supply chain operations reveal why supply and demand planning became so challenging. Covid-19 took hold in Wuhan in January 2020 and then spread throughout China. In response, the authorities undertook a lockdown of the worst impacted cities and road, air and sea freight transport in many parts of the country came to a halt. Most manufacturers got back to work in mid-February, although it took much longer in some parts of the country. This sequence of events instigated many of the supply-side dynamics that continued for much of 2020. The virus had not yet affected Western markets which still had demand for Chinese products. Ports in China were not working at full capacity at the time and there was a backlog of containers building. Air freight could still be moved,

and air passenger flights were still in service. However, shipping lines began to blank sailings from China due to a lack of export volume, while ports operating on reduced staffing levels saw containers begin to pile up. Many freight forwarding offices were shut or staff worked from home and air cargo shipments were disrupted by lack of ground distribution. By late-February, however, much of the backlog at ports was being cleared (Shanghai was moving almost 60,000 containers compared with an average daily volume of 54,000 at the time) and manufacturing returned to normal, at least in China.

As the pandemic spread, first to the rest of Asia, but then to Europe and the US, consumers in these markets started to panic buy and grocery/FMCG retailers experienced stock outs as they struggled to meet demand. The suspension of international air passenger services saw air cargo capacity plummet, with high tech, pharmaceuticals and perishables supply chain around the world particularly affected. Additional capacity was added as airlines re-configured passenger aircraft to transport

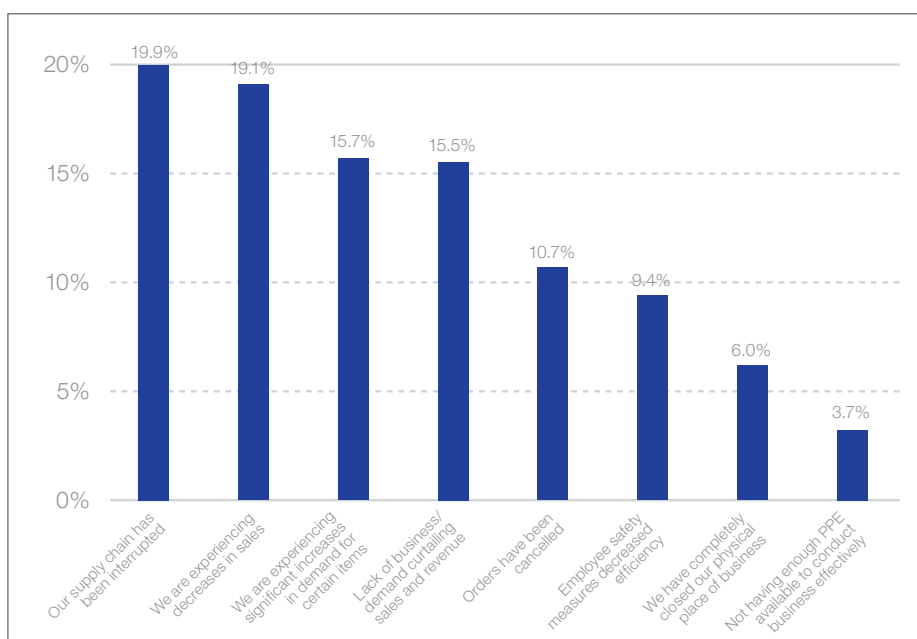
cargo. Charter and scheduled air freight rates increased fourfold. During April and May shipping lines again started to blank sailings due to a lack of demand for imports. It was around this time port congestion began to create significant challenges in the predictability of supply chain operations, with onward landside transportation also imbalanced. Rail and road freight on China-Europe routes received a boost from the cessation of air passenger services to the country. When services on the route started operating again in March 2020, volumes saw a spike with the number of containers increasing by a third year-on-year and trains operating at full capacity. Meanwhile, as online retail picked up pace, last mile providers saw surging demand.

From May onwards, lockdowns were gradually lifted, resulting in a period of sustained volatility with shipping volumes experiencing peaks and troughs of demand. Shipping volumes increased for a time as manufacturers and retailers re-placed orders which had been postponed, but a lack of confidence and the onset of recessions led to a downturn, meaning that, overall, the shipping industry was severely impacted. Air passenger services recommenced although passengers were reticent in flying to many parts of the world. Capacity gradually increased, but 'lumpiness' in demand created volatile air cargo rates. In the warehouse sector, when the lockdown was eventually lifted there was an initial surge in activity from existing stock locations and then again when 'postponed' shipments from Asia were received and distributed.

As can be seen, the effects of Covid-19 pulled supply chain operations in all directions during 2020. Along with uncertainty over supply and demand, survey respondents

rank challenges with orders/contracts and cash flow as significantly impacted supply chain processes. The experience of garment manufacturers illustrates the impacts of both these challenges. Demand for clothing fell rapidly in western consumer markets as pandemic lockdowns forced consumers to stay at home and economic uncertainty grew. Alongside this, store-based retail sales dropped as many were forced to close. The effect was immediate and devastating, with McKinsey estimating that as many as one third of global fashion brands and department stores players will not survive the crisis.

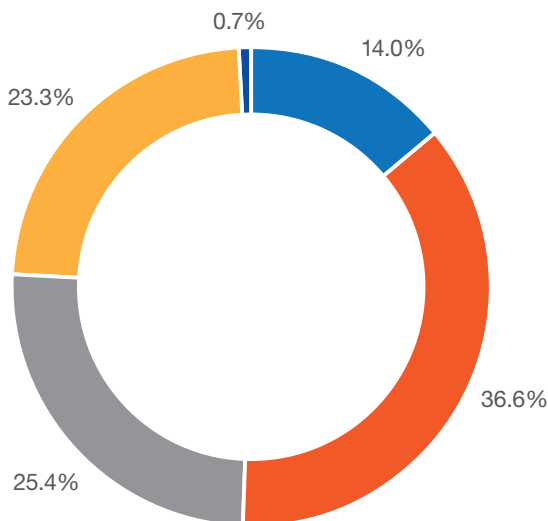
Amid ongoing costs, many fashion brands cancelled orders and even refused to pay for goods already manufactured, creating acute distress throughout the sector's complex global supply chain. Manufacturers in Bangladesh, the second-largest exporter of clothing globally, lost some \$3 billion in revenue for t-shirts, shoes and other clothing already produced or sourced when orders were cancelled, according to the Bangladesh Garment Manufacturers and Exporters Association. As a result, up to half of the 4 million Bangladeshi jobs supported by the sector were lost, with the government subsequently providing cover for 65% of workers' wages. Similar dynamics were seen in the garment and textiles sector of Vietnam and Sri Lanka, while further upstream, cotton producers face the lowest trade prices in 15 years. With the fashion industry only one example of many that saw such up- and down-stream disruptions as a result of the Covid-19 pandemic, it is easy to understand why survey respondents saw significant challenges with order management and cash flow.



HOW HAVE YOUR OPERATIONS BEEN AFFECTED BY COVID-19? (TICK ALL THAT APPLY)

Along with cashflow challenges, decreased sales are a financial consequence of the Covid-19 pandemic singled out by survey respondents. **As highlighted elsewhere in the survey, many businesses operating in emerging markets have had to confront violent swings in supply and demand dynamics and contend with disruption to orders and contract cancellations during 2020. Decreased sales and subsequent declines in revenue will compound the challenge. Producers and manufacturers in emerging markets will be hoping for a return of demand from consumers over the course of 2021, and survey respondents suggest that will arrive with both the European and North American economies expected to recover during the year.**

The recovery will need to be broad-based, however. At 15.7%, a core group of survey respondents suggest they have benefitted, at least partially, from the changing patterns of demand that result from the shift in social and working lives in consumer markets. As millions across the world adjusted to working from home, and as government support packages maintained household incomes for those unable to work, sales of home office equipment and consumer electronics grew rapidly. The boost in spending on such categories has helped businesses involved in the supply chains for such goods to weather the worst of the pandemic's effects. However, for a wider recovery, and for sales to return to previous levels, a wider demand profile is needed.



HAS THE COVID-19 CRISIS PERMANENTLY CHANGED THE WAY YOUR BUSINESS OPERATES?

- NO - WE WILL CONTINUE TO OPERATE AS BEFORE
- YES - IN CERTAIN REGIONS WE HAVE TO CHANGE
- IT'S TOO SOON TO TELL
- YES - GLOBALLY WE CAN'T RETURN TO PREVIOUS OPERATING MODELS
- OTHER (PLEASE SPECIFY)

Close to two-thirds of survey respondents (59.9%) say operations have changed permanently, either globally or within certain regions, as a result of the pandemic. At 14%, only a minority assert that operations are unchanged. The evidence from survey respondents is that operating models must adapt to changes in supply chains and global economy as the Covid-19 pandemic recedes.

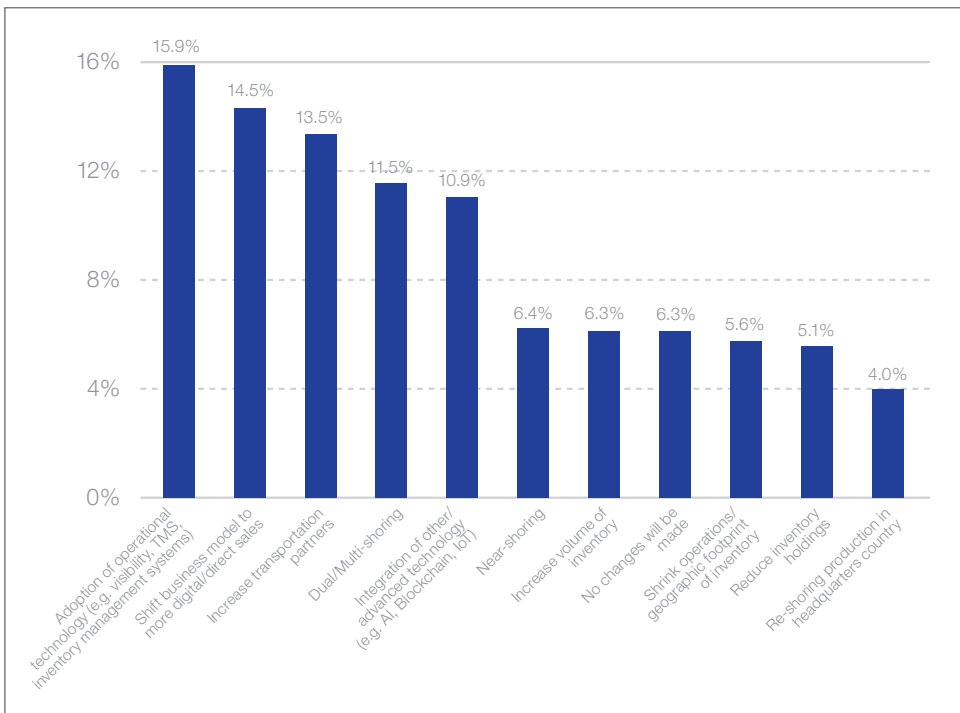
It is possible to identify some early signs of change. In automotive manufacturing, the combination of a collapse in sales across much of the world in 2020 and a shift in technology has thrust the automotive sector into crisis. Consolidation amongst manufacturers is likely as they seek to gain scale and cost efficiency, resulting in fewer but larger engine and assembly plants, and a reduction in the number of component suppliers as well as in internal combustion models produced. For automotive supply

chains, the implications are a greater need for inter-continental transportation as local facilities are reduced in number, while investment in assembly plants is likely to fall, resulting in fewer, smaller contracts. Where demand will increase, however, is in electric vehicle production.

In retail, the accelerated shift to online sales seems irreversible. This change has a number of implications for the sector's logistics provision. Large, highly capitalized networks of fulfilment hubs and cross-docks with high-levels of automation and even higher levels of focus on data are the key infrastructure that delivers e-commerce. Indeed, it is one of the defining characteristics of major e-retail companies that the likes of Amazon have reversed the trend towards outsourcing logistics and have made logistics a core-competency. Meanwhile, the adoption and integration of technology, as highlighted elsewhere in the survey, will also drive change in business operations throughout the supply chain.



2021 AND BEYOND



WHICH OF THE FOLLOWING ARE YOU LIKELY TO IMPLEMENT IN ORDER TO CREATE MORE RESILIENCE WITHIN YOUR SUPPLY CHAINS?

The lessons learned from the pandemic are set to accelerate the adoption and integration of technology into supply chains. Respondents show a clear plan to increase the use of technology to more efficiently manage supply chain operations, communications and data sharing in order to increase resilience in supply chains. By a two-to-one margin, survey respondents favor accelerated adoption and integration of technology plus enhanced digital business (41.3%) over movement of production through multi-shoring, near-shoring or reshoring strategies (21.9%).



The integration of technology into supply chain management and operations was underway before the pandemic. Respondents here suggest that the speed of integration will increase, and also highlight that technologies which improve control, visibility, communication and decision-making at the operational level is a priority. This not only addresses problems many supply chains encountered during the pandemic, but also reflects the reality of today's supply chains.

The digital age has transformed the supply chain in networks of interconnected suppliers, manufacturers, distributors, retailers, customers and logistics service providers, with communications between the parties increasingly online and automated. The adoption of technologies at the operational level, including WMS, TMS and inventory management systems, increases not only the efficiency and control of operations but will allow for the network of partners to work together in reaction to shared and consolidated data. Such operational technologies also provide the capability to remove a person's physical presence as an essential requirement in logistics, and specifically warehousing, operations. Such technologies are also now increasingly available via cloud-based subscription services, making them much more affordable to emerging market operators. Incumbent on emerging market governments to facilitate such advances, then, is the provision widely available, stable, fast and affordable internet access, whether fixed or mobile, as a utility.

Respondents also state a preference to better utilize online and direct sales channels. The rapid acceleration in consumer e-commerce during the pandemic has been one of the most prominent trends of 2020. Increased digital and direct sales are ranked as the second most important factor in increasing supply chain resilience,

suggesting survey respondents hold a motivation to reach a wider group of customers. This is part of a wider shift in logistics towards online service offerings which are more accessible, transparent and responsive. In recent years, a number of logistics service providers have launched digital forwarding platforms – including Agility's shipa.com – which aim to make the provision of spot and contracted logistics services more widely available. The pandemic may accelerate this trend and encourage both shippers and LSPs to utilize online sales channels to secure capacity and

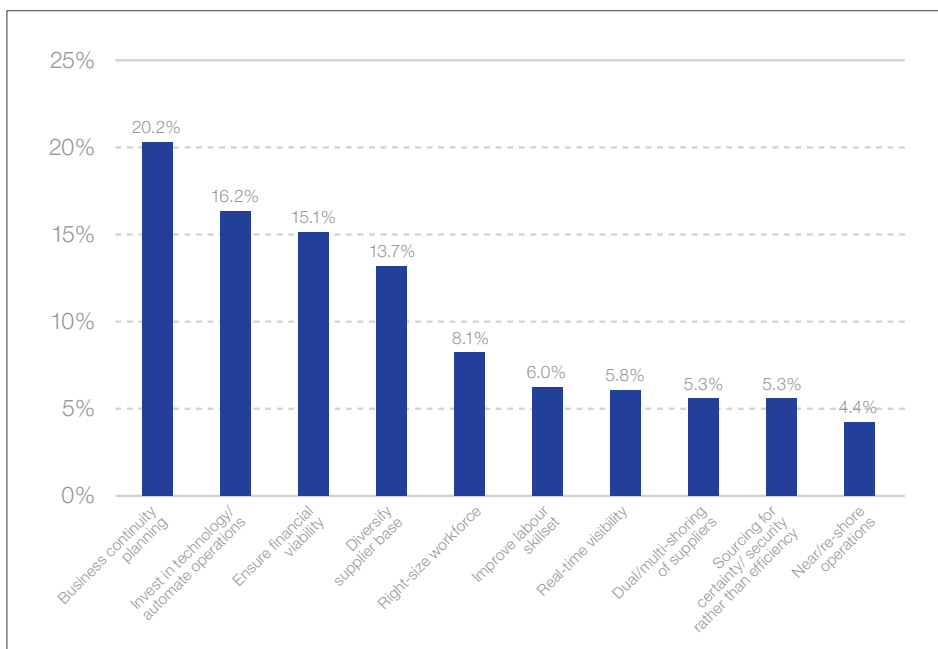
volumes to a greater extent. Survey respondents clearly show a belief that advanced technologies can unlock value in supply chains, but the fact that fewer respondents are planning implementations of technologies such as artificial intelligence and blockchain in the coming 12 months suggests that investment capital is required elsewhere for the majority of respondents, and that the case for

return on investment has not yet been made.

Survey respondents are less likely to undertake relocations or establish complementary operations to improve supply chain resilience in the next 12 months, however. Throughout the survey, respondents highlight both the advantages and challenges of such move, notably citing the complexity of decision-making processes and cost of undertaking such moves. The lower ranking is also likely due to the time required to plan and undertake such moves. Finally, that 13.5% of those surveyed plan to increase the number of transportation partners is likely a direct result of capacity constraints seen over the course of 2020. A larger pool of suppliers should, in theory, reduce the risk of failing to both secure transportation capacity and more competitive rates in times of tight capacity. This will however, come with additional costs of finding and vetting transportation partners, although increased use of technology is likely to make supplier management less complex.

The lessons learned from the pandemic are set to accelerate the adoption and integration of technology into supply chains.

**WHAT ARE YOUR TOP 3 PRIORITIES IN 2021?
(TICK ALL THAT APPLY)**

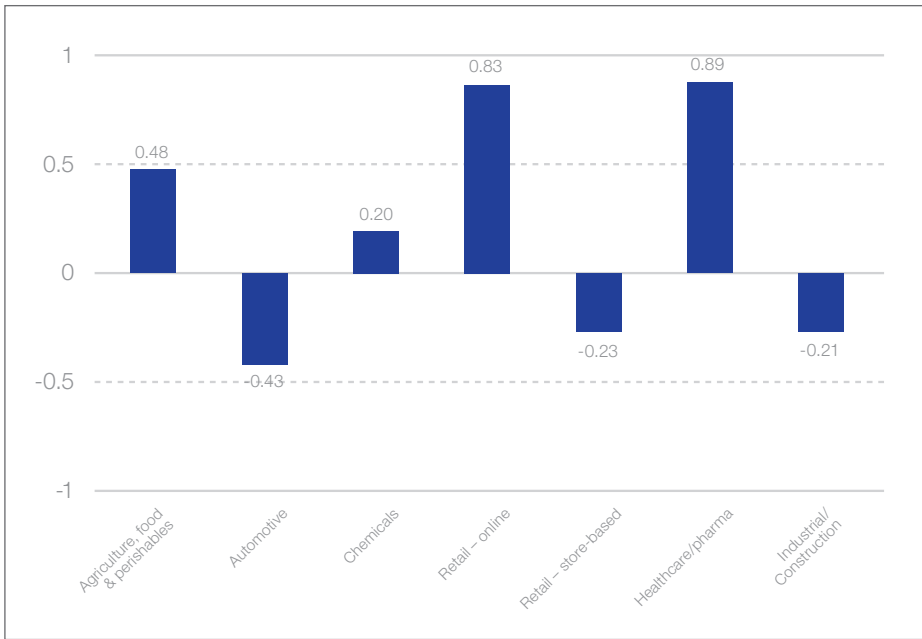


Alongside the integration of technology to improve operational efficiency and communications in supply network, survey respondents also show that business continuity planning will be a priority in 2021. This is likely to be wide ranging as for many, resilience, agility and adaptability in their supply chains will be a key to economic survival in the short-term and development over the medium and long-term. It is undoubtedly the case that the pandemic has revealed vulnerability and weaknesses in the supply chains of many companies and will serve as a catalyst for strategic action in the months and years ahead. Where resources allow, business continuity planning may well grow to include pre-emptive risk management and make use of the vastly higher volume and granularity of data available across supply network. It is likely to also include mapping and scenario planning based around key supply chain locations and events such as natural disasters and further or continued social lockdowns. Identifying and understanding such vulnerabilities will allow risks, such as overreliance on single suppliers to high-risk locations, to be mitigated either before or during disruptions more effectively.

The introduction of technology and automation into supply chains, cited by 16.2% of respondents as a priority for 2021, will have a number of strategic imperatives, including aiding with business continuity in the face of future disruptions. It is likely to go much further as well. As has been demonstrated elsewhere in the survey, there

is a desire to introduce more operational technology into supply chain management, speeding up communication but also digitising previously manual processes. This will create the ground for one aspect of automation which survey respondents are likely seeking as a priority. **The automation of decision making based on data inputs removes risks and speeds up decision making in both standard and distressed operational environments.** For example, pricing can be automatically adjusted and pushed through a supply network to all relevant partners. In addition, the ability to capture, give context to and take action from operational and network data is greatly enhanced when analytics capabilities are applied within WMS, TMS, inventory management and other software systems, as they are on many third-party and proprietary systems today. Leveraging these automated capabilities can increase visibility and speed, reduce waste and create more resilience and agility.

The third most significant priority for survey respondents brings into sharp relief a reality many have faced in 2020. The universally felt disruption caused by the Covid-19 pandemic has been extremely painful for many businesses. While some in certain sectors and locations have seen accelerated growth, the reality for many is that simple survival remains in the balance. During 2021, many will require a more stable operating environment across their supply networks before planning for the future again reaches the top of their agendas.



HOW SIGNIFICANTLY HAVE THE FOLLOWING INDUSTRY SECTORS BEEN AFFECTED BY THE COVID-19 CRISIS?

Indeed, it is clear where survey respondents have most caution over future prospects. **Asked to rate how significantly various logistics intensive sectors had been impacted by the Covid-19 pandemic from extremely positive to extremely negative, it is clear to see that automotive, store-based retail and the industrial/construction sectors have suffered greatly in the minds of survey respondents.** In the chart above, a score of 1 indicates universally positive impact, a score of -1 indicates a universally negative impact, while 0 would indicate no impact.

The automotive industry scores lowest, with survey respondents saying they felt distinct downward pressure from the effects of the Covid-19 pandemic. According to Ti market sizing data, the global automotive logistics sector contracted a staggering 20.4% during 2020, as the COVID-19 pandemic decimated manufacturers' ability to produce cars and squeezed consumer spending power. All sectors of the market – inbound/production logistics, finished vehicles and the aftermarket – were affected with contractions in each regional market. The impact on emerging markets was also severe, with Mexico's automotive production dropping 93.0% year-on-year in May 2020 alone.

E-commerce however, is set to gain significantly as a result of the pandemic, however. **Such is the strength of sentiment behind expectations for e-commerce, according to survey respondents, it appears fair to surmise that growth will come from both new sales**

activity as well as at the expense of store-based retail. The contrasting fortunes of retail segments have been one of the most prominent trends revealed by the Covid-19 pandemic. While store-based retail has faced difficulties including drops in footfall due to Covid-19, e-commerce has filled the void. For many, online sales have represented the most viable shopping option during the pandemic. In emerging markets, the pandemic has helped facilitate the switch to online retail as middle class expansion in recent years has increased consumer buying power and internet access has widened with the availability of smartphones, digital payment systems and last mile delivery networks.

Survey respondents believe most of the positive impacts from the Covid-19 pandemic have accrued to the healthcare & pharmaceutical sector. The sector has understandably made headlines during 2020 as it became the focus of efforts to develop and distribute a vaccine. It first gained mention, though, as shortage of PPE hindered efforts to treat patients effectively in medical settings. The unprecedented circumstances of the Covid-19 crisis led to wild variability in demand. This was created and exacerbated by an inability to forecast the volumes of PPE required, but also the confused and chaotic procurement strategies of individual countries and even hospitals competing against each other or with federal agencies. The situation was made worse as countries imposed export bans on PPE items. Although this came from a desire to conserve stocks, it resulted in a disjointed and fractured market and destroyed trust between supplier and

customer. As countries attempted to regain some order by centralizing purchasing functions, decision-making slowed and bureaucracy increased. This was unhelpful in a market in which agility and flexibility was critical. Despite the somewhat dysfunctional market, Ti market size data puts the value of international PPE logistics at \$15.8 billion

in 2020. Survey respondents also undoubtedly have the global roll-out of Covid-19 vaccines in mind. Efforts to develop, trial and distribute a vaccine have been global and proceeded at rapid speed during the year, requiring clinical trials support from logistics providers and late in 2020, air and road freight capacity for the vaccine itself.





THE EMERGING MARKETS



■ Sub-Saharan Africa
 ■ Latin America
 ■ Central & Eastern Europe
 ■ Middle East & North Africa
 ■ Asia Pacific

China and India remain executives' top choices as the emerging logistics markets with the most potential and continue to trade positions as China took the top spot. Saudi Arabia and Kuwait were the fastest rising markets, both gaining three positions, and alongside Egypt, Qatar the UAE and Turkey make a total of six Middle East & North Africa markets in the top 20. All six also rise in the ranking, indicating survey respondents expect a markedly better year ahead for the markets.

Kuwait, which fell four positions in the Domestic Logistics Opportunities ranking and three positions for International Logistics Opportunities, entered the list of top 20 emerging logistics markets with the most potential for the first time, indicating survey respondents expect a buoyant year ahead for the Gulf state. As a country that is heavily exposed to oil prices, Kuwait experienced a turbulent year in 2020, resulting in the shuttering or suspension of 45% of Kuwaiti businesses due to Covid-19 pandemic impacts. Looking ahead, Kuwait's new government will need to deal with the economic fallout of the pandemic as well as push economic diversification forward while reducing the country's dependence on foreign labor in the public and private sector. There will be challenges in 2021. Stimulus spending to counter the pandemic has depleted financial reserves and led Moody's to downgrade Kuwait's rating for the first time. While there remains some room for public spending in support of diversification, a number of projects have been halted. This includes the Kuwait Port Authority's decision to put the \$6.5 billion Mubarak Al-Kabeer port project on hold, which constituted a major part of the state's Vision 2025 plans and of the wider \$86 billion Silk City project.

The Philippines, unchanged in 16th, has performed consistently in the Index during the years leading up to the Covid-19 pandemic. The country has been severely impacted by the pandemic, however, with the IMF expecting an 8.3% decline in GDP during 2020. The year ahead looks set to continue in the same vein, with lower demand in the Philippines domestic market as consumers feel the pinch of lower remittances and higher unemployment. Investment in capital goods recovered over the course of 2020, but according to financial services provider ING, remains below the five-year average of \$3.5 billion per month, while purchases of equipment and investments in expansions have been put on hold.

South Africa retains a top 20 position as an emerging logistics market with the most potential, holding onto 12th for a second consecutive year. The result is a hopeful sign in a year where South Africa again slid in the overall ranking of the data-driven Index where it lost one position to end up 24th. South Africa's rank of 18th for International Logistics Opportunities is now its only top 20 position as Sub-Saharan Africa's second largest economy now falling outside of the top 20 for Business Fundamentals and outside of the top 30 for Domestic Logistics Opportunities. South Africa recorded more than 1 million Covid-19 cases in 2020 and saw a quarter-on-quarter GDP fall of 16.4% in the three months to June when restrictions to suppress the pandemic were at their most strict. The

IMF expects that GDP will have fallen 8% during 2020. Even before the pandemic, South Africa's economy had been stagnating with inconsistent power supplies making blackouts a regular part of life. Still, survey respondents remain optimistic, likely underpinned by the opportunities presented in Sub-Saharan Africa's most industrialized nation where GDP per capita tops \$6,000 according to the World Bank.

Survey respondents state 12 of the top 13 ranked countries now have less potential as logistics markets in 2021 than a year ago, a clear indication that the Covid-19 pandemic has severely reduced optimism surrounding a group of emerging markets.

Iran tops this year's least potential ranking. The country was already in a three-year recession before the Covid-19 crisis hit. The crisis risks further limiting foreign investment in Iran, while its rial currency lost around 50% of its value against the US dollar over the course of 2020. This is a reflection of the damages of the pandemic as well as the economic sanctions introduced with the US withdrawal from the nuclear deal under the Trump administration. More normal relations with the US are a prospect under the new Biden administration, although the extent of any shift remains to be seen. After several years of sanctions, though, Iran's domestic market has moved to fill some of the void, with local manufacturers and producers now meeting demand for previously imported goods from cosmetics to home appliances and some consumer electronics. The Covid-19 pandemic severely affected Iran's export market, closing borders with Iraq and curtailing trade with China, its largest export partner. Official statistics show non-oil exports were 25% down year-on-year in 2020.

It has been a near catastrophic year for Lebanon, which fell three positions to 33rd in the overall Index, lost ground in Domestic and International Logistics Opportunities as well as Business Fundamentals and ranked as the 5th emerging logistics market with the least potential. Lebanon ended 2019 amid protests and civil unrest at economic and political mismanagement, and the situation worsened in 2020. In April, it entered talks with the IMF over a rescue deal, but talks have not progressed meaningfully. The country's government was functionally bankrupt and had defaulted on its debts. Lebanon's economy had essentially collapsed, with inflation, unemployment and rates of poverty rapidly rising, the UN believes at least 50% of the population is below the poverty line. All of this resulted from factors in play before both the pandemic and the explosion at the port which devastated Beirut and left 300,000 homeless. The country needs reform and

assistance from international organizations but seems unwilling to open itself to the scrutiny that would entail. While Lebanon retains some potential, primarily on the back of longstanding and forecast data in the Index, it is likely to slip further in coming years. The rise in the Least Potential survey question is an accurate real-time reflection of a country struggling to function.

Ghana, which has taken great strides in recent decades to introduce an independent and political stability, rockets up through the ranking for emerging logistics markets with the least potential in 2021, rising 17 ranking positions to 11th. The country is Sub-Saharan Africa's largest producer of gold and second biggest producer of cocoa, while over the last decade hydrocarbon exports have become a more significant part of Ghana's export mix. **A reliance on commodity exports leaves Ghana vulnerable to crop failures and falling prices, however. In 2020, restrictions to limit the spread of Covid-19 saw lockdowns in Greater Accra and Kumasi, Ghana's**

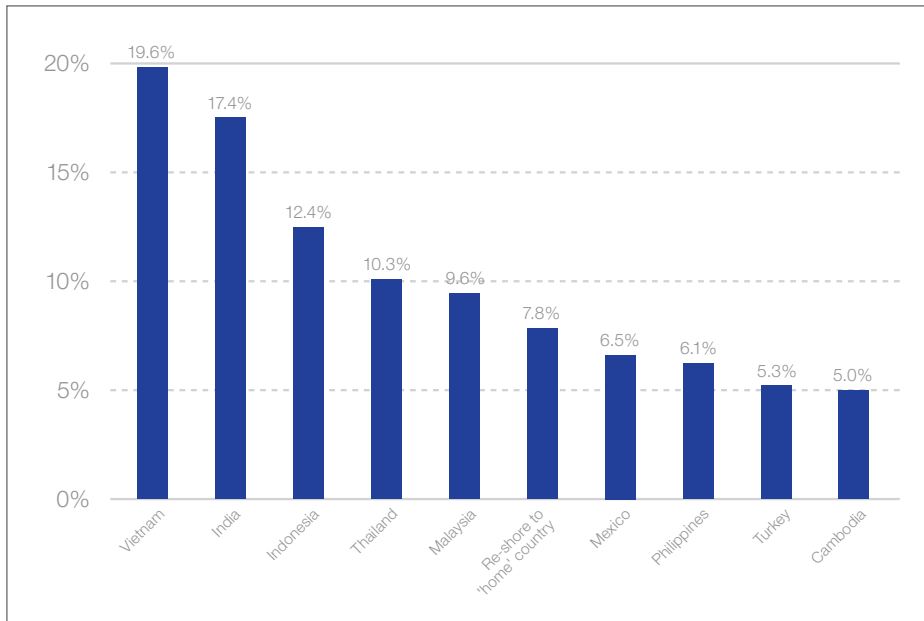
most important economic hubs, resulting in thousands of SMEs closing and the loss of several hundred thousand jobs despite government support to back loans from commercial lenders. Amongst the sectors hardest hit were hospitality and tourism, as well as commercial land, sea and air transportation. The effects were deep, Ghana's economy contracted 3.2% in Q2 2020 and 1.1% in the following quarter, meaning Ghana entered its first recession in more than four decades.

Sentiment surrounding Pakistan improved during 2020 as fewer survey respondents ranked it as an emerging market lacking in potential. Pakistan felt the impacts of the Covid-19 pandemic but fared well, recording around 500,000 cases of the virus, while the IMF expected 2020 GDP to contract just 0.4%, one of the better performances globally. The country also made strides in improving cross-border trade process with the integration of various agencies into a centralized online customs portal, a



reduction in trade documentation requirements and redefined roles for Customs officials in border trade. The increased efficiency in trade procedures will be important for Pakistan as it tries to recover export volumes after the Covid-19 pandemic. In the first half of 2020, Pakistan's

exports were just 53% of the target for the period. While exports rose 5% in the second six months of 2020, in value terms they totalled \$12.1 billion, markedly lower than nearby emerging markets such as Bangladesh.



IF COMPANIES MOVE OPERATIONS FROM CHINA, WHERE ARE THEY MOST LIKELY TO RELOCATE? (TICK ALL THAT APPLY)

Vietnam once again tops the ranking as the emerging market best placed to benefit from any shift away from China. Vietnam, along with India, which remains in second place, is rated as the best alternative option by meaningfully fewer respondents this year. Throughout the survey, respondents stress that China remains a vital supply chain location and that cost is an extremely important and complex calculation when determining geographic locations. While the vulnerabilities of overexposure to China have become more apparent during the Covid-19 pandemic, so too has the time, cost and complexity required to relocate. A June 2020 business confidence survey by the European Chamber of Commerce showed 65% of members still ranked China amongst their top three destinations for new investment, while research from Baker McKenzie found the development of China's domestic market was a key motivator for manufacturers to retain operations in the country.

The evidence, then, points out that a wholesale move from China is unlikely. This is reinforced by trade data,

Vietnam once again tops the ranking as the emerging market best placed to benefit from any shift away from China.

which illustrates the complexity of the situation. Data from Silk Road Associates, which examined export market share across 350 product categories and 150 countries, found significant swings in exports away from China

and towards other emerging markets in some, but not all, sectors. As the US-China trade war took hold in 2019, China's share of global consumer goods exports dropped from 46% to 42%, the data shows, with gains in export share going to Southeast Asia, Latin America and Europe. Southeast Asian markets in particular increased exports of smartphones, consumer electronics and furniture, with Vietnam a notable winner. However, the data also reveals that China is still gaining export market share in higher value manufacturing sectors and those in which it has a strategic focus, including energy, mining and infrastructure equipment. The picture is a complex one.

Along with Vietnam, Indonesia, Thailand and Malaysia are all rated highly by survey respondents as alternatives should businesses move operations from China. The region has developed manufacturing capabilities over the last decade as it became increasingly integrated

Agility's Take

Vietnam: Powering through the Global Downturn



Vietnam has been a rare pandemic success story. It used strict quarantine and tracking measures to contain virus outbreaks, giving it the chance to bounce back economically faster than most of the world.

The Vietnamese economy experienced its slowest rate of growth in 30 years – but still expanded by 2.9% in 2020, spurred by steady growth in manufacturing and processing. GDP is expected to grow 7% a year over the next five years.

Vietnam has benefitted from free trade agreements with the European Union and UK, as well as Asia's Comprehensive & Progressive Agreement for Trans-Pacific Partnership (CPTPP), which gives Vietnamese goods improved access to Canada and Mexico. Both before and during the pandemic, it has seen an influx of manufacturing and investment, including some from producers looking to relocate from China, some from neighboring countries that couldn't reopen production lines amid the pandemic.

In recent years, Vietnam has moved up the value chain from textiles and apparel to microchips, smart phones and other electronics. Apple and its suppliers Foxconn and Pegatron, along with Panasonic, were among the companies that began producing in Vietnam, expanded production, or announced new plans to manufacture there in 2021.

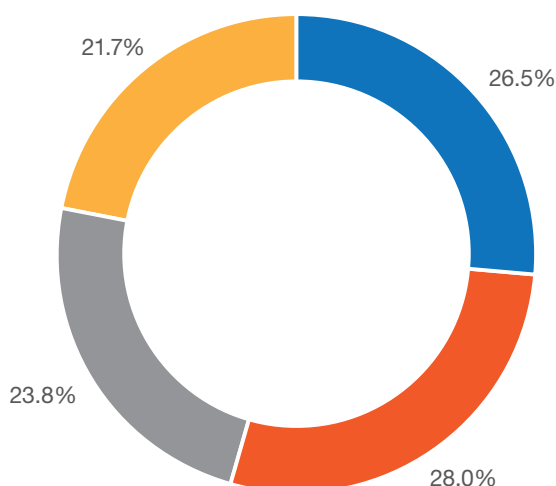
About 40% of Vietnam's exports go to the U.S. and European Union. Unclear is whether the incoming Biden administration will heed calls for the U.S. to take a tougher trade posture toward Vietnam by declaring it a currency manipulator and imposing tariffs. Also unclear is whether Vietnam can supply new arrivals with enough affordable skilled labor and warehouse space, as well as whether its clogged roads, single-gauge national rail line, and overworked ports can keep up.

with China-focussed supply chains. The result has been growing capability across the region, as stages of manufacturing and production have spread and specialization in sectors and capabilities have been developed. Manufacturing sector development has also become a core strategy for countries in the region. The Making Indonesia 4.0 strategy is designed to catalyze battery and electric vehicle production in the country, for example. Such initiatives, along with the development of infrastructure, production facilities and logistics capabilities will continue to drive the potential of Southeast Asia as a supply chain hub.

A higher proportion of survey respondents view Mexico as a viable alternative to China this year. The USMCA was ratified in mid-2020, calming what had become tense relations between Mexico and the neighboring Trump administration and creating certainty over the rules of trade in the region. Combined with the rising costs of the US-China trade war – in terms of both direct tariff-

related costs, but also costs of compliance – and the effects of the Covid-19 pandemic on US imports from China which ranged from delays to sky rocketing sea and air freight rates, the increase in sentiment for Mexico is understandable.

The Covid-19 pandemic, though, has undoubtedly caused manufacturers and retailers to reassess sourcing locations. In doing so, a number of factors, including proximity to suppliers and customers, availability of transportation capacity on specific lanes, overall lead time, storage locations and modal mix amongst others, will be considered, as will the component and overall costs. After several decades of increasingly global supply chains, a combination of increased trade barriers and vulnerabilities exposed by the pandemic are forcing an assessment of global, regional and local options, of how and where to consolidate sourcing, and how to mitigate risk through dual- and multi-sourcing.



SELECT THE BUSINESSES WITH THE MOST POTENTIAL TO SPUR EMERGING MARKETS RECOVERY:

- SMEs
- LARGE MULTINATIONAL CORPORATIONS
- LARGE NATIONALS/REGIONS
- COMPANIES OF DIFFERENT SIZES WILL CONTRIBUTE SIMILARLY

When asked which group of businesses have the most potential to power recovery in emerging markets, survey respondents presented an even picture between all groups, suggesting that every micro-, small- and medium-sized business has just as much potential to power growth in the years ahead as every large regional and global corporate business. The findings again highlight an inescapable reality of the Covid-19 pandemic – its impacts have been profound, universal and have changed the way businesses operate globally. It has ushered in the deepest global recession in a generation and the recovery will see old industries changed and new industries created.

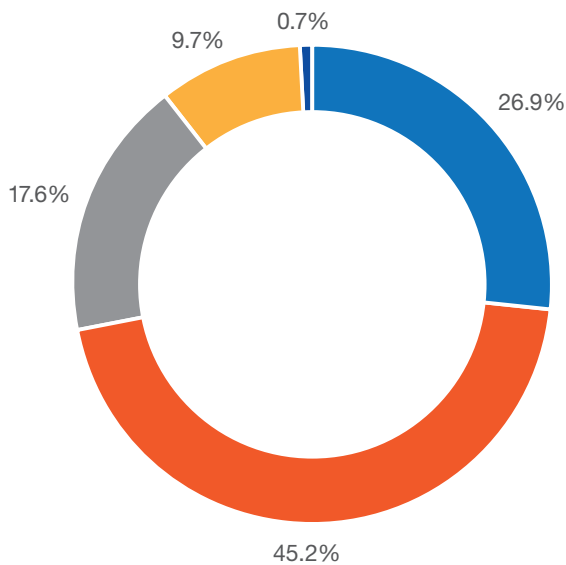
Each category of business will find its own set of advantages and challenges as the pandemic fades in the years ahead. SMEs are likely to have fewer financial resources to deploy and investments in future development may be more sparing, while large multinational corporations may find themselves less able to quickly respond to rapidly changing market dynamics or consumer preference, for example. Indeed, research from the Asian Development Bank shows how deep the financing challenges will become in emerging markets runs, finding that the trade financing gap is approximate to \$1.5. trillion, widening to \$2.5 trillion in 2025, due to the limited access of SMEs.

All groups will have commonalities as well, though. It is clear throughout the survey and Index that businesses which are most able to adopt new technologies and become valuable players in supply networks will be most successful. Throughout supply networks, business will seek greater communication, transparency, adaptability and flexibility from partners, promoting the need to utilise technology to automate data gathering and sharing, as well

as to automate decision making based in agreed standards and data-based insights.

Each category of business will also find deep changes and opportunities in their own markets. The Covid-19 pandemic has accelerated a number of trends that were building and disrupting consumer markets and supply chain operations. Perhaps the most viable example is the rapid adoption of online retail across both developed and emerging markets, which has accelerated growth opportunities for retailers and logistics providers across the world. The wider development of online services, including online payment and digital banking services, not only spurred e-commerce growth in emerging markets, but also created new opportunities by formalizing banking processes and bringing new purchasing and transactional capabilities to millions of previously unbanked people and businesses. Alongside the range of fulfilment and e-commerce platforms available, these developments in e-commerce markets are as open to SMEs as their larger regional and global counterparts.

Indeed, the underlying developments which make e-commerce opportunities available to SMEs can increasingly be found throughout supply chains. The adoption of cloud computing technology and subscription-based Software-as-a-Service solutions allow SMEs to leverage advanced technologies from WMS, TMS and inventory management systems to AI-powered decision-making system more than ever. Further Asian Development Bank data shows that supply chain financing driven by technology platforms could boost SME revenues by \$1 trillion through the automation of invoicing and settlement process that would reduce transaction costs, improve efficiency, lower risk and enhance transparency.



HAVE YOUR PLANS TO IMPLEMENT ENVIRONMENTALLY SUSTAINABLE PRACTICES CHANGED OVER THE LAST 12 MONTHS?

- MORE LIKELY TO IMPLEMENT
- PLANS ARE UNCHANGED
- ON HOLD FOR NOW
- LESS LIKELY TO IMPLEMENT
- OTHER (PLEASE SPECIFY)

For survey respondents, the sustainability movement is proving to be durable. At 26.9%, more than one quarter of executives surveyed say their companies are boosting implementation of environmentally sustainable practices in the wake of the pandemic. Another 45.9% say their plans are unchanged, suggesting they have no plans to retreat from sustainability commitments.

In sum, nearly three quarters of survey participants are as, or more likely to, implement sustainability practices as before the Covid-19 pandemic. Of those, more than one quarter are now more likely to push sustainability plans forwards. The findings highlight a commitment to decreasing the impact of supply chain operations on the wider environment.

Progress on sustainability implementation in the logistics industry has gathered pace in recent years as the logistics providers themselves, as well as retail and manufacturing clients, push towards carbon neutrality. As well as being internal, the drive also comes from consumers in many markets increasingly placing value on sustainably sourced, produced and transported goods. The drive for implementation also comes from regulatory frameworks that are increasingly stringent on environmental standards. It should be noted however, that the development of such frameworks remains uneven. According to World Bank data, population growth, shorter product life cycles and increased purchasing power led to a 231% increase in per capita consumption in the world's emerging markets. As the trends continue, tackling the environmental impact will remain high on the agendas of logistics service providers according to survey respondents.



SOURCES & METHODOLOGY

Source

The Agility Emerging Markets Logistics Index has three main components.

- First is the Index country rankings: 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 is a survey of trade and logistics industry professionals.
- Third is an examination, by volume and mode of transport, of the largest and fastest-growing major trade lanes linking emerging and developed markets.

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. In addition, Ti's own proprietary market size and forecast data is used. Trade lane data is derived from United States Census Bureau and Eurostat data.

Methodology

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, with the aim of reaching 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).

The Agility Emerging Markets Logistics Index

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

- Domestic Logistics Opportunities (33%)
- International Logistics Opportunities (33%)
- Business Fundamentals (33%)

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

- Urbanisation of 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 which 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 which 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 individual 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 which 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.

Trade Lanes

The trade lane section measures the volume of goods shipped by air and sea between the emerging markets included in the Index and the US/EU. The trade lane section includes two parts:

1. Top Trade Lanes – Air and Sea, Import/Export A list of trade lanes with the highest volumes, as measured by tonnes, split by air and sea, and by import and export (from emerging markets to the EU/ US and to emerging markets from the EU/US).
2. Fastest-Growing Trade Lanes – Air and Sea, Import/ Export, presented in an appendix.

For air and sea, by imports and exports, the 25 fastest growing trade lanes for each case have been ranked by their growth in 2020. In addition, an index has been calculated with a base year of 2013 to offer a long-term perspective on each trade lane's performance.

2013-2019 data are 'actual' figures, whereas 2020 data are forecast figures based on actual monthly data from January-August 2020. A forecast model which accounts for seasonality has been applied to estimate full-year 2020

figures. For sea freight, tonnage relating to HS2 product group 27 "mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes" has been subtracted from total figures. No product groups are excluded from air freight figures. To qualify as one of the 25 fastest-growing trade lanes, a certain volume must be reached. For sea freight trade lanes this threshold is 1million tonnes. For air freight, it is 10,000 tonnes. This prevents relatively insignificant trade lanes entering the rankings.

CAGRs have been used to measure each trade lane's performance. CAGR stands for Compound Annual Growth Rate. It measures the constant annual percentage growth rate of a time series between a particular start and end point. While CAGRs can be a quick and useful way to analyse medium- and long-run performance, caution should be taken as they can often disguise volatility. Inspection of each year's index value over time reveals volatility.

APPENDIX 2 – EMERGING MARKETS TRADE LANE DATA

AIR FREIGHT

AIR FREIGHT EU/US TO EMERGING MARKETS

Fastest Growing Trade Lanes (Index of tons, 2013=100)

Rank	Destination	Origin	2019 Tons	2020* Tons	19-20 growth	2013 Index	2014 Index	2015 Index	2016 Index	2017 Index	2018 Index	2019 Index	2020* Index	2013-2020 CAGR
1	Ethiopia	EU	10,243	13,522	32.0%	100	93	146	117	124	127	122	161	7.1%
2	Kazakhstan	EU	15,600	17,691	13.4%	100	89	73	73	88	85	79	89	-1.6%
3	Qatar	US	12,775	13,430	5.1%	100	99	87	89	108	105	110	115	2.1%
4	Vietnam	US	35,817	33,958	-5.2%	100	144	177	176	185	217	251	237	13.2%
5	Malaysia	US	43,096	40,363	-6.3%	100	96	87	80	82	96	93	87	-1.9%
6	China	US	338,321	313,988	-7.2%	100	107	117	121	142	146	128	119	2.5%
7	Thailand	US	40,764	36,970	-9.3%	100	100	101	96	100	105	103	93	-1.0%
8	Russia	US	18,405	16,383	-11.0%	100	98	61	68	86	81	76	68	-5.4%
9	Indonesia	US	16,312	14,343	-12.1%	100	90	89	87	86	102	97	86	-2.2%
10	Brazil	US	93,518	81,337	-13.0%	100	97	79	69	77	83	76	66	-5.7%
11	Chile	US	40,792	34,143	-16.3%	100	96	92	87	94	100	109	91	-1.3%
12	Pakistan	EU	13,831	11,442	-17.3%	100	59	55	74	67	55	46	38	-12.9%
13	Vietnam	EU	51,012	41,082	-19.5%	100	129	141	190	197	199	200	161	7.1%
14	Turkey	US	20,693	16,381	-20.8%	100	111	107	104	120	128	115	91	-1.3%
15	Colombia	US	47,929	37,616	-21.5%	100	104	85	69	71	74	76	60	-7.1%
16	Chile	EU	27,029	21,144	-21.8%	100	88	102	111	102	110	101	79	-3.3%
17	Philippines	US	19,761	15,446	-21.8%	100	108	110	100	99	148	105	82	-2.8%
18	Kuwait	EU	28,677	22,337	-22.1%	100	105	117	116	141	136	138	107	1.0%
19	Saudi Arabia	EU	95,804	74,524	-22.2%	100	108	127	104	99	102	99	77	-3.7%
20	Thailand	EU	60,100	46,567	-22.5%	100	66	92	100	83	79	76	59	-7.2%
21	China	EU	788,946	602,571	-23.6%	100	88	103	108	126	122	117	89	-1.7%
22	India	US	72,705	55,492	-23.7%	100	107	109	107	125	144	136	104	0.6%
23	United Arab Emirates	US	60,530	46,106	-23.8%	100	112	105	92	98	96	96	73	-4.4%
24	Saudi Arabia	US	43,887	33,056	-24.7%	100	108	108	100	107	110	99	75	-4.1%
25	Argentina	US	25,080	18,747	-25.3%	100	94	91	87	97	89	85	64	-6.2%
n/a	All 50 EM	US	1,125,447	947,006	-15.9%	100	103	98	93	103	109	101	85	-2.3%
n/a	All 50 EM	EU	2,590,113	1,804,417	-30.3%	100	95	110	110	119	118	113	78	-3.4%
n/a	All 50 EM	EU & US	3,715,560	2,751,423	-25.9%	100	98	106	104	114	115	109	81	-3.0%

AIR FREIGHT EMERGING MARKETS TO EU/US

Fastest Growing Trade Lanes (Index of tons, 2013=100)

Rank	Destination	Origin	2019 Tons	2020* Tons	19-20 growth	2013 Index	2014 Index	2015 Index	2016 Index	2017 Index	2018 Index	2019 Index	2020* Index	2013-2020 CAGR
1	US	Malaysia	50,943	74,145	45.5%	100	104	108	106	123	126	111	162	7.1%
2	US	Chile	174,603	207,279	18.7%	100	96	91	90	92	110	111	132	4.0%
3	US	China	1,161,041	1,311,665	13.0%	100	117	123	112	126	128	114	129	3.7%
4	US	Vietnam	133,821	148,501	11.0%	100	123	170	180	224	218	253	280	15.9%
5	EU	Ethiopia	65,799	69,591	5.8%	100	111	180	182	177	133	126	134	4.2%
6	US	Thailand	72,011	74,978	4.1%	100	102	105	103	105	120	116	120	2.7%
7	US	Colombia	185,516	189,963	2.4%	100	99	94	100	106	107	111	114	1.9%
8	US	Mexico	57,964	58,836	1.5%	100	96	91	95	116	119	105	106	0.8%
9	US	Sri Lanka	15,156	15,069	-0.6%	100	98	135	143	150	112	89	89	-1.7%
10	EU	China	1,383,029	1,358,346	-1.8%	100	118	98	111	118	129	124	122	2.9%
11	US	Ecuador	65,401	61,292	-6.3%	100	95	108	110	111	121	130	122	2.9%
12	US	Turkey	36,378	34,065	-6.4%	100	124	148	150	176	196	203	190	9.6%
13	US	Philippines	34,749	31,427	-9.6%	100	137	137	123	138	146	149	135	4.4%
14	EU	Morocco	15,424	13,542	-12.2%	100	58	53	58	56	57	88	78	-3.6%
15	EU	Argentina	14,068	12,103	-14.0%	100	112	99	101	135	128	148	127	3.5%
16	EU	Ecuador	33,558	28,567	-14.9%	100	113	113	133	128	136	142	121	2.8%
17	US	Brazil	55,532	47,201	-15.0%	100	102	113	127	139	170	147	125	3.2%
18	US	Peru	58,171	49,158	-15.5%	100	105	107	92	78	70	58	49	-9.8%
19	EU	Colombia	28,370	23,036	-18.8%	100	135	106	107	108	115	117	95	-0.7%
20	EU	Chile	13,825	11,074	-19.9%	100	90	87	39	27	31	28	22	-19.4%
21	EU	Ghana	16,015	12,605	-21.3%	100	119	106	93	122	114	130	102	0.3%
22	US	India	167,703	128,084	-23.6%	100	108	115	124	150	153	155	119	2.5%
23	US	Argentina	20,951	15,912	-24.0%	100	90	82	87	91	64	93	70	-4.9%
24	EU	Turkey	64,976	49,010	-24.6%	100	106	133	133	118	131	124	93	-1.0%
25	EU	Uganda	33,275	24,868	-25.3%	100	93	94	103	97	102	105	78	-3.4%
n/a	US	All 50 EM	2,441,856	2,569,531	5.2%	100	110	115	110	122	126	119	125	3.2%
n/a	EU	All 50 EM	3,335,789	2,593,984	-22.2%	100	110	101	110	131	148	135	105	0.7%
n/a	US & EU	All 50 EM	5,777,645	5,163,514	-10.6%	100	110	107	110	127	138	128	114	1.9%

SEA FREIGHT

SEA FREIGHT EU/US TO EMERGING MARKETS

Fastest Growing Trade Lanes (Index of tons, 2013=100)

Rank	Destination	Origin	2018 Tons	2019* Tons	19-20 growth	2013 Index	2014 Index	2015 Index	2016 Index	2017 Index	2018 Index	2019 Index	2020* Index	2013-2020 CAGR
1	Nigeria	EU	3,619,967	5,286,770	46.0%	100	105	91	82	91	81	91	133	4.1%
2	China	US	48,935,036	64,204,747	31.2%	100	102	100	105	96	54	60	78	-3.4%
3	China	EU	43,693,680	51,942,843	18.9%	100	101	105	100	102	94	114	135	4.4%
4	Bangladesh	US	2,989,173	3,498,833	17.1%	100	138	296	365	606	702	682	799	34.6%
5	Saudi Arabia	EU	13,144,746	15,352,126	16.8%	100	86	102	103	96	93	85	99	-0.1%
6	Philippines	US	7,042,177	8,038,862	14.2%	100	113	110	135	133	147	150	171	8.0%
7	Colombia	US	11,001,878	12,459,381	13.2%	100	170	184	188	200	219	199	225	12.3%
8	Philippines	EU	2,475,463	2,800,754	13.1%	100	125	123	134	129	157	195	221	12.0%
9	Turkey	US	6,980,942	7,834,665	12.2%	100	85	84	73	87	73	70	79	-3.3%
10	Morocco	EU	11,281,668	12,508,921	10.9%	100	120	114	133	114	104	115	127	3.5%
11	Malaysia	US	5,198,831	5,745,404	10.5%	100	89	76	79	116	152	211	233	12.9%
12	Jordan	EU	1,946,814	2,098,789	7.8%	100	115	115	135	119	110	98	106	0.9%
13	Morocco	US	1,830,169	1,949,987	6.5%	100	111	110	220	214	234	157	167	7.6%
14	Ecuador	US	2,020,989	2,133,703	5.6%	100	108	97	79	86	98	117	124	3.1%
15	Algeria	EU	12,338,204	12,892,114	4.5%	100	113	113	95	59	65	59	62	-6.6%
16	Egypt	US	5,210,480	5,420,916	4.0%	100	131	74	54	55	142	102	106	0.8%
17	Ghana	EU	2,315,045	2,386,255	3.1%	100	103	124	125	198	131	95	98	-0.3%
18	Brazil	US	11,799,312	11,987,240	1.6%	100	91	71	82	81	83	82	83	-2.6%
19	Thailand	US	5,587,615	5,613,838	0.5%	100	137	154	162	186	218	185	186	9.3%
20	Pakistan	US	2,671,264	2,667,528	-0.1%	100	97	151	210	339	378	327	327	18.4%
21	Saudi Arabia	US	3,298,124	3,217,489	-2.4%	100	133	133	149	144	142	110	108	1.1%
22	Vietnam	US	8,766,063	8,512,355	-2.9%	100	121	116	173	140	278	238	231	12.7%
23	Turkey	EU	33,618,109	32,513,206	-3.3%	100	99	96	101	115	99	108	104	0.6%
24	Chile	US	38,78,187	3,728,291	-3.9%	100	83	85	103	106	102	101	97	-0.5%
25	Mexico	US	18,193,071	17,182,882	-5.6%	100	106	115	125	137	142	131	123	3.0%
n/a	All 50 EM	EU	237,875,569	231,977,913	-2.5%	100	103	102	101	97	94	101	98	-0.3%
n/a	All 50 EM	US	186,794,635	199,205,199	6.6%	100	104	100	108	108	100	96	103	0.4%
n/a	All 50 EM	EU & US	424,670,204	431,183,112	1.5%	100	104	101	104	102	97	99	100	0.0%

SEA FREIGHT EMERGING MARKETS TO EU/US

Fastest Growing Trade Lanes (Index of tons, 2013=100)

Rank	Destination	Origin	2019 Tons	2020* Tons	19-20 growth	2013 Index	2014 Index	2015 Index	2016 Index	2017 Index	2018 Index	2019 Index	2020* Index	2013-2020 CAGR
1	US	Vietnam	8,297,882	10,603,707	27.8%	100	110	122	157	169	193	238	305	17.3%
2	US	Ukraine	1,868,772	2,245,442	20.2%	100	82	90	85	136	186	152	183	9.0%
3	US	Saudi Arabia	1,429,979	1,648,928	15.3%	100	109	113	130	123	132	120	138	4.7%
4	US	Thailand	5,542,220	6,111,564	10.3%	100	105	114	128	147	149	169	186	9.3%
5	US	Ecuador	1,420,196	1,565,299	10.2%	100	106	112	110	92	99	100	110	1.4%
6	US	Turkey	9,411,164	10,262,287	9.0%	100	145	188	232	246	259	320	349	19.6%
7	US	Colombia	1,511,363	1,583,593	4.8%	100	113	103	96	100	119	109	114	1.9%
8	US	Malaysia	4,156,405	4,333,001	4.2%	100	99	100	99	97	107	132	137	4.6%
9	EU	Ecuador	1,868,736	1,890,988	1.2%	100	109	104	104	122	131	123	125	3.2%
10	EU	Qatar	2,007,234	2,007,439	0.0%	100	95	45	52	87	68	95	95	-0.7%
11	US	Argentina	1,748,769	1,739,617	-0.5%	100	67	90	123	107	56	69	68	-5.3%
12	EU	Morocco	7,418,985	7,314,077	-1.4%	100	105	112	111	132	128	137	135	4.4%
13	US	Indonesia	5,082,990	4,975,965	-2.1%	100	104	113	120	115	121	125	123	3.0%
14	US	Peru	4,185,616	3,978,539	-4.9%	100	152	148	138	157	201	194	185	9.2%
15	EU	Algeria	5,664,002	5,363,107	-5.3%	100	110	117	143	108	108	105	100	-0.1%
16	EU	Malaysia	5,957,414	5,639,963	-5.3%	100	121	130	114	118	123	135	128	3.6%
17	US	Pakistan	1,107,284	1,044,060	-5.7%	100	107	126	116	134	127	146	138	4.7%
18	US	Philippines	1,416,276	1,326,129	-6.4%	100	96	94	95	105	104	99	93	-1.1%
19	US	UAE	1,139,571	1,056,064	-7.3%	100	142	178	218	215	156	137	127	3.5%
20	EU	Nigeria	3,525,595	3,261,576	-7.5%	100	80	104	111	214	230	264	244	13.6%
21	US	China	59,164,587	53,355,506	-9.8%	100	112	117	112	119	127	105	95	-0.7%
22	US	Mexico	20,924,342	18,821,477	-10.0%	100	118	122	110	105	121	134	120	2.7%
23	US	India	9,558,616	8,558,667	-10.5%	100	124	127	114	148	156	180	161	7.0%
24	EU	Russia	38,076,794	33,876,613	-11.0%	100	120	126	119	116	141	156	138	4.8%
25	EU	Tunisia	3,380,373	2,979,128	-11.9%	100	85	87	88	99	119	120	105	0.7%
n/a	US	All 50 EM	194,247,526	180,576,638	-7.0%	100	116	119	112	121	130	126	117	2.3%
n/a	EU	All 50 EM	371,246,708	301,671,106	-18.7%	100	105	108	107	114	121	122	100	-0.1%
n/a	US & EU	All 50 EM	565,494,234	482,247,744	-14.7%	100	108	112	109	116	124	124	105	0.8%

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

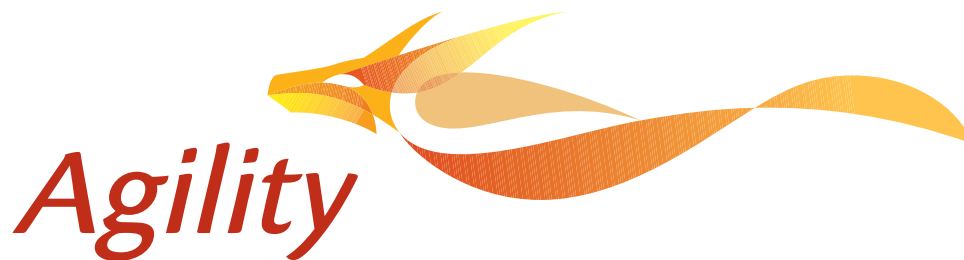
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ABOUT AGILITY



Agility is a global logistics company with \$5.1 billion in annual revenue and 23,000+ employees in more than 100 countries. It is one of the world's top freight forwarding and contract logistics providers, and a leader and investor in technology to enhance supply chain efficiency. Agility 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 fuel logistics, airport services, commercial real estate and facilities management, customs digitization, and remote infrastructure services.

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