

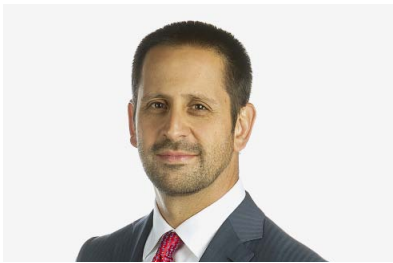


Agility Emerging Markets Logistics Index 2018



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Foreword

ESSA AL-SALEH, CEO AND PRESIDENT OF AGILITY GLOBAL INTEGRATED LOGISTICS (GIL)

Summary

- World economy is outperforming expectations and is poised for a strong 2018
- Emerging markets growth expected to be strong overall but uneven from country to country and region to region
- Asia Pacific is strongest region despite expectations that China will cool off
- Russia, Egypt, Bangladesh, Uruguay were strong performers in 2018 Index; Brazil, Nigeria, Kazakhstan, Venezuela underperformed.

This is the 9th annual Agility Emerging Markets Logistics Index and the first in several years to arrive as both emerging and developed markets are exceeding expectations. “For the first time since 2010, the world economy is outperforming most predictions, and we expect this to continue,” Goldman Sachs said recently. Its report, titled “As Good As It Gets,” forecasts 4% global GDP growth for 2018. The International Monetary Fund is more conservative but has revised its 2018 forecast upward to 3.7%. Either rate would represent good news for a global economy that has sputtered along, growing at less than 3% a year since 2011.

The outlook for emerging markets as a group is also bright. The IMF projects 4.9% growth in 2018 and 5% growth over the medium term. Sentiment in the logistics industry reflects that optimism. We surveyed more than 500 supply chain executives for the Index, and 65% said the IMF’s 2018 forecast is “about right.” In this year’s survey, logistics professionals offer their

views on the future of the North American Free Trade Agreement (NAFTA), the impact of Brexit, Chinese e-commerce, African infrastructure, 2018 supply chain risks, and best/worst emerging markets for logistics. By a margin of more than two to one, the executives in our survey said small and medium-sized enterprises – those with fewer than 250 employees – will be the businesses that benefit most from emerging markets growth.

In the 50-country Index rankings, compiled from economic, trade and social data, the world’s two largest markets, China and India, come out on top again. Russia moves up three spots to No. 7 amid a resumption in growth. Brazil, struggling to climb out of its worst recession in a century, slipped from No. 7 to No. 9. Egypt, Bangladesh and Uruguay are among those making impressive gains in the Index. Nigeria, Kazakhstan and Venezuela are among countries that disappointed. There is mixed news for others, including Ukraine and the Philippines. UAE and other Gulf countries once again set the standard for emerging markets infrastructure development and overall business climate.

Likewise, the outlook is brighter for some regions, notably Asia Pacific. “Prospects for many emerging markets and developing economies in sub-Saharan Africa, the Middle East, and Latin America are lackluster, with several experiencing stagnant per capita incomes,” the IMF says.

Emerging markets are growing more dependent on one another, buying an increasing share of each other’s exports and integrating their production. Nowhere is that more true than in Asia, where the Chinese economy bears special scrutiny because the fortunes of other Asian economies are dependent on it. Most economists look for China’s GDP growth to slow from

6.7% in 2017 to about 6.5% this year as the government tries to slow credit expansion to avoid the risk of a sharper slowdown. Investors are watching for signs the government might act to curb the explosive growth of internet and e-commerce giants such as Tencent, Alibaba and JD.com. They want reassurances that policymakers can defuse housing-market speculation, rid state enterprises of excess capacity, and deal with sizeable corporate and public-sector debt.

In 2017, portfolio investors poured back into emerging markets stocks, which ended a three-year slide and enjoyed their biggest net inflows since 2010. But logistics companies and their customers can't jump in and out of markets like stock investors. They have longer time horizons and more at stake. When we

first partnered with Transport Intelligence to create the Index, our objective was to give them more information about emerging markets. The Index and survey offer a snapshot, a look at how these 50 countries stack up against one another in the data and a sense of sentiment about them among logistics industry executives. The Index is not meant to take the place of in-depth market research into an emerging market. Nor will it substitute for deeper conversations and careful analysis of potential commercial and government partners. Still, we believe it will prove useful to companies looking for a deeper understanding of the world's most vibrant markets – and the risks and rewards that await. Thank you for reading.

JOHN MANNERS-BELL, CEO TRANSPORT INTELLIGENCE

Despite the political uncertainty which has affected many countries and regions around the world, global economic development has been largely unaffected. This has been of critical importance to emerging markets with key trade lanes benefitting from vigorous growth in North America and healthy business activity in Europe. Even Japan has shown signs of shrugging off years of stagnation.

This year's Agility Emerging Markets Logistics Index reflects this sentiment. Trade has picked up significantly since 2016, with growth in the mid-to-high single digits. There has been a boom in air cargo meaning that space has been at a premium and sea freight volumes have also been strong. The survey contained within the Index reinforces this positivity with a large majority of respondents agreeing with the International Monetary Fund that 2018 will be even stronger.

It is also apparent that emerging markets are now confidently playing an important role in nurturing and developing technologies which will influence the future of industry around the world. Countries such as China and India are embracing 'Industry 4.0', investing heavily in innovations which are starting to revolutionize global business, banking and supply chains. China, for example, is the world's largest market for electric vehicles and is targeting global domination of the battery market. India has two of the world's best-funded new generation road freight tech start-ups. For many years, emerging markets have

aspired to move up the value chain and reduce their dependence on the West. It seems that this is now starting to happen.

However, despite the generally positive mood, it would be dangerous to become too complacent. Whilst macro indications are good, many of the world's most important emerging markets face significant challenges. Economists are particularly worried about China's so-called debt 'mountain' which at some point will need to be addressed. Another of the world's most important markets, Saudi Arabia, is going through a period of political upheaval which has added to instability in the region; Brazil's corruption scandals threaten a fledgling recovery and nascent reforms.

The problems lie not just in some of the world's largest emerging markets. It seems inevitable that the political uncertainty in North America and Europe will have economic ramifications. The NAFTA renegotiations could severely impact trade between the US, Mexico and Canada, affecting many other regions as well due to the nature of cross-border supply chain networks which have developed in sectors such as automotive. In Europe the stakes are even higher. Issues such as Brexit, the Catalanian question in Spain, difficulties in forming a German government, the election of anti-EU politicians in key countries, not to mention the threat of Russian expansionism in Eastern Europe, all point to future turbulence in Western economies with potential consequences for emerging markets.

As for now, though, a robust global economy has shrugged off such considerations. As indicated by the research undertaken for this report, emerging markets are becoming increasingly important to the world's economic health, both in terms of

consumer markets but also in value adding manufacturing. This will create a more balanced and resilient economy in a better position to face whatever political shocks may occur in the coming years.



Sources

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 market size and growth prospects, market compatibility or overall business climate, and market connectedness or transport infrastructure and customs/border efficiency. Second is an examination, by volume and mode of transport, of the largest and fastest-growing major trade lanes linking emerging and developed markets. Third is a survey of trade and logistics industry professionals.

The Index country rankings are underpinned by data from the International Monetary Fund, Organisation of Economic Co-operation and Development, World Bank, government statistical agencies, United Nations and UN agencies, World Economic Forum, International Trade Centre and International Air Transport Association.

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 characterised 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':

- Market Size & Growth Attractiveness (50% of overall Index score)
- Market Compatibility (25% of score)
- Market Connectedness (25% of score).

Market Size & Growth Attractiveness (MSGA) rates a country's economic output, its projected growth rate, financial stability and population size.

Market Compatibility rates emerging markets according to their market accessibility and business regulation, foreign direct investment (FDI), market risk and security threats, as well as

the level of likely demand for logistics services based on the country's economic development.

Market Compatibility is a blend of:

- A country's development through the importance of its service sector – indicative of the level of outsourcing of logistics services
- Urbanisation of population – a driver of manufacturers' centralised distribution strategies and the likely consolidation of retailing
- Distribution of wealth throughout the population – indicative of the widespread need for higher value goods often produced by international manufacturers, as measured by the Gini Index
- Foreign Direct Investment (FDI) – an indicator of the penetration of an economy by international companies
- Market accessibility – how easy it is for foreign companies to enter the market and deal with existing bureaucracy and regulation
- Security – this measures the risk to companies' operations from threats such as theft, piracy and terrorism.

Market Connectedness assesses a country's domestic and international transport infrastructure and how well they connect.

Specifically, this involves:

- The frequency and range of destinations of its liner shipping connections
- The level of airport infrastructure relative to the market's size
- A rating of its overall transport infrastructure

- A rating of the efficiency of its customs and border controls.

The Agility Emerging Markets Logistics Index for Countries with GDP more/less than US\$300bn

GDP is measured in current US\$. GDP data has been obtained from the World Bank.

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 10 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

For air and sea, by imports and exports, the 25 fastest-growing trade lanes for each case have been ranked by their growth in 2017. In addition, an index has been calculated with a base year of 2005 to offer a long-term perspective on each trade lane's performance.

2005-2016 data are 'actual' figures, whereas 2017 data are forecast figures based on actual monthly data from January-July 2017. A forecast model which accounts for seasonality has been applied to estimate full-year 2017 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 1m 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.



Key Findings

EMERGING MARKETS: HOW LOGISTICS EXECUTIVES SEE THEM

More than 500 supply chain and logistics executives worldwide shared their views of the 2018 global economic outlook, prospects for emerging markets, key growth drivers and trends affecting emerging markets countries.

- Logistics executives are optimistic and share the IMF's view that 2018 will be a stronger year for emerging markets. Nearly two-thirds (65.1%) say the IMF's 4.8% emerging markets growth forecast is "about right." Last year, a significant minority (42.8%) said the IMF was being too optimistic in forecasting 2017 emerging markets growth of 4.6%. Optimism about emerging markets is especially notable because the IMF predicts that China's economy – the most dominant among emerging markets – will slow slightly in 2018.
- Small and medium-size businesses – those with fewer than 250 employees – are going to be the biggest beneficiaries of emerging markets growth, industry executives believe. Fifty-six percent say SMEs operating in emerging markets will grow the fastest; 26.2% say large companies will grow faster.
- Supply chain professionals are baffled by the Trump administration's high-stakes brinkmanship over NAFTA and cannot agree on who will win and lose in renegotiations. Logistics executives were split on whether an updated agreement would help Mexico (24.3%); hurt Mexico (21.8%); or leave trade broadly unchanged (25.7%). The original agreement, widely credited with generating growth in the United States, Canada and Mexico since it went into effect in 1994, has been derided by President Trump as the "worst deal ever made." U.S. negotiators have taken a hard line in renegotiating talks.
- Industry executives see poor governance (40.78%) as the biggest obstacle to growth in Brazil, but a larger percentage (29.13% vs. 21.1% a year ago) blame outright corruption.
- India's Goods & Services Tax unification and other economic reforms have been greeted favorably by the logistics industry. The percentage of professionals who said their companies are now considering investment in India jumped from 22.8% a year ago to 37.4% in the latest survey.
- Infrastructure is playing a larger role in the industry's view of Sub-Saharan Africa. A much larger percentage of supply chain professionals (21.4% vs. 15.2% a year earlier) identified rapid infrastructure development as a significant driver in African growth. A greater percentage (16.7% vs. 12.2%) said poor connectivity and links between economic centres was one Africa's biggest challenges. Finally, industry executives cited poor infrastructure as Africa's biggest supply chain risk, ahead of corruption, government instability and terrorism.
- Few in the logistics industry see reason to worry the UK's departure from the European Union will damage emerging markets economies, even though Brexit will force the UK to negotiate its own trade agreements with non-EU countries. Nearly 45% of executives say emerging markets will be unaffected; 25.4% said emerging markets stand to gain from Brexit.
- Supply chain executives believe Amazon will overcome its struggles in China, the world's largest online retail market. Amazon's meager 1.3% share of the market is dwarfed by homegrown Alibaba (47%) and JD.com (20%), but logistics professionals are believers in Amazon: 56.4% say Amazon

will have a significant presence in Chinese cross-border e-commerce.

- India and China remain, by far, the leading investment destinations for the logistics industry. Vietnam leads a second group that includes UAE, Brazil and Indonesia. Among the countries drawing increased interest from the industry: South Africa, Malaysia, Turkey, Philippines, Thailand, Myanmar, Kenya, Egypt and Bangladesh. Countries attracting less investment interest from the logistics industry: Brazil, Russia, Saudi Arabia, Mexico and Nigeria.
- Supply chain risks differ by region. In Asia Pacific, the top

concern is economic shocks; in Latin America, corruption; in the Middle East and North Africa, terrorism is the leading worry; and in Sub-Saharan Africa, poor infrastructure. Overall, corruption and poor infrastructure are the leading concerns that logistics executives have in doing business in emerging markets.

- Cheap labour continues to slip as a prime factor in how logistics professionals view emerging markets. They rank economic growth, foreign direct investment, trade volumes, location and transport infrastructure ahead of cheap labour as keys to making a country an important emerging market.

MARKETS ON THE MOVE

Broadly speaking, the Index is a gauge of emerging markets' competitiveness. The performance of most countries in the 50-nation Index was relatively stable from year to year, but in a few instances noted below there was considerable volatility. And despite optimism at the IMF and among logistics executives surveyed for the Index, there are factors that have the potential to cloud the 2018 emerging markets outlook, among them: debt in China; the Saudi reform agenda; the direction of NAFTA renegotiations; and Brazil's political turmoil.

- Among the largest emerging markets, the so-called BRICs countries, China and India topped the Index again and put more distance between themselves and No. 3 UAE. But the biggest movers were Russia (up three spots to No. 7) and Brazil (falling two places to No. 9).
- Russia's economy, shrinking under the weight of low oil prices and western economic sanctions, stabilized and showed modest growth. The "OPEC+" production agreement struck with Russia has benefitted the economy, as has a wave of corporate cost-cutting, banking industry consolidation and economic reform. Improvements in business conditions pushed Russia up five spots to No. 13 in the Market Compatibility area of the Index. Logistics industry executives surveyed for the Index remain wary, making Russia only their No. 9 pick as a major logistics market of the future.
- The much-anticipated revival of Brazil's economy stalled again. The country remains preoccupied with a sprawling corruption

scandal and hamstrung by years of depressed prices for key commodities and agricultural products. Brazil's chronic infrastructure deficiency sent it falling from No. 28 to No. 32 in the Market Connectedness portion of the Index, where it trails Kenya and Libya among others.

- Egypt surged six spots to No. 14, the largest jump by any country in this year's Index. The improvement in Egypt's business conditions is reflected by the astonishing 26-spot jump it made in the Market Compatibility portion of the Index, among the largest leaps by any country in any category in the nine years since the Index was first compiled. Infrastructure investment helped push Egypt's Market Connectedness rank to No. 20, up three places. Egypt helped secure IMF loans and an endorsement of its economic reforms by agreeing to float its currency and cut subsidies.
- Gulf countries continue to set the pace when it comes to best emerging markets business conditions. UAE, Qatar, Oman and Bahrain outpaced all other countries. Saudi Arabia was No. 8. Kuwait fell six spots to No. 16, despite embarking on an ambitious reform and diversification drive intended to pull in foreign investment. Gulf countries also dominate in quality of infrastructure, where UAE (1), Bahrain (5), Oman (6), Saudi Arabia (7) and Qatar (8) were all stellar performers in the category of Market Connectedness.
- Africa's largest economy, Nigeria, tumbled seven spots to No. 31 in the Index, where its infrastructure gives in the next-to-

last ranking and business climate is 46th out of 50 countries. Low oil prices, corruption and political uncertainty have acted as drags on the economy and dampened optimism about the fast-growing markets for consumer goods and sophisticated logistics services.

- Venezuela fell 15 spots to dead last out of 50 countries in Market Size and Growth Attractiveness as its economy imploded. Venezuela slid four spots in the overall Index to No. 48, ahead of only Mozambique and Angola. President Nicolas Maduro announced plans to stabilize the economy through the introduction of a new virtual currency backed by the country's oil, gas, gold and diamonds, but he gave no details and his plan was widely derided.
- Bangladesh and Uruguay improved their Index rankings significantly, each jumping four spots. No. 23 Bangladesh, with a population the size of France, Germany and the Netherlands combined, has grown at 6%+ for seven years (7.28% in 2017) and has the potential to emerge as a new Asian Tiger. Today, 14% of its population lives in extreme poverty vs. 40%+ in 1991, the World Bank says. Bad debt and overreliance on the textile and garment sector remain risks. Tiny Uruguay, sandwiched between Brazil and Argentina, has shown steady economic growth and prides itself on transparency, rule of law and the prosperity of a broad, stable middle class.
- Qatar defied the odds in this year's Index, improving its overall ranking one spot to No. 11; upping its infrastructure or Market Connectedness ranking by two spots to No. 8; and holding steady at No. 2 for Market Compatibility, a gauge of business conditions. Among Index countries with annual GDP of less than \$300bn, it leaped over Chile to No. 2 behind only Malaysia. The world's largest producer and exporter of LNG is on pace to grow faster than any GCC country in 2017, despite efforts by neighbouring Saudi Arabia and UAE to isolate it diplomatically and economically. Qatar has invested heavily in logistics centres, special economic zones, port infrastructure and road networks.
- Kazakhstan slumped six places to No. 20 in the Index, despite increased oil production that helped lift growth from 1.1% in 2016 to an estimated 3.8% in 2017. The country's long-term development blueprint, released in November, suggests an emphasis on high-tech and green industries and diversification from commodities but was criticized as vague. Kazakhstan's Market Connectedness, or infrastructure, slipped five spots to No. 14 in this year's Index.
- Algeria, Ukraine and Ethiopia were among the countries making big strides in improving business conditions. Each jumped in the Market Compatibility portion of the Index. The business climate deteriorated in Sri Lanka, Cambodia, Tanzania, Lebanon and the Philippines.
- Countries showing the biggest improvement in infrastructure or Market Connectedness were India, Indonesia, Turkey, Egypt, Iran, Pakistan, Argentina and Bangladesh. Infrastructure rankings fell for Kazakhstan, Sri Lanka, Colombia, Brazil, Thailand and Kuwait.

Markets on the Move



UP

BIGGEST MOVERS

POS	COUNTRY	CHANGE IN SCORE
1	Egypt	0.44
2	Qatar	0.24
3	Bangladesh	0.21
4	Pakistan	0.19
5	Thailand	0.15
6	Ethiopia	0.15
7	Iran	0.13
8	Vietnam	0.13
9	China	0.13
10	Peru	0.12

DOWN

BIGGEST MOVERS

POS	COUNTRY	CHANGE IN SCORE
1	Venezuela	-0.40
2	Nigeria	-0.34
3	Brazil	-0.20
4	Kazakhstan	-0.19
5	South Africa	-0.19
6	Saudi Arabia	-0.19
7	Cambodia	-0.13
8	Kuwait	-0.12
9	Sri Lanka	-0.11
10	Angola	-0.10

TRADE LANES: THE LARGEST AND FASTEST-GROWING AIR AND SEA ROUTES

Summary

- In line with the turnaround in global trade, volume growth has picked up substantially in emerging markets in 2017. For most of 2016, emerging markets suffered low or no trade growth, until green shoots emerged towards the end of the year.
- That momentum continued into 2017 and year-on-year emerging markets import volume growth has been in the high single digits for most of 2017. The turnaround in exports has not been as drastic, but growth has still been in the mid-to-high single digits for much of the year.
- Alphaliner estimates that global port container handling volumes increased by 6.7% in the first six months of 2017. As for air freight, 2017 has been a banner year. According to WorldACD, September 2017 marked the 13th consecutive month of year-on-year volume growth in excess of 5% and was the “first month in a long time in which growth remained below 10%.”
- It seems that much of the global rebound in 2017 was driven by re-stocking, given that the pickup in global air freight traffic growth in 2017 was mirrored by a clear fall in the inventory-to-sales ratio.
- Looking ahead, unless another unexpected increase in demand arises, this effect will not persist into 2018 and lower growth should be expected. The consensus among sea freight analysts seems to be that 2018 growth in containerised trade volumes will fall somewhere in between the low growth performance of 2016 and the very strong year of 2017, with 3-4% a reasonable central estimate.

Air Freight to Emerging Markets

- The busiest emerging markets air freight lanes originating in the EU or US tend to connect to larger emerging markets in the Index: China, UAE, India, Mexico, Turkey, Saudi Arabia, Brazil, Russia and South Africa. Volume growth for five of these lanes in 2017 is forecast to be in the double-digits, while three more are in the high single digits. EU-South Africa is predicted growth of 3.8%, while EU-Saudi Arabia is the only lane where a volume contraction should be expected.
- The five fastest-growing trade lanes in 2017 are EU-Ukraine (+40.9%), EU-Qatar (+39.4%), EU-Angola (+38.3%), US-Ecuador (+33.3%) and US-Russia (+30.8%).

- EU air shipments to emerging markets are on pace to increase by 10.2% for 2017, while US air shipments to those same markets look set to grow by 9.1%.

Air Freight from Emerging Markets

- Flowing in the other direction – from emerging markets to the EU and US – the picture is more mixed. Five of the top 10 lanes are anticipated double-digit growth, including the crucial two Chinese lanes, which account for almost half of emerging markets tonnage alone. However, three are expected to contract (Ethiopia-EU, Mexico-EU and Chile-US), while the key export lane for flowers of Kenya-EU is forecast tonnage growth of just 0.5%.
- The five trade lanes forecast for the fastest growth in 2017 are Cambodia-EU (+44.1%), Indonesia-EU (+38.6%), Sri Lanka-EU (+34.3%), Ghana-EU (+32.6%) and Philippines-EU (+25.0%).
- Air freight shipments from the Index’s 50 emerging markets countries to the EU are projected to increase by 7.3% and shipments to the US will grow by 9.7%.

Ocean Freight to Emerging Markets

- US and EU ocean freight to China accounts for over a quarter of all tonnage to the Index’s 50 emerging markets. US-China ocean freight volumes are predicted to drop by 5.0% in 2017 (though containerised freight is doing better), as EU-China volumes increase by 6.7%.
- US-Mexico (+13.3%) is the best performer among the top 10 lanes, followed by EU-Turkey (+9.5%) and US-Colombia (+8.7%).
- Among the 25 fastest-growing lanes, several are experiencing drastic increases in cereals tonnage and other bulk goods. Among EU/US origin ocean freight lanes it is almost always bulk goods that drive sharp volume growth swings.
- The five trade lanes forecast for the fastest growth in 2017 are US-Bangladesh (+110.1%), US-Nigeria (+73.9%), US-Malaysia (+45.0%), US-Pakistan (+38.0%) and EU-Russia (+31.0%).
- Overall, EU-origin trade lanes are set for growth of -3.8% in 2017, while the corresponding figure for US lanes is 3.3%.

Ocean Freight from Emerging Markets

- Emerging markets sea freight exports are much more diverse compared to imports, which are overwhelmingly comprised of agricultural goods.
- This is best exemplified by the largest exporter of all, China, whose most important export groups include a vast array of manufactured goods. In 2017 China-US ocean freight volumes are expected to increase by 7.2%, while China-EU will see more tepid growth of 1.8%.
- The rest of the top 10 is a mixed bag: Ukraine-EU (+32.3%), India-EU (+23.8%) and Turkey-EU (+21.0%) are some strong performers, but Mexico-EU (-7.9%), Russia-EU (-6.0%) and Brazil-EU (-5.8%) volumes are forecast to contract.
- The five trade lanes forecast the fastest growth in 2017 are Qatar-EU (+121.7%), Nigeria-EU (+78.9%), Egypt-US (+75.0%), Ukraine-US (+70.9%) and Morocco-US (+58.1%).
- Overall, EU ocean freight from emerging markets origins is predicted to grow by 6.8% in 2017, while inbound US ocean freight is projected to decline 9.8%.



Overview & Outlook

Entering 2018, the global economy is clearly in an upswing; some may even call it a boom. And despite continued upward revisions throughout 2017, measures of global activity are continuing to overshoot expectations. US and Eurozone growth are looking healthy, and Japanese growth is also running above trend. This favourable international backdrop is particularly helpful for emerging market exports.

Nevertheless, the global economy remains vulnerable to a range of downside risks. These include a faster and greater tightening of global financial conditions, which may well transpire if the US Federal Reserve increases its base rate sooner than expected or by more than anticipated. Possible financial turmoil may also arise if China fails to counter risks associated with its expansion of credit. If a shock occurs that causes a growth slowdown in China, this would have adverse consequences for other economies through weaker trade, commodity prices and confidence. The IMF also asserts that there is a chance that a shift towards more protectionist policies would reduce trade and cross-border investment flows, harming global growth.

Agility and Transport Intelligence's own research suggests that emerging markets are in a period of relative stability. The Index is a broad gauge of competitiveness in terms of market size and growth, business climate, infrastructure and transport connections. Of the 50 emerging markets measured, the scores of just 22 changed significantly (by more than 0.10). The corresponding figure for the previous year was 30.

Though just as the global economy looks vulnerable to various shocks, many crucial storylines in emerging markets have not yet played out or have had just a partial impact on the data that would alter their Index scores. Such narratives include China's debt mountain, India's economic reforms, the blockade of Qatar,

Saudi Arabia's changing regime and reform agenda, tax reforms across the GCC, a number of terrorist incidents and Brazil's corruption scandal to name just a few.

Even putting ongoing political and economic developments to one side, the logistics industry itself is being reshaped by various innovations. Typically, new technologies impact advanced economies first and then steadily trickle down to emerging markets. This however does not apply for many of the innovations affecting the logistics industry.

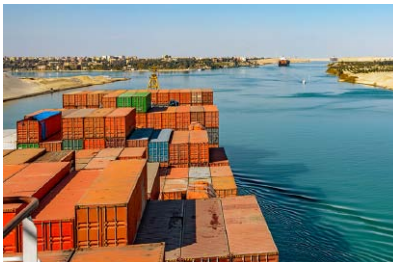
For instance, the funding of various tech-based road freight startups tells a story. Of the world's five best-funded, three are Chinese and two are Indian. This arguably reflects a belief that the opportunity for grabbing a greater share of the market is higher in these markets compared to advanced economies.

Given all the news around Tesla, one would imagine the US is the world's biggest market for electric vehicles; it is actually China.

The biggest threat of all is probably tech-driven 'deglobalisation'. The logic goes that technologies such as improved automation, computerisation and 3D printing will undermine the economics of manufacturing in emerging markets. In future, many companies will instead produce as close to end markets as possible. At the end of 2015, Adidas unveiled its new Speedfactory in Germany. Shoes usually made by hand in Asia are now being made by robots in one of the highest-cost economies in the world. Elsewhere, the United States has seen the likes of GE, Caterpillar, Mars and Kangol return from abroad. According to a Boston Consulting Group survey of American companies with sales of over \$1bn taken around the end of 2015, 17% of companies surveyed are actively reshoring. This percentage

more than doubled between 2012 and 2015. Finbarr Livesey, the author of *From Global to Local*, has stated: “It is likely we will see anything from a 20-30% fall in global merchandise trade (services are not affected the same way) over the coming decade.” If you believe this, deglobalisation is not something to be concerned about in years to come, but now. It would entail a colossal restructuring of global production and significant decline of cross-border supply chains.

Many disagree with his forecast, though almost everybody agrees, as economist Diane Coyle puts it, “that the technological, political and economic conditions that shaped the world of global supply chains are changing substantially.”



The 2018 Agility Emerging Markets Logistics Index

INDEX HIGHLIGHTS

The Top 10

The rankings of the top four markets – China, India, UAE and Malaysia – remained the same year-on-year.

China retains its position atop the Index thanks to its continued excellence across all three facets of the Index, ranking near the top of the Market Size & Growth Attractiveness, Market Compatibility (business conditions) and Market Connectedness (infrastructure and connectivity) sub-indices. While its Index score and rank did not change much, there is much debate about whether a mountain of debt threatens to undermine its economy over the next few years. Its economic growth rate, which many argue has been held up artificially for years by the funding of unproductive investments, could significantly slow (see the Emerging Narratives section for more information).

India remains second, with its Index score also changing very little. It remains a large emerging market with excellent growth prospects, which is held back by mediocre business conditions and infrastructure (though infrastructure in particular is improving rapidly). Its inertia in the Index this year may surprise some, given the generally positive news surrounding its economic reforms, especially the Goods and Services Tax (GST), but the data is yet to catch up with any impact that such reforms may have had. Many have touted its reforms as ‘game-changing’, and that proposition is examined as an Emerging Narrative.

The UAE is No. 3 once again, staying atop the Compatibility and Connectedness sub-indices, whilst remaining in the middle of the pack of Market Size & Growth Attractiveness. Its fellow GCC partner, Saudi Arabia, is down one place to No. 6, as worsening economic growth forecasts and financial stability took their

toll. While their positions in the Index are stable for now, there is much change brewing on the Arabian Peninsula. Political tensions boiled over in June when Saudi Arabia, Egypt, Bahrain, Yemen and the UAE enforced a blockade of Qatar. Later in the year, an anti-corruption purge swept Saudi Arabia as its young crown prince, Muhammad bin Salman, is set to become ruler. In the background, structural economic changes are taking place as the region takes steps to adjust to a world of cheaper oil. A deeper examination of these dynamics forms another of our Emerging Narratives.

Malaysia is yet another member of the top 10 whose position appears to have changed little as it stays at No. 4 in the Index. However, this disguises significant sub-index variation. It is up three places in Market Size & Growth Attractiveness, on the back of improving financial stability, though its scores declined in Compatibility and Connectedness, due mainly to lower foreign direct investment and poorer overall infrastructure, respectively.

Malaysia’s neighbour Indonesia is up one place to No. 5, on the back of moving up five spots in the Connectedness sub-index. The overall quality of its infrastructure and efficiency of its customs procedures have improved. Indonesia is a large emerging market that has historically been curtailed by middling business conditions and infrastructure, though there are signs that the latter may be turning a corner, as is explored in depth by another Emerging Narrative.

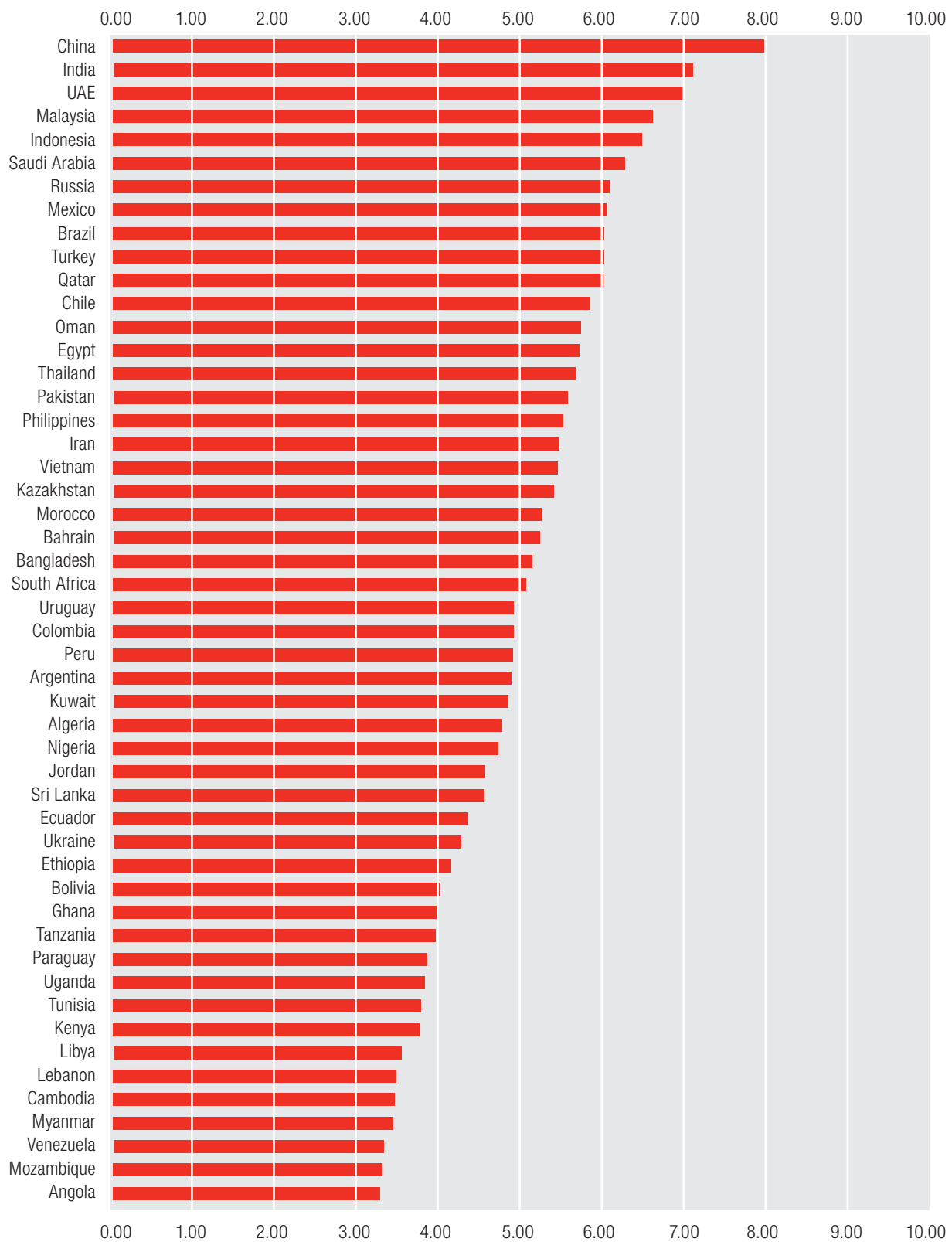
Russia has gained the most places of any country in the top 10, rising three spots to No. 7. It only gained, however, because others around it fell. Russia’s Index score rose by the smallest of margins: just 0.01.

The 2018 Agility Emerging Markets Logistics Index

Ranking	Country	2018 Index	2017 Index	Change in Ranking
1	China	8.00	7.88	-
2	India	7.12	7.14	-
3	UAE	7.01	7.07	-
4	Malaysia	6.63	6.66	-
5	Indonesia	6.50	6.41	1
6	Saudi Arabia	6.29	6.48	-1
7	Russia	6.10	6.09	3
8	Mexico	6.06	6.15	-
9	Brazil	6.03	6.23	-2
10	Turkey	6.03	6.09	-1
11	Qatar	6.02	5.78	1
12	Chile	5.86	5.88	-1
13	Oman	5.75	5.62	-
14	Egypt	5.73	5.29	6
15	Thailand	5.68	5.53	-
16	Pakistan	5.58	5.39	1
17	Philippines	5.53	5.42	-1
18	Iran	5.48	5.35	-
19	Vietnam	5.46	5.33	-
20	Kazakhstan	5.41	5.60	-6
21	Morocco	5.26	5.23	1
22	Bahrain	5.24	5.16	1
23	Bangladesh	5.15	4.94	4
24	South Africa	5.07	5.26	-3
25	Uruguay	4.92	4.90	4
26	Colombia	4.92	4.99	-1
27	Peru	4.91	4.78	3
28	Argentina	4.89	4.94	-
29	Kuwait	4.85	4.98	-3
30	Algeria	4.78	4.73	1
31	Nigeria	4.73	5.07	-7
32	Jordan	4.57	4.58	1
33	Sri Lanka	4.56	4.67	-1
34	Ecuador	4.36	4.44	-
35	Ukraine	4.27	4.14	-
36	Ethiopia	4.15	4.00	1
37	Bolivia	4.02	4.03	-1
38	Ghana	4.00	3.97	1
39	Tanzania	3.96	3.98	-1
40	Paraguay	3.86	3.86	-
41	Uganda	3.83	3.81	-
42	Tunisia	3.78	3.78	-
43	Kenya	3.76	3.76	-
44	Libya	3.54	3.57	2
45	Lebanon	3.48	3.50	2
46	Cambodia	3.46	3.58	-1
47	Myanmar	3.44	3.45	1
48	Venezuela	3.32	3.72	-4
49	Mozambique	3.31	3.38	1
50	Angola	3.28	3.38	-1

Source: Transport Intelligence

The 2018 Index



Source: Transport Intelligence

Mexico remains at No. 8, although its score fell by 0.09 points as it lost ground across all three sub-indices. Its most notable change was a downgrade in its economic forecasts. A big question mark over its future is the renegotiation of NAFTA and the subsequent impact on supply chains. Our Emerging Narrative asserts that trade patterns are likely to change regardless of whether negotiations succeed or collapse.

The worst performer in this year's top 10 is Brazil. Its score fell by 0.20, more than any other country, seeing it drop to No. 9. All three of its sub-index scores fell this year, with Market Size & Growth down the most acutely (-0.33). Poorer economic

forecasts and worsening measures of financial stability are to blame. Brazil hung on to its place in the top 10 by a thread, with its score the smallest possible margin (0.01) ahead of Qatar, ranked No. 11. That the world's ninth-largest economy and third biggest in the Index is on the cusp of dropping out of the top 10 is a clear indicator of just how much Brazil has struggled. We examine whether it is likely to escape its political crisis any time soon in another Emerging Narrative.

Turkey rounds off the top 10, falling by one place year-on-year, as its position remained relatively stable across all three sub-indices.



Agility's Take / China

China's economy continues to grow at a 6.7% to 7% clip. Key indicators, including surging exports and a spike in air freight volumes, spurred optimism in late 2017 that the economy might be picking up steam after dipping to a 26-year low in 2016.

The 2015 stock market meltdown startled China's leadership, which is sharply focused on the need to manage a delicate balancing act: encouraging growth and "higher quality development" while addressing the obvious risks of massive public and corporate debt levels, troubled banks, and overheated housing market. Economists expect the central government to rein in certain kinds of investment, encourage local governments and state enterprises to lighten their debt loads, and look for ways to cool off speculation in the housing market without dampening consumer spending.

Chinese consumers continue to do

their part for an economy once fueled almost entirely by exports. Consumers are responding with gusto to "shopping festivals" promoted by e-commerce giants such as Alibaba and JD.com. Singles Day in November is four times larger than the Black Friday and Cyber Monday shopping extravaganzas in the United States, generating an estimated \$25bn in one-day sales in 2017. Singles Day is now only one of an almost monthly series of shopping events, which have contributed to e-commerce sales of nearly \$800bn annually. Fortune magazine says this is only the beginning for China's still-emerging 300m-member middle class. The magazine notes that China has 730m internet users, accounts for 40% of global retail e-commerce, and has a mobile payment market 11 times the size of the U.S. market.

Exciting developments in China include its aggressive move to build smart,

connected cities and become a leader in next-generation, 5G telecommunications. It is already a leader in manufacturing automation. At the same time, it must figure out how to cope with industrial pollution and environmental degradation on a massive scale and find ways to improve productivity in bloated state industries.

A big concern is the possibility of a serious confrontation with the United States on a range of prickly trade issues. The Trump administration contends that price controls, subsidies and other intervention in the economy by Beijing distort the prices of Chinese goods. The United States recently gave formal notice of its opposition to China gaining "market economy" status at the World Trade Organization. Such a designation would limit the ability of the United States and other WTO countries to impose anti-dumping duties on Chinese goods.

BIGGEST MOVERS UP

Egypt (+0.44, up 6)

Egypt (No. 14) moved up more places in the Index and increased its score by more than any other country. It made solid gains in Connectedness, as the quality of its infrastructure improved markedly, while business costs associated with crime, violence and terrorism are judged to have turned around, driving its Compatibility sub-index rank up by 26 places.

This reflects relative political stability following the crisis years of 2011 to 2014, which saw Hosni Mubarak removed from office and the proceeding Islamist president Mohamed Morsi being overthrown in 2013, before things finally began to stabilise with the election of current President Abdel Fattah el-Sisi.

The notion that business costs of crime, violence and terrorism have fallen dramatically may seem absurd, given that an attack in November on a mosque in Sinai killed over 300 people. It is believed to be the deadliest attack ever on the country's soil. However, the metric is based on a weighted average of executive

responses from the WEF's Global Competitiveness Index survey from the first quarters of 2017 and 2016, with each response in 2017 given more weight than those in 2016. The November attack has not been taken into account.

Egypt has made clear moves over the last couple of years to normalise its economy, partially to clinch a \$12bn loan from the IMF, the largest ever to a Middle East nation. Egypt floated its currency in November 2016, which saw the value of the Egyptian pound fall by half against the dollar overnight. It has also increased interest rates in a bid to attract foreign currency back. At least \$40bn in investments and transfers from abroad have been secured following the moves. It has returned to the international investment map. The government has also introduced VAT and cut fuel subsidies to improve its fiscal position. The next step is putting in place a robust regulatory environment and continuing with much-needed structural reforms. Overall, the direction of travel for its economy is most certainly up.



Agility's Take / Egypt

Egypt took bold steps to devalue its currency, the pound, and cut government subsidies in hopes it could lure fresh investment, jump-start export industries, revive its tourism sector, and gain support from international institutions such as the IMF. We see reason for optimism. Several of our customers are shifting production lines to Egypt or expanding existing lines in the country to take advantage of Egypt's new cost competitiveness. Some of them aim to use Egypt as a production

and distribution hub to serve Africa and the Middle East. Elsewhere, tourism has been on the increase, though monthly visitor numbers are far below what they were in 2010 and before. The IMF has pledged \$12bn in loans. The central bank has done a good job managing inflation, and a new investment law is likely to entice FDI. Foreign currency reserves have grown, and restrictions on imports have been eased. Important infrastructure projects are underway or

nearing completion, which will strengthen the power grid and enhance Egypt's road system. Businesses want to see inflation remain under control. They are concerned about stability ahead of and after mid-year 2018 presidential elections and wonder if the government of President Abdel Fattah al-Sisi will move ahead with plans to raise energy prices by cutting subsidies in an election year.

Qatar (+0.24, up 1)

The fact that Qatar (No. 11) had the second-highest score increase in the Index is another movement that may turn heads, given its ongoing blockade since June 2017. As with the Egyptian terror attacks, this is a development that has not yet had a chance to fully impact the data that underpins the Index.

But whether it will adversely impact Qatar's score is an open

question. It appears to be managing the situation well (see Emerging Narratives for more).

Qatar made significant gains in Compatibility as economic diversification progressed and non-tariff barriers were judged to be less of a burden, while Connectivity improved thanks to better liner shipping connections. However, its improvement should be treated cautiously as the data has not yet had a chance to really take account of the impact of its blockade.

Bangladesh (+0.21, up 4)

Bangladesh (No. 23) has recorded the third-highest improvement in its Index score. It made gains across all three facets of the Index, but its most notable gains were in the Market Size & Growth and Compatibility sub-indices. Its economic forecasts improved year-on-year, while non-tariff barriers and business costs of crime and violence fell sharply.

Some are referring to it as the new 'Asian Tiger', a term which refers to the club of countries which experienced rapid growth between the 1960s and 1990s: Hong Kong, Singapore, South Korea and Taiwan. Bangladesh has averaged economic growth in excess of 6% over the past decade.

Many reforms are needed, however. The government is planning to cut red tape so that it takes seven days to start a business, rather than 19.5, and reduce the time it takes for a company to connect to the national grid to 28 days, from 404.

Possibly the biggest concern for Bangladesh going forward is whether its core industry of clothing, textiles and ready-made garments is vulnerable. There are fears that it could lose out to new competing countries in the Horn of Africa, especially

Ethiopia. While many clothing manufacturers are indeed setting up production there, the gulf between them remains enormous. Bangladesh's fashion & textiles exports amounted to \$35.6bn in 2016; Ethiopia's were just over \$100m.

Of more concern is the threat of automation. It has taken a long time for technology to be able to manufacture simple items of clothing efficiently, but that point has now been reached. Tianyuan Garments, a Chinese firm that produces for brands such as Adidas and Armani, has invested \$20m in a 100,000 sq ft factory in Little Rock, Arkansas. Scheduled to open in 2018, the factory will have 21 robotic production lines supplied by SoftWear Automation (staffed by so-called 'sewbots') and will be capable of making 1.2m t-shirts a year.

The Chairman of Tianyuan Garments reckons that, in a completely automated production line, the cost of human labour works out to be about \$0.33 per shirt. In Bangladesh, you pay about \$0.22 in labour costs at the moment to make a denim shirt. The same labour-intensive approach in the United States cost \$7.47. While widespread adoption is years away, Bangladesh's economy is under threat from sewbots. Sooner or later, it needs to diversify.



Agility's Take / Bangladesh

Bangladesh's economy grew at a record 7.28% in 2017, and its manufacturing sector expanded by more than 10%. The country is positioning itself as the next Asian Tiger economy, an attractive investment destination and export-led economy. Goldman Sachs has identified Bangladesh as one of the N-11 emerging markets – or Next Eleven after the BRIC economies of Brazil, Russia, India and China. With a population of 159m

and a young workforce, the country is emphasising investment in transportation and IT/communications networks, water distribution and power generation. The goal is to make electricity available to all Bangladeshis by 2021. Showcase infrastructure projects are the Metro Rail Project extension, intended to ease traffic congestion in Dhaka, and construction of the 6.15-km Padma Bridge, as well as improvements in railways and expansion

of mass transit bus lines. Bangladesh has manufacturing ambitions beyond the ready-made garments and apparel sector. It wants to grow its pharmaceutical, steel, shipbuilding and food processing industries. The main attraction for investors in those industries is Bangladesh's abundance of skilled, easily trainable, low-cost workers.

BIGGEST MOVERS DOWN

Venezuela (-0.40, down 4)

Venezuela (No. 48) is somehow becoming more of a basket case. Dreadful governance is at the heart of it all. Its economy is expected to shrink by 12% in 2017. It has the world's most alarming spike in prices: the IMF thinks inflation will top 650% in 2017 and 2,300% in 2018, rendering its currency virtually worthless. Over 90% of the population can't buy the food it needs, and more than three-quarters of the population lost weight in 2016. According to Transparency International, the Venezuelan government is the most corrupt in the Western Hemisphere. Caracas is possibly the most murderous city in the world.

A curious quirk of its economy, however, makes some logistics operations viable. Due to distortions created by multiple currency and price controls, the cost of sending a package abroad is actually much lower than in nearby countries. For instance, to send a small package to Spain from Venezuela by FedEx costs about \$1.50 at Venezuela's widely used black market rate. It would cost \$56 from Mexico. This may not carry on however. In June 2017, DHL postponed flights to and from Venezuela indefinitely. It did not give a reason, but many airlines have stopped flying there due to an inability to repatriate earnings.

Nigeria (-0.34, down 7)

Nigeria (No. 31) fell by seven places in this year's Index, following a similar collapse last year, meaning it has lost 16 positions in two years. President Muhammadu Buhari spent more than three months in London last summer on sick leave due to a mystery illness which officials refused to identify. In August, seemingly healthy, he returned to resume leadership of a difficult situation. Nigeria's economy shrank by 1.5% in 2016, its first annual contraction in 25 years, thanks to poor revenues from oil exports, which it remains far too dependent on. Crude oil accounts for around 70% of government revenues and over 90% of exports. In addition, Islamist militant group Boko Haram has ramped up attacks on the military and civilians in the north-east.

There are, however, grounds for optimism. Buhari's war on corruption continued in his absence, as Nigerian and U.S.

Justice Department officials seized millions of dollars' worth of property owned by a former oil minister and other officials accused of graft. In addition, the economy emerged from recession in the second quarter of 2017, in part helped by rising oil prices and production.

Moreover, advanced logistics operations are increasingly taking hold. There is a growing demand for sophisticated logistics services, particularly for fast-moving consumer goods brands and food retailers, which are looking for receipt of finished goods, storage, warehouse management and inventory, reconditioning, order preparation, consolidation and distribution.

But for all Nigeria's promise, it remains far too dependent on oil. If the banner growth figures for its middle class and explosion of e-commerce are to be realised in full over the long term, it simply must diversify.



Agility's Take / Nigeria

We see Nigeria turning the corner. Oil prices have begun to recover and growth resumed at the end of 2017. Nigeria is Africa's largest single market with over 200m people. It's got natural resources that provide government revenue and drive the economy. Despite the difficulties of the past three years, significant infrastructure expenditure is ongoing

and more is planned in the 2018 budget. The government is implementing a determined policy to reduce the import of fuel and agricultural commodities and focus on supporting indigenous production. In the medium term, these policies should pay off by creating domestic growth and employment. This, combined with improved governance

and a crackdown on corruption, leads us to believe that the short-term outlook for Nigeria is more positive. The challenge is the government's capacity to stimulate investment and reduce bureaucracy to provide a business-enabling environment to fulfill the evident demand.

Kazakhstan (-0.19, down 6)

Brazil's score actually fell by more (0.20) than Kazakhstan, as discussed in The Top 10 section above. However, Kazakhstan (No. 20) is the next worst performer. It reported declines across all three sub-indices, but suffered worst in Market Size & Growth and Connectedness. Financial stability has worsened. In February 2017, the head of the IMF mission to Kazakhstan asserted that the country's main challenge was cleaning up a banking system saddled with bad loans.

A significant share of Kazakh banks' combined \$80bn assets is tied up in loans to developers and construction companies whose businesses have been hit by a series of property price crashes.

Other sectors of the oil-dominated economy have also suffered from the slump in energy prices, which slowed Kazakhstan's growth to 1% last year from an average of 5.5% in the preceding decade.

Aside from economic factors, Kazakhstan's Connectedness score fell by 0.28, primarily on the back of worsening customs efficiency. While its Law on Investments provides customs duty exemptions for imported equipment and spare parts, this is only if Kazakh-made stocks are unavailable or not up to international standards.

Kazakhstan is yet another economy whose fortunes are tied far too much to the price of oil, making diversification necessary.

Sub-Indices

Ranking	Country	Market Size and Growth Attractiveness sub-index	Market Compatibility sub-index	Market Connectedness sub-index	Total Index
1	China	9.49	6.96	6.85	8.00
2	India	9.46	5.05	5.52	7.12
3	UAE	5.78	8.88	7.43	7.01
4	Malaysia	6.78	6.07	6.76	6.63
5	Indonesia	8.58	4.62	5.11	6.50
6	Saudi Arabia	6.18	6.59	6.25	6.29
7	Russia	6.73	5.85	5.50	6.10
8	Mexico	7.35	4.64	5.33	6.06
9	Brazil	7.32	5.83	4.64	6.03
10	Turkey	6.63	5.54	5.60	6.03
11	Qatar	4.87	8.60	5.95	6.02
12	Chile	5.28	5.99	6.46	5.86
13	Oman	4.17	8.09	6.30	5.75
14	Egypt	6.51	5.19	5.13	5.73
15	Thailand	6.79	4.43	5.06	5.68
16	Pakistan	7.55	3.08	4.65	5.58
17	Philippines	7.58	3.96	4.00	5.53
18	Iran	6.12	5.03	5.00	5.48
19	Vietnam	5.99	5.38	4.89	5.46
20	Kazakhstan	4.60	6.91	5.52	5.41
21	Morocco	4.35	6.15	5.83	5.26
22	Bahrain	3.41	7.03	6.38	5.24
23	Bangladesh	6.43	4.72	3.90	5.15
24	South Africa	5.40	3.76	5.40	5.07
25	Uruguay	3.72	6.63	5.39	4.92
26	Colombia	5.90	2.79	4.93	4.92
27	Peru	5.14	4.47	4.87	4.91
28	Argentina	4.90	5.33	4.65	4.89
29	Kuwait	4.73	5.73	4.52	4.85
30	Algeria	4.68	5.93	4.27	4.78
31	Nigeria	6.58	3.05	3.51	4.73
32	Jordan	3.12	5.85	5.55	4.57
33	Sri Lanka	3.77	4.93	5.26	4.56
34	Ecuador	2.89	4.74	5.86	4.36
35	Ukraine	3.50	5.10	4.70	4.27
36	Ethiopia	3.83	4.51	4.32	4.15
37	Bolivia	3.07	5.71	4.21	4.02
38	Ghana	3.11	5.12	4.43	4.00
39	Tanzania	3.45	4.46	4.29	3.96
40	Paraguay	3.11	4.54	4.36	3.86
41	Uganda	3.26	3.71	4.55	3.83
42	Tunisia	3.33	4.04	4.16	3.78
43	Kenya	3.55	2.44	4.74	3.76
44	Libya	3.04	1.76	5.09	3.54
45	Lebanon	2.69	4.02	4.11	3.48
46	Cambodia	2.86	4.10	3.80	3.46
47	Myanmar	3.74	2.53	3.60	3.44
48	Venezuela	2.62	3.85	3.85	3.32
49	Mozambique	2.77	3.56	3.80	3.31
50	Angola	3.31	3.34	3.22	3.28

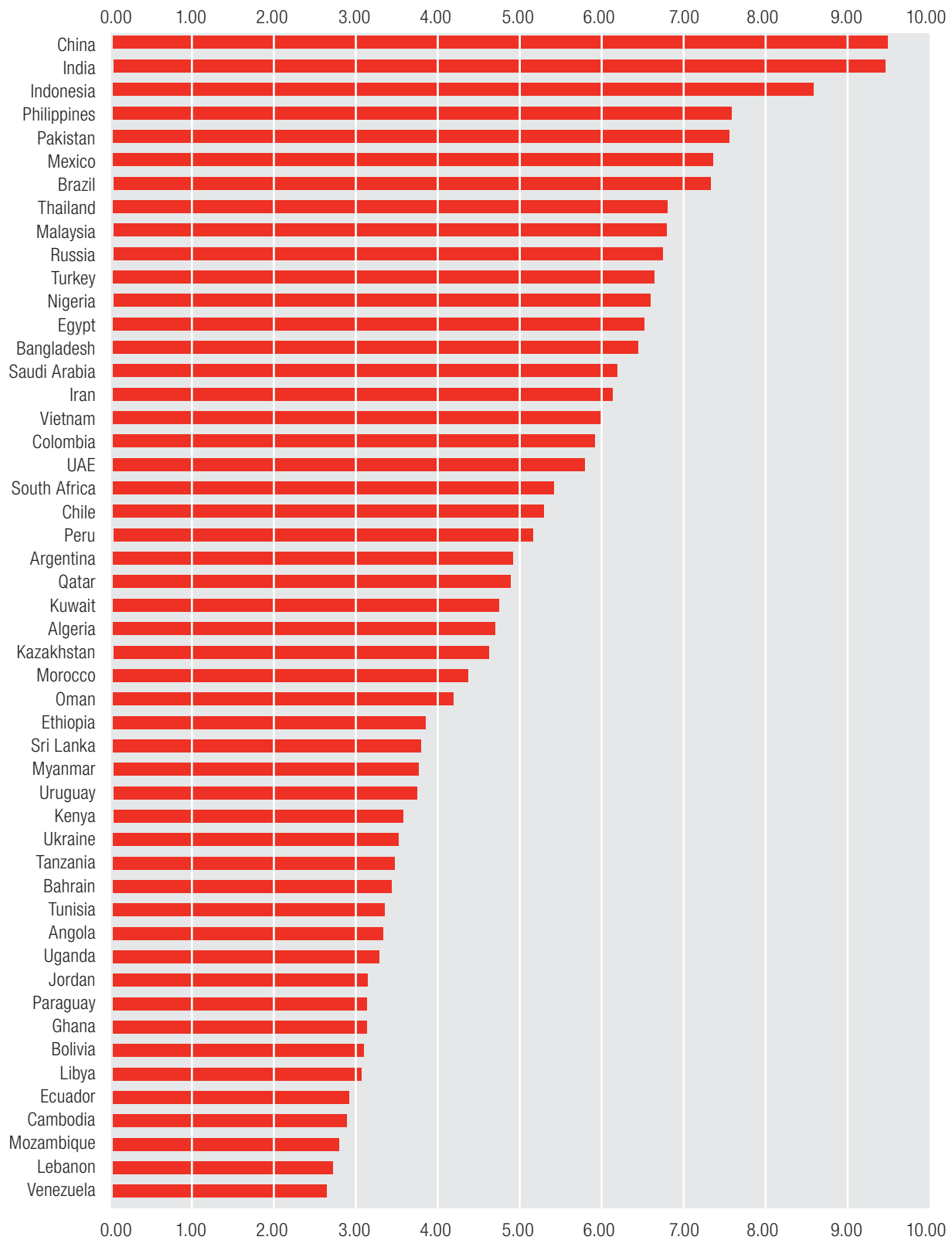
Source: Transport Intelligence

Market Size & Growth Attractiveness Sub-Index

Ranking	Country	Market Size and Growth Attractiveness sub-index 2018	Market Size and Growth Attractiveness sub-index 2017	Change in Rank
1	China	9.49	9.23	1
2	India	9.46	9.39	-1
3	Indonesia	8.58	8.64	-
4	Philippines	7.58	7.03	4
5	Pakistan	7.55	7.25	1
6	Mexico	7.35	7.42	-1
7	Brazil	7.32	7.65	-3
8	Thailand	6.79	6.53	5
9	Malaysia	6.78	6.65	3
10	Russia	6.73	6.80	-1
11	Turkey	6.63	6.76	-
12	Nigeria	6.58	7.07	-5
13	Egypt	6.51	6.77	-3
14	Bangladesh	6.43	6.05	1
15	Saudi Arabia	6.18	6.48	-1
16	Iran	6.12	5.98	-
17	Vietnam	5.99	5.73	1
18	Colombia	5.90	5.94	-1
19	UAE	5.78	5.73	-
20	South Africa	5.40	5.52	-
21	Chile	5.28	5.29	-
22	Peru	5.14	4.94	2
23	Argentina	4.90	5.16	-1
24	Qatar	4.87	4.71	2
25	Kuwait	4.73	4.69	2
26	Algeria	4.68	5.02	-3
27	Kazakhstan	4.60	4.81	-2
28	Morocco	4.35	4.34	-
29	Oman	4.17	4.12	-
30	Ethiopia	3.83	3.72	-
31	Sri Lanka	3.77	3.44	6
32	Myanmar	3.74	3.69	-1
33	Uruguay	3.72	3.56	1
34	Kenya	3.55	3.61	-1
35	Ukraine	3.50	3.62	-3
36	Tanzania	3.45	3.44	2
37	Bahrain	3.41	3.45	-1
38	Tunisia	3.33	3.28	2
39	Angola	3.31	3.31	-
40	Uganda	3.26	3.18	1
41	Jordan	3.12	3.05	3
42	Paraguay	3.11	3.06	1
43	Ghana	3.11	3.12	-1
44	Bolivia	3.07	3.01	1
45	Libya	3.04	2.97	1
46	Ecuador	2.89	2.92	1
47	Cambodia	2.86	2.80	1
48	Mozambique	2.77	2.78	1
49	Lebanon	2.69	2.71	1
50	Venezuela	2.62	3.55	-15

Source: Transport Intelligence

Market Size and Growth Attractiveness Sub-Index



Source: Transport Intelligence

Highlights

The Market Size & Growth sub-index ranks participants according to criteria measuring population, size of economy, economic growth forecasts and financial stability. With absolute population and size of economy relatively constant measures year-on-year, what tends to drive change are shifts in growth forecasts and financial stability. This year, 29 countries improved their four-year ahead economic forecasts. Downgrades have been suffered by 21.

Perhaps the most symbolic movement in the sub-index is China reclaiming top spot from India, which was viewed as something of a changing of the guard last year. China has retaken the lead on the back of slightly improved economic forecasts, whereas the reverse is true for India. Both countries, however, improved their scores overall and India lies just 0.03 points behind. Although China reclaimed the lead this year, over the next few years it is expected that India will establish a clear gap at the top. This is on the basis that, looking forward, India's economic growth prospects and financial stability look more robust than China's (see China's Emerging Narrative for more).

Many oil-dependent economies were the biggest movers down. Brazil lost three spots, Nigeria fell by five, while Venezuela sunk 15 places to rank bottom of the list. Brazil's financial stability has taken a big hit, Nigeria's growth forecast has been revised down sharply, while Venezuela has suffered in both regards. That the country which is the 16th largest economy of the 50 emerging markets (according to 2013 data, the latest available) ranks last in Market Size & Growth shows just how disastrous its economic prospects and financial stability are.

Some notable improvers this year are Sri Lanka (up 6), Thailand (up 5) and the Philippines (up 4).

Sri Lanka's financial stability has improved markedly. An IMF visit to Sri Lanka, concluded in September 2017, noted that its rebuilding of foreign reserves has strengthened the economy's

resilience. In addition, it commended the government for "strong efforts in implementing their IMF-supported economic reform program with all quantitative performance targets through end-June 2017 having been met and the landmark Inland Revenue Act (IRA) legislation passed by Parliament." The IRA will take effect from April 1, 2018, and will effectively simplify the tax system to create a more investor-friendly environment. Sri Lanka is hoping to attract more foreign direct investment. In November 2017 there was initially encouragement for foreign LSPs when Sri Lanka's finance minister announced that restrictions on foreign ownership of shipping agency and freight forwarding businesses would be removed. Later in the month, however, the shipping minister vociferously announced his opposition, asserting: "This is not a subject for the finance ministry, nor should it have come up in the budget", adding "The President is firmly against this move."

Elsewhere, Thailand moved up five spots thanks to slightly improved growth forecasts and improved financial stability. Thailand's central bank has kept its benchmark interest rate unchanged at 1.5% since 2015, rebuffing calls from the IMF and the government to loosen policy. The Bank of Thailand has argued that a rate cut may increase financial stability risks. It has also fended off claims of currency manipulation as it boosts foreign-exchange reserves close to a record. President Donald Trump's executive order to probe 16 countries that run the largest bilateral trade deficits with the United States poses a risk for export-dependent Thailand.

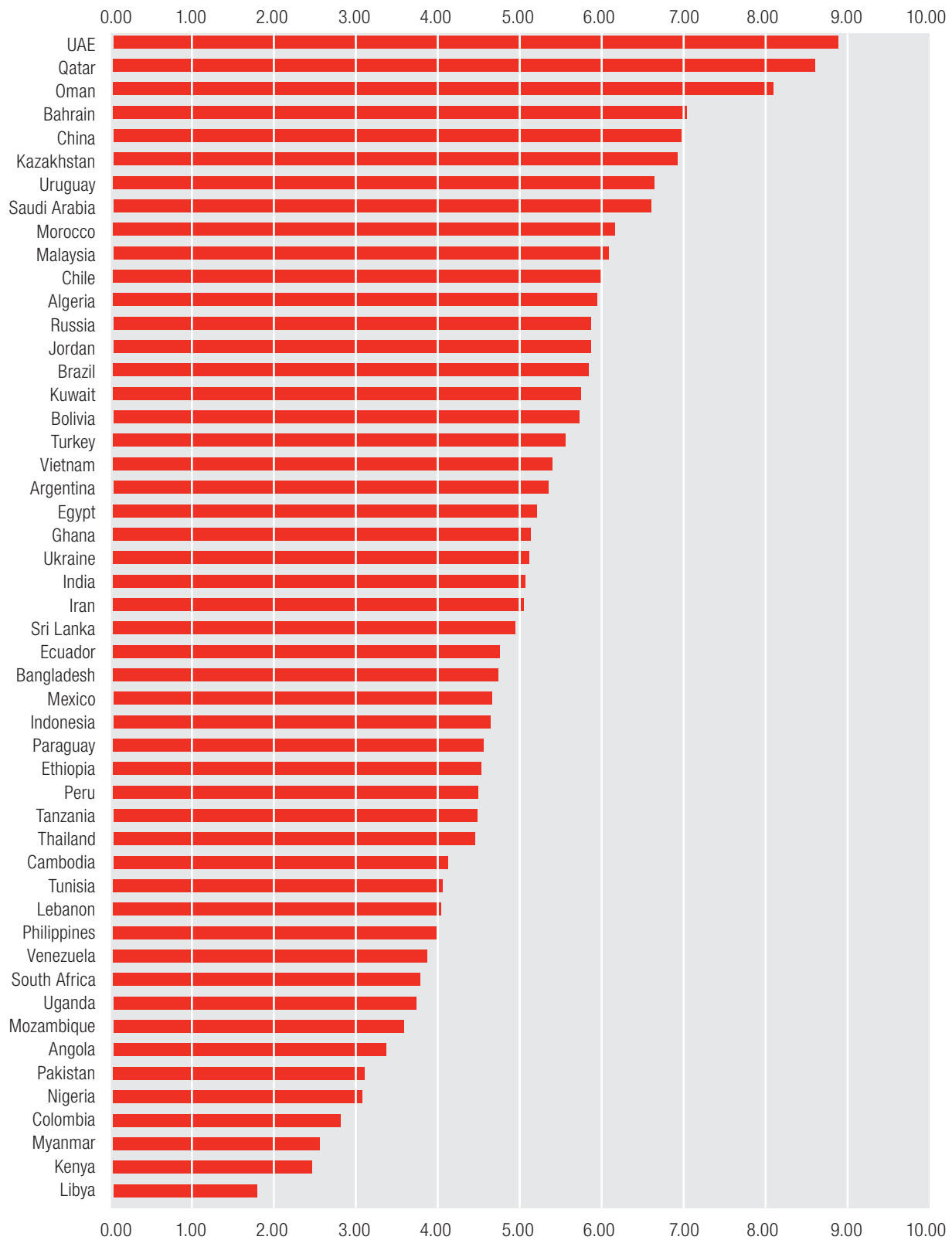
The Philippines' position improved largely due to its excellent economic growth in 2016, with its growth of 6.8% surpassing the likes of China (6.7%) and Vietnam (6.2%). The government is looking to boost growth by pushing through its Comprehensive Tax Reform Program (CTRP), which will provide tax relief for millions, while also funding the administration's infrastructure plans.

Market Compatibility Sub-Index

Ranking	Country	Market Compatibility sub-index 2018	Market Compatibility sub-index 2017	Change in Rank
1	UAE	8.88	8.77	-
2	Qatar	8.60	8.26	-
3	Oman	8.09	7.80	-
4	Bahrain	7.03	6.99	-
5	China	6.96	6.91	1
6	Kazakhstan	6.91	6.95	-1
7	Uruguay	6.63	6.83	1
8	Saudi Arabia	6.59	6.88	-1
9	Morocco	6.15	6.41	-
10	Malaysia	6.07	6.22	2
11	Chile	5.99	6.25	-
12	Algeria	5.93	4.96	12
13	Russia	5.85	5.45	5
14	Jordan	5.85	5.98	-1
15	Brazil	5.83	5.95	-1
16	Kuwait	5.73	6.33	-6
17	Bolivia	5.71	5.83	-2
18	Turkey	5.54	5.67	-1
19	Vietnam	5.38	5.32	1
20	Argentina	5.33	5.25	1
21	Egypt	5.19	2.82	26
22	Ghana	5.12	5.16	-
23	Ukraine	5.10	4.31	11
24	India	5.05	5.39	-5
25	Iran	5.03	5.09	-2
26	Sri Lanka	4.93	5.77	-10
27	Ecuador	4.74	4.73	-
28	Bangladesh	4.72	4.52	3
29	Mexico	4.64	4.75	-4
30	Indonesia	4.62	4.52	-
31	Paraguay	4.54	4.75	-5
32	Ethiopia	4.51	4.00	7
33	Peru	4.47	4.31	2
34	Tanzania	4.46	4.72	-6
35	Thailand	4.43	4.27	1
36	Cambodia	4.10	4.61	-7
37	Tunisia	4.04	4.09	1
38	Lebanon	4.02	4.37	-6
39	Philippines	3.96	4.36	-6
40	Venezuela	3.85	3.74	1
41	South Africa	3.76	4.25	-4
42	Uganda	3.71	3.75	-2
43	Mozambique	3.56	3.61	-1
44	Angola	3.34	3.39	-1
45	Pakistan	3.08	2.95	-
46	Nigeria	3.05	3.37	-2
47	Colombia	2.79	2.89	-1
48	Myanmar	2.53	2.67	-
49	Kenya	2.44	2.29	-
50	Libya	1.76	2.20	-

Source: Transport Intelligence

Market Compatability Sub-Index



Source: Transport Intelligence

Highlights

The Compatibility sub-index is effectively a measure of market accessibility and the ease of doing business.

Six of the top 10 ranked markets for Compatibility come from the Middle East & North Africa region, down from seven last year, as Kuwait dropped out of the top 10. The UAE retains its position at the top for a fourth consecutive year, with its abundance of free trade zones, no corporation tax, the offer of full ownership and unlimited repatriation of profits still setting the benchmark for emerging markets. That said, Qatar, which halved the gap last year, has caught up even more as economic diversification progresses and non-tariff barriers diminish. Its improvement should be treated cautiously, however, as the data has not yet had a chance to really take account of the impact of its blockade. Whether it will adversely impact Qatar's score is an open question: it appears to be handling the situation comfortably (see Emerging Narratives for more).

Some of this year's best performers include Egypt (up 26 places), Algeria (up 12 places), Ukraine (up 11 places) and Ethiopia (up 7 places).

As examined in detail earlier, Egypt's score has jumped due to business costs of crime, violence and terrorism falling markedly. The same story applies for Ukraine: the business environment has returned to some semblance of normality. For Ethiopia, again overall security is improving, which may also in part be driving improved foreign investment flows. Many textiles manufacturers are embarking on small-scale investments to test the water of the operating environment. Algeria's gains are more broad-based, as non-tariff barriers have reduced significantly, while FDI flows have increased.

As North Africa's oil superpower, Algeria is desperate to diversify away from hydrocarbons which account for around one-third of GDP, more than two-thirds of government revenues and over 90% of exports. New laws designed to incentivise investment in non-oil sectors have been proposed, providing tax breaks and looser regulations. The hope is that 'high value-added' sectors such as agribusiness, renewable energy and ICT will be able to attract significant funding. Unfortunately, Algeria is particularly weak in rule of law, government effectiveness and regulatory quality, which contribute to pervasive corruption. This makes attracting new investors all the more difficult.

The worst performers this year include Sri Lanka (down 10), Cambodia (down 7) and Kuwait, Tanzania, Lebanon and the Philippines (all down 6). Sri Lanka fell off a cliff, as its business costs of crime, violence and terrorism jumped year-on-year. The same applies, but less acutely, for Cambodia, Kuwait, Lebanon and the Philippines.

In Tanzania, more burdensome non-tariff barriers and weaker foreign direct investment have pushed down its score. Many have flagged legislation enacted in July 2017 as threatening to the mining sector. The new laws give the Tanzanian Government the power to tear up and renegotiate mining contracts, introduce higher royalties, enforce local beneficiation of minerals and bring in strict local-content requirements. They also require the government to own at least a 16% stake in mining projects and deny the rights of mining companies to seek international arbitration in the event of disputes. Numerous mining companies have announced that they are reviewing their operations in the country as a result.



Agility's Take / Kuwait

Policymakers in Kuwait are keenly aware that the country's competitiveness has eroded in recent years and that government bureaucracy and inefficiency are among the leading culprits. In 2017, Kuwait outlined a national development plan intended to diversify the economy, grow the private sector, promote job creation, and position the country as a low-tax regional financial, cultural and institutional hub.

To attract investment and spur private sector growth, Kuwait has strengthened its legal framework, streamlined customs and border processes, and embarked on infrastructure improvements. It has begun construction on a new terminal at Kuwait International Airport; opened major new

hospital and cultural projects; expanded the port on Boubiyan Island; invested in local and regional rail links; and launched public housing, clean fuels, and higher education initiatives. A new 23.5 km causeway, set to open in 2020, will encourage development north of Kuwait City. The government has made strides in key ease-of-doing-business areas, establishing one-stop shops and online registration, and improving transparency in property registration. The stock market is now open to foreign investors. Many sectors of the economy now permit 100% foreign ownership. Incentives for direct investment are plentiful.

Kuwait's problems will not be solved overnight. The government currently

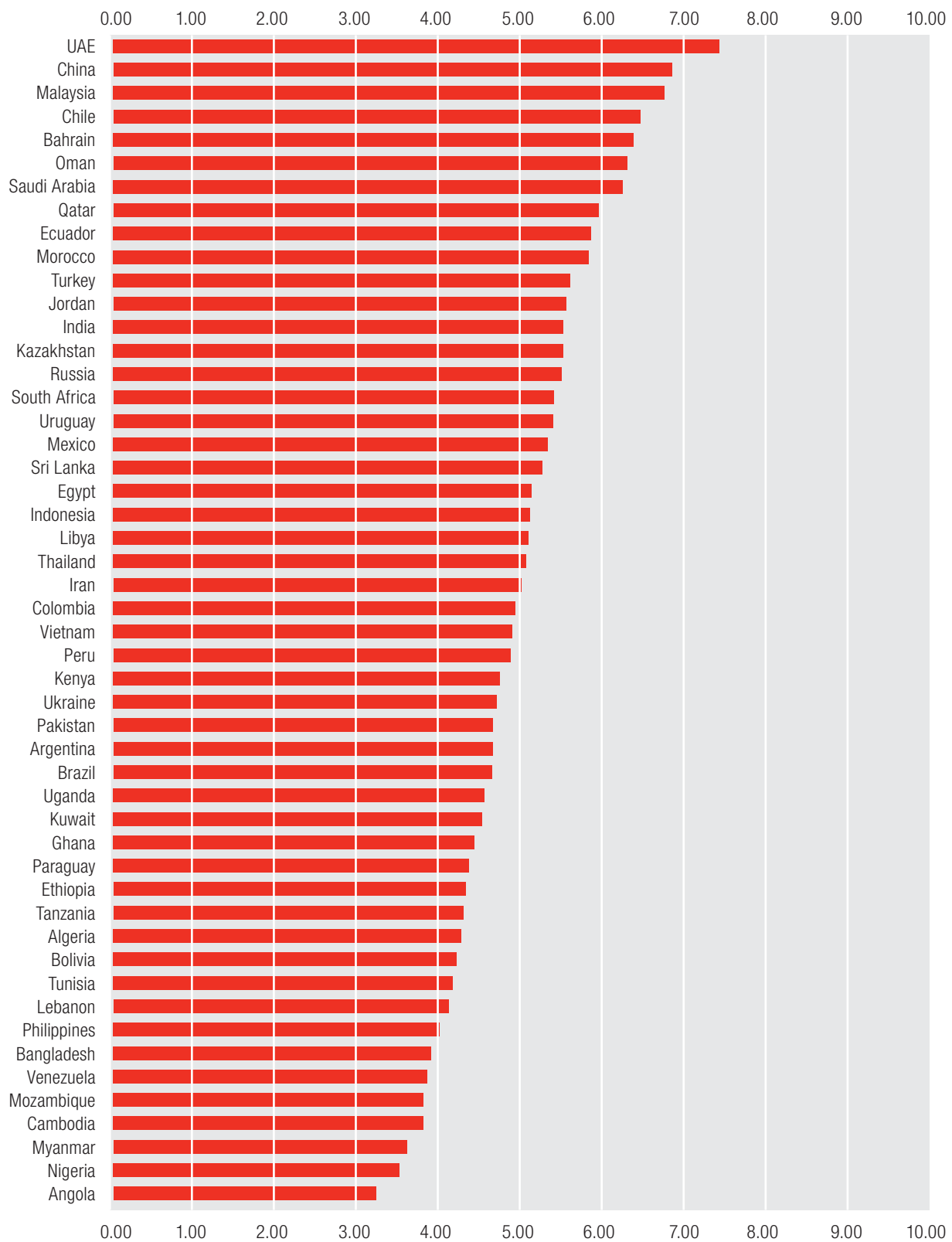
runs a budget deficit, and oil revenues still account for over 90% of GDP. More than 80% of working Kuwaitis hold government jobs. There is near-unanimity on the need to ease the country's reliance on oil and create jobs through development of a vibrant, competitive private sector. Even so, many proposed reforms continue to meet stiff resistance in Parliament. Adding to the urgency for Kuwait are continued weakness in oil prices, a large population of young people reaching working age, and the growing sophistication and competitiveness of neighbours such as UAE, Qatar and Saudi Arabia.

Market Connectedness Sub-Index

Ranking	Country	Market Connectedness sub-index 2018	Market Connectedness sub-index 2017	Change in Rank
1	UAE	7.43	7.74	-
2	China	6.85	6.80	1
3	Malaysia	6.76	6.91	-1
4	Chile	6.46	6.38	-
5	Bahrain	6.38	6.20	2
6	Oman	6.30	6.22	-
7	Saudi Arabia	6.25	6.25	-2
8	Qatar	5.95	5.71	2
9	Ecuador	5.86	6.06	-1
10	Morocco	5.83	5.65	1
11	Turkey	5.60	5.53	3
12	Jordan	5.55	5.64	-
13	India	5.52	5.43	5
14	Kazakhstan	5.52	5.80	-5
15	Russia	5.50	5.59	-2
16	South Africa	5.40	5.49	-
17	Uruguay	5.39	5.45	-
18	Mexico	5.33	5.41	1
19	Sri Lanka	5.26	5.51	-4
20	Egypt	5.13	4.88	3
21	Indonesia	5.11	4.79	5
22	Libya	5.09	5.01	-
23	Thailand	5.06	5.02	-3
24	Iran	5.00	4.76	3
25	Colombia	4.93	5.01	-4
26	Vietnam	4.89	4.87	-2
27	Peru	4.87	4.84	-2
28	Kenya	4.74	4.71	1
29	Ukraine	4.70	4.66	1
30	Pakistan	4.65	4.51	3
31	Argentina	4.65	4.51	3
32	Brazil	4.64	4.72	-4
33	Uganda	4.55	4.59	-1
34	Kuwait	4.52	4.60	-3
35	Ghana	4.43	4.33	-
36	Paraguay	4.36	4.32	-
37	Ethiopia	4.32	4.32	-
38	Tanzania	4.29	4.21	2
39	Algeria	4.27	4.26	-
40	Bolivia	4.21	4.27	-2
41	Tunisia	4.16	4.19	-
42	Lebanon	4.11	3.97	1
43	Philippines	4.00	4.08	-1
44	Bangladesh	3.90	3.85	3
45	Venezuela	3.85	3.91	1
46	Mozambique	3.80	3.95	-2
47	Cambodia	3.80	3.95	-2
48	Myanmar	3.60	3.60	1
49	Nigeria	3.51	3.63	-1
50	Angola	3.22	3.46	-

Source: Transport Intelligence

Market Connectedness Sub-Index



Source: Transport Intelligence

Highlights

The top 10 ranking positions for Market Connectedness exhibited a large amount of continuity year-on-year, as nine markets retained their positions in the top 10.

Kazakhstan was the sole country to fall out, dropping five places to 15th. The overall quality of its infrastructure is judged to have worsened marginally, but its customs efficiency took a significant step back. According to the US Department of Commerce, Kazakhstan's customs code remains overly complicated and does not encourage transparency or the expeditious movement of goods. Generally, Customs requires imported goods to be placed in a temporary storage warehouse pending clearance, causing delays and incurring significant costs. US firms have noted the need to present "transaction passports", ranging from procurement documents to bank transfers, in order to clear their goods with Customs. That said, the situation may soon improve. In August 2017, the government announced that it would overhaul procedures by introducing a new Customs code, switching to complete electronic customs declaration and the possibility of using a single-window system. In tandem, these two provisions would allow goods to be released automatically, simplifying the declaration process and reducing corruption risk. The new code would also permit postponing customs duties and taxes. It is due to come into effect in January 2018.

Elsewhere, two major markets, India and Brazil, continue to go in opposite directions. India is clearly taking steps to address its infrastructure deficit, having moved up from 22nd to 18th last year and now up to 13th this year. Conversely, Brazil continues its slide into mediocrity, falling from 23rd to 28th a year ago and this year slumping to 32nd.

India's power supply is streets ahead compared to just five years ago, when it embarrassingly suffered the world's biggest-ever blackout, which affected over 600m people. In 2017, Prime

Minister Modi commissioned the country's longest road tunnel and longest bridge. The tunnel will cut driving time between Jammu and Srinagar, the winter and summer capitals of the state of Jammu & Kashmir, by two hours. The new bridge traverses the Brahmaputra River in the north-eastern state of Assam. Another crossing, the world's tallest railway bridge, which stretches 359 metres over a gorge, will link Kashmir to the rest of India by rail for the first time. India has also started work on its first high-speed rail link, connecting Ahmedabad to Mumbai. As for rapid-transit metro systems, seven cities already have them, while eight more are building them.

In contrast, Brazil's infrastructure is creaking. Operation Car Wash, the giant corruption investigation of the state-owned oil company, Petrobras, not only drew in the government but also most of Brazil's largest construction companies. This crippled their ability to pursue new infrastructure investments. The government is desperately trying to attract private investment. There is some interest – foreign operators such as German airport manager Fraport are bidding for airports, while Chinese companies are also snapping up assets, including electricity company CPFL Energia. The biggest problem is that the government itself has no money. The Port of Santos, South America's largest container port and perhaps Brazil's single most important infrastructure asset, also has its fair share of problems. Although Maersk has invested more than \$400m in its terminal there since 2010, supporting infrastructure is shoddy. There is only one highway overpass linking to the terminal and truck drivers suffer long delays at railway crossings. The port authority has failed to dredge the terminal's access canal properly, preventing certain container ships from loading to full capacity. As explored in one of our Emerging Narratives, it is difficult to see how Brazil's political problems will turn around any time soon.

INDEX FOR COUNTRIES WITH GDP OVER US\$300BN

While there remain 16 Index countries with GDP above \$300bn, the Philippines enters the ranking this year as South Africa drops out. The Philippines comes in on the back of real GDP growth of 6.9%, whilst South Africa's departure is due to a substantial fall in the value of the rand. As measured by the average annual exchange rate, it depreciated by 13.6% against the dollar in 2016.

While there remains a strong correlation between size of economy and high potential as an emerging logistics market,

market size alone can paint a misleading picture of logistics potential. The Index rankings convey this: Brazil has the third highest GDP of all Index countries but ranks 9th in the Index. Conversely, the UAE punches above its economic weight, ranking third in the Index, with the 14th highest GDP. Even though Nigeria has the 11th highest GDP, it ranks just 31st in the Index, having fallen 16 places in two years.

Index for countries with GDP over US\$300bn

Ranking	Country	Market Size and Growth sub-index	Market Compatibility sub-index	Market Connectedness sub-index	Total Index
1	China	9.49	6.96	6.85	8.00
2	India	9.46	5.05	5.52	7.12
3	UAE	5.78	8.88	7.43	7.01
4	Indonesia	8.58	4.62	5.11	6.50
5	Saudi Arabia	6.18	6.59	6.25	6.29
6	Russia	6.73	5.85	5.50	6.10
7	Mexico	7.35	4.64	5.33	6.06
8	Brazil	7.32	5.83	4.64	6.03
9	Turkey	6.63	5.54	5.60	6.03
10	Egypt	6.51	5.19	5.13	5.73
11	Thailand	6.79	4.43	5.06	5.68
12	Philippines	7.58	3.96	4.00	5.53
13	Iran	6.12	5.03	5.00	5.48
14	Argentina	4.90	5.33	4.65	4.89
15	Nigeria	6.58	3.05	3.51	4.73
16	Venezuela	2.62	3.85	3.85	3.32

Source: Transport Intelligence

Note: GDP here is measured in current US\$. Venezuela's figure is based on 2013 data, the latest available figure for the country.



Agility's Take / South Africa

Rising social discontent and political uncertainty have damaged confidence in the South African economy. Both factors have been exacerbated by lower growth, projected at 1.2% for 2018, and by increased government spending that has stirred fresh concern about debt. With growth lagging and the lack of a clear economic strategy, unemployment has been on the rise. More than one-quarter of South African workers are unemployed. The mining sector, which is 8% of GDP

and 5% of employment, is critical to the overall economy. The sector has been choked by over-regulation and has experienced sharp declines in productivity and investment in recent years. Ratings agencies have downgraded South African debt to junk or near-junk status, which affects borrowing, investor confidence and Foreign Direct Investment. The climate of uncertainty has led businesses to hoard cash rather than invest. That makes it hard to be bullish about South

Africa in the near term to medium term. South Africa remains a country with a strong constitutional and legal framework and a sophisticated, well-developed banking and financial services sector. South Africa's central bank chief has acknowledged the need for the country to address political uncertainty and corruption in order to win back the confidence of consumers, businesses and investors.

INDEX FOR COUNTRIES WITH GDP LESS THAN US\$300BN

The countries that sit closer to the top of this list are typically emerging markets with mid-sized economies, good infrastructure and favourable business conditions. At the top of the list, Malaysia and Chile aptly fit that description.

Qatar and Oman are slightly different because they have the 26th and 37th highest GDPs respectively, but compensate for that by ranking very close to the top of both the Compatibility and Connectedness sub-indices.

Pakistan, in 5th on this list, is again slightly different. While its business conditions and infrastructure are mediocre and the size of its economy ranks just 19th, its population of almost 200m pushes it up the list.

Comparing the overall Index scores of the countries here with those in the grouping with a GDP above \$300bn reveals that 32 of the 34 outperform Venezuela, while 16 better Nigeria.

Index for Countries with GDP less than US\$300bn

Ranking	Country	Market Size and Growth sub-index	Market Compatibility sub-index	Market Connectedness sub-index	Total Index
1	Malaysia	6.78	6.07	6.76	6.63
2	Qatar	4.87	8.60	5.95	6.02
3	Chile	5.28	5.99	6.46	5.86
4	Oman	4.17	8.09	6.30	5.75
5	Pakistan	7.55	3.08	4.65	5.58
6	Vietnam	5.99	5.38	4.89	5.46
7	Kazakhstan	4.60	6.91	5.52	5.41
8	Morocco	4.35	6.15	5.83	5.26
9	Bahrain	3.41	7.03	6.38	5.24
10	Bangladesh	6.43	4.72	3.90	5.15
11	South Africa	5.40	3.76	5.40	5.07
12	Uruguay	3.72	6.63	5.39	4.92
13	Colombia	5.90	2.79	4.93	4.92
14	Peru	5.14	4.47	4.87	4.91
15	Kuwait	4.73	5.73	4.52	4.85
16	Algeria	4.68	5.93	4.27	4.78
17	Jordan	3.12	5.85	5.55	4.57
18	Sri Lanka	3.77	4.93	5.26	4.56
19	Ecuador	2.89	4.74	5.86	4.36
20	Ukraine	3.50	5.10	4.70	4.27
21	Ethiopia	3.83	4.51	4.32	4.15
22	Bolivia	3.07	5.71	4.21	4.02
23	Ghana	3.11	5.12	4.43	4.00
24	Tanzania	3.45	4.46	4.29	3.96
25	Paraguay	3.11	4.54	4.36	3.86
26	Uganda	3.26	3.71	4.55	3.83
27	Tunisia	3.33	4.04	4.16	3.78
28	Kenya	3.55	2.44	4.74	3.76
29	Libya	3.04	1.76	5.09	3.54
30	Lebanon	2.69	4.02	4.11	3.48
31	Cambodia	2.86	4.10	3.80	3.46
32	Myanmar	3.74	2.53	3.60	3.44
33	Mozambique	2.77	3.56	3.80	3.31
34	Angola	3.31	3.34	3.22	3.28

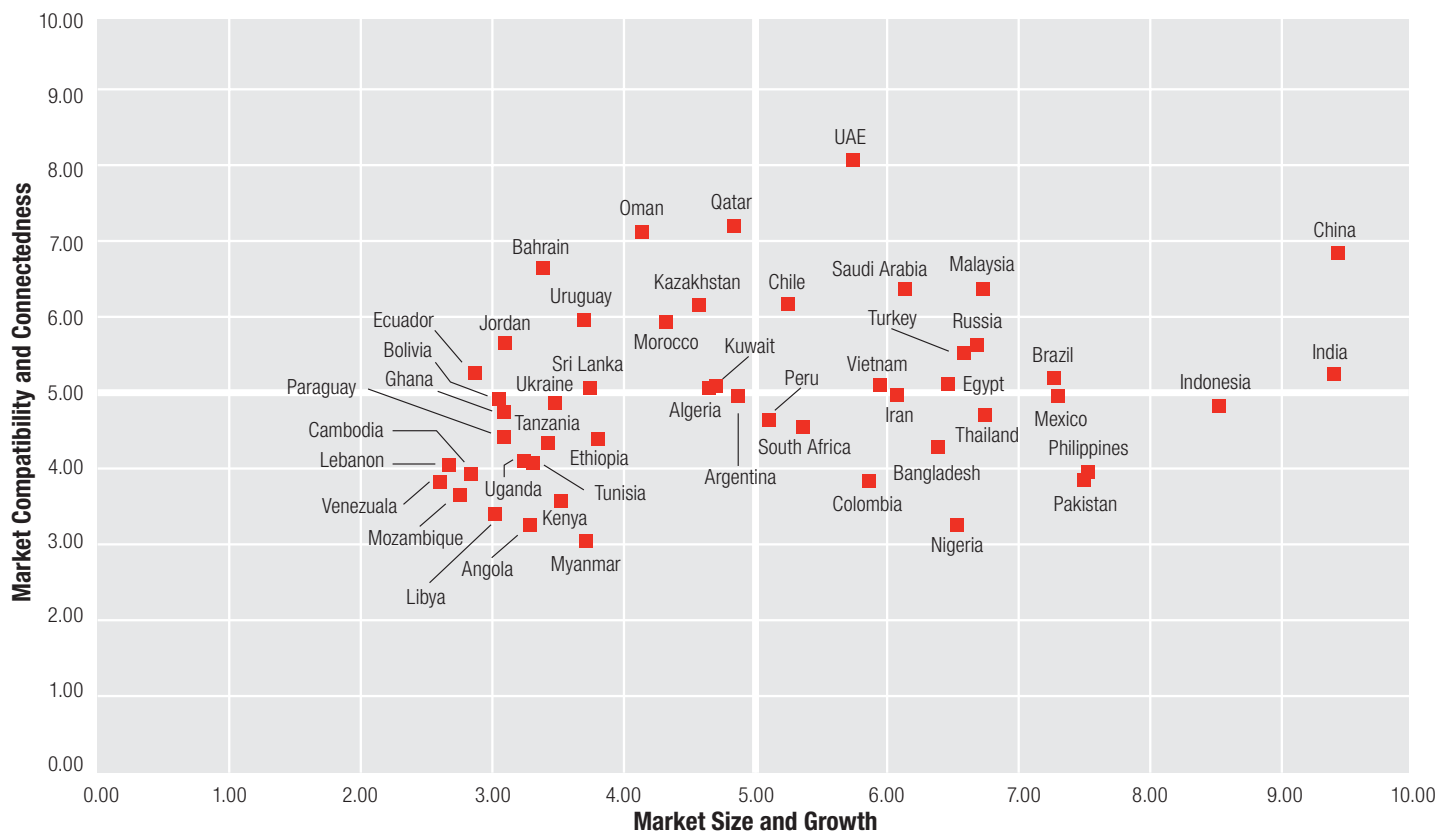
Source: Transport Intelligence

EMERGING MARKETS QUADRANT

The emerging markets quadrant displays the relative positions of the countries in the Index. The chart is divided into four areas based on size and potential barriers to entry (an average of Market Compatibility and Market Connectedness). Countries in the top right quartile, such as China, represent those which have strong Market Size & Growth scores and are the easiest markets to operate in. In the top left quartile are those countries

that represent smaller opportunities, but are easily penetrated, such as Oman and Bahrain. Countries in the bottom half have more significant barriers to entry and are associated with greater operational difficulties. Nigeria (a larger market in the bottom right quartile) and Kenya (a smaller market in the bottom left quartile) are examples of these types of opportunities.

Emerging Markets Quadrant



Source: Transport Intelligence

EMERGING NARRATIVES

China (No. 1): Debt disaster looming or just doom-mongering?

China's overall Index score increased by 0.12 points to 8.00 this year. Once again, it sits atop the overall Index ranking and has also maintained its positions at the top or near the top of all three sub-indices. There is little change to speak of. Its score primarily improved due to superior economic forecasts compared to last year.

Indeed, emerging and developing Asia is predicted to remain the engine of global economic growth for the foreseeable future. For example, the IMF's latest set of forecasts (October 2017) asserts

that the region's growth rate will remain in excess of 6% every year until 2022. This is of course entirely dependent on China keeping its economy ticking over each year at close to that rate.

Many argue that China's GDP growth is illusory. The argument here is not that the figure itself is incorrect (although there are those that would make that case), but that the government's GDP growth targets of recent years have only been met due to huge levels of debt-financed investment in 'unproductive' projects, as Box 1 explains.

Box 1: China's GDP growth is not the same as its economic growth

According to an article in the Financial Times by Michael Pettis, a professor of finance at Peking University, local governments in China have been expected to boost spending by the amount necessary in any given year to ensure that the country's GDP growth targets are met, regardless of whether this spending is 'productive' or not.

What is meant by productive? Pettis argues that GDP growth is not the same as economic growth.

"Consider two factories that cost the same to build and operate. If the first factory produces useful goods and the second produces unwanted ones that

pile up as inventory, only the first boosts the underlying economy. Both factories, however, will increase GDP in exactly the same way.

"Most economies, however, have two mechanisms that force GDP data to conform to underlying economic performance. First, hard budget constraints, which set spending limits, drive companies that systematically waste investment out of business before they can substantially distort the economy.

"Second, there is a market-pricing factor in GDP accounting so that when bad debts caused by wasted investment are written down, the value-added component

of GDP and the overall level of reported growth are reduced.

"In China, however, neither mechanism works. Bad debt is not written down and the government is not subject to hard budget constraints. It is the government sector that is mainly responsible for the investment misallocation that characterises so much recent Chinese growth."

The clear implication is that China's GDP growth does not equal its economic growth. Pettis contends that if it were done 'correctly', by some estimates, GDP growth would fall below 3%.

How large are China's debts? According to the New York Fed, China has accounted for half of all new credit created globally since 2005. Based on official Chinese GDP figures, estimates suggest that China's debt-to-GDP ratio has surpassed 300%. Unofficial estimates put China's debt-to-GDP based on 'productive GDP' (subtracting some of the infrastructure investment that has contributed to GDP growth but has little or no economic return) above 800%.

Is there a problem with this accumulation of debt? State control over the banking system means that bad debts can be swept

under the carpet for a long time. As much of the debt sits with state-owned entities or those backed by the government there may be no reason to think a Western style banking insolvency crisis, that takes the economy with it, will arise any time soon.

But the former chief economist of UBS, George Magnus argues that the shadowy financing of debt through interbank and repo lending is an Achilles heel for China, with the funding structure of these liabilities more immediate than the state rolling over SOE and bank debts. A shadow-funding crunch, with lenders steadily shut out of the system and going bust with potentially

dire consequences for the rest of the financial system, could well play out.

In March 2017, he outlined the two possibilities: “Optimists hope that there will be a sea-change after the 19th Congress in which China would finally put the credit genie back in the bottle and try to manage a deleveraging-led slowdown in economic growth that could end in low single digits for a while.

“The alternative, though, is an event-driven denouement when key financial ratios are even more vulnerable than they are today, and probably some time in the early years of Xi’s second five-year term. The catalyst could be capital flight, property prices, political or a trade shock in which there’s a scramble to withdraw liquidity. No Lehman moment as such in a state controlled financial system, but most likely the precursor to a much more difficult and protracted growth slowdown.

“No one can time this. The good news is it’s not imminent or likely before the Party Congress. The bad news is that it’s probably not more than 2-3 years away if there isn’t a material change in economic policy and management.”

In October, the Xi administration signalled that it would curb debt by abandoning long-term economic growth targets, allowing GDP growth to fall. It therefore seems the mantra of ‘growth at any cost’ is gone.

Arguably, the biggest threat emerging markets face is China’s mountain of debt. China is the linchpin of so many global supply chains. Some say a slowdown is definitely coming, the big question is when, and whether it will be managed or disorderly. Others will contend that prophecies of doom for China have been around every year for the last 15 years or so and even in the event of something resembling a crisis, many are confident that the government would manage it effectively.

The fact that China’s government is abandoning its long-term growth targets and is far more actively speaking about managing debt levels down must count for something. But it remains to be seen whether a crisis will erupt or if it will be more or less business as usual.

India (No. 2): Will economic reforms be game-changing?

The Index this year reveals little change for India, as its score fell by just 0.02 points to 7.12. It has maintained its rank of No. 2, behind China. It may perhaps surprise some that India has not progressed, given the hype around its economic reforms, but the data has not yet really had a chance to catch up. Greater change to its Index score should be expected next year.

Extensive analysis of India’s economic reforms was provided in the Agility Mid-Year Emerging Markets Review 2017.

One of these was India’s demonetisation initiative. On November 8, 2016, the Indian government surprisingly announced that it would remove all existing 500 and 1,000-rupee notes from its economy, meaning 86% of its cash could no longer be used, effective from midnight of the same day. These may sound like high denominations, but 500 rupees was worth, on average, just over \$7 or just under €7 in 2016. These were the bank notes that households, businesses and retailers were primarily using for transactions every day. Old notes needed to be exchanged for new 500 and 2,000 rupee notes. The motivation behind the move was to curtail the shadow economy and crack down on the use of

illicit and counterfeit cash to fund illegal activity.

The upshot was that demonetisation proved to be a short, sharp shock on the Indian economy, but most of its effects were relatively short-lived. While jarring, it forced Indian businesses and consumers to rapidly adopt modern cashless payment systems and techniques. It severely negatively impacted the informal logistics sector (small, unorganised, often one-person operations) in the short run, but looks to be a shot in the arm for the organised logistics sector in the long run, particularly if it dismantles corruption, as some have suggested.

The other major initiative is the Goods and Services Tax (GST) reform package, which was rolled out on July 1, 2017. These have replaced more than a dozen levies with a single tax regime.

In the Agility Mid-Year Emerging Markets Review 2017, it was argued that the organised logistics sector may benefit more than any other economic sector from the reforms. Indirectly, it should benefit from a dramatic expansion in economic activity, as Box 2 explains.

Box 2: GST reforms entail substantial boost to economic activity

Research by authors at the U.S. Federal Reserve suggests that the total impact of GST reforms over the long run is expected to increase Indian internal and external trade by 29% and 32% respectively.

The authors caution, however, that these numbers should be seen as lower bounds. This is because the economic model underpinning the predictions is unable to account for certain effects, such

as the fact that the present tax system encourages within-state supply chains which may be sub-optimal. The numbers detailed in the table below therefore should be exceeded.

Total (Long Run) Effects of GST on Indian Growth

	India	Port States	Non-Port States
Real GDP	4.2%	4.4%	3.9%
Internal Trade	29%	29%	29%
External Trade	32%	30%	43%
Agricultural Production	-0.5%	-1.6%	0.7%
Manufacturing Production	14%	14%	13%

Source: Van Leemput and Wiencek (2017), Federal Reserve Research Paper

These substantial growth numbers alone suggest GST will be extremely beneficial for Indian logistics. However, coupled with the more direct impact of the reforms on logistics, the potential for the sector is game-changing. GST reforms move India much

closer to something resembling a country-wide single market because crossing state borders is so much easier. This will transform warehousing and transportation networks, as Box 3 illustrates.

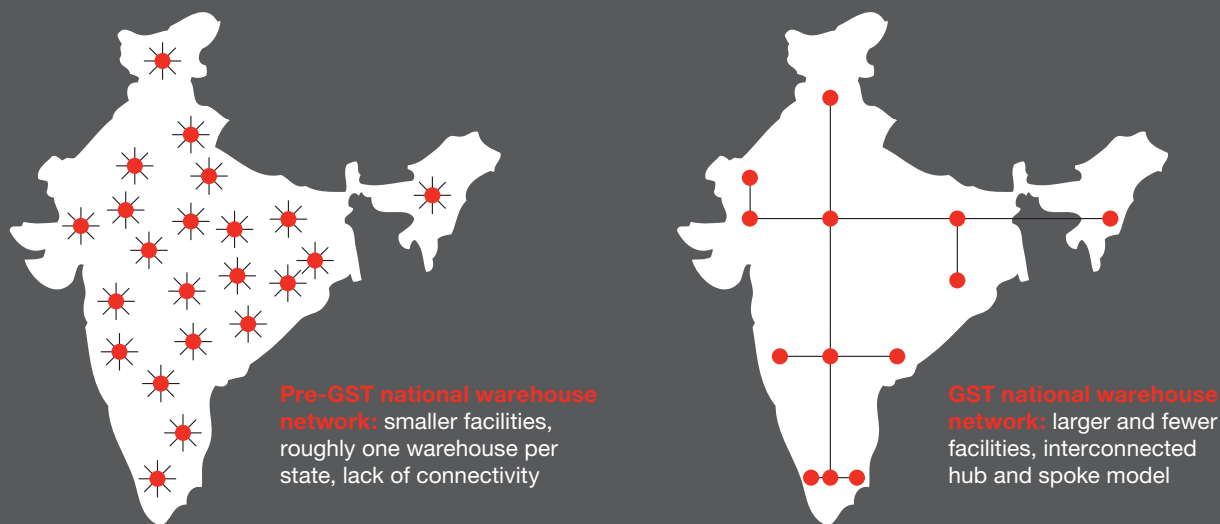
Box 3: Indian supply chains to reshape as GST takes hold

Large companies are expected to reshape their supply chain networks as the new tax regime will no longer incentivise setting

up one major warehouse in each state. Inventory will be centralised and national warehouse networks will consist of fewer

but larger interconnected warehouses, as depicted in the image below.

Indian national warehouse networks pre-GST and with GST



Source: Transport Intelligence

As for transportation, the Agility Mid-Year Emerging Markets Review 2017 asserts that remodelled warehouse networks will entail new transportation networks. Networks with fewer warehouses are associated with lengthier average transport distance for shipments and

therefore higher transportation costs. For major warehouses in newly formed networks, full truckload services will become increasingly economical and therefore more prevalent. In addition, there will have to be a corresponding increase in less-than-truckload

movements to regional markets. Cross-docking facilities, where freight is rapidly unloaded, sorted and then loaded on to outbound trucks, will become more common as hub and spoke networks develop.

As concluded in the Agility Mid-Year Emerging Markets Review 2017, GST and demonetisation will provide the already surging Indian economy and logistics sector with increased momentum.

There have been some concerns raised by LSPs since the rollout of GST, but these should not undermine the effectiveness of the policy over the longer term.



Agility's Take / India

India's GDP is accelerating again after early 2017 when businesses struggled to adjust to upcoming requirements of the new Goods & Services Tax (GST) and small enterprises and consumers were trying to cope with the replacement of bank notes used for most everyday transactions. Introduction of the GST eliminated a tangle of state-level taxes in favour of a single, unified tax. Manufacturing and sales slowed early in 2017 as companies destocked and began to examine their inventory, distribution and strategic supply chain needs more closely. Removal of taxes imposed at state borders has reduced transit time for domestic freight movements and has spurred the growth of e-commerce. Amazon and others are investing heavily and consider India the world's fastest-growing e-commerce market. Many logistics customers in India

are still scrutinizing their distribution requirements, something likely to continue well into 2018.

Although generally seen as positive, the GST regime is still sorting itself out for many. The freight industry faces an additional administrative compliance burden as GST is a state-level tax. In our case, GST can mean proliferation of invoices and the generation of massive amounts of data to be reconciled with invoices. Monthly tax calculations can be cumbersome. Unbalanced input/output taxes within a state can result in cash flow difficulties because refund processes and interstate transfers of credits are not yet in place. Ultimately, increased compliance could lead to additional simplification and reduction in tax rates.

We believe customs reforms have helped to make customs clearance in India much

easier. India jumped 30 places in the Ease of Doing Business rankings, climbing to 100th in 2017. Reforms are in place for recapitalizing banks, and there is a new strong bankruptcy law that helps to restructure stressed companies in an orderly manner. The introduction of national ID is an effort by the government to close loopholes in the tax system and to identify 'shell' entities previously used to hide income or provide a shield for questionable activities. An estimated 200,000 companies have been identified for closure. Demonetisation, although largely negated by the reissuing of new bank notes, has had the impact of forcing significant funds back into the banking sector where they are now traceable. Meanwhile, Moody's raised India's credit rating from the lowest investment grade of Baa3 to Baa2, and changed the outlook from stable to positive.

GCC countries: Political powerplays front and centre as economic changes lurk in the background

This year's Index scores and rankings of GCC countries have perhaps not shifted as much as one would think given the upheaval experienced in the region in 2017. The data has not yet caught up with events so next year's figures are likely to be more volatile.

This year, the worst performer by score was Saudi Arabia, which fell by 0.19 points and slipped one rank to No. 6. Its Market Size & Growth sub-index score fell by 0.30 points as its economic growth forecasts were cut and its financial stability worsened. Compatibility also fell as FDI was down, non-tariff barriers became more burdensome, and the business costs related to security worsened. The Connectivity sub-index remained the same.

Kuwait also struggled as it fell three places to No. 29, although its score declined by just 0.13. Its Compatibility sub-index score

slumped by 0.60 points as its security-related business costs worsened.

Index scores for the UAE (-0.06 to 7.01, level at No. 3) and Bahrain (+0.08 to 5.24, up one place to No. 22) did not change much. Oman registered a greater improvement of 0.13 points to 5.75, holding its rank of No. 13. Its Compatibility sub-index improved by 0.29 on the back of improved economic diversification.

Qatar was the surprise GCC Index darling this year, with its score improving by 0.24 points to 6.02, ranking it No. 11. It made significant gains in Compatibility as economic diversification progressed and non-tariff barriers were judged to be less of a burden, while Connectivity improved thanks to better liner shipping connections. However, Qatar's improvement should be treated cautiously, as the data has not yet had a chance to really

take account of the impact of the Saudi- and UAE-led blockade (see Box 4).

Indeed, political developments affecting a number of GCC countries have stolen the headlines in 2017.

The most obvious episode that directly affected the logistics sector was the aforementioned June 2017 economic isolation of Qatar imposed by Saudi Arabia, Egypt, Bahrain, Yemen and the UAE (see Box 4 for details).

In addition, later in the year in Saudi Arabia, more than 200 princes, ministers and businessmen were detained on anti-corruption charges. Reports suggest that the elites being held may be allowed freedom in exchange for a certain proportion of their assets, boosting public finances.

Social and cultural reforms in Saudi Arabia are pressing ahead

too: women will be allowed to drive from summer 2018, and cinemas may open for the first time in decades.

At the heart of it all is Muhammad bin Salman (commonly known as MBS), Saudi Arabia's 32-year old crown prince who is poised to become the Kingdom's strongest ruler in decades, with King Salman bin Abdulaziz expected to hand over the throne soon.

Vision 2030, the crown prince's plan, aims to reduce the country's dependence on oil by diversifying its economy. Among many objectives, the plan aims to boost non-oil exports, raise the contribution of the private sector from 40% to 65% of GDP, the share of SMEs from 2% to 35% of GDP and vault Saudi Arabia from number 25 in the Global Competitiveness Index to one of the top 10. In other words, it aims to fundamentally transform the economy. All other GCC markets have similar plans for structural economic change, sparked into action by the oil price crash.

Box 4: The logistics of Qatar's blockade

Tensions in the Persian Gulf boiled over in June when a coalition of five nations, Saudi Arabia, Egypt, Bahrain, Yemen and the UAE, enforced a blockade of Qatar. As a result, Qatari-flagged ships and aircraft are prohibited from crossing into the territory of the aforementioned nations. This ban also extends to feeder services which call at Qatari locations, which has caused significant problems for inbound supply chains. The vast majority of Qatari sea freight imports have historically been transshipped from Jebel Ali in the UAE, whilst most food and beverage imports were previously trucked over the Saudi border.

However, several factors combine to ensure that Qatar, whilst inevitably weakened, is well-equipped to endure the blockade. Firstly, the country can rely on highly developed air and sea infrastructure. Hamad International Airport in Doha is the second-largest

air cargo hub in the region, after Dubai International, and handled 1.7m tonnes of goods in 2016. Hamad Port became fully operational in December 2016 and has an annual capacity of 2m TEUs, 1.7m tonnes of general cargo, 1m tonnes of grain and 500,000 vehicles. If necessary, Qatar can also revive operations at Doha Port, which Hamad has replaced.

Oman was rapidly identified as the main alternative to the UAE for container transshipment, with the country's Sohar Port set to benefit from an increase in volumes. In the wake of the crisis, Qatari logistics group Milaha Maritime & Logistics announced the launch of a regular direct service from Sohar to Hamad, whilst Maersk Line commenced feeder services from Salalah on June 19. Other container lines soon followed.

As for air freight connections, cargo shipments only face lengthened flight times if they are connecting to or from

southern Europe, North Africa or the Horn of Africa. Routes to northern Europe and North America generally pass over Turkey and Iran, and are thus unaffected, as are flights from Asia.

Qatar's exports were relatively unaffected by the blockade. The country has become one of the world's richest on a per capita basis due to the sale of liquefied natural gas (LNG), which it mainly sends east to Japan, South Korea, Singapore and India. In order to get to these countries, ships have to first transit the chokepoint of the Straits of Hormuz, but this passage is administered by Iran and Oman, which each maintain pragmatic relations with Qatar. Any exports heading west must transit the Suez Canal, though Egyptian authorities maintained this route would only be closed in the event of war.

All in all, Qatari supply chains are weathering the storm well.

One common economic change that has grabbed headlines is the introduction of VAT across the GCC. VAT of 5% across goods and services will be introduced at the beginning of 2018. GCC logistics providers expect a surge in volumes in the run-up to the introduction of the tax and something of a lull afterwards. Overall, the introduction of VAT will improve governments' fiscal positions, but may have an adverse impact on demand as prices increase.

In summary, there is almost universal approval of the GCC's economic transformation plans. Politically, however, things are murkier. The war in Yemen has proved costly, and not all GCC members support the isolation of fellow GCC member Qatar. Economic reforms promise much for the development of formal logistics processes and diversification across the GCC, but the events of 2017 show that supply chain disruption is never too far away.



Agility's Take / Abu Dhabi

Abu Dhabi, like governments throughout the Gulf, is introducing a value-added tax as part of a larger effort to diversify its income and make up for a decline in revenue generated by oil and gas. For companies operating in Abu Dhabi, VAT will affect cash flow more than profitability. Cash flow considerations will be greater for small and medium-size companies rather than large ones that have better access to financing and more systems and tools to manage their

cash effectively. The retail and hospitality industries are likely to see short-term dips in demand because imposition of VAT will add 5% to prices. The next two to three years will be exciting times for Abu Dhabi as a number of high-profile infrastructure projects come on line. Among them are a new container terminal at Khalifa Port; expansion of the main Abu Dhabi-Saudi highway; and stage two of the Etihad Rail expansion that will bring connections to Mussafah Industrial Area, Khalifa

Port, Jebel Ali Port and the Saudi and Omani borders. A new midfield terminal at Abu Dhabi International Airport will increase annual capacity to more than 30m passengers and 2m tonnes of cargo. Beyond that, the national oil company has announced plans to invest AED400bn in long-term exploration, development and production of oil and gas and petrochemicals.

Indonesia (No. 5): Has the government finally turned the corner on infrastructure?

Indonesia has advanced by one place in the overall Index to rank No. 5, with its score increasing by 0.09. Two facets of the Index, Market Size & Growth and Compatibility, have lower scores year-on-year, but a significant improvement of 0.32 in Connectedness more than offset these declines.

Meaningful gains in the quality of its overall infrastructure and the efficiency of customs processes were reported. Coupled with the fact that infrastructure investment has ramped up in recent years, there is a suggestion that Indonesia's infrastructure and connectivity may have turned a corner.

In the latest iteration of the World Economic Forum's Global Competitiveness Index, Indonesia ranked 60th globally for infrastructure, up from 82nd in 2013-14 before the administration of Joko 'Jokowi' Widodo came to power. In PwC's first annual Indonesian infrastructure report in 2015, it was asserted that the period of 2015 to 2019 – and potentially beyond – was likely to be

a 'game changing' era for Indonesia's infrastructure sector.

In January 2015, fuel subsidies were largely scrapped, while power subsidies were also reduced, saving the government \$15.1bn in 2015 and a further \$4bn in 2016. Over half of these funds were redirected towards infrastructure investment.

Government infrastructure spending really stepped up in 2015, as it increased by 51% to IDR209 trillion. It projects to spend IDR388 trillion in 2017 and has earmarked IDR404 trillion for 2018. The government is putting its money where its mouth is.

And according to the World Bank's latest Ease of Doing Business report, customs efficiency has also improved, with importing made faster by the introduction of an electronic single billing system.

Perhaps most crucially, the government has acknowledged the need to collaborate with the private sector. It has increased

the limit of foreign ownership in certain sectors, introduced deregulation packages for key investment sectors and, according to PwC, has “displayed an openness to leverage private sector finance.”

PwC concludes: “Continued success in the government’s infrastructure ambitions will depend on high quality leadership at all levels of Government.”

Mexico (No. 8): Supply chains face disruption whether NAFTA renegotiations fail or succeed

Mexico’s overall Index score fell by 0.09 points to 6.06, but it maintained its ranking of No. 8. It lost a bit of ground across all three sub-indices, with the most notable changes being a downgrade of its economic forecasts and a slight drop in the efficiency of its customs processes.

Although the Index does not reveal a great deal of change for Mexico year-on-year, that does not mean 2017 was just another year for Mexican logistics. The big story, of course, was the start of NAFTA renegotiations in August, sparking those involved in supply chains to start analysing the possible consequences.

Plenty is at stake for NAFTA’s sole emerging market. According to the Financial Times, Spanish bank Santander warns that Mexico’s economy could contract by 2.6% if NAFTA dies and the US goes into full trade war mode rather than reverting to World Trade Organization tariff rules. Moody’s Investors Service says the economy could shrink by up to 4%.

There is some comfort to be drawn from the fact that even in the event that NAFTA ends, about half of what Mexico exports to the US would still cross the border without incurring tariffs. Nevertheless, Santander’s forecasts assert that export and import volumes would fall by 15% and 16% respectively if NAFTA ends and a trade war ensues, implying significant supply chain disruption.

Alternative trade avenues are already being explored. For instance, Mexico imported more yellow corn from Brazil and Argentina in September 2017 than in the whole of 2016. The US is currently its major source. The search for substitute markets does not appear to be extensive yet, but if uncertainty builds or negotiations get ugly, expect the pursuit for alternatives to accelerate.

Even in the event a new accord is reached, there remains plenty of scope for supply chain patterns to shift, as the example in Box 5 illustrates.

Box 5: Rules of origin – the Mexican vehicle manufacturer’s dilemma

For those hoping for minimal disruption to North American supply chains, the area of renegotiations probably generating the most angst is possible changes to the rules of origin chapter. From a US perspective, these specify that for a good to be imported tariff-free from Canada or Mexico, a certain proportion of its value must be produced within NAFTA. The proportion of regional content required varies by good.

For a car, 62.5% of its value must have been produced within NAFTA to be imported tariff-free to the US from Canada

or Mexico.

For firms to prove they have met the necessary share, they are required to document the origin of parts used in production and obtain a certificate of origin. This implies administrative costs and inefficiencies, which increase as the content share rises.

The White House is proposing to increase the NAFTA share from 62.5% to 85% and add a requirement for 50% US content.

What is the impact of stricter rules of origin on supply chains? The logic goes

that as requirements tighten, more trade should take place within NAFTA, given the desire to qualify for free trade. For example, cheaper car parts from Asia or Europe may be eschewed in favour of more expensive NAFTA components by a Mexican vehicle manufacturer aiming to meet the 62.5% benchmark. But as the benchmark increases, there comes a point when it becomes cheaper to import parts from outside NAFTA and pay the tariff on the finished vehicle anyway.

What that means is the tariff rate imposed by the US for a vehicle manufactured in

Mexico or Canada would be the same as for anybody else the US doesn't have a free trade agreement with. A competitive advantage is lost. At this point, the vehicle manufacturer may start to question

whether Mexico is actually the best place for its production.

Toying with rules of origin is therefore a risky business, one which can easily have unintended consequences. All that

can be said for sure is that the greater the changes to content shares, the more likely it is that Mexican and NAFTA supply chains will be forced to adjust, one way or the other.



Agility's Take / Mexico

Mexico's economy performed better than expected in the first half of 2017, growing at a 2.3% pace before slowing to 1.8% in the second half. The economy is rebalancing with exports and investment contributing more to growth and private consumption decelerating as inflation dents purchasing power and credit expansion slows amid monetary tightening. Important structural reforms in the energy, telecommunications and education sectors have yet to yield results, although they should produce a pay-off over the next couple of years. The contentious and drawn-out renegotiation of the North American Free Trade Agreement (NAFTA) is worrisome for Mexico. If talks fail to move forward, there is a risk of inertia with the approach of Mexico's presidential election (July 2018) and the U.S. mid-term elections

(Nov. 2018). This will be a landmark election in Mexico. The left is resurgent, and independent candidates can run for president for the first time. The closer we get to the election, the greater the chance that the NAFTA renegotiation becomes a political issue. A collapse in negotiations could result in termination of NAFTA, which would disrupt the economies of all three partners. Auto industry rules of origin and pay in Mexico are among the biggest areas of contention with the United States.

Mexico's new leader will be under pressure to reduce crime, tackle corruption and make more progress on structural reforms. If the U.S. cuts corporate taxes, Mexico will need to consider its own cuts. Fuel prices are expected to climb 25% in January, adding to inflation and raising the cost of

domestic transportation.

E-commerce growth has surged, and an estimated 65m Mexicans now have internet connections. Amazon and others are investing in distribution centres and other facilities intended to serve the growing market. On the infrastructure front there is important work underway: a new airport for Mexico City; modernization of ports in Lazaro Cardenas, Progreso and Veracruz; expansion and improvement of highways and roads; a high-speed train connecting Toluca and Mexico City, and an electric train in Guadalajara. Mexico is trying to promote investment and infrastructure development through the creation of special economic zones near port cities (Zonas Economicas Especiales) where qualified businesses will be exempt from VAT and income taxes.

Brazil (No. 9): Crisis remains, and candidates for 2018 elections do not inspire hope

Brazil is among the worst performers in this year's Index. Its score fell by 0.20 points to 6.03, the worst decline in the top 10. This saw it lose two places to rank No. 9, as it continues its multi-year slide down the table. All three of its sub-index scores fell this year, with Market Size & Growth down the most acutely (-0.33). Poorer economic forecasts and worsening measures of financial stability are to blame.

It is clear that Brazil remains in crisis. The economy has suffered a huge recession, with real incomes per capita down by 9% between 2013 and 2016. Its fiscal position is unsustainable. Above all, a corruption scandal has consumed the political elite and leading businessmen. The Supreme Court has authorised investigations into one-third of current cabinet members, senators, state governors, as well as the president, leaders of

Congress and of the main political parties. Perhaps the bottom of the barrel has been reached, although that is by no means a sure thing. The IMF forecasts economic growth of 0.7% in 2017 and 1.5% in 2018.

Respected economics journalist Martin Wolf asserts: “Brazil needs comprehensive economic and fiscal reform. The most important economic reforms include: opening up a relatively closed economy, tax reform, labour market reform, higher investment in infrastructure and policies aimed at raising national savings.”

Where should Brazil start? Wolf actually says that first the government at all levels needs to fundamentally change the way it operates.

“The system needs to move from corruption to honesty, opacity to transparency, discretion to predictability and from looking after the privileged to serving the people. That is what the corruption scandals, the slow-burning fiscal crisis, the inefficient pattern of government spending and the longer-term economic weaknesses are telling Brazilians.”



Agility's Take / Brazil

After the worst economic crisis in 100 years, when Brazilian GDP dropped roughly 7%, the country's economy was expected to show slight growth (1%) in 2017. The forecast for 2018 is 2% - modest but heading in the right direction after years of worrisome contraction and drift. Industries are producing more, and unemployment has levelled off. Interest rates are on the decline, which

is rekindling consumer spending. All of those factors are reasons for optimism.

Political polarisation, however, is cause for concern. The two most prominent candidates in the 2018 presidential election are on the far left (former President Luiz Inacio Lula da Silva) and far right (Jair Bolsonaro), making it difficult for either to unite the fractured country.

Business leaders are hoping for the emergence of a centrist candidate who will focus on economic reform and clean governance. The country's painful and prolonged series of corruption scandals – still ongoing – could produce a much-needed change in business and political culture. The economic impact of the Operation Carwash scandal appears to be over, although political fallout continues.

Iran (No. 18): Is the hype around the logistics industry justified?

Building on a strong entry to the Index for the first time last year, Iran has improved once again. Its overall Index score has increased by 0.13 points to 5.48, seeing it maintain its rank of No. 18.

Its Market Size and Growth sub-index score has increased by 0.14 on the back of improved financial stability, although it is still relatively poor in this regard. Although its Compatibility sub-index score is actually down marginally, the big gain has come from

the Connectedness sub-index, which increased by 0.24. This is primarily thanks to significantly better liner shipping connectivity, as many of the world's largest container lines have returned.

Following the lifting of UN and EU sanctions in January 2016, many analysts predicted that numerous logistics opportunities would arise in Iran. Box 6 examines what has happened so far across a variety of logistics sectors.

Box 6: The return of international LSPs and multinationals to Iran

Sea and air freight

Maersk resumed services to Iran in October 2016 after a five-year hiatus. The company said it represents a 1.4m TEU market. In anticipation of sanctions lifting, MSC, CMA CGM, HMM, Evergreen and Yang Ming resumed services in 2015. In a nutshell, container lines have returned en masse.

A similar story applies for air freight. Many major European airlines have resumed services to Iran. KLM commenced in October 2016, IAG Cargo in September and Air France in April. In addition, Iran has ordered 80 jets from Boeing and 100 from Airbus, the country's first planes acquired from Western manufacturers since 1979.

Road freight

The major announcements made surrounding road freight really relate to trade between Europe and Iran. DHL Freight, Delamode and Gebrüder Weiss all announced new services to Iran in

2016, while Militzer & Munch formed a joint venture with Andreas Schmid Logistik in March 2017. Growing overland trade with Europe appears to be a significant opportunity for LSPs.

Freight forwarding

A few European and Turkish freight forwarders have established a presence in Iran, partnering with local agents to service ports north of Tehran and on the Caspian Sea, and investing in logistics facilities. A Turkish forwarder is exploring the possibility of a time-critical air freight service from Cologne, Germany, for vehicle parts. At the moment, there is no way to move cargo between Western Europe and Iran in less than eight days.

Other major forwarders such as Agility, Panalpina and DB Schenker Logistics have also expressed interest in Iran.

Logistics suppliers

Another way to assess the opportunity for the logistics industry is to look at what is going on in various vertical sectors.

One industry which has been particularly enthusiastic about Iran is the automotive sector. In August 2017, Renault announced that it would set up a new factory south of Tehran producing 150,000 vehicles per year, putting it on course to manufacture 500,000 per year in Iran by 2022. Fellow French manufacturer PSA has also committed €300m to make Citroens in the country. Tier-one parts supplier Bosch also returned to Iran in May 2016.

Another dynamic sector is oil & gas. Iran has the world's largest natural gas reserves and the second-largest oil reserves in the Gulf. In July 2017, French giant Total, in partnership with China's CNPC, signed a \$4.8bn deal to develop the country's South Par gas field. Shell and Eni have also signed provisional agreements. The world's largest oil driller, Schlumberger, also said it had signed a preliminary agreement to study an Iranian oil field.

While many Asian and European companies are eagerly scrambling for new business as the UN lifted all nuclear-related sanctions against Iran and the EU removed many bilateral sanctions on Iran's banking and energy sectors in January 2016, the US government still has in force a myriad of unilateral sanctions, largely prohibiting US companies doing business with Iran. The trade situation does not look like it will improve any time soon because the Trump administration has taken a hard line with Iran.

Companies outside the United States are also affected by its sanctions. Iranian banks and foreign banks processing Iran-related transactions are not allowed to deal in dollars. US sanctions are deterring some European and Asian companies from investing in Iran that otherwise would.

Iran is also generally an opaque place to do business, corruption is extensive and there is political opposition to letting foreigners invest in Iran's natural resources.

Despite this, there are many examples of logistics activity ramping up across various logistics markets and a broad range of vertical sectors. The optimism must be tempered by the fact that this is largely limited to European and Asian linkages with Iran. US sanctions remain a major headache for boosting logistics activity in Iran and their impact is not limited to US companies.



The 2018 Agility Emerging Markets Logistics Index Survey

INTRODUCTION AND SAMPLE CHARACTERISTICS

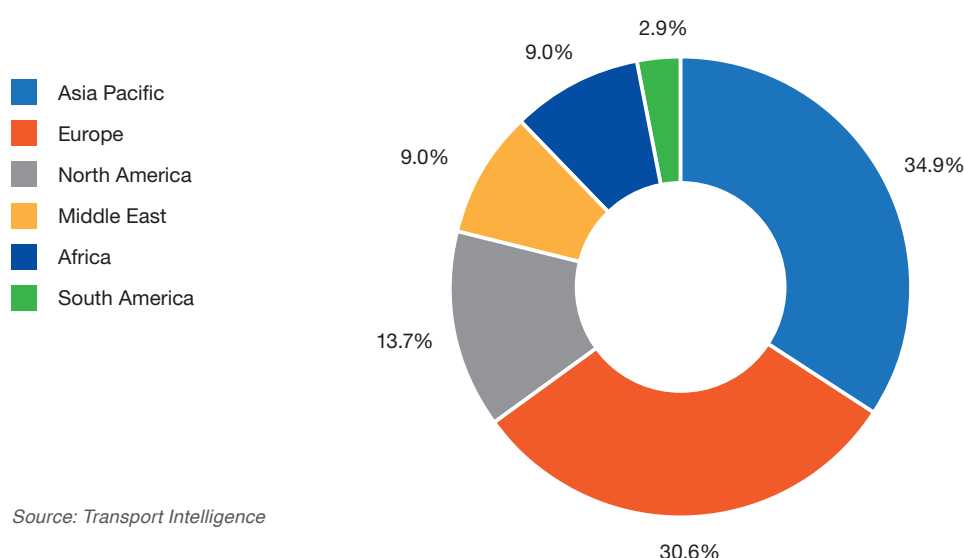
To further examine the potential of the world's most-promising emerging logistics markets, Transport Intelligence surveyed logistics industry professionals between September and November 2017.

Participants from a broad range of regions took part. Respondents working for logistics providers accounted for just

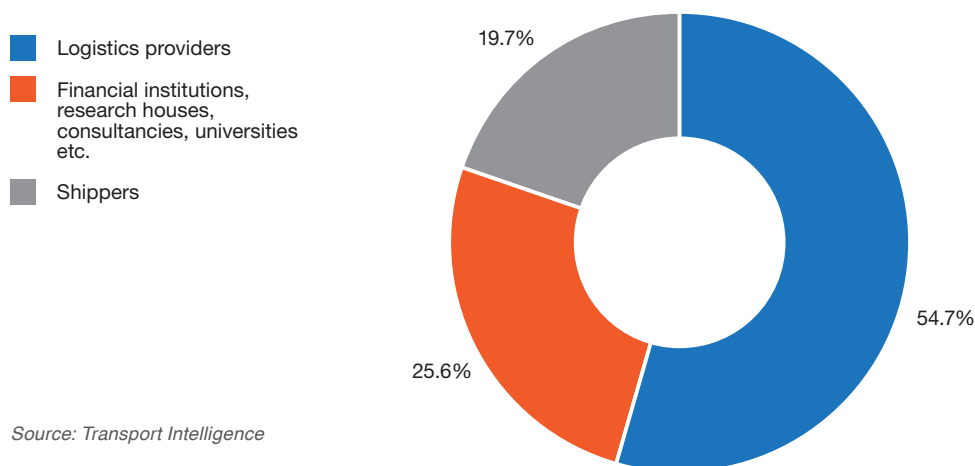
over half of respondents, those working for shippers around one-fifth, while about a quarter were from various other organisations.

Overall, responses from 529 supply chain professionals are used in this, the ninth annual edition of the Agility Emerging Markets Logistics Index Survey.

Geographical Distribution of Survey Respondents



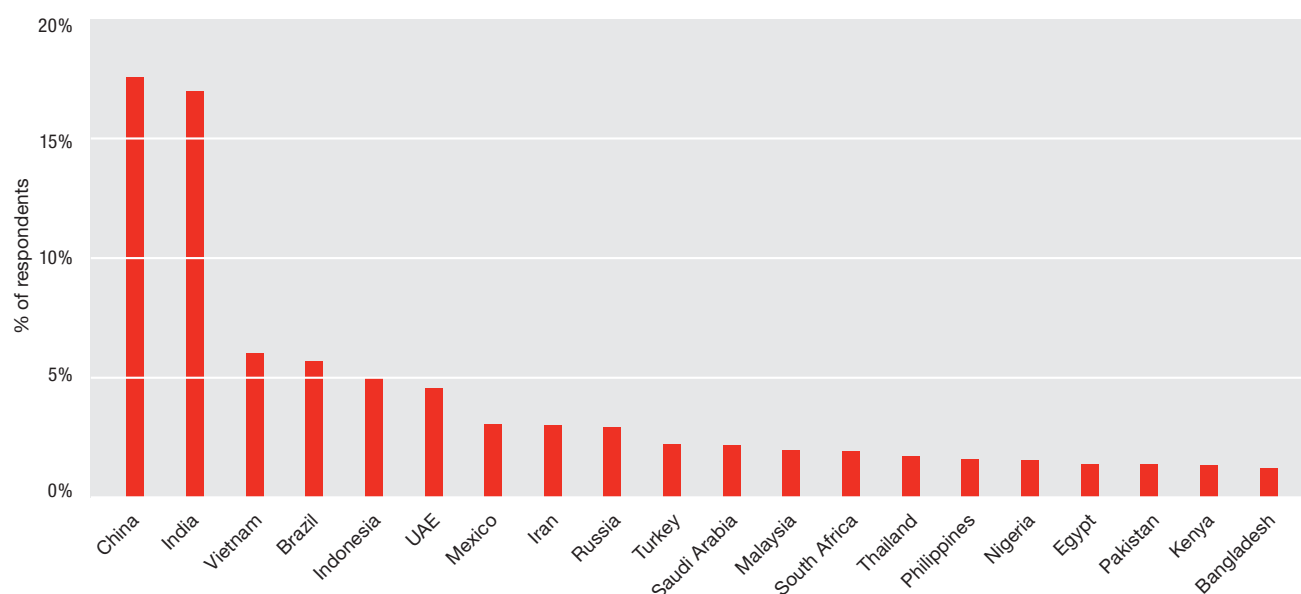
Occupational Distribution of Survey Respondents



Source: Transport Intelligence

LOGISTICS MARKETS OF THE FUTURE

Which of the following countries do you believe have the most potential to grow as logistics markets in the next five years?
Please rank.



Source: Transport Intelligence

Country	2018	2017	YoY Change
China	1	2	up 1
India	2	1	down 1
Vietnam	3	4	up 1
Brazil	4	3	down 1
Indonesia	5	5	-
UAE	6	6	-
Mexico	7	7	-
Iran	8	9	up 1
Russia	9	8	down 1
Turkey	10	10	-
Saudi Arabia	11	14	up 3
Malaysia	12	11	down 1
South Africa	13	12	down 1
Thailand	14	15	up 1
Philippines	15	16	up 1
Nigeria	16	13	down 3
Egypt	17	23	up 6
Pakistan	18	21	up 3
Kenya	19	17	down 2
Bangladesh	20	18	down 2

Source: Transport Intelligence

Survey respondents were asked to rank the five emerging markets they viewed as having the most potential to grow as logistics markets over the next five years. A score was calculated in order to rank the markets – a first preference was awarded five points, a second preference four points, and so on down to a single point for the fifth preference.

There is much continuity between 2018 and 2017, with large markets remaining at the head of the list, indicating that market size remains a very important determinant of market potential.

China and India remain by far the most compelling opportunities. China has reclaimed the top spot from India, though by a very

slight margin. The result suggests that many have not been put off by predictions of a 'hard landing' for the Chinese economy. Its recent economic growth data and forecasts from institutions such as the IMF suggest it will continue to be the main locomotive of the world economy over the next five years or so. Despite warnings of a possible debt crisis (see China's Emerging Narrative), industry professionals remain confident about the Chinese economy.

It is a bit surprising that India fell to second, as there is much optimism around the Goods and Services Tax (GST) and its potential to positively impact various facets of the economy (see

India's Emerging Narrative). The results of a separate survey question suggest that the passing of GST has had a positive impact on LSP investment plans. Perhaps some respondents saw India's demonetisation initiative as poorly executed and this stuck in the minds of investors.

That survey respondents selected Vietnam as the market with the third-highest potential confirms that market size isn't everything. Vietnam has recorded impressive economic and trade growth over many years.

Although Brazil managed to maintain its position within the top five, it slid one place to 4th. While respondents continue to show faith in the market, years of corruption and political uncertainty are taking their toll (see Brazil's Emerging Narrative). Its unsustainable fiscal position, high unemployment rate and under-developed infrastructure likely also weigh down its perceived potential.

Indonesia once again ranks 5th. Ramped up infrastructure investment after years of neglect is possibly helping to sustain confidence in its potential (see Indonesia's Emerging Narrative).

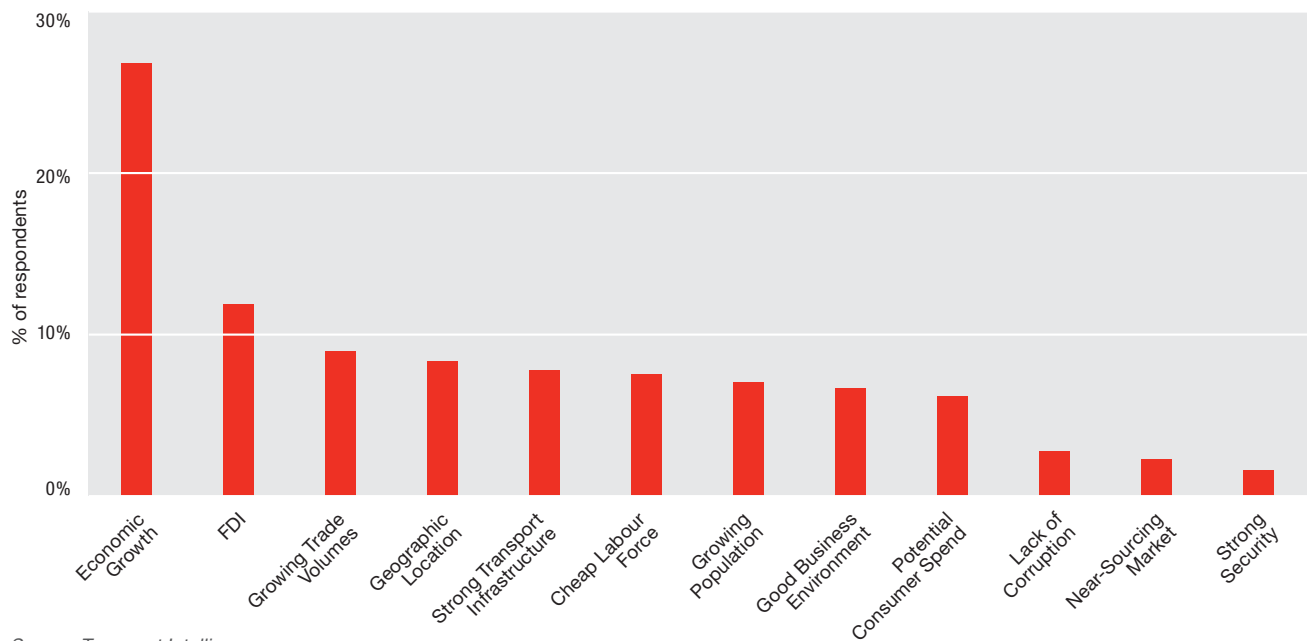
Up one place to 8th, Iran continues its remarkable rise, having jumped from 27th to 15th in 2016, and then 15th to 9th in last year's survey. The ranking suggests Iran's rise is no flash in the

pan, and that investors are impressed with how international LSPs have managed to successfully expand operations following the lifting of UN and EU sanctions in January 2016 (see Iran's Emerging Narrative).

As for the biggest movers, Saudi Arabia gained three positions to rank 11th, perhaps an indication of faith that business-friendly reforms will take place and kick-start the country's economy. Crown prince Mohammed bin Salman is driving forward programmes of social liberalisation and economic diversification away from oil. The most significant mover in the rankings of logistics potential is Egypt, which climbed six positions to claim 17th. Notably, Egypt was also this year's biggest mover up in the Index, rising six places to No. 14. Relative political stability coupled with economic reforms appear to be inspiring renewed confidence. A terrorist attack in Sinai which killed over 300 came after the survey was closed and did not affect the data that underpins the Index either. Elsewhere, in line with its Index decline, Nigeria dropped three positions to 16th for logistics potential. It continues to struggle due to low oil prices, and some investors may have been spooked by the prospect of political instability with President Buhari spending more than three months in London last summer on sick leave due to a mystery illness which officials refused to identify.

WHAT MAKES AN EMERGING MARKET?

Please rank, in order of importance, the key drivers that make a country an important emerging market.

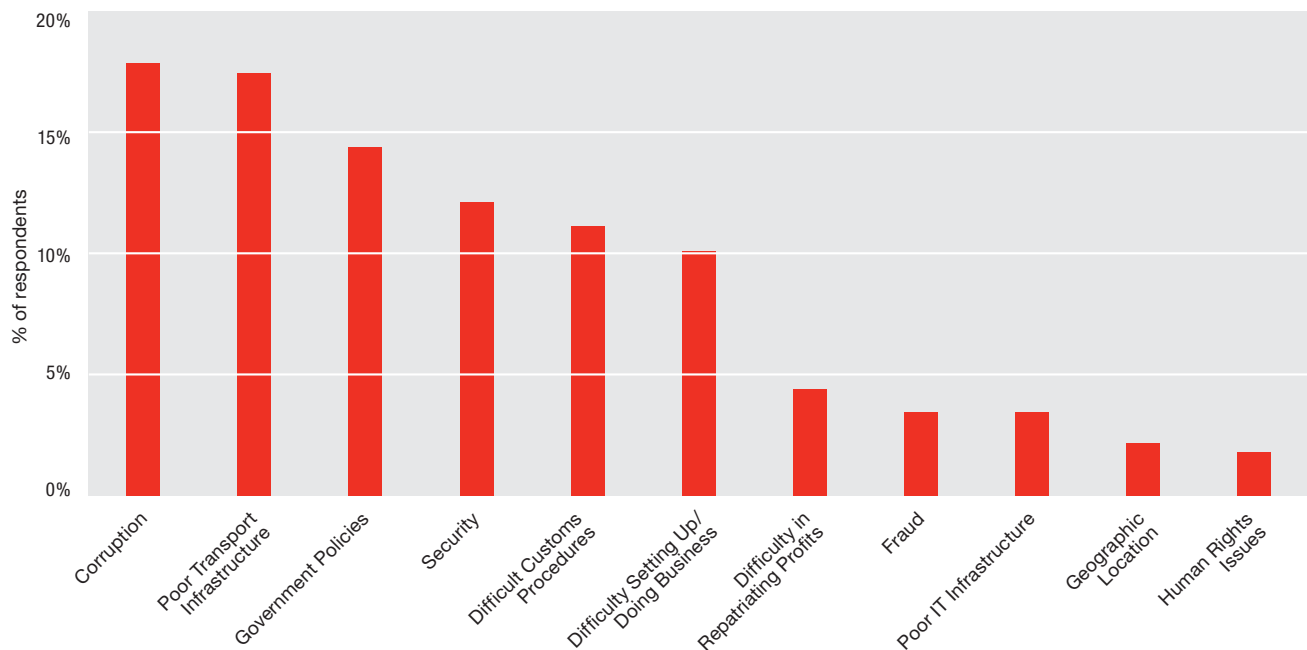


Factor	2018	2017	YoY Change
Economic growth	1	1	-
FDI	2	2	-
Growing Trade Volumes	3	3	-
Geographic Location	4	5	up 1
Strong Transport Infrastructure	5	7	up 2
Cheap Labour Force	6	4	down 2
Growing Population	7	8	up 1
Good Business Environment	8	6	down 2
Potential Consumer Spend	9	9	-
Lack of Corruption	10	11	up 1
Near Sourcing Market	11	10	down 1
Strong Security	12	12	-

Source: Transport Intelligence

CHALLENGES OF DOING BUSINESS IN EMERGING MARKETS

Please rank, in order of importance, the main problems associated with doing business in emerging markets.



Source: Transport Intelligence

Factor	2018	2017	YoY Change
Corruption	1	1	-
Poor Transport Infrastructure	2	2	-
Government Policies	3	3	-
Security	4	4	-
Difficult Customs Procedures	5	5	-
Difficulty in Setting Up and Doing Business	6	6	-
Difficulty in Repatriating Profits	7	8	up 1
Fraud	8	7	down 1
Poor IT Infrastructure	9	11	up 2
Geographic Location	10	9	down 1
Human Rights Issues	11	10	down 1

Source: Transport Intelligence

The top three drivers of growth in emerging logistics markets remained 'Economic Growth', 'FDI' and 'Growing Trade Volumes'. Given the correlation between wider economic expansion and growing demand for logistics services, the continued emphasis placed on this as the top factor is not surprising. It is likely this will continue, with general economic growth playing an important role in encouraging spending within consumer markets, pulling larger amounts of the population into the middle class and increasing levels of public spending on infrastructure projects and other public services.

The fall of 'Cheap Labour Force' by two positions suggests there may be a growing perception that low-cost manufacturing as a model of economic development could be running out of steam. Aside from labour costs, manufacturers may be assigning more importance to other cost factors and broader considerations when making investment decisions. Going forward, this perhaps bodes well for countries that perform strongly in the Compatibility and Connectedness sub-indices. Technological advances and growing confidence in technology's capacity to replace many manual operations might be another explanation for the drop of 'Cheap Labour Force' in this year's Index.

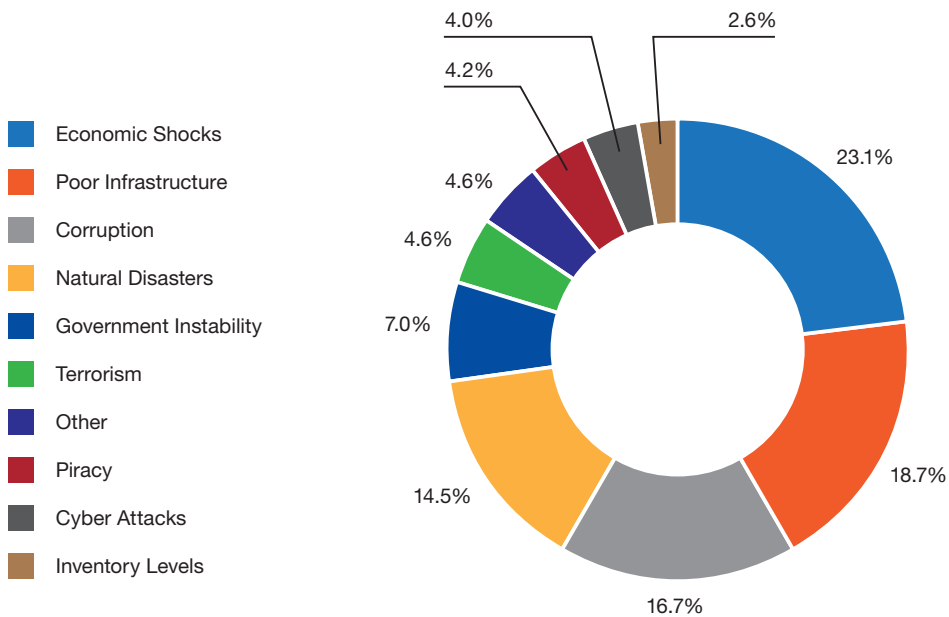
The rise of 'Strong Transport Infrastructure' by two positions indicates that infrastructure development is increasingly perceived as a key enabler of economic activity. Poor infrastructure restricts logistics providers from transporting goods predictably and efficiently, holding back the development of formal logistics provision in emerging markets. 'Poor Transport Infrastructure' is also once again the second most important inhibitor to growth in emerging markets.

Having fallen from 4th to 6th last year, 'Good Business Environment' fell two positions further to 8th this year. Optimistically, this may be an indication that robust business conditions are an ever more common feature of emerging markets. A second, more negative interpretation, is that LSPs have to follow opportunities into less than optimal locations as growth is squeezed across emerging markets. Such an interpretation may also explain the seemingly contradictory results which place decreasing value in 'good business environment' but continuously rank problems such as 'corruption' and 'government policies' as key inhibitors of growth.

BIGGEST SUPPLY CHAIN RISKS BY REGION

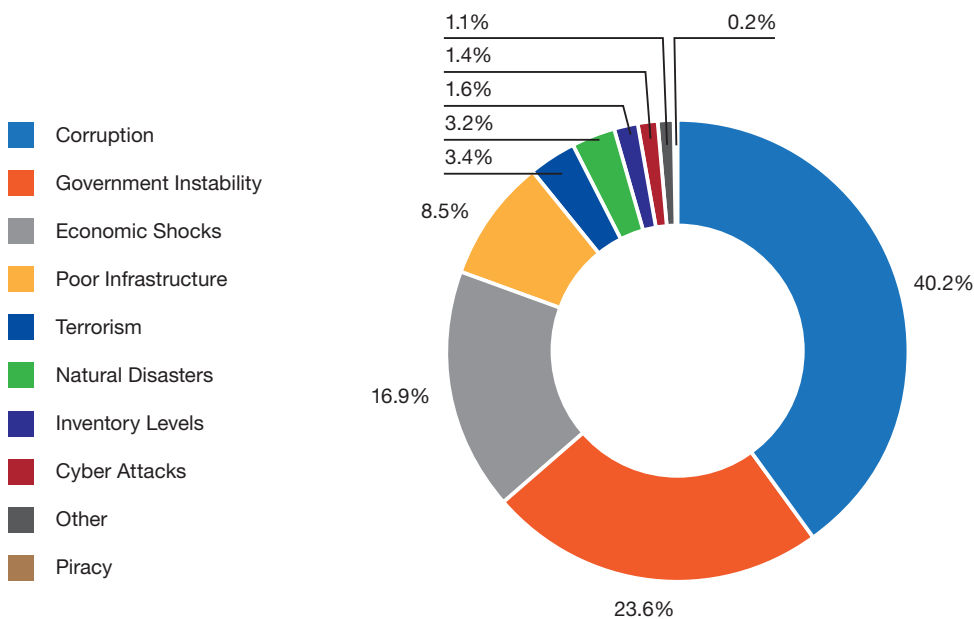
For each of the following regions, please outline which supply chain risk poses the most considerable threat to growth:

Asia Pacific



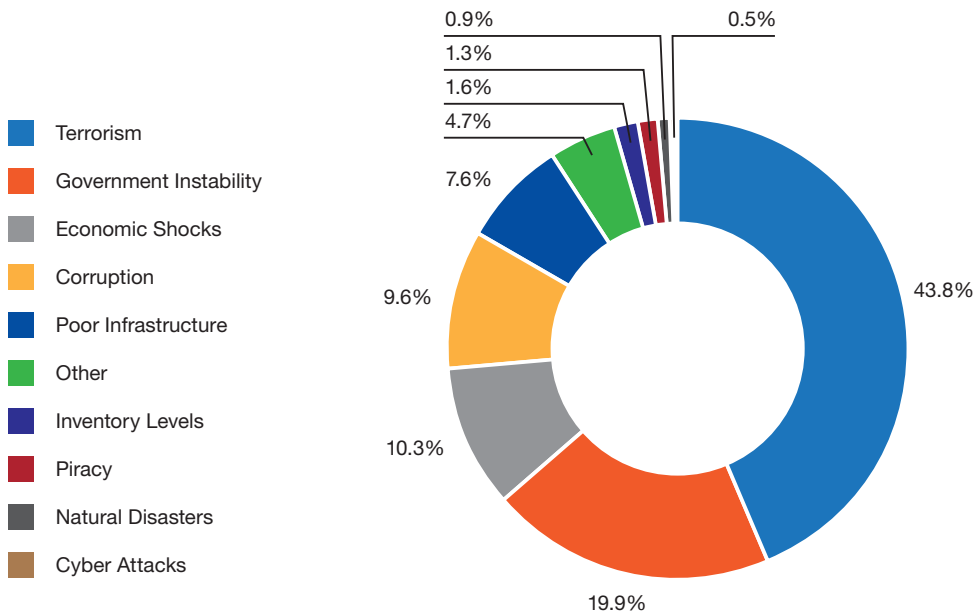
Source: Transport Intelligence

Latin America



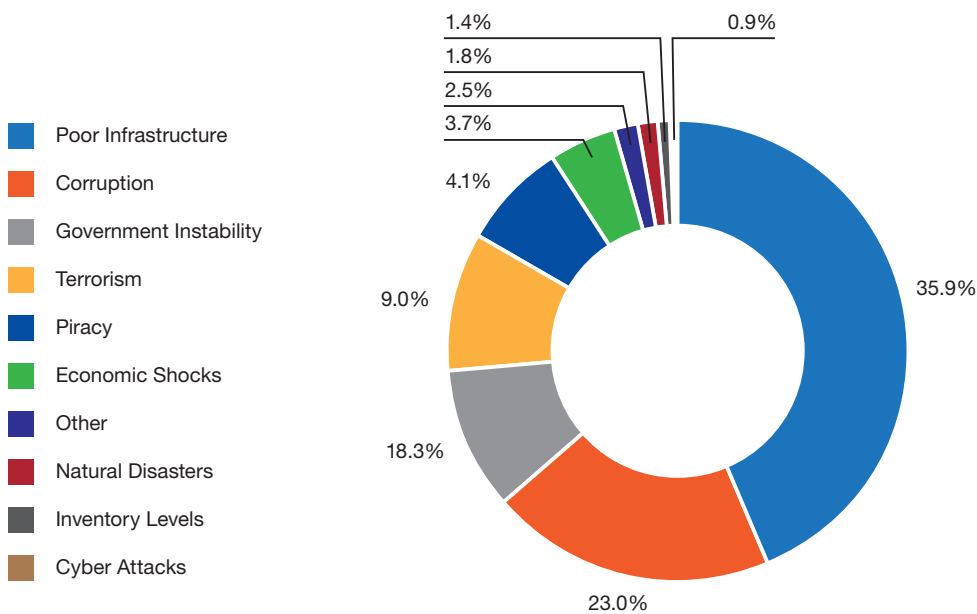
Source: Transport Intelligence

Middle East & North Africa



Source: Transport Intelligence

Sub-Saharan Africa



Source: Transport Intelligence

Asia Pacific

Economic shocks, poor infrastructure, corruption and natural disasters have been rated as the most significant supply chain risks across Asia Pacific for a third consecutive year. Overall, the four risks account for 72.0% of the total responses. While growth prospects remain positive for Asia Pacific, the survey's results imply that economic shocks will pose the main threat to growth in the region. The dominance of this factor may suggest that respondents anticipate unexpected events to negatively impact the region's positive outlook. This could relate specifically to the threat of a 'hard landing' in China, or to broader concerns around protectionism, for example.

Natural disasters are perceived as the fourth most threatening supply chain risk for the region. This factor dropped two positions, perhaps indicating that respondents have more faith in the ability of the governments of the region to introduce countermeasures to better prepare for future events.

Climbing two positions compared to last year, 'poor infrastructure' was cited as the 2nd most significant supply chain risk across Asia Pacific. This is consistent with the rise of 'strong transport infrastructure' as a driver of growth in emerging logistics markets.

Latin America

Corruption and government instability remained the top two risks in Latin America, accounting for 63.8% of total responses, an increase of 4.5pp compared with the previous year. These findings come as little surprise in a year where corruption continued to make headlines across Latin America. Bribery of public officials and in public procurement as well as embezzlement of public funds remain prevalent.

Recent events in the region go a long way in explaining respondents' particularly high ranking of government instability. Brazil's numerous political and business corruption scandals have been well-documented, while disastrous governance in Venezuela has left many describing it as a failed state.

Middle East and North Africa

Terrorism and government instability once again ranked as the most significant supply chain risks across MENA, accounting for 63.6% of the total responses, although both factors accounted for a slightly lower proportion of total responses this year. The dominance of the two risk factors reflects ongoing conflicts and terrorism risk present in parts of the region.

Economic shocks are quite a bit more important than last year, suggesting that respondents are becoming aware of the new realities in the region following the oil price crash. GCC countries have been buffeted by falling oil prices, leading to far-reaching consequences for businesses.

Similarly, the perception of 'corruption' as a supply chain risk across the Middle East and North Africa increased from 7.2% to 9.6%. The corruption purge in Saudi Arabia might be behind the rise in the share of this factor.

The perception of poor infrastructure as a supply chain risk to growth in Middle East & North Africa continues to decline which is likely a result of vast investments in infrastructure across the region. These include the development of numerous special economic zones, ports and airports, leading many to suggest that the region actually has too many 'mega hubs', with some destined to be underutilised.

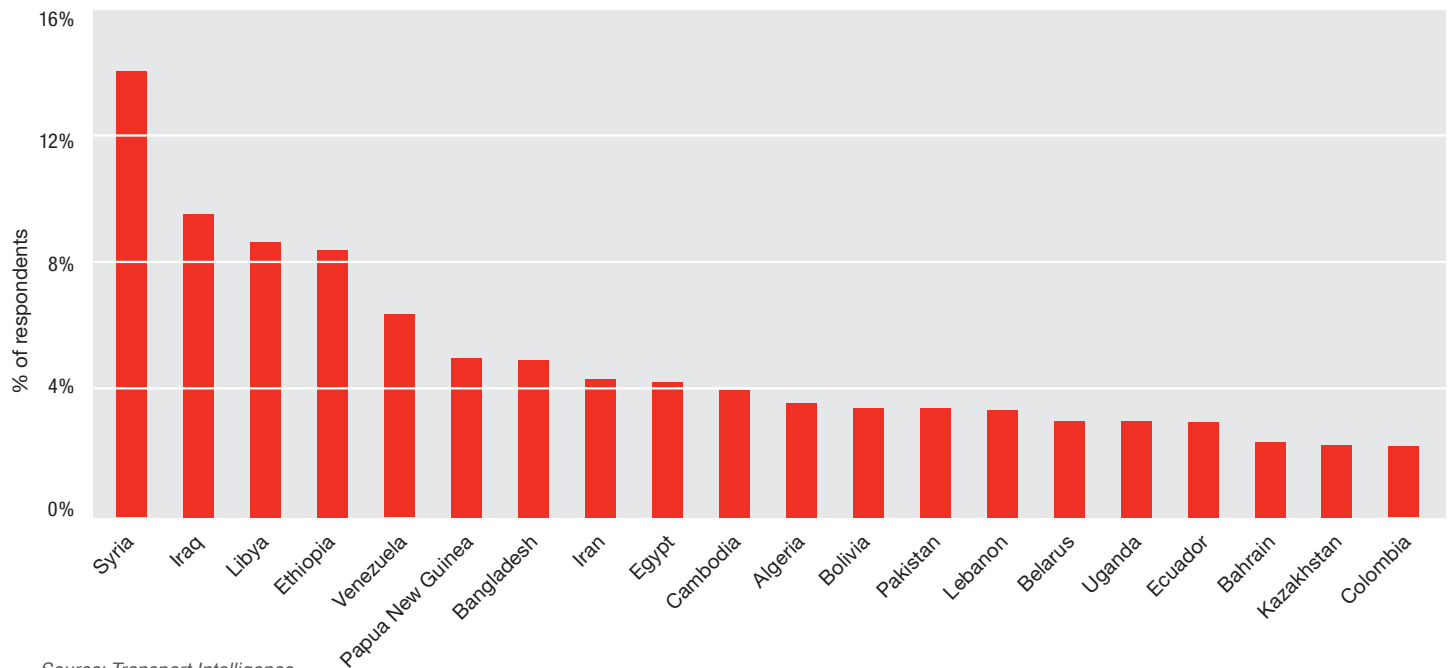
Sub-Saharan Africa

The perception of supply chain risks in sub-Saharan Africa is more or less unchanged year-on-year, with poor infrastructure, corruption and government instability making up the top three risks. Together, these risk factors account for 77.2% of total responses.

The most significant change is the 3.7pp rise in the proportion of respondents that suggested corruption as the gravest supply chain risk, echoing concerns that widespread graft continues to stifle development and remains a key barrier to foreign investment in Sub-Saharan Africa.

LEAST ATTRACTIVE EMERGING LOGISTICS MARKETS

Which of the following countries do you believe have the LEAST potential as emerging logistics markets? Please rank.



Source: Transport Intelligence

	2018	2017	YoY Change
Syria	1	1	-
Iraq	2	3	up 1
Libya	3	2	down 1
Ethiopia	4	4	-
Venezuela	5	11	up 6
Papua New Guinea	6	9	up 3
Bangladesh	7	5	down 2
Iran	8	6	down 2
Egypt	9	7	down 2
Cambodia	10	10	-
Algeria	11	8	down 3
Bolivia	12	12	-
Pakistan	13	16	up 3
Lebanon	14	18	up 4
Belarus	15	14	down 1
Uganda	16	15	down 1
Ecuador	17	21	up 4
Bahrain	18	23	up 5
Kazakhstan	19	20	up 1
Colombia	20	22	up 2

Source: Transport Intelligence

Countries from the Middle East and North Africa dominate the list of countries with the least potential to grow as logistics markets. Syria maintains the top position in the ranking, which comes as little surprise given the ongoing conflict, now into its sixth year. Lower oil prices and ISIS's insurgency are likely behind Iraq's rank of 2nd.

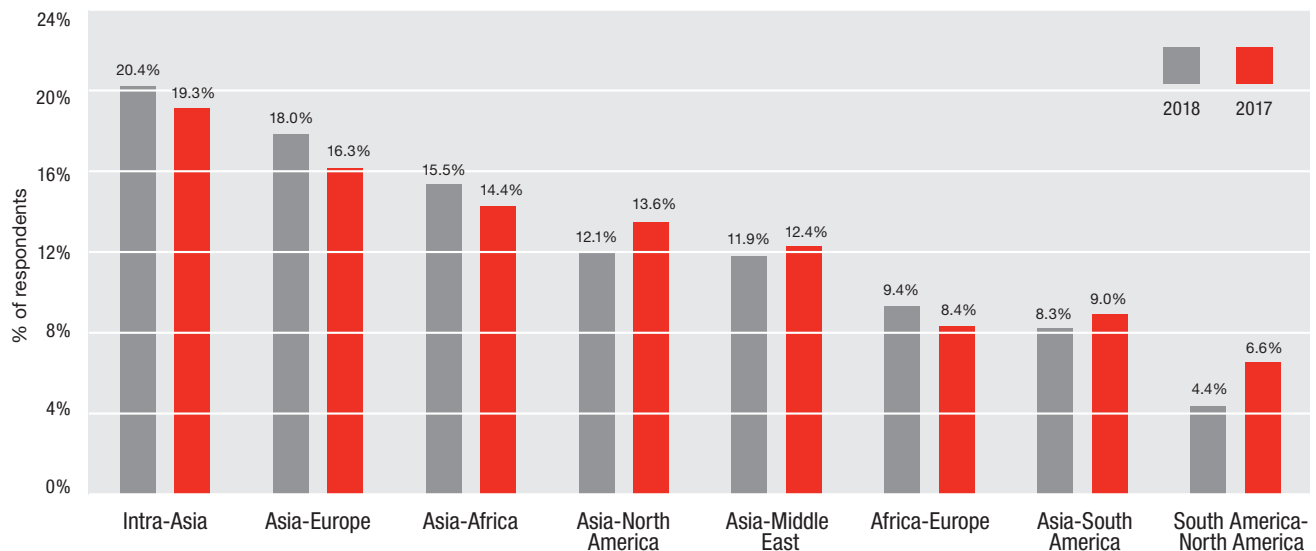
Ethiopia holds its position of 4th, which is at odds with results elsewhere. In a later question, Ethiopia climbed two positions to rank as the 5th most-promising logistics market in sub-Saharan Africa over the next five years. Its ambition to become a low-cost manufacturing hub has caught the eye of a number of investors. In particular, it is positioning itself as an alternative fashion & textiles producer, competing against the likes of Bangladesh and Vietnam. It also has significant air freight operations with exports centred around flowers. Africa's largest air cargo terminal recently opened at Addis Ababa airport. Ethiopia's position as one of the least attractive emerging markets may be related to the ongoing threat of terrorism, especially in border areas with Somalia, Kenya, South Sudan, Sudan and Eritrea. While the security risk is lower in the capital, it is still deemed 'high' in all surrounding areas by a number of international authorities. The Somalia-based terrorist group Al-Shabaab has issued public threats against Ethiopia due to its involvement in military intervention in Somalia.

The most significant movement in the ranking relates to Venezuela, which climbed six positions to place 5th. Venezuela is the only South American country to place in the top 10 markets with the least potential. Its rise in this list coincides with its loss of four places in the Index, leaving it at No. 48. The country has declined across so many facets of society: its economy is tanking, hyperinflation is a reality, many are going hungry and corruption is the worst in the Western Hemisphere. To top it all off, in August 2017, Mercosur suspended Venezuela's membership in the trading bloc for violating democratic principles and failing to comply with trade obligations. An already disastrous situation for freight forwarders worsened further.

Algeria has recorded the most significant improvement, falling three positions in the list to 11th. Its government has announced measures to control public spending and aims to reduce its dependence on oil. New laws designed to incentivise investment in non-oil sectors have been proposed, providing tax breaks and looser regulations. The hope is that 'high value added' sectors such as agribusiness, renewable energy, and ICT will be able to attract significant funding.

PROSPECTS FOR EMERGING MARKET TRADE LANES

Which of the following trade lanes do you believe have the greatest potential for future growth?



Source: Transport Intelligence

Intra-Asia remains the most-promising emerging market trade lane according to survey respondents. Home to some of the largest and fastest-growing economies in the world, intra-Asia trade continues to be strong as ‘factory Asia’, a complex web of supply chains primarily feeding China, becomes more entrenched. In addition to flourishing trade relationships with China, trade between other Asia Pacific countries is also predicted to increase significantly in the coming years. For instance, bilateral trade between Indonesia and Thailand has grown at an average of 10.5% annually during the past five years and is projected to be almost five times as high in 2030 as in 2009.

Asia-Europe maintains its position as the trade lane with the second-best potential for future growth, as the share of respondents selecting it as best increased by 1.7pp year-on-year. This perhaps reflects faith among respondents that demand from Europe for Asia’s exports will expand as its economic situation improves. In addition, at times in 2017, eastbound air freight tonnage on Europe-Asia services exceeded westbound volumes on certain key markets, confirming a long-term ‘re-balancing’ of the previous strong directional imbalance on key Far East-Europe markets. According to WorldACD, over the past six years, there was hardly any growth westbound from Asia Pacific to Europe, but in the opposite direction, volumes increased by an

average of almost 40%. This has been attributed to increased purchasing power of the growing middle classes in Asia, especially in China. There has been growing demand for quality food, as well as high-value fashion garments, pharmaceuticals, and consumer products.

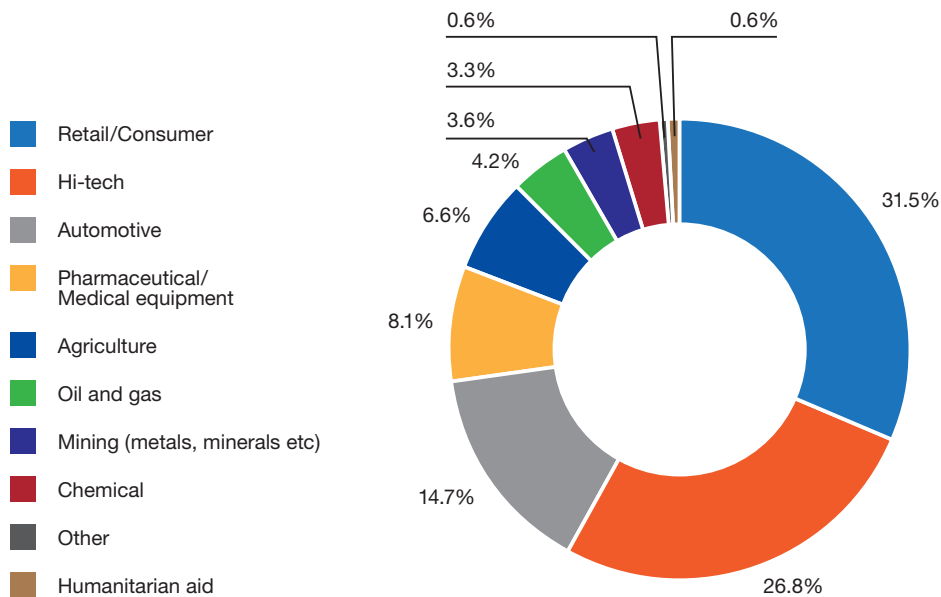
The relatively high degree of confidence in the growth potential of the Asia-Africa trade lane may be explained by investments made by Chinese government and business which has improved the scale and efficiency of Asia-facing logistics infrastructure in sub-Saharan Africa.

The results also suggest that trade lanes connected to North America have worse prospects compared to last year. Short term pessimism for the Asia-North America trade lane is hard to explain, given North America’s strong economic performance in 2017. However, the United States’ withdrawal from TPP and fears of a trade war between China and the United States have perhaps clouded the outlook in the minds of respondents.

VERTICAL SECTOR POTENTIAL BY REGION

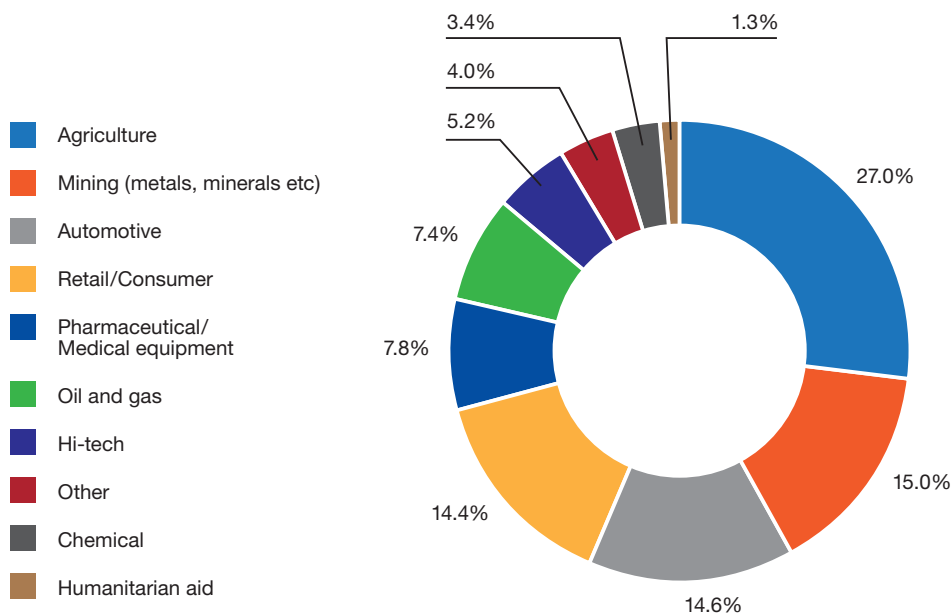
Which of the following vertical sectors do you believe have the greatest potential for future growth in emerging markets?

Asia Pacific



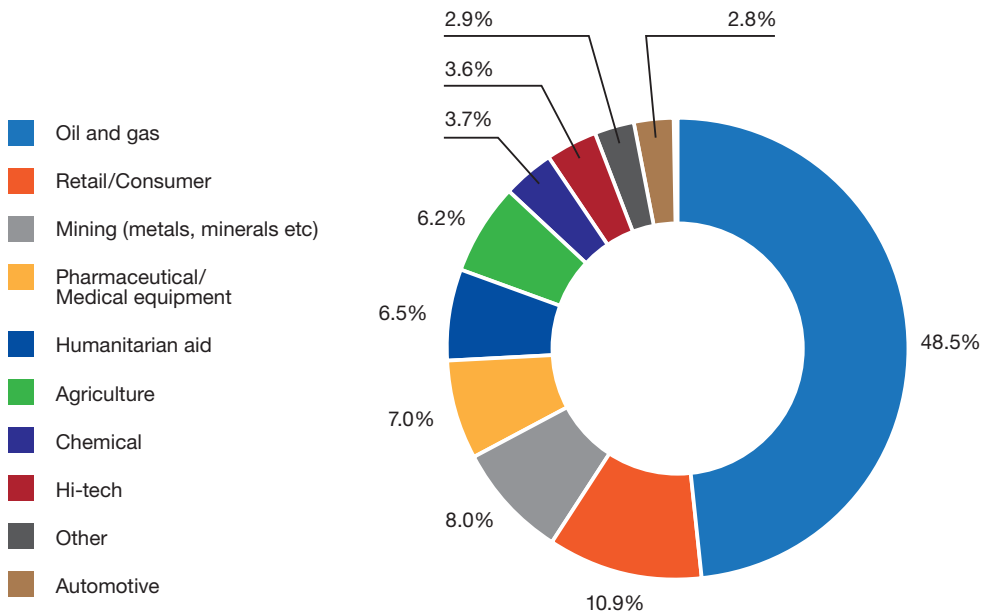
Source: Transport Intelligence

Latin America



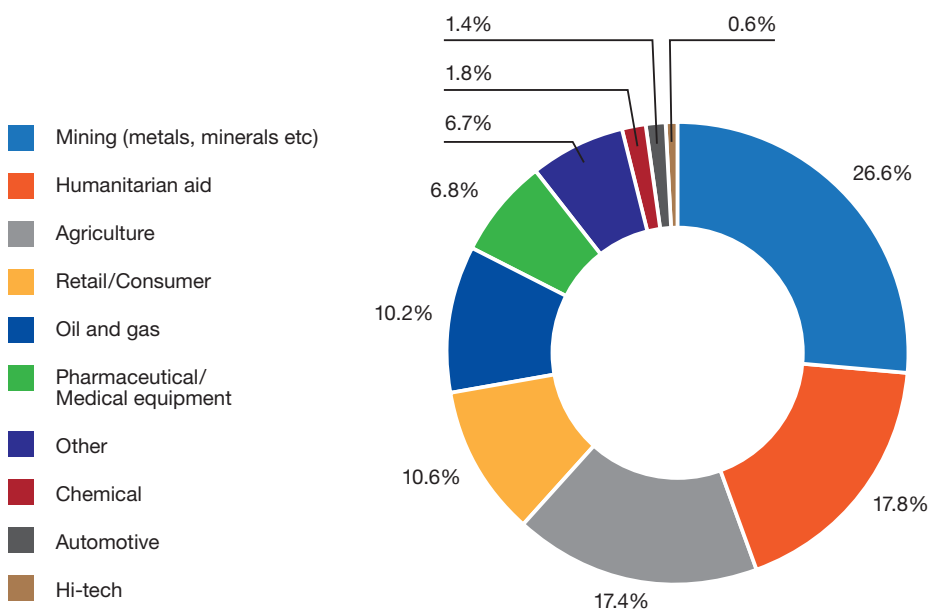
Source: Transport Intelligence

Middle East & North Africa



Source: Transport Intelligence

Sub-Saharan Africa



Source: Transport Intelligence

Asia Pacific

Retail & consumer, hi-tech and automotive rank as the vertical sectors most likely to create opportunities for LSPs across the Asia Pacific.

Together the three verticals accounted for 73.0% of the total

responses, underlining that retail sales volume growth driven by increased spending power of the region's middle classes as well as manufacturing production remain fundamental drivers of growth.

Latin America

Agriculture remains by far the most chosen sector, with 27.0% of respondents believing it has the greatest potential for future growth. In a second tier, mining, automotive and retail & consumer all have approximately a 15% share. There is then a clear drop-off, with the next sector being healthcare & pharmaceutical (about 8%).

That agriculture has been identified as the most-promising sector is perhaps no surprise given that is already a large and historically established sector. The same could be said for mining however, so why is there such a big gap? It perhaps reflects that agriculture offers a more diverse range of opportunities than

mining, with perishables including fruits, vegetables, flowers, fish and meat interesting many forwarders. Automotive and retail & consumer are very different opportunities. Automotive offers both export opportunities and growth from domestic demand, whereas retail & consumer is highly oriented towards serving domestic markets. Overall, the variety of sectors with relatively high shares points to divergent stages of economic development across the region and illustrates that there are two distinct opportunities for LSPs – one serving locations rich in mineral wealth and one serving locations with increasing individual wealth.

Middle East and North Africa

Almost half of respondents (48.5%) stated that the oil & gas sector has the greatest potential for future growth, up by 0.6pp year-on-year.

This is not surprising considering the significance of the sector to the region. While many governments have announced strategies

or 'Visions' to diversify away from oil & gas, these are long-term ambitions. Significant change will not be realised over the course of a few years. In addition, investors may view growth opportunities in oil & gas as far from exhausted, particularly given the opening of the market in Iran.

Sub-Saharan Africa

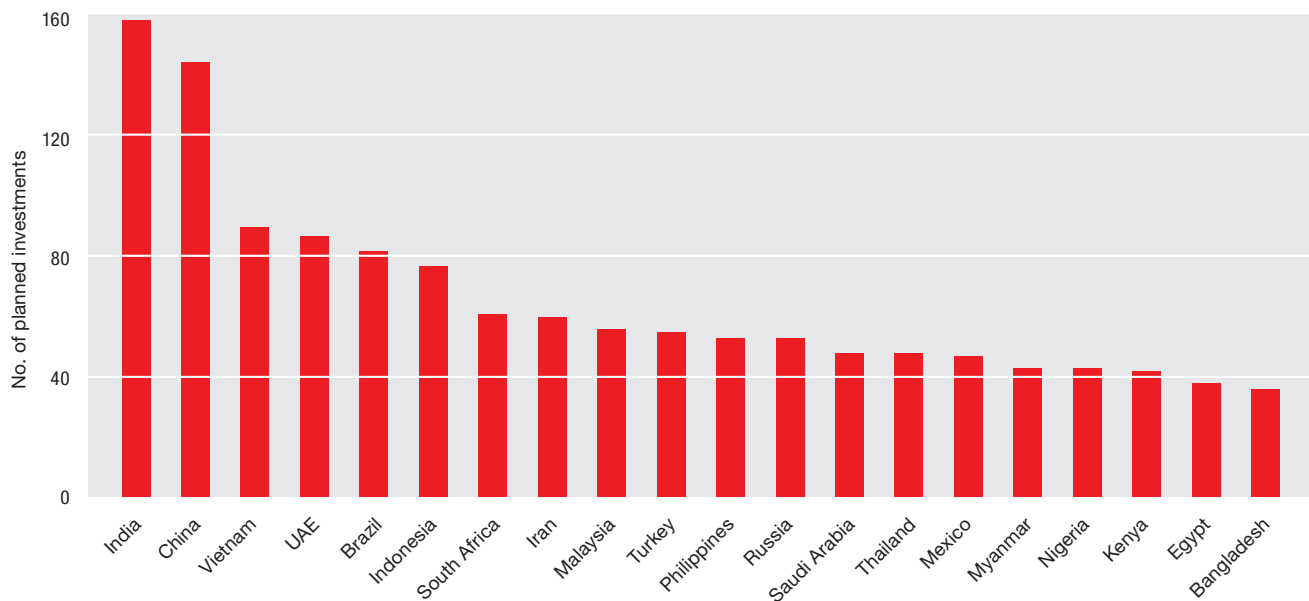
There is much continuity in the top four sectors between 2017 and 2018. Mining is considered to be the vertical with the greatest potential for growth by more than a quarter of the respondents (26.6%).

A year-on-year increase of 2.4pp for the oil & gas sector suggests that respondents maintain a relatively high level of confidence, perhaps due to ongoing substantial investments in African oil projects and the emergence of East Africa as a gas region of global importance.

Retail & consumer also rose by 1.1pp compared to 2017, perhaps pointing at the changing landscape in West and East Africa, where the middle class and spending power are expanding rapidly.

MARKETS FOR POTENTIAL INVESTMENT OVER THE NEXT FIVE YEARS

Which of the following countries, if any, do you plan to expand into in the next five years?



Source: Transport Intelligence

	2018	2017	YoY Change
India	1	1	-
China	2	2	-
Vietnam	3	5	up 2
UAE	4	4	-
Brazil	5	3	down 2
Indonesia	6	7	up 1
South Africa	7	9	up 2
Iran	8	8	-
Malaysia	9	13	up 4
Turkey	10	12	up 2
Philippines	11	18	up 7
Russia	12	6	down 6
Saudi Arabia	13	11	down 2
Thailand	14	15	up 1
Mexico	15	10	down 5
Myanmar	16	38	up 22
Nigeria	17	16	down 1
Kenya	18	19	up 1
Egypt	19	21	up 2
Bangladesh	20	27	up 7

Source: Transport Intelligence

India and China remain the top two leading markets dominating investment plans over the next five years, however some change has occurred further down the list. Vietnam rose two positions to claim 3rd. Its prospects remain strong although relatively unchanged year-on-year. Its movement up may rather be due to less confidence in the markets it surpassed: the UAE and Brazil. The former has suffered as energy prices have slumped while Brazil has fallen two places to 5th as years of corruption and uncertainty in the political climate put off investors.

Myanmar has recorded the most significant improvement, rising 22 places to rank as the market with the 16th highest number of planned investments over the next five years. Logistics providers have ramped up investment there in recent years, opening new offices and logistics centres, and forming partnerships with local players. While there is much optimism around Myanmar's economic development, there is also concern as hundreds of thousands of Rohingya, labelled by some as the "world's most persecuted minority", have fled to neighbouring Bangladesh.

Among the other winners across the Asia Pacific are the Philippines and Bangladesh, which both climbed seven positions.

The Philippines' rise follows a booming year for its economy in 2016, with container traffic at the Port of Manila up 13.8%. Like Indonesia (see its Emerging Narrative), Philippines has long been held back by inadequate infrastructure, but there seems to be renewed confidence that both archipelago countries are taking serious steps to overcome their deficits. For example, the largest container terminal at the Port of Manila has introduced

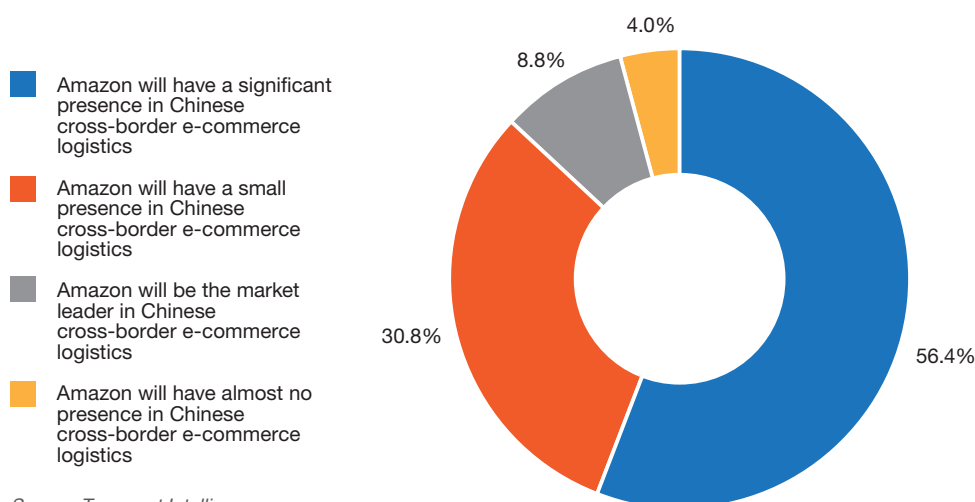
an online container booking platform which has helped optimise truck movements in and out of the terminal. Capacity has also increased, and further investments are in the pipeline. Government spending on infrastructure in the first year of the Duterte administration was 5.4% of GDP, the highest level since the Marcos era before the 1990s, when the figure was 3.2%. It is expected to rise from 5.4% to 7.4% of GDP by the end of Duterte's term in five years' time, an increase of around 40%. Projects will be funded through a combination of tax reforms, public-private partnerships (PPPs), and overseas loans – mostly from China.

Bangladesh's gain here coincides with it being the country that recorded the third-highest improvement in its Index score. Some are referring to it as the new 'Asian Tiger', a term which refers to the club of countries which experienced rapid growth between the 1960s and 1990s: Hong Kong, Singapore, South Korea and Taiwan. Bangladesh has averaged economic growth in excess of 6% over the past decade. Many reforms are needed however. The government is planning to cut red tape such that it takes seven days to start a business rather than 19.5, and reduce the time it takes for a company to connect to the national grid to 28 days from 404.

Elsewhere, Mexico and Russia are major losers, dropping five and six positions respectively. Mexico's drop may be related to uncertainty arising from the renegotiation of NAFTA. It has also downgraded its economic forecasts this year.

AMAZON AND CHINESE CROSS-BORDER E-COMMERCE LOGISTICS

Over the next 10 years, do you believe that Amazon will become a substantial player in Chinese cross-border e-commerce logistics?



More than half of respondents believe that Amazon will establish a significant presence in Chinese cross-border e-commerce logistics over the next ten years.

Although Amazon entered China over a decade ago, it has largely missed the boat on e-commerce sales as the Chinese market is dominated by homegrown champions like Alibaba and JD. It is making a push to offer logistics services however. At present, through Amazon Logistics+, the company offers the ability to ship goods around the world by sea, land or air, essentially positioning itself as a freight forwarder. Its services also include packaging, warehousing, customs and handling services. Previously, manufacturers selling goods through Amazon had to deliver those goods directly to Amazon warehouses.

Amazon Logistics+ began importing ocean containers into the US from China in November 2016, and was bringing in between

10 and 15 containers a week on behalf of other customers as of April 2017. It also imports around 350 containers per week for its own use.

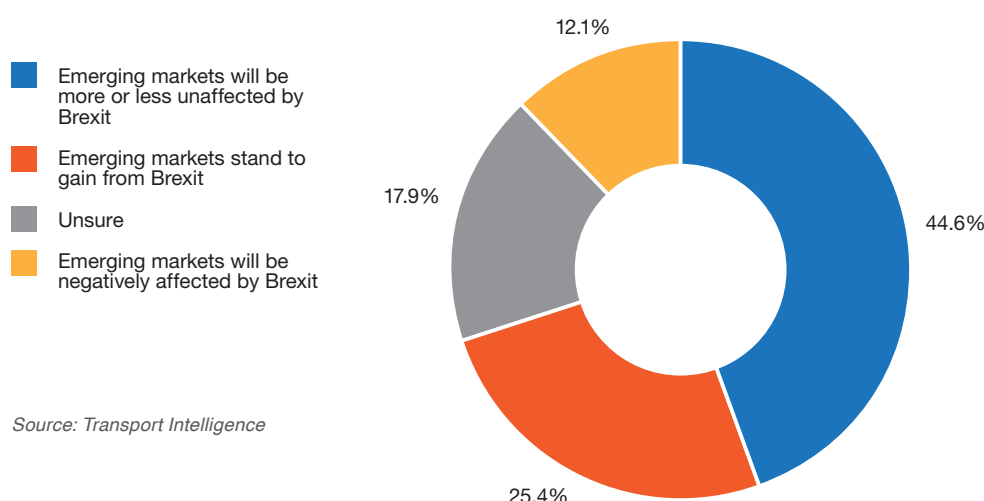
Perhaps such small volumes are why a significant minority, just 30.8%, believe that Amazon will only develop a “small” presence in Chinese cross-border e-commerce logistics over the next 10 years.

Amazon has also made logistics investments in the US, leasing its own air cargo fleet and purchasing truck trailers. It has also recruited a number of logistics industry veterans.

Only a very small proportion of respondents (8.8%) believe that Amazon will be the market leader in Chinese cross-border e-commerce logistics, which perhaps reflects thinking that Amazon’s e-commerce sales will never be that large in China, therefore it will not bother to seriously try and take on leading LSPs.

BREXIT AND EMERGING MARKETS

What impact do you think Brexit will have on emerging markets?



The dominant view among survey respondents (44.6%) is that emerging markets will be more or less unaffected by Brexit. One possible explanation for this view might be that many emerging markets' economic exposure to the UK is just not that large.

Slightly more than a quarter of respondents (25.4%) believe that emerging markets stand to gain from Brexit. Indeed, there is hope that Brexit will lead to a string of new trade agreements between the UK and emerging markets. Such agreements appear most likely to be agreed first with English-speaking countries, where legal systems and trade objectives are closely aligned, so that there is likely to be less opportunity for misunderstandings and mistakes. Smaller negotiating partners will probably make for easier agreements, rather than larger markets such as China or India which will demand greater concessions. That said, even relatively small emerging markets may be able to punch above their economic weight to secure preferential trade deals with the UK if British politicians are desperate to make Brexit look like a success.

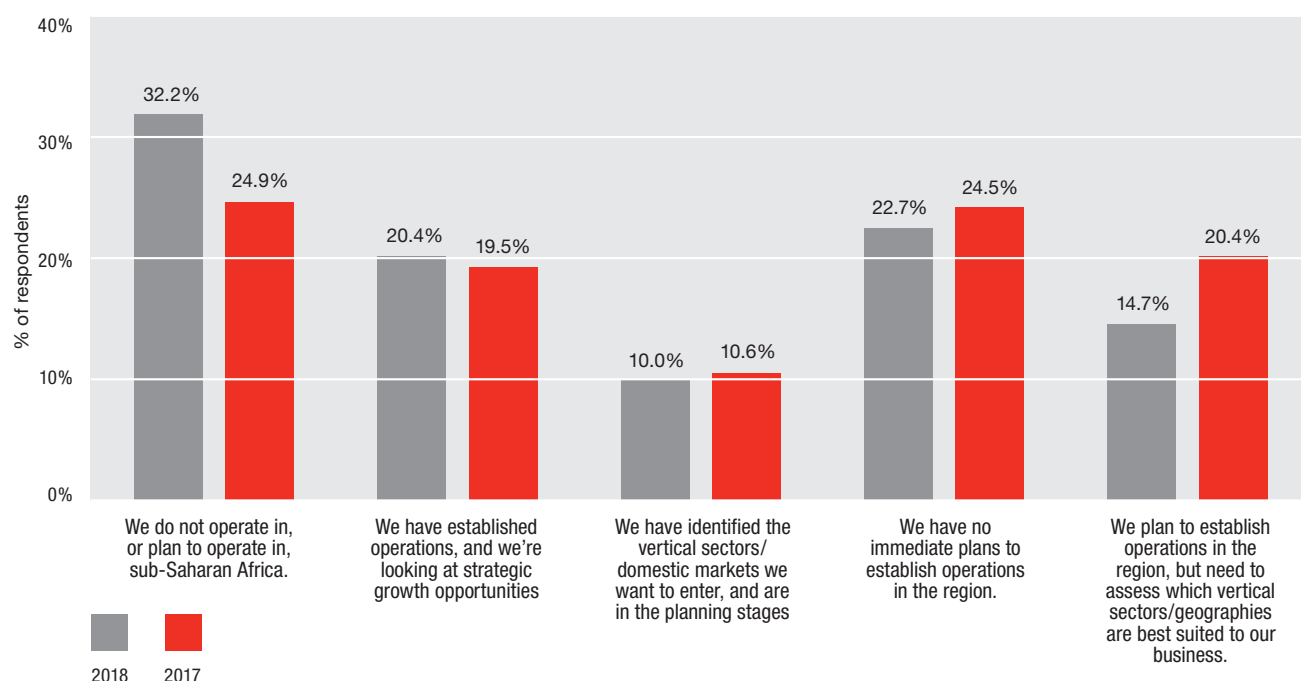
Separately, there appears to be scope for disagreements between the UK and EU on one side and potentially a whole host of countries on the other over the issue of tariff rate quotas

(TRQs). TRQs specify that limited quantities of imports are allowed into a country duty-free or at low duty. Quantities beyond those limits are charged higher duties. They typically apply to agricultural goods; the EU has around 100 on various foodstuffs. On October 12, the EU and UK submitted a joint approach to the WTO on how it proposed to split their TRQs post-Brexit. Soon after, opposition emerged from Argentina, Brazil, Canada, New Zealand, Thailand, the United States and Uruguay. They argue the proposal would leave them worse off. For lamb, the EU currently has a TRQ of 300,000 tonnes. The seven countries argue that post-Brexit, the split of the quota between the UK and EU should exceed 300,000 tonnes, because the commercial value is reduced as they have less flexibility to choose where to export. This impasse is by no means a disaster, it just means that any hopes that TRQs could be sorted out quickly have been dashed – months of negotiations will follow. Trade negotiations are almost never quick or easy, and if they are, it usually means one side capitulated.

For further analysis, refer to the Agility Mid-Year Emerging Markets Review 2017.

INVESTMENT PLANS FOR SUB-SAHARAN AFRICA

Which of the following statements best reflects your strategy for sub-Saharan Africa?



Source: Transport Intelligence

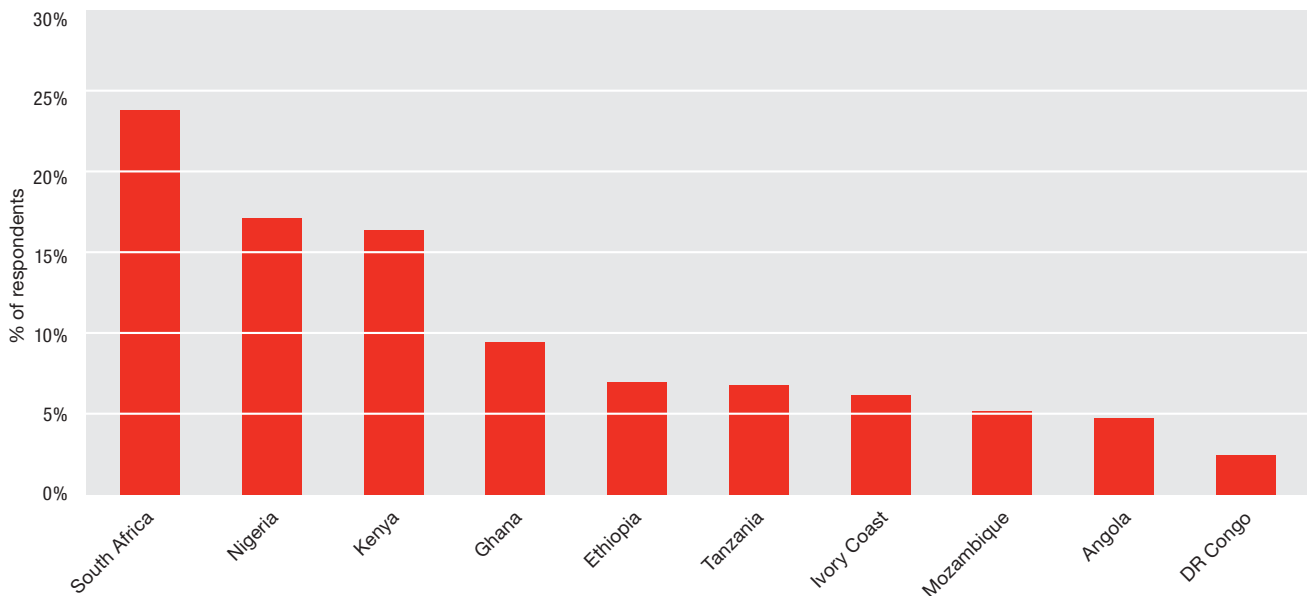
A total of 54.9% of survey respondents stated that expanding operations in sub-Saharan Africa is not in their plans. Of this, 32.2% stated that they do not operate in, or plan to operate in sub-Saharan Africa, which represents a 7.3pp increase year-on-year. 22.7% indicated that they do not have immediate plans to establish operations in the region, a 1.8pp decrease compared to last year. At the other end of the spectrum are those respondents that have already established operations and are looking at strategic growth opportunities (20.4%), as well as those respondents (24.7%) who are planning to establish operations in the region.

Overall, the results indicate diametrically opposite positions between those who do not consider the sub-Saharan markets

to have compelling opportunities for LSPs and those who eye expansion in the region. This split seems to reflect the dilemma that investors are likely to be faced with when evaluating the investment opportunities in the region. On the one hand, the region exhibits considerable growth, buoyed by the rising middle class and abundant natural resources. On the other, a whole host of issues related to poor infrastructure, connectivity and more generally the ability to do business effectively persist, putting off investors and making it difficult to run modern logistics operations in some locations. It is not surprising therefore that some LSPs shy away from investing in Africa whilst others decide to take on the challenges and embrace the opportunities the region has to offer.

MOST-PROMISING LOGISTICS MARKETS IN SUB-SAHARAN AFRICA

Which of these African countries do you believe has the most potential as a logistics market over the next five years?



Source: Transport Intelligence

	2018	2017	YoY Change
South Africa	1	1	-
Nigeria	2	2	-
Kenya	3	3	-
Ghana	4	4	-
Ethiopia	5	7	up 2
Tanzania	6	5	down 1
Ivory Coast	7	6	down 1
Mozambique	8	8	-
Angola	9	9	-
DR Congo	10	10	-

Source: Transport Intelligence

A significant degree of continuity was seen year-on-year in survey respondents' perception of the most-promising emerging markets in sub-Saharan Africa.

South Africa, Nigeria, Kenya and Ghana have each maintained their positions in the top four. South Africa remains the undisputed leader when it comes to growth opportunities for LSPs. This possibly reflects the fact that it has the best infrastructure and connectivity of all the Sub-Saharan African markets in the Index.

Ethiopia climbed two positions, resulting in it being the 5th most-promising logistics market in sub-Saharan Africa over the next five years. This result may suggest that the Ethiopian government's bid to become a low-cost manufacturing hub has boosted the country's potential as a logistics market. Ethiopia has set itself an ambitious target of becoming the leading manufacturing hub in Africa, as part of its Vision 2025 agenda.

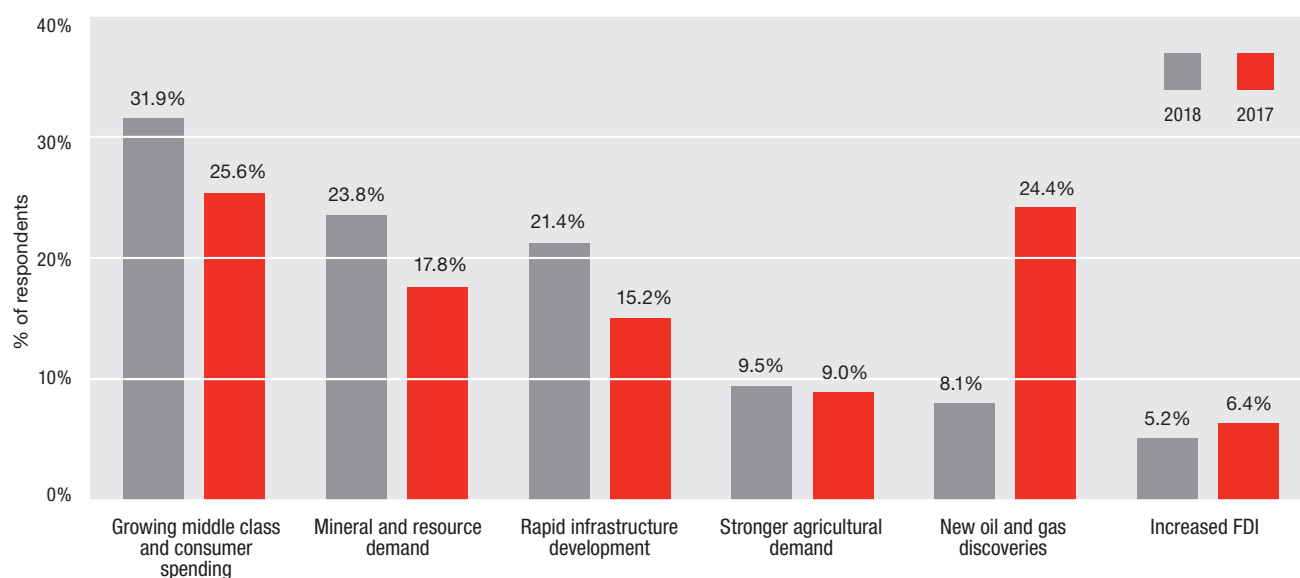
Indeed, the government of Ethiopia has taken steps to develop its textile and garment industries. A number of manufacturers

from China, South Korea, India and other countries have decided to open new plants in the country, while a growing number of European and US brands are sourcing garments there. Respondents may also have taken note of the opening of a railway line between Ethiopia's capital Addis Ababa and Djibouti.

Ethiopia uses Djibouti's ports for most of its imports and exports. The time to transport a container from Addis Ababa to Djibouti should fall from three days to 10 hours and the cost is expected to be slashed by a third. Officials say each freight train could transport the same cargo as 200 trucks.

DRIVERS OF LOGISTICS GROWTH IN SUB-SAHARAN AFRICA

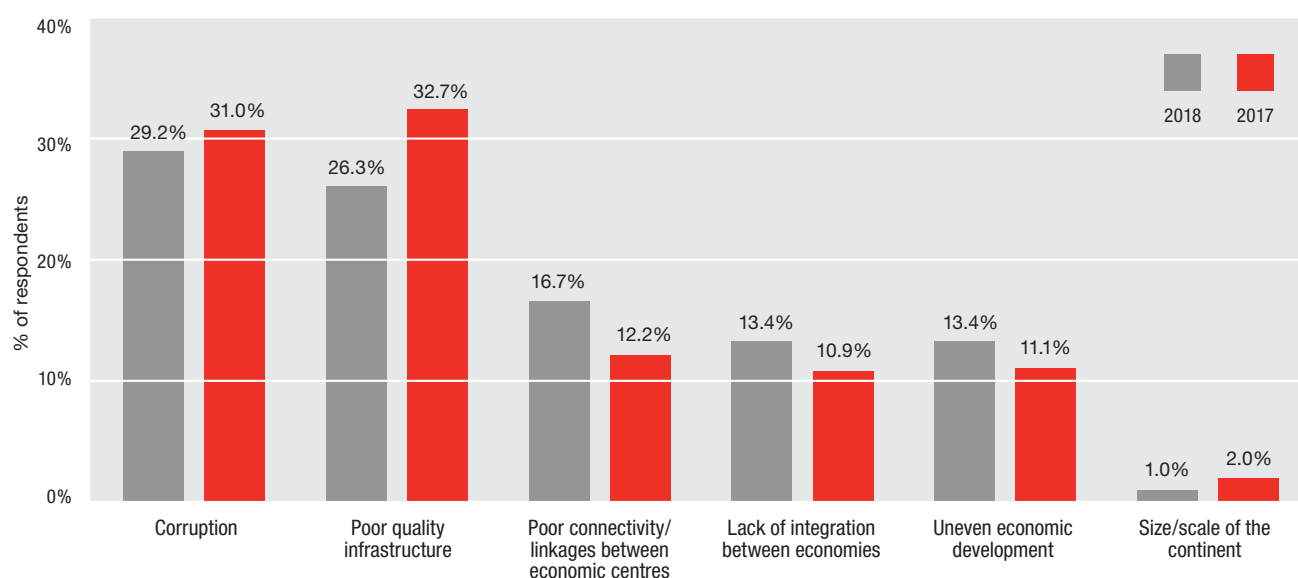
What do you perceive to be the most significant driver of growth in the emergence of Africa's logistics market?



Source: Transport Intelligence

INHIBITORS OF LOGISTICS GROWTH IN SUB-SAHARAN AFRICA

What do you perceive to be the biggest challenge prohibiting the emergence of Africa's logistics market?



Source: Transport Intelligence

Growth in the middle class and consumer spending remains the top driver of Sub-Saharan Africa's logistics markets according to survey respondents.

There appears to be a meaningful shift in the perception of Sub-Saharan African infrastructure. 'Rapid infrastructure growth' increased its share of those who thought it was the top driver of African logistics growth from 15.2% to 21.4%, while the share of those who perceived infrastructure as the biggest inhibitor fell from 32.7% to 26.3%. Perhaps supply chain professionals have faith that infrastructure is meaningfully improving in the region.

The growth effects of narrowing Sub-Saharan Africa's infrastructure quantity and quality gap are potentially large. According to the World Bank, growth of GDP per capita for the region would increase by an estimated 1.7pp per year if it were to close the gap with the median of the rest of the developing world.

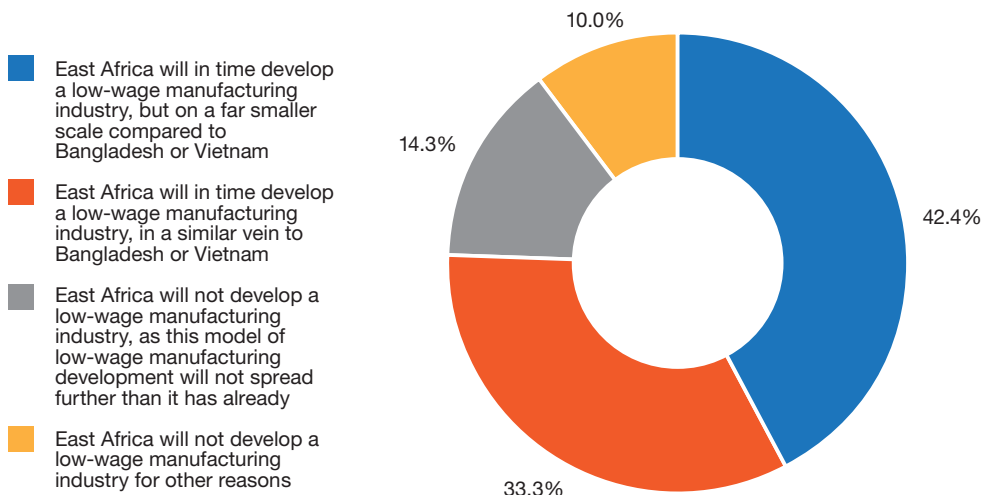
Closing the infrastructure quantity and quality gap relative to the best performers in the world could increase growth of GDP per capita by 2.6% per year. The largest potential growth benefits would come from closing the gap in electricity-generating capacity.

Another significant movement is the big drop in 'new oil and gas discoveries' as the most important driver of African logistics growth. It fell from being the choice of 24.4% of respondents in last year's survey to just 8.1% this year, and is now considered as one of the least significant drivers of growth in the region. The slide probably reflects the collapse in the oil price, which has now filtered through in terms of perception, and perhaps a belief that oil prices are set to remain relatively low over an extended period.

EAST AFRICA AS THE NEXT LOW-COST MANUFACTURING HUB

East African countries are trying to emulate the success of markets like Vietnam and Bangladesh by creating low-wage

manufacturing jobs. Can East Africa attract investment and emerge as a low-wage manufacturing centre?



Source: Transport Intelligence

Overall, 75.7% of respondents asserted that, to one extent or another, East Africa will emerge as a low-wage manufacturing centre in time. Of these, the majority (42.4%) believe that East Africa will in time develop a low-wage manufacturing industry, but on a far smaller scale compared to Bangladesh or Vietnam. About one-third (33.3%) believe that East Africa will in time develop a low-wage manufacturing industry, in a similar vein to Bangladesh or Vietnam.

Just 14.3% thought that East Africa would not succeed in this regard because low-wage manufacturing as a development model has run out of steam, while 10% thought it would not emerge for other reasons.

These sunny predictions about East Africa's future are somewhat at odds with results reported in a previous question. Ethiopia appeared 4th in the list of emerging markets that respondents believe have the least potential to grow as logistics markets.

The optimism conveyed might be based on the rising interest among manufacturers in East African countries as potential sourcing destinations for apparel. The governments of both Ethiopia and Kenya in particular are taking steps to develop their textile and garment industries.

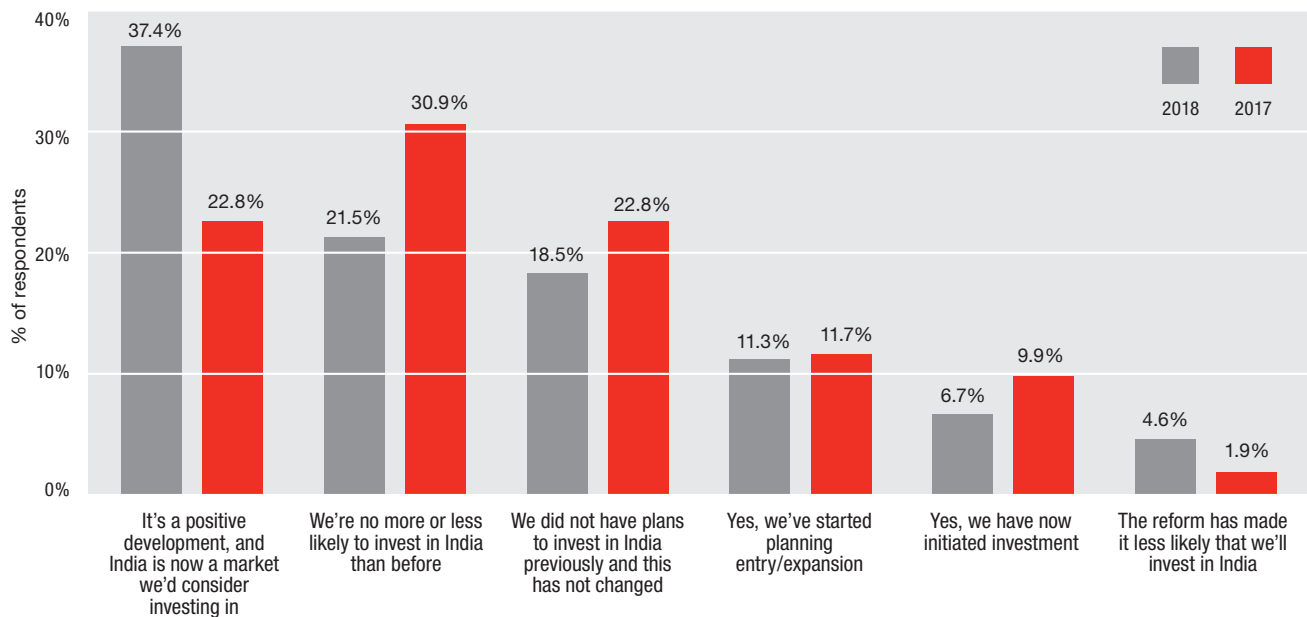
Two comments provided by respondents summarise the opposing views on offer.

One stated: "In the long run these countries will be able to learn out of the story of Bangladesh and Vietnam. Africa will eventually catch up with South-East Asian countries."

Another remarked: "Low wages just produce poor societies, and that's not a good path for the success of markets."

INDIA'S ECONOMIC REFORMS AND IMPACT ON INVESTMENT

Has the passing of reform, including the Goods & Services Tax, changed your plans to invest in India?



Source: Transport Intelligence

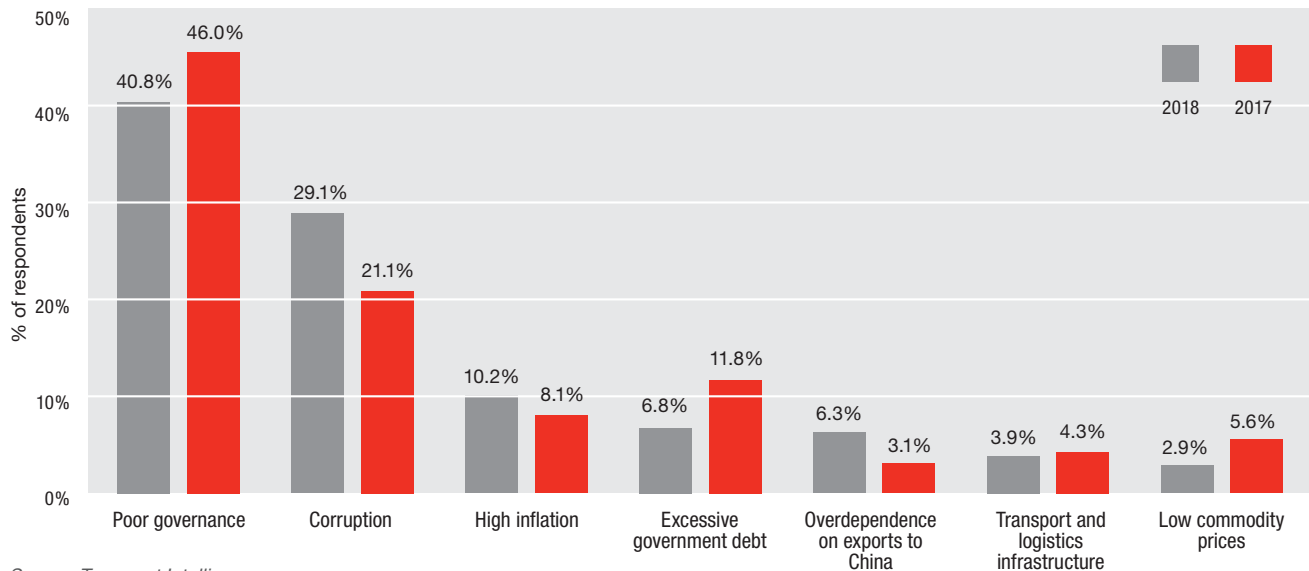
While last year's survey results revealed that the passing of the Goods & Services Tax (GST) did have a significant impact on respondents' investment plans for India, this year's results paint a much more convincing picture.

Over a third (37.4%) of respondents now view India as a market they'd consider investing in thanks to economic reforms, up from 22.8% last year. In addition, the share of respondents asserting that they're no more or less likely to invest in India than before fell to 21.5% from 30.9%.

GST was rolled out on July 1, 2017, simplifying the existing federal, state, and local indirect tax structure. By unifying over ten types of indirect taxes into one tax and simplifying collection, GST is expected to be a game changer for Indian logistics, due to the indirect impact it will have on the sector through its positive economic impact, as well as the direct impact it will have as it incentivises logistics networks to be operationally optimised rather than tax optimised (see India's Emerging Narrative for more).

BARRIERS TO GROWTH IN BRAZIL

What is Brazil's biggest obstacle to returning to higher growth?



Despite a reduction in the share of respondents citing 'Poor governance' as the biggest barrier to higher growth, this factor remains the biggest obstacle to Brazil's growth this year. 'Corruption', on the other hand, saw an increase of 8.0pp. Together, the two factors account for 69.9% of responses, a year-on-year increase of 2.8pp.

It is clear that Brazil remains in crisis. The economy has suffered a huge recession, with real incomes per capita down by 9%

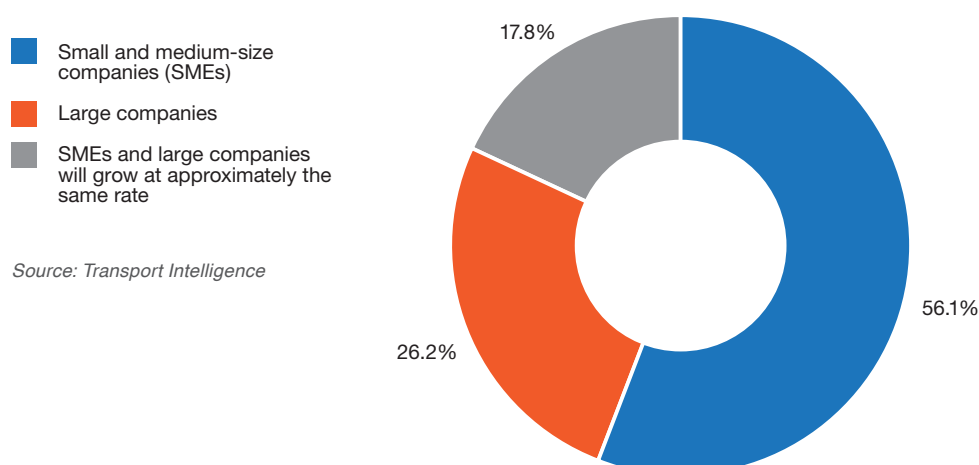
between 2013 and 2016. Its fiscal position is unsustainable.

Above all, a corruption scandal has consumed the political elite and leading businessmen.

The Supreme Court has authorised investigations into one-third of current cabinet members, senators, state governors, as well as the president, leaders of congress and of the main political parties.

GROWTH PROSPECTS FOR SMEs AND LARGE COMPANIES IN EMERGING MARKETS

Which size company do you believe will grow fastest in emerging markets over the next five years?



More than half of respondents (56.1%) believe that SMEs will grow fastest in emerging markets over the next five years, as opposed to 26.2% who envisage faster growth in large companies.

Almost one-fifth (17.8%) think that they will grow at about the same rate. Some respondents were keen to assert the interdependence between SMEs and large companies, with one noting: “Some SMEs will be able to benefit out of the expanding economic boom stirred by large companies”, while another remarked “Large multinationals are usually the first and then they create a network of local suppliers.”

At least in India, SMEs have been growing faster. A report from the Reserve Bank of India found that SMEs’ sales in India grew

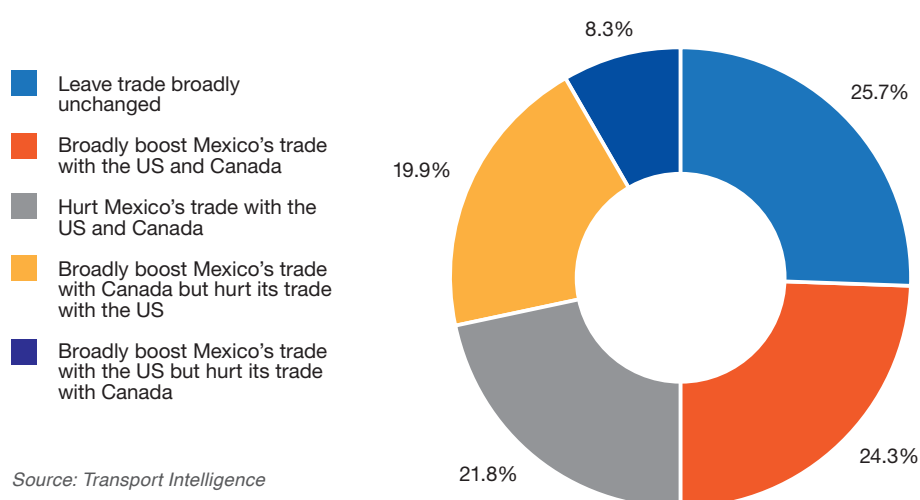
by 12% in 2015 whereas listed big companies grew by just 1.4%. One respondent hinted that SMEs may have an advantage due to their agility, stating: “Being able to adapt to any and all situations is the key to survival in emerging markets. Things change in a flash. If the decision maker has to be consulted, he/she should be easy to reach.”

Across emerging markets however, it is generally unclear whether SMEs are growing faster than large companies.

What is not in doubt is that large companies play a very important role as customers for logistics providers. According to Caroline Freund of the Peterson Institute, based on research of 32 emerging markets, the top firm typically accounts for 15% of non-oil exports. The top ten tends to represent about 40%.

NAFTA RENEGOTIATIONS AND MEXICAN TRADE

Efforts by the US, Canada and Mexico to renegotiate the NAFTA agreement will:



Survey respondents had very mixed views on how the renegotiation of NAFTA will affect Mexican trade volumes. About a quarter believe trade will be left broadly unchanged (25.7%). Slightly less (24.3%) think Mexico's trade with both its NAFTA partners will benefit from the renegotiation, while 21.8% believe Mexico's trade with both partners will suffer. A very similar share (19.9%) selected that Mexico will boost its trade with Canada as its volumes with the US suffer. Just 8.3% think that the renegotiation will boost Mexican trade volumes with the US but hurt its trade with Canada.

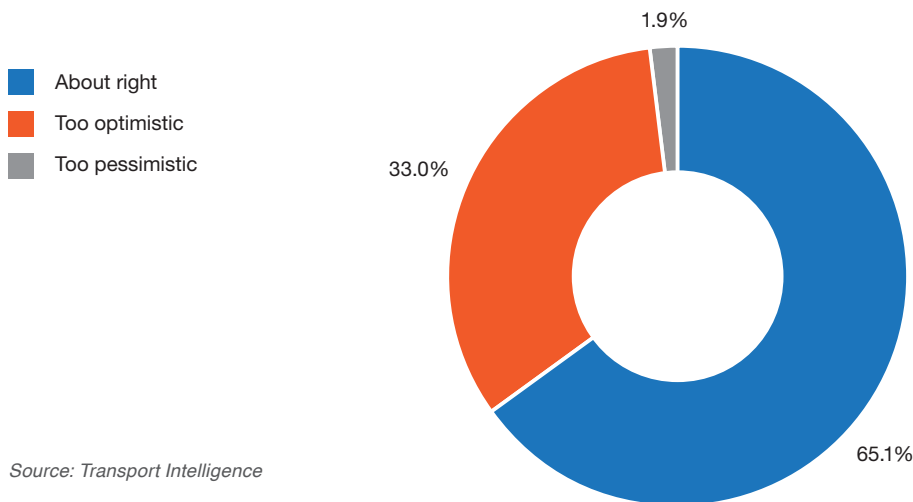
There is a somewhat clearer picture if the results are aggregated. 32.6% think the renegotiation will positively impact Mexico's trade volumes with the US, while 41.7% envisage a negative impact. That a greater proportion believe Mexico's trade with the US will be hurt is perhaps not surprising given the Trump administration's rhetoric around bringing back manufacturing jobs to the US.

Overall, the results are not conclusive one way or the other. This is broadly in line with prior expectations. If the renegotiations fail, it is a no-brainer that trade volumes will suffer. However, if an agreement is reached, it really is not clear what the impact on trade will be. There are many variables in play, not least possible changes to NAFTA's rules of origin chapter, as explored in our Mexico Emerging Narrative.

From a US perspective, rules of origin specify that for a good to be imported tariff-free from Canada or Mexico, a certain proportion of its value must be produced within NAFTA. For a car, the threshold is 62.5%. The White House is proposing to increase the NAFTA share to 85%, and add a requirement for 50% US content. Generally, the logic goes that as the content share increases, more trade should take place within NAFTA, given the desire to qualify for free trade. Cheaper car parts from Asia or Europe may be rejected in favour of more expensive NAFTA components. But as the benchmark increases, there comes a point when it becomes cheaper to import parts from outside NAFTA and pay the tariff on the finished vehicle anyway. The impact on trade flows is therefore unclear.

PROSPECTS FOR EMERGING MARKET GROWTH

The IMF forecasts 2018 emerging market growth of 4.8%. In your opinion, is this:



Source: Transport Intelligence

Almost two-thirds of supply chain professionals (65.1%) think the IMF's 2018 economic growth forecast for emerging markets of 4.8% is about right. Around one-third (33.0%) think this prediction is too optimistic. A year ago, 42.8% thought the IMF's 4.6% forecast for 2017 was excessive. Hardly any (1.9%) expect the 2018 forecast to be meaningfully exceeded.

That almost a third see the forecast as too optimistic is perhaps a reflection of various economic risks, which the IMF maintain are still skewed to the downside.

These include a faster and greater tightening of global financial conditions, which may well transpire if the US increases its base rate sooner than expected or by more than anticipated. The institution also warns of possible financial turmoil in emerging markets if China fails to counter risks associated with the expansion of credit. If a shock occurs that causes a growth slowdown in China, this would have adverse consequences for other economies through weaker trade, commodity prices and confidence. The IMF also states that there is a chance that a shift towards more protectionist policies would reduce trade and cross-border investment flows, harming global growth.

On the other hand, the IMF also asserts that "momentum could prove to be more durable than expected amid strong consumer and business confidence, for instance, in the euro area and in East Asia, and near-term growth could exceed the forecast."

As ever, logistics providers in emerging markets should expect the unexpected, be prepared to deal with volatility and take a long-term view when investing or expanding. Those hoping for a smooth ride are likely to be sorely disappointed.



Emerging Markets Trade Lanes

OVERVIEW

After several difficult years, emerging markets trade volume growth finally picked up in 2017. The following graph tracks their year-on-year export and import volume growth. Specifically, it measures the total value of trade over time, but holds the prices of all goods constant so that changes are only driven by variation in the quantity of goods exported or imported.

For January to August 2017, measured monthly, year-on-year growth of emerging markets' trade volumes has averaged 6.0% for imports and 4.1% for exports. For all of 2016, the corresponding averages were -0.1% and 1.8% respectively.

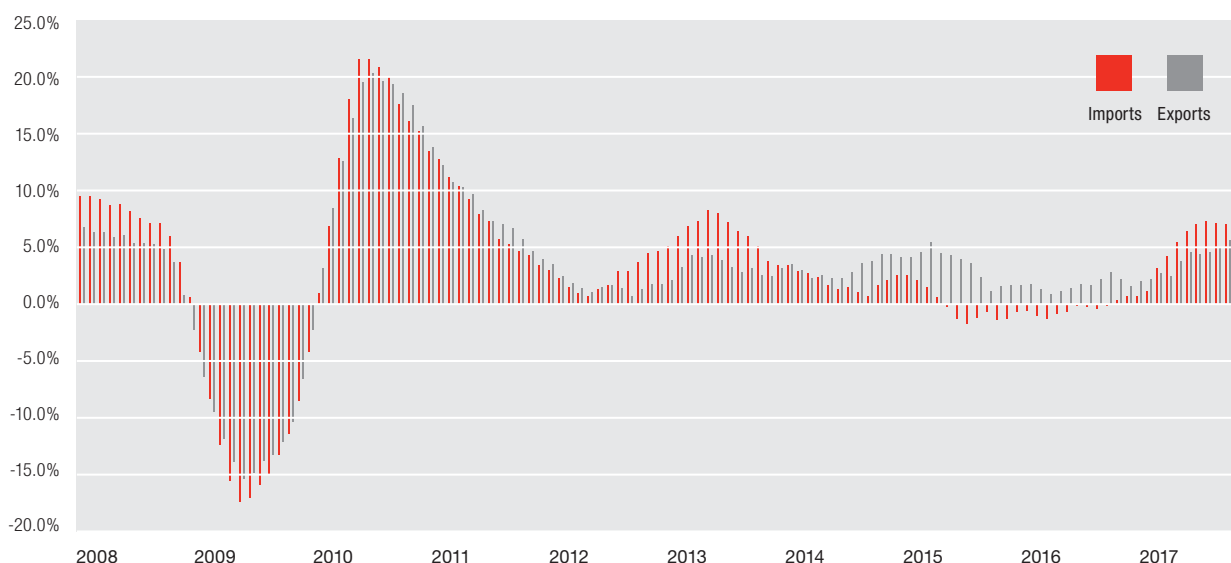
Digging deeper, emerging markets' import volume growth is being largely powered by China, with emerging Asia

experiencing growth of 8.8%. Eastern Europe / CIS (8.4%) is also doing well, while Latin America's growth is more moderate (4.1%). Africa and the Middle East, however, has seen volumes contract by 8.7%.

Export volume growth by region is positive across the board. Eastern Europe / CIS leads the way (8.7%), while emerging Asia (4.4%), Latin America (3.0%) and Africa and the Middle East (1.4%) are lagging behind.

As for advanced economies, 2017 has seen a pickup in exports, with growth of 3.0% beating the 2016 figure of 0.6%. However, import growth is more or less the same at about 2%.

Emerging market merchandise trade volumes, six-month average, % change on a year earlier



Source: TI calculations, using data from CPB World Trade Monitor

Looking ahead, the big question is whether growth for 2018 and beyond will be similar to what we've seen in 2017, or whether growth will return to the low single-digits. Alphaliner data suggests global container throughput increased by 6.7% in the first six months of 2017.

Linton Nightingale, the editor of Lloyd's List's One Hundred Ports, suggests that port throughput growth will come back down, stating: "Box traffic may have surged in the first half of 2017 – prompting revised forecasts of unprecedented 5% or even 6% full-year volume growth – but that will prove to be an anomaly. Moderate demand growth could return as early as next year."

Neil Davidson, Drewry senior analyst for ports and terminals, has stated: "The message is not to get too carried away with potential 2017 growth, as in 2018 we will probably be back to our normal 3% or 4% growth level."

That seems like a reasonable central estimate. The biggest downside risk probably relates to China. If a sudden tightening of global financial conditions exposes financial fragilities, there is a

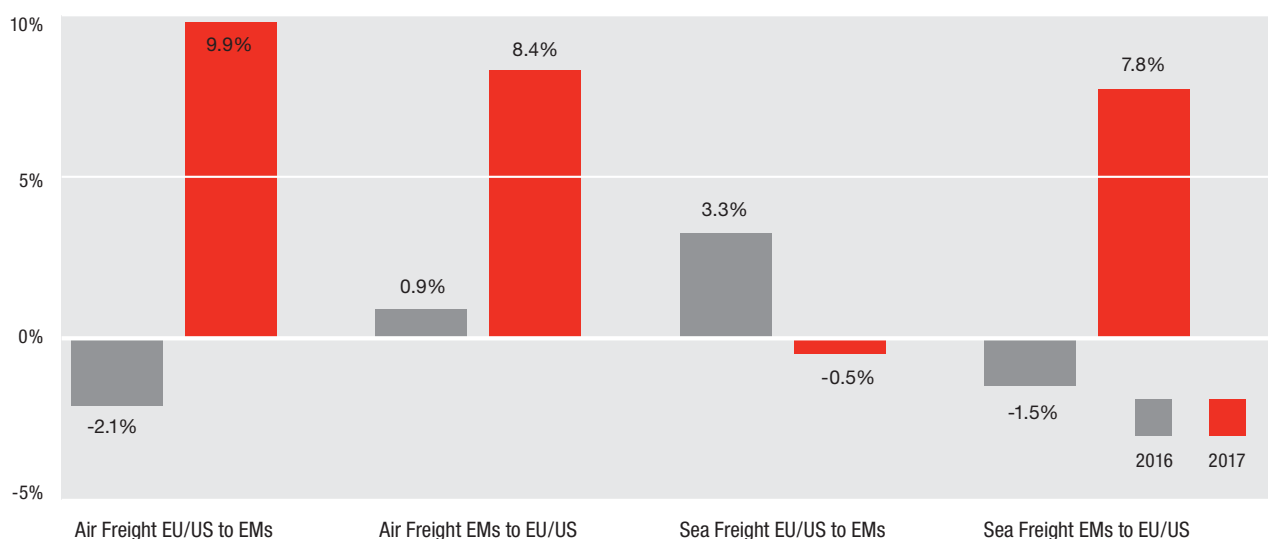
possibility of a sharp slowdown. That really would wreck global port throughput growth.

As for air freight, 2017 has been a banner year. According to WorldACD, September 2017 marked the 13th consecutive month of year-on-year volume growth in excess of 5% and was the "first month in a long time in which growth remained below 10%."

It seems that much of the global rebound in 2017 was driven by re-stocking, given that the pickup in global air freight tonne-kilometre growth in 2017 has been mirrored by a clear fall in the inventory-to-sales ratio. As inventories fell, due to an unexpected rise in demand, firms have had to resort to air freight to quickly bring stock in. Unless another unexpected increase in demand arises, this effect will not persist into 2018 and lower growth should be expected.

Turning specifically to emerging markets' air and sea trade lanes in 2017, in line with the pickup in global trade volumes, the aggregate results are far more encouraging for emerging markets than in last year's Index.

Emerging market air and sea freight trade lane growth



Source: Transport Intelligences

Air freight across the board is up dramatically. From the US and EU to all 50 Index emerging markets, as well as the reverse lanes, volume growth forecasts for 2017 are head and shoulders above actual volume growth in 2016. Emerging market sea freight export growth to the EU and US has also turned around drastically, although the same cannot be said for emerging

market sea freight imports, with volumes overall falling by 0.5%. A key caveat here is that this decline is being driven by bulk commodities. Product groups associated with containerised freight look to be doing considerably better, so freight forwarders ought to be enjoying higher volume growth than what this number suggests.

As ever with emerging markets, there are many big individual winners and losers in any given year. The rest of this chapter focuses on demystifying how the highest-volume and fastest-growing emerging market trade lanes have fared in 2017. It also draws attention to those which are long-term successes.

The discussion dives deep, highlighting the commodity groups responsible for the bulk of volume on particular lanes, the specific products that are powering growth and those that are holding back progress.

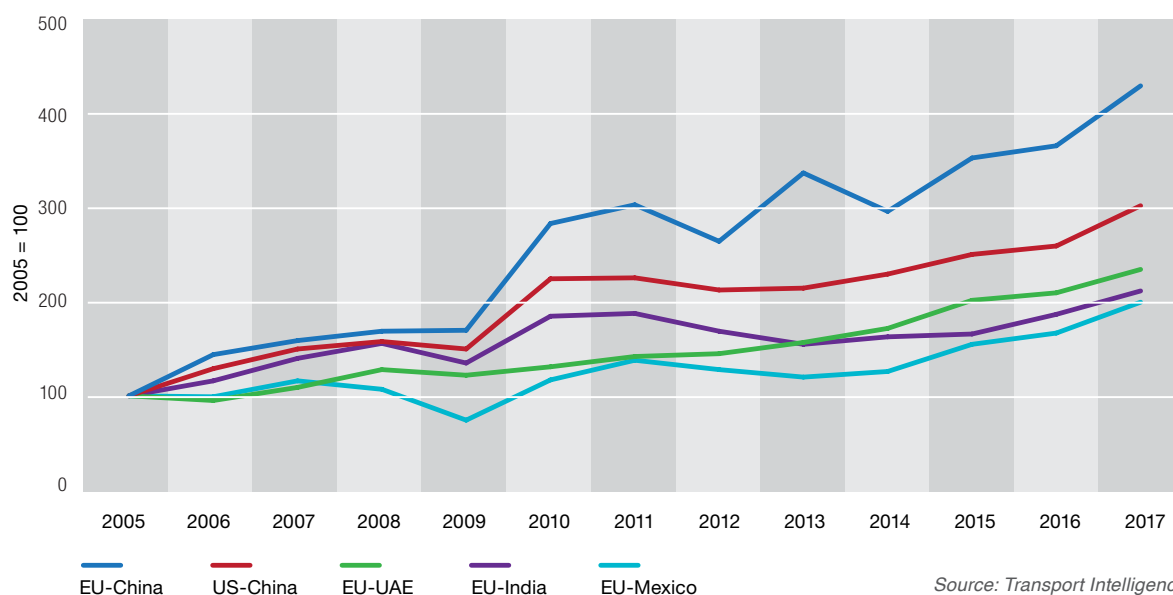
AIR FREIGHT TOP 10 TRADE LANES – EU/US TO EMERGING MARKETS

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth
1	EU	China	735,944	863,180	17.3%
2	US	China	319,732	372,951	16.6%
3	EU	UAE	246,878	276,007	11.8%
4	EU	India	176,337	200,778	13.9%
5	EU	Mexico	117,991	141,176	19.6%
6	EU	Turkey	101,886	111,927	9.9%
7	EU	Saudi Arabia	100,826	96,784	-4.0%
8	EU	Brazil	87,896	95,224	8.3%
9	EU	Russia	84,530	92,258	9.1%
10	EU	South Africa	87,173	90,472	3.8%
n/a	EU	All 50 EM	2,524,697	2,783,038	10.2%
n/a	US	All 50 EM	1,035,197	1,129,414	9.1%
n/a	EU and US	All 50 EM	3,559,894	3,912,452	9.9%

Note: 2017* figures are forecasts

Source: Transport Intelligence

Air Freight EU/US to Emerging Market Top 5 Trade Lanes 2005-2017 Growth



The 100 air freight trade lanes going from the EU/US to the 50 selected emerging markets in the Index are forecast tonnage growth of 9.9% in 2017. EU trade lanes are predicted growth of 10.2%, whereas US trade lanes are anticipated volume growth of 9.1%. The top 10 lanes are expected to account for approximately 60% of total air tonnage in 2016. This forecast implies an increase of 2.0pp year-on-year, signalling that the top 10 emerging market air freight destinations continue to become relatively more important compared to the chasing pack.

China continues to occupy the top two spots. Out of all air freight going from the EU to the 50 emerging markets, China is expected to be the recipient of 31.0% of tonnage in 2017. For the US, the corresponding figure is 33.0%. EU-China air freight tonnage is expected to be comfortably more than twice as large as US-China tonnage in 2017. The gap is expected to remain about the same, as EU growth (17.3%) is similar to the US' performance (16.6%).

By commodity, EU-China air freight is enduring a mixed year. Core manufacturing sub-sector groups such as machinery & machinery parts (154,000 tonnes in 2016) and electronics (102,000 tonnes) - which together accounted for over a third of total air freight tonnage in 2016 – have performed positively in the year to date. For January-July 2017 volumes for these product groups have increased by 31.4% and 20.4% respectively

year-over-year. Other important sectors like plastics & plastic articles (+33.0%) and vehicles & vehicle parts (+46.4%) are also doing well, though dairy products (-31.3%) and pharmaceuticals (-2.8%) are struggling.

US-China air freight is dominated by machinery & machinery parts (56,000 tonnes in 2016), electronics (43,000 tonnes), optic, photo, medic and surgical instruments (29,000 tonnes) and plastics & plastic articles (26,000 tonnes), which together comprised almost half of air freight tonnage in 2016. For January-August 2017 the four groups have reported mixed growth. Machinery (+22.3%) and plastics (+62.2%) volumes have surged, while electronics (+1.0%) and optic, photo, medical and surgical instruments (+5.6%) volumes have grown more modestly. Fruits tonnage is continuing its rapid ascent seen over the past few years and has almost doubled (82.9% growth) year-on-year to nearly 17,000 tonnes.

Turning away from China, all other trade lanes in the top 10 are projected to record positive growth rates, apart from EU-Saudi Arabia. There, tonnage for 2017 is forecast to decline by 4.0%. Its most important product group, machinery, which accounted for almost a quarter of tonnage in 2016, has reported year-on-year volumes declines of 37.1% for January-July 2017. This decline has been offset somewhat by tonnage growth of iron and steel goods, ceramics and vegetables.

Outside of China, the strongest-growing trade lanes among the top 10 for 2017 are expected to be the other largest markets: EU-UAE (third-largest, growth of 11.8%), EU-India (fourth-largest, growth of 13.9%) and EU-Mexico (fifth-largest, growth of 19.6%). No other trade lanes in the top 10 had double-digit growth.

EU-UAE 2017 tonnage growth of 11.8% is being driven by growth in oil industry goods, with tonnage increasing by 49.4% year-on-year to 52,000 tonnes for January-July 2017, though growth is poorer elsewhere.

EU-India's 2017 forecast of 13.9% is a result of broad-based gains: its six largest product groups in 2016 (and most others) have recorded higher year-on-year tonnage for January-July 2017. Machinery & machinery parts (+25.3% to 30,000 tonnes), plastics & plastic articles (+44.3% to 8,000 tonnes) and iron & steel articles (+21.7%) are some of the stand out performers. Automotive goods tonnage, however, declined by 5.7% over the same period.

For EU-Mexico, a 2017 forecast of 19.6% is being driven by very strong growth in vehicles & vehicle parts, which have more than doubled to almost 9,000 tonnes for January-July 2017

year-on-year. Other product groups developing robustly include machinery (+25.0% to 16,000 tonnes) and electronics (+26.0% to 11,000 tonnes), though fertilisers tonnage has collapsed (-66.9% to 1,000 tonnes).

Three of the four remaining lanes in the top 10 are expected to experience growth in the high single digits in 2017: EU-Turkey (+9.9%), EU-Brazil (+8.3%) and EU-Russia (+9.1%).

For EU-Turkey, electronics growth of 55.6% in the first seven months of 2017 is being offset by a 40% collapse in vehicles & vehicle parts tonnage. For EU-Brazil, over the same period, machinery and electronics tonnage growth were 19.9% and 32.5% respectively, while vehicles & vehicle parts tonnage was down by 39.1%. As for EU-Russia, oil & gas-related goods trade has grown by 6.6%, electronics volumes have surged by 44.5%, but machinery volumes have contracted by 17.0%.

EU-South Africa's growth will be more moderate (+3.8%), as strong year-on-year electronics growth for January-July 2017 of 17.7% is being offset by a contraction in vehicles & vehicle parts growth (-26.8%).

Air Freight Fastest-Growing Trade Lanes – EU/US to Emerging Market (Index of Tons, 2005=100)

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth	2014 Index	2015 Index	2016 Index	2017 Index*	2014-2017 CAGR	2005-2017 CAGR
1	EU	Ukraine	17,713	24,962	40.9%	61	87	106	149	34.9%	3.4%
2	EU	Qatar	63,813	88,934	39.4%	306	373	391	545	21.2%	15.2%
3	EU	Angola	11,233	15,531	38.3%	128	92	71	98	-8.5%	-0.2%
4	US	Ecuador	8,572	11,427	33.3%	135	102	77	103	-8.7%	0.2%
5	US	Russia	16,478	21,547	30.8%	200	125	139	182	-3.1%	5.1%
6	US	Kuwait	14,988	18,886	26.0%	139	165	164	206	13.9%	6.2%
7	EU	Kazakhstan	14,515	18,038	24.3%	175	144	144	179	0.8%	5.0%
8	EU	Mexico	117,991	141,176	19.6%	126	155	167	200	16.7%	5.9%
9	EU	China	735,944	863,180	17.3%	297	354	367	431	13.2%	12.9%
10	US	China	319,732	372,951	16.6%	230	251	260	303	9.7%	9.7%
11	US	Turkey	18,621	21,215	13.9%	162	155	151	172	2.1%	4.6%
12	EU	India	176,337	200,778	13.9%	163	166	187	212	9.1%	6.5%
13	EU	Jordan	14,460	16,222	12.2%	100	127	126	142	12.4%	3.0%
14	EU	UAE	246,878	276,007	11.8%	172	202	210	235	10.9%	7.4%
15	US	India	57,392	63,745	11.1%	167	171	168	187	3.7%	5.3%
16	US	Argentina	25,853	28,579	10.5%	124	121	116	128	1.1%	2.1%
17	EU	Kuwait	24,290	26,752	10.1%	94	104	104	115	6.8%	1.1%
18	EU	Iran	20,461	22,524	10.1%	65	94	90	99	15.1%	-0.1%
19	EU	Turkey	101,886	111,927	9.9%	152	186	166	182	6.3%	5.1%
20	US	Mexico	50,617	55,284	9.2%	104	100	92	101	-1.1%	0.1%
21	EU	Russia	84,530	92,258	9.1%	56	62	61	66	5.7%	-3.4%
22	EU	Vietnam	48,491	52,884	9.1%	316	344	466	509	17.2%	14.5%
23	US	South Africa	20,612	22,349	8.4%	118	117	106	115	-0.9%	1.2%
24	EU	Brazil	87,896	95,224	8.3%	148	133	117	127	-5.1%	2.0%
25	EU	Ethiopia	9,833	10,652	8.3%	158	240	200	217	11.1%	6.6%
n/a	EU	All 50 EM	2,524,697	2,783,038	10.2%	151	176	174	192	8.4%	5.6%
n/a	US	All 50 EM	1,035,197	1,129,414	9.1%	168	160	152	165	0.5%	4.3%
n/a	EU and US	All 50 EM	3,559,894	3,912,452	9.9%	156	171	167	184	5.9%	5.2%

Note: 2017* figures are forecasts. Index 2005=100.

Source: Transport Intelligence

Out of the 57 air freight trade lanes from the EU/US to the Index's emerging markets which recorded volumes of at least 10,000 tonnes, 42 reported positive growth. Of the 25 fastest-growing, the EU is the origin for 16 lanes, with the US accounting for just nine.

Two very strong trade lanes over the long run are EU-Qatar and EU-Vietnam, with 2005-2017 CAGRs of 15.2% and 14.5% respectively. EU-Qatar is expected to better its long-run performance in 2017, with tonnage forecast to increase by 39.4%. The reverse is true for EU-Vietnam, although tonnage growth is still projected at 9.1%.

EU-Qatar growth in 2017 is once again primarily being powered by oil & gas sector volumes. For the first seven months of the year, tonnage is up by 56.5%. Electronics tonnage has also grown sharply over the same period, from 1,900 tonnes to 3,600 tonnes. Unusual for an emerging market trade lane, EU-Qatar's growth trajectory is remarkably consistent, displaying relatively little volatility. EU-Vietnam air freight growth, meanwhile, is being primarily driven by electronics and machinery volume growth.

Elsewhere, two markets in relatively close geographical proximity that look to be experiencing strong air freight volume growth from the EU in 2017 are Kazakhstan and Iran, with projections of 24.3% and 10.1% respectively. For Kazakhstan, growth appears to be being driven by an expansion in flowers volumes, with tonnage for January-July 2017 reaching over 2,000 tonnes, almost ten times higher year-on-year.

For Iran, electronics, plastics and pharma volumes look to be growing impressively. International logistics providers returned en masse in 2016 following the lifting of UN sanctions in January of the same year. Exports doubled in the year to €13.7bn. LSPs are now steadily ramping up their presence as their confidence in the country grows

Turning to US lanes, a couple of South American trades look to be having successful years: US-Ecuador and US-Argentina. US-Ecuador volumes are predicted to reach over 11,000 tonnes in 2017, rising by around one-third. Machinery and electronics, the two most important product groups on the trade lane, have seen year-on-year tonnage rise by 24.5% and 29.6% respectively for January-July 2017. As for US-Argentina, the same product groups are again the most important and are driving growth, although it is expected to be less impressive, at just over 10%, with volumes approaching 29,000 tonnes.

Two other US lanes which stand out involve Central and Eastern European markets: US-Russia and US-Turkey. US-Russia volumes are forecast at about 22,000 tonnes for 2017, growing by over 30%. Machinery tonnage, which accounted for over one-fifth of the trade lane's volume in 2016, has grown year-on-year by almost a half for the period January-July 2017. As for US-Turkey (19,000 tonnes in 2016), the forecast is more circumspect, with growth of just over 10% projected for 2017. The big driver is automotive goods, with volumes increasing by almost 1,000 tonnes year-on-year for January-July 2017.

Finally, one of the few markets to appear in the list of the 25 fastest-growing lanes twice is Kuwait. US-Kuwait air freight tonnage is forecast to approach 19,000 tonnes in 2017, representing growth of 26.0%. Perhaps surprisingly, the lane's two most important product group are fruits and vegetables (18.5% and 12.6% of total tonnage in 2016). For January-July 2017, fruits tonnage is up by over 1,000 tonnes year-on-year to almost 3,000 tonnes: a 60% rise. Although vegetables tonnage is down by 20%, other product groups such as machinery and high-tech instruments are doing well. As for EU-Kuwait, volumes are forecast to rise by around 10% to 27,000 tonnes. Vegetables is the most important product group, accounting for 13% of tonnage in 2016, followed by machinery (11%), electronics (6%) and pharma (5%). Vegetables tonnage was basically flat for January-July 2017 year-on-year, but machinery and electronics volumes were up by about two-thirds and one-third respectively.

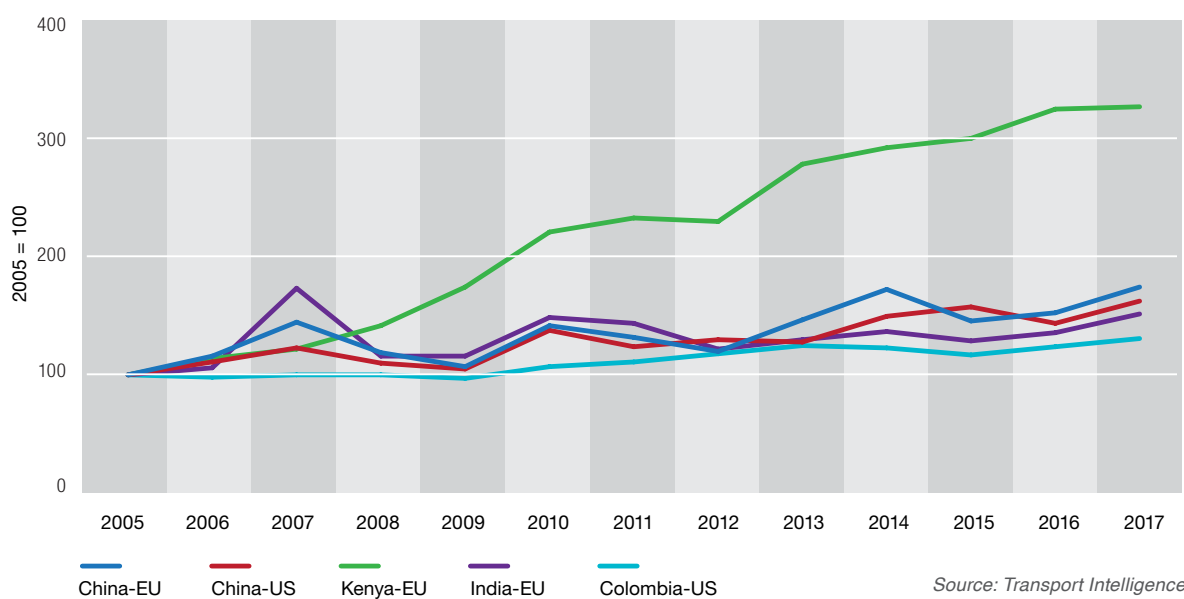
AIR FREIGHT TOP 10 TRADE LANES – EMERGING MARKET TO EU/US

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth
1	China	EU	1,161,931	1,327,787	14.3%
2	China	US	1,147,344	1,304,302	13.7%
3	Kenya	EU	218,467	219,621	0.5%
4	India	EU	189,873	211,391	11.3%
5	Colombia	US	166,258	175,473	5.5%
6	India	US	133,555	153,476	14.9%
7	Chile	US	141,244	128,439	-9.1%
8	Vietnam	US	95,533	114,166	19.5%
9	Ethiopia	EU	94,623	94,242	-0.4%
10	Mexico	EU	98,587	90,943	-7.8%
n/a	All 50 EM	EU	2,642,698	2,836,192	7.3%
n/a	All 50 EM	US	2,272,648	2,492,846	9.7%
n/a	All 50 EM	EU and US	4,915,346	5,329,039	8.4%

Note: 2017* figures are forecasts

Source: Transport Intelligence

Air Freight Emerging Markets to EU/US Top 5 Trade Lanes 2005-2017 Growth



In total, it is estimated that the Index's 50 emerging markets will export 7.3% more air freight to the EU and 9.7% more to the US in 2017.

Out of the 100 trade lanes going from the 50 emerging markets to the EU/US, the top 10 lanes are predicted to account for 71.7% of total air tonnage in 2017. China is by far the largest exporter, having comprised 44.0% of all emerging market air freight to the EU and 50.5% of air freight to the US in 2016. In a nutshell, China represents around half of emerging market air export tonnage to the US and EU.

China-EU and China-US are forecast volume growth of 14.3% and 13.7% respectively. For China-EU air freight, the two largest groups of electronics and machinery – which represented 26.3% and 19.3% of total tonnage in 2016 – have seen volume growth of 16.0% and 28.0% respectively, for the year to date (January-July 2017). Apparel (+11.9%), plastics & plastic articles (+21.3%), high tech instruments (+10.8%) and furniture (+21.2%) are some other important product groups that have recorded strong gains. For air freight to the US, the two largest product groups (electronics and machinery) have recorded volume growth of 18.8% and 11.1% for January-July 2017, year-on-year. These two groups accounted for 29.5% and 23.5% respectively of total freight on this lane in 2016. Other important product groups recording impressive growth in the year to date include apparel (+17.3%), plastics & plastic articles (+35.0%) and furniture (+24.6%), while toys, games & sports equipment volumes have more than doubled.

Kenya-EU remains the third-largest emerging market air export trade lane by tonnage, exceeding even India's trade with the EU, an economy which is 30 times larger. Tonnage is predicted to increase by just 0.5% in 2017 to 220,000 tonnes. Two product groups are responsible for almost all of Kenya's air exports: flowers (74.2% in 2016) and vegetables (23.0% in 2016).

Kenya continues to interest major logistics providers, particularly those specializing in perishables (flowers and vegetables) and looking to expand in neighbouring Tanzania and Uganda.

Turning elsewhere in Africa, Ethiopia-EU is the ninth-largest air export trade lane. Flowers accounted for 95% of all tonnage in 2016. Although flowers tonnage is down by 2.7% in the year to date, growth for 2017 overall is forecast at -0.4%. Moreover, infrastructure development suggests there is confidence in

Ethiopia air freight. In 2017 Africa's largest air cargo terminal opened at Addis Ababa Airport. The \$150m facility has the capacity to handle 600,000 tonnes of cargo per year, expanding on its previous capacity by 250,000 tonnes.

India's air freight exports to the EU (+11.3%) and US (+14.9%) are expected to develop at a very healthy rate in 2017. Interestingly, apparel exports, which account for about 25% of all tonnage, have fallen by 3.8% in the year to date. However, growth is being powered by machinery (+24.6%), vegetables (+15.1%), electronics (+17.7%) and organic chemicals, which have more than doubled. To the US, the biggest export group is pharmaceuticals (30,000 tonnes in 2016). For the year to date, volumes have increased by 5.5%. However, machinery (+81.3%), electronics (+10.5%) and automotive goods (+56.4%) particularly boosting the lane's figures.

There are two South American trade lanes that make the top ten: Colombia-US and Chile-US. Colombia-US air freight is anticipated to grow by 5.5%, whereas Chile-US is predicted a drop of 9.1%. For Colombia, around 90% of its export tonnage to the US is comprised of flowers. For January-July 2017, volumes have improved by 6.1% year-on-year. For Chile, the dominant commodity is fish (about 80% of total tonnage in 2016). For the year to date, tonnage has slid by 2.7%. Fruit volumes, which account for about 15% of total tonnage, have slid by almost 30% in the year to date.

The remaining US destination lane in the top 10 is Vietnam-US, which is forecast to grow by 19.5% to 114,000 tonnes. Apparel volumes, which account for almost half of all tonnage, have expanded by 44.5% in the year to date. The related industry of footwear has seen volume growth of 32.4%. Electronics and machinery tonnage has increased by 21.7% and 27.6% respectively, with losses elsewhere bringing the overall forecast down.

Mexico-EU tonnage is projected to decrease by 7.8% to 91,000 tonnes in 2017. For the year to date, electronics and fruits tonnage, its two most important product groups, have recorded tonnage declines of 18.4% and 43.1% respectively. More optimistically, vegetables and machinery tonnage has increased by 11.2% and 30.0% respectively.

Air Freight Fastest-Growing Trade Lanes - Emerging Market to EU/US (Index of Tons, 2005=100)

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth	2014 Index	2015 Index	2016 Index	2017 Index*	2014-2017 CAGR	2005-2017 CAGR
1	Cambodia	EU	11,959	17,238	44.1%	344	316	344	496	12.9%	14.3%
2	Indonesia	EU	21,621	29,969	38.6%	82	64	69	96	5.2%	-0.4%
3	Sri Lanka	EU	12,817	17,209	34.3%	131	79	85	114	-4.3%	1.1%
4	Ghana	EU	11,481	15,224	32.6%	96	87	75	100	1.2%	-0.0%
5	Philippines	EU	15,968	19,956	25.0%	72	79	76	95	9.7%	-0.4%
6	Mexico	US	52,586	65,704	24.9%	82	79	82	102	7.4%	0.2%
7	Vietnam	EU	54,652	66,500	21.7%	236	241	249	304	8.8%	9.7%
8	Vietnam	US	95,533	114,166	19.5%	236	326	346	413	20.5%	12.5%
9	Pakistan	US	14,433	16,990	17.7%	61	57	59	69	4.1%	-3.0%
10	India	US	133,555	153,476	14.9%	120	128	138	158	9.5%	3.9%
11	China	EU	1,161,931	1,327,787	14.3%	173	146	153	175	0.3%	4.8%
12	China	US	1,147,344	1,304,302	13.7%	150	158	144	163	2.9%	4.2%
13	Turkey	US	26,878	30,171	12.3%	126	150	152	171	10.8%	4.6%
14	Malaysia	EU	44,655	50,077	12.1%	106	99	114	128	6.6%	2.1%
15	India	EU	189,873	211,391	11.3%	137	129	136	152	3.5%	3.5%
16	Pakistan	EU	59,872	66,615	11.3%	112	101	125	139	7.4%	2.8%
17	Malaysia	US	48,769	54,188	11.1%	39	41	40	45	4.2%	-6.5%
18	Philippines	US	28,672	30,569	6.6%	86	86	77	82	-1.4%	-1.6%
19	Brazil	US	47,909	51,025	6.5%	42	46	52	55	9.9%	-4.8%
20	Colombia	US	166,258	175,473	5.5%	123	117	124	131	2.1%	2.3%
21	Thailand	EU	57,657	60,724	5.3%	89	76	82	87	-0.8%	-1.2%
22	Sri Lanka	US	24,281	25,214	3.8%	102	140	149	155	15.1%	3.7%
23	Brazil	EU	79,011	81,459	3.1%	142	108	125	129	-3.0%	2.2%
24	Colombia	EU	25,959	26,491	2.0%	156	123	124	127	-6.7%	2.0%
25	Bangladesh	US	23,127	23,515	1.7%	96	147	163	165	19.8%	4.3%
n/a	All 50 EM	EU	2,642,698	2,836,192	7.3%	136	125	132	142	1.5%	3.0%
n/a	All 50 EM	US	2,272,648	2,492,846	9.7%	121	127	121	133	3.4%	2.4%
n/a	All 50 EM	EU and US	4,915,346	5,329,039	8.4%	128	126	127	138	2.3%	2.7%

Note: 2017* figures are forecasts. Index 2005=100.

Source: Transport Intelligence

Out of the 44 emerging market air freight trade lanes to the EU/US for which volumes exceeded 10,000 tonnes, 29 are expected to increase their tonnage in 2016.

Of the 25 fastest-growing in 2017, only seven have long-run CAGRs (2005 to 2017) in excess of 4%.

A common theme among those seeing rapid growth this year is that the fashion & textiles sector appears to be driving a resurgence in volumes.

Cambodia-EU, expected to be the fastest-growing emerging market air export trade lane in 2017, easily fulfils that criteria. It is forecast growth of 44.1% for 2017, with its long-run CAGR at 14.3%. Tonnage is set to exceed 17,000 tonnes this year, with apparel accounting for around 90% of all tonnage and footwear making up pretty much all of the rest. Cambodia is another 'frontier' market, like Kenya, where major LSPs are steadily ramping up their operations.

Vietnam-EU has about four times as much volume compared to Cambodia, with 2017 tonnage projected at 67,000 tonnes. Its long run CAGR is just shy of 10%. Its most important

product groups are electronics (28% of all volume), apparel (21%), footwear (14%) and machinery (13%). For January-July 2017, footwear is driving growth, with exports up by 83.4%, while apparel is also growing at a healthy 21.8%. Electronics and machinery volumes, however, are down 2.0% and 4.3% respectively.

Turkey-US is another member of the club achieving decent growth this year and in the long run. Volume is expected to increase by 12.3% to 30,000 tonnes in 2017, while its long run CAGR is a solid 4.6%. Apparel is the lane's most important product group, accounting for almost 30% of tonnage. For January-July 2017 volume is up by 16.8% year-on-year. Machinery (+10.8%), fish (+58.8%) and automotive goods (+11.9%) are also having strong years.

Malaysia-EU is anticipated to achieve double-digit growth of 12.1% in 2017, although its long-run CAGR is a less impressive at 2.1%. Its volume was below its level in 2005 as recently as 2015. Once again, footwear and apparel are driving growth, while electronics and machinery volumes are down slightly. For Pakistan-EU, apparel growth is again the main driver of growth.

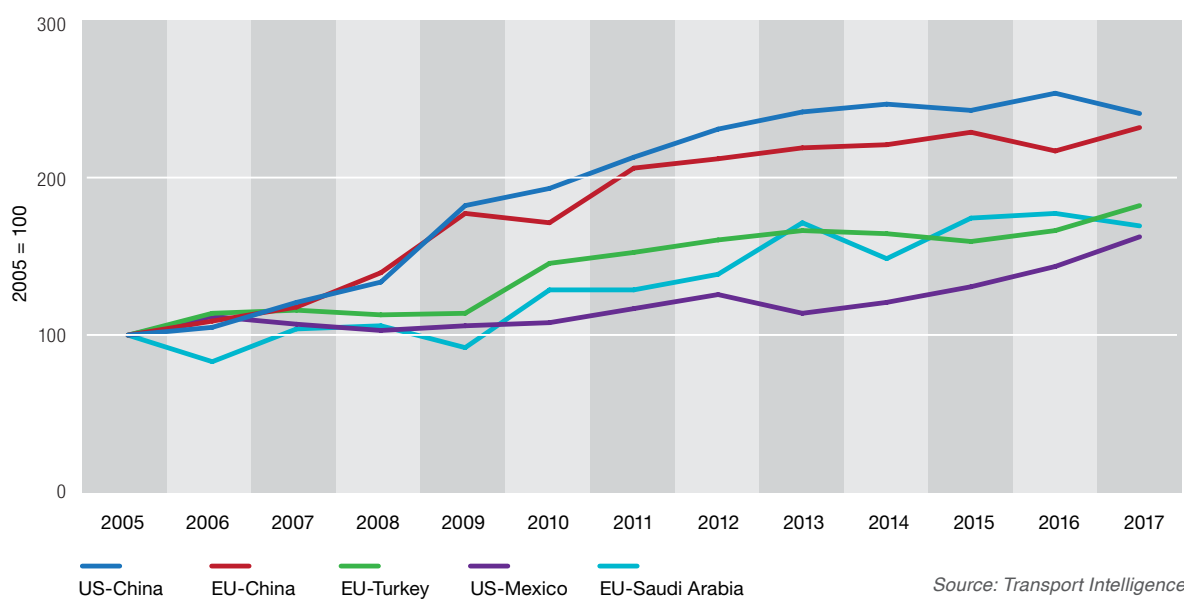
SEA FREIGHT TOP 10 TRADE LANES – EU/US TO EMERGING MARKET

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth
1	US	China	85,881,199	81,591,759	-5.0%
2	EU	China	38,175,237	40,725,559	6.7%
3	EU	Turkey	31,314,953	34,296,648	9.5%
4	US	Mexico	17,571,032	19,902,231	13.3%
5	EU	Saudi Arabia	15,925,162	15,271,162	-4.1%
6	US	Brazil	11,820,842	12,728,055	7.7%
7	EU	Egypt	13,169,590	11,734,693	-10.9%
8	EU	Morocco	13,068,707	11,408,146	-12.7%
9	US	Colombia	10,381,337	11,284,827	8.7%
10	EU	Algeria	19,734,341	10,873,730	-44.9%
n/a	EU	All 50 EM	237,914,256	228,917,569	-3.8%
n/a	US	All 50 EM	209,057,550	215,921,627	3.3%
n/a	EU and US	All 50 EM	446,971,806	444,839,197	-0.5%

Note: 2017* figures are forecasts

Source: Transport Intelligence

Sea Freight EU/US to Emerging Market Top 5 Trade Lanes 2005-2017 Growth



Overall, sea freight tonnage to emerging markets from the EU and US is predicted to contract by 0.5% in 2017. EU tonnage is forecast to decrease by 3.8%, while growth of 3.3% is anticipated for the US.

Starting with the largest lane, US-China tonnage is expected to shrink by 5.0% in 2017. For January-to-July 2017 exports of key commodities such as wood pulp and food industry residues have suffered declines of 5.7% and 72.6% respectively, although soybeans growth of 7.2% has offset this to an extent. More encouragingly, on the same basis, in non-bulk sectors like automotive goods and machinery, volumes are up by 15.7% and 12.1% respectively. Forwarders exposed to these commodities ought to be doing quite well.

For EU-China, overall volume is projected to expand by 6.7% in 2017. Similar to US-China trade, its main non-bulk sectors, automotive goods and machinery parts, are doing well. For January-July 2017 year-on-year volumes are up by 9.1% and 11.9% respectively.

Excluding the impact of China, EU and US export tonnage to the remaining 49 emerging markets would have decreased by 5.8% and increased by 9.1% respectively. Cumulatively, EU and US tonnage would have contracted by 0.1%.

Five trade lanes in relatively close geographical proximity to the EU feature in the top 10. For EU-Turkey, tonnage growth of 9.5% is forecast for 2017, driven by January-July 2017 growth of 11.7% for iron & steel, which accounted for over a third of volume alone in 2016. For EU-Algeria, 2017 volumes are predicted to slump by 45%. The year to date has seen major products groups such as cereals (-43.1%) salt, sulphur, earths & stone (-78.5%) and iron & steel (-77.0%) suffer large tonnage declines. Its most important non-bulk product group, machinery, has seen volumes slide by 27.2%. EU-Saudi Arabia volumes are predicted to fall too, although only by 4.1% for 2017. Major containerised freight commodity groupings such as machinery and automotive goods have not fared well over the year to date, with volume slumping by 16.2% and 33.4% respectively.

EU-Morocco sea freight is expected to decline by 12.7% in 2017. Cereals tonnage is down by 64.4% for the year to date, although iron and steel tonnage is up by 72.6%. Tonnage growth in non-bulk sectors appears to be relatively flat. Going forward, Morocco in particular looks to be an upcoming location for the automotive sector. PSA Peugeot-Citroen has revealed plans to build a €557m production plant, with operations beginning in 2019. It will have an initial capacity of 90,000 engines and vehicles, possibly rising to 200,000. Engine parts manufacturer Linamar has also pledged to build a \$280m engine parts plant (which will supply the PSA plant), while fellow parts manufacturer Delphi will launch a new factory to make electrical distribution systems, as well as an R&D centre.

Elsewhere in North Africa, a collapse in cereals tonnage is to blame for EU-Egypt's volume growth forecast of -10.9% in 2017. Vegetables tonnage, a booming commodity last year, has slumped by about half for the year to date.

North-South trades account for the remaining three trade lanes in the top 10 and all have US origins: US-Mexico, US-Brazil and US-Colombia. US-Brazil tonnage is estimated to grow by 7.7% in 2017, with fertilisers and machinery tonnage up by 42.9% and 47.2% for the year to date, offset by declines of 5.5% and 21.4% for inorganic chemicals and cereals respectively. US-Colombia tonnage is predicted to increase by 8.7%. For the year to date, cereals tonnage (which accounts for almost 40% of tonnage) is up by 2.6%, although other important product groups such as food industry residues and organic chemicals have seen their tonnage increase much more dramatically (27.5% and 14.6% respectively). Meanwhile, US-Mexico tonnage is predicted to grow by 13.3% in 2017, mainly on account of higher cereals tonnage.

Sea Freight Fastest-Growing Trade Lanes – EU/US to Emerging Market

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth	2014 Index	2015 Index	2016 Index	2017 Index*	2014-2017 CAGR	2005-2017 CAGR
1	US	Bangladesh	1,598,742	3,359,265	110.1%	253	542	669	1405	77.1%	24.6%
2	US	Nigeria	1,699,011	2,954,205	73.9%	88	74	49	85	-1.1%	-1.3%
3	US	Malaysia	1,937,042	2,809,541	45.0%	129	110	114	165	8.7%	4.3%
4	US	Pakistan	1,710,101	2,360,406	38.0%	139	216	300	414	43.8%	12.6%
5	EU	Russia	4,114,423	5,390,694	31.0%	152	97	88	115	-8.9%	1.2%
6	EU	Ghana	3,024,314	3,878,543	28.2%	227	276	274	352	15.8%	11.0%
7	EU	Argentina	1,781,263	2,197,992	23.4%	144	169	151	186	8.8%	5.3%
8	US	Ecuador	1,351,906	1,625,684	20.3%	185	167	135	162	-4.3%	4.1%
9	US	Peru	5,759,482	6,845,408	18.9%	385	343	422	502	9.3%	14.4%
10	EU	Mexico	5,716,267	6,650,262	16.3%	118	144	153	178	14.5%	4.9%
11	US	India	7,137,134	8,128,454	13.9%	228	235	255	290	8.4%	9.3%
12	US	Mexico	17,571,032	19,902,231	13.3%	121	131	144	163	10.4%	4.2%
13	EU	Peru	993,219	1,123,146	13.1%	190	223	208	235	7.5%	7.4%
14	US	Saudi Arabia	4,455,100	5,023,426	12.8%	213	214	239	270	8.2%	8.6%
15	EU	Kuwait	1,079,164	1,211,919	12.3%	125	132	111	125	0.0%	1.9%
16	US	Turkey	7,248,933	8,107,605	11.8%	202	199	173	193	-1.5%	5.6%
17	US	Chile	3,972,117	4,441,637	11.8%	224	228	277	310	11.4%	9.9%
18	EU	South Africa	5,156,952	5,706,153	10.6%	154	168	166	184	6.1%	5.2%
19	EU	Turkey	31,314,953	34,296,648	9.5%	165	160	167	183	3.5%	5.2%
20	US	Colombia	10,381,337	11,284,827	8.7%	170	184	188	204	6.2%	6.1%
21	US	South Africa	1,268,520	1,378,809	8.7%	99	102	145	157	16.6%	3.9%
22	US	Indonesia	7,223,022	7,836,978	8.5%	187	152	207	224	6.1%	7.0%
23	EU	Nigeria	3,223,183	3,490,585	8.3%	128	110	99	108	-5.7%	0.6%
24	EU	Lebanon	2,651,697	2,867,700	8.1%	188	207	215	233	7.4%	7.3%
25	US	Algeria	1,346,307	1,453,929	8.0%	37	42	94	101	40.3%	0.1%
n/a	EU	All 50 EM	237,914,256	228,917,569	-3.8%	179	177	176	169	-1.9%	4.5%
n/a	US	All 50 EM	209,057,550	215,921,627	3.3%	194	185	200	207	2.2%	6.2%
n/a	EU and US	All 50 EM	446,971,806	444,839,197	-0.5%	185	180	186	185	0.0%	5.3%

Note: 2017* figures are forecasts. Index 2005=100.

Source: Transport Intelligence

Out of the 58 trade lanes with volumes of at least 1m tonnes, 34 are expected to record higher volumes in 2017 than in 2016. 18 are predicted growth in excess of 10%, while eight are expected to have growth of over 20%.

For US origin lanes, most countries with rapid tonnage growth forecasts primarily have higher cereals tonnage to thank. One exception is US-Bangladesh, as soybeans and iron & steel tonnage have grown rapidly, although cereals tonnage has skyrocketed too. Tonnage on this lane is forecast to more than double in 2017. For US-Pakistan, cereals tonnage has in fact collapsed, although iron & steel is up by around a half for the year to date, while soybeans tonnage has shot up. For US-India, cereals accounts for relatively little tonnage and organic chemicals tonnage has taken off for the year to date, resulting in its forecast of 13.9% for 2017. For US-Turkey, food industry residues growth of 84.3% for the year to date is driving the

overall 2017 forecast of 11.8%, as declines in iron & steel and wood products bring down the overall figure. US-Chile (organic chemicals) and US-South Africa (plastics, salt, sulphur, earths and stone, meat and vegetables) are other exceptions where cereals is not the prime driver of growth.

For EU origin trade lanes, EU-South Africa and EU-Turkey are experiencing growth primarily due to higher cereals tonnage, though it is a mixed bag of product groups driving growth on others lanes: EU-Russia (inorganic chemicals, iron & steel, automotive, salt, sulphur, earths & stone), EU-Ghana (salt, sulphur, earths & stone), EU-Argentina (fertilisers, salt, sulphur, earths & stone and inorganic chemicals), EU-Mexico (iron & steel, paper, machinery, automotive goods), EU-Peru (chemical products), EU-Kuwait (iron & steel) and EU-Lebanon (iron & steel).

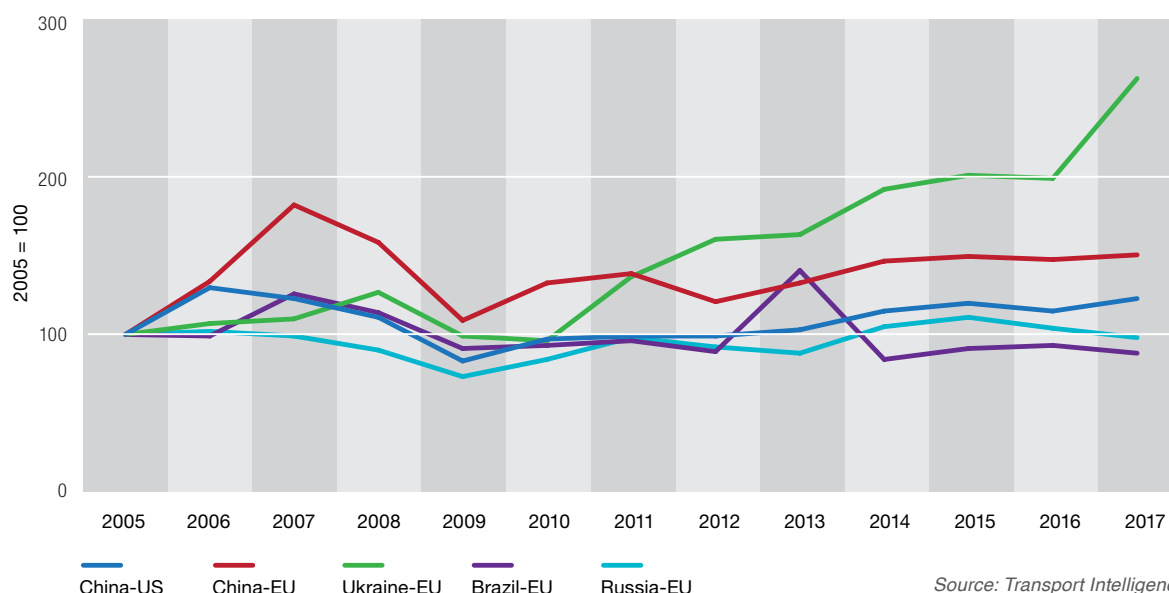
SEA FREIGHT TOP 10 TRADE LANES – EMERGING MARKET TO EU/US

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth
1	China	US	63,000,650	67,537,539	7.2%
2	China	EU	52,558,917	53,521,081	1.8%
3	Ukraine	EU	22,244,725	29,422,722	32.3%
4	Brazil	EU	30,700,576	28,913,671	-5.8%
5	Russia	EU	28,971,241	27,236,407	-6.0%
6	Turkey	EU	19,935,497	24,121,143	21.0%
7	Brazil	US	14,873,783	16,303,614	9.6%
8	Mexico	US	17,247,123	15,881,473	-7.9%
9	Argentina	EU	15,034,657	14,204,951	-5.5%
10	India	EU	11,062,698	13,697,444	23.8%
n/a	All 50 EM	EU	274,905,102	293,542,489	6.8%
n/a	All 50 EM	US	169,663,222	186,282,817	9.8%
n/a	All 50 EM	EU and US	444,568,324	479,825,306	7.9%

Note: 2017* figures are forecasts

Source: Transport Intelligence

Sea Freight Emerging Market to EU/US Top 5 Trade Lanes 2005-2017 Growth



Out of the 100 trade lanes going from the 50 emerging markets to the EU and US, the top 10 are forecast to constitute 60.6% of total tonnage in 2017. China alone will represent 25.2% of tonnage. However, China is a far more significant partner to the US compared to the EU. China-US tonnage represents 36.3% of all tonnage to the US, whereas for the EU the corresponding figure is just 18.2%.

Another salient feature of emerging market sea freight exports is that they are much more diversified compared to imports, which are overwhelmingly comprised of agricultural goods. Such variation holds generally across the board for emerging market exports, but China is perhaps the best example of it.

In 2016 the top 10 product groups by tonnage for China-US sea freight were furniture (7.4m), machinery & machinery parts (5.6m), electronics (4.8m), iron & steel articles (4.1m), plastics & plastic articles (3.6m), salt, sulphur, earths & stone (3.1m), toys, games & sports equipment (3.0m), vehicles & vehicle parts (2.9m), wood & wood articles (2.4m) and ceramic products (2.0m). Moreover, 21 different product groups had volumes in excess of 1m tonnes.

For 2017 China-US export tonnage is expected to increase by 7.2%. For January-July 2017, most major product groups have recorded significant tonnage growth year-on-year. Some of the best performers are furniture (+15.1%), machinery (+9.9%), iron

& steel articles (+8.4%), plastics & plastic articles (+12.5%) and automotive goods (+8.4%).

For China-EU sea freight, the top 10 product groups by tonnage in 2016 were iron & steel (6.3m), machinery & machinery parts (5.2m), electronics (3.7m), furniture (3.7m), iron & steel articles (3.5m), stone articles (2.5m), plastics & plastic articles (2.4m), organic chemicals (1.7m), toys, games & sports equipment (1.5m) and automotive goods (1.4m). In total, export volumes in 18 different product groups were above 1m tonnes.

Overall, China-EU tonnage is anticipated to rise by 1.8% in 2017. For January-July 2017, year-on-year export growth has been solid in most major commodity groups that necessitate containerised sea freight: machinery (+11.2%), electronics (+4.6%), furniture (+4.0%), iron & steel articles (+4.5%) and plastic articles (+5.3%), toys, games & sports equipment (+5.0%) and automotive goods (+8.4%). What brings the overall figure down is a collapse in tonnage of iron & steel (-39.5%).

The only other emerging market to appear twice in the top 10 is Brazil. Exports to the EU are forecast to contract by 5.8% in 2017, while the corresponding figure for the US is growth of 9.6%. For January-July 2017, Brazil-EU's decline is primarily being driven by lower soybeans tonnage, whereas for Brazil-US, growth is primarily on account of greater iron & steel volumes.

Elsewhere, the two CIS markets in the top 10 – Russia-EU and Ukraine-EU – are forecast contrasting growth of -6.0% and 32.3% respectively in 2017. For January-July 2017, year-over-year growth in Russian exports of iron and steel (-19.8%) and fertilisers (-12.7%) has been negative. On the other hand, Ukrainian exports of cereals, which accounted for around 35% of its total volume in 2016, are up by 38.8% for the year to date.

Turkey-EU and India-EU are projected similarly strong growth rates of 21.0% and 23.8% respectively for 2017. While bulk commodities are still most important for Turkey-EU sea freight, with 26.7% year-to-date growth in salt, sulphur, earths & stone driving much of the lane's promising 2017 forecast, vehicles & vehicle parts (8.0% of total tonnage in 2016) and machinery & machinery parts (3.1% of tonnage) are relatively more important compared to most other lanes. Volumes for these for the year to date are up by 7.2% and 3.1% respectively. Turkey has long been considered an intriguing near-sourcing location for manufacturers looking to export to Europe, not least among automotive manufacturers who continue to develop their presence there. At the beginning of 2016 around \$1.2bn of investment was at the ready for Turkey, with five vehicle manufacturers – Fiat, Renault,

Toyota, Hyundai and Honda – all set to ramp up operations. The medium-term outlook for the country's manufacturing sector appears to be robust. India-EU's strong forecast is almost solely being driven by a year-to-date tripling of iron and steel tonnage. As for more forwarding-intensive sectors, machinery (3.2% of total tonnage in 2016) and automotive goods (2.5% of total tonnage in 2016) exports have increased by 8.6% and 25.4% for the year to date.

The two remaining Latin American trade lanes rounding off the top 10 are predicted similar results. Mexico-US is expected to see tonnage slide by 7.9%, while Argentina-EU volume is predicted to fall by 5.5%. The former's woes are primarily on account of salt, sulphur, earths & stone tonnage contracting by 14.4% for January-July 2017 year-on-year. This group comprises over three-quarters of total tonnage. On the same basis, in relatively important non-bulk sectors, the story is quite different. Tonnage is significantly up in automotive goods (+60.7%), fruits (+26.1%), machinery (+29.8%) and vegetables (+14.2%). Argentina's falling volumes are largely as a result of a 3.6% year-to-date decline in food industry residues exports.

Sea Freight Fastest-Growing Trade Lanes – Emerging Market to EU/US

Rank	Origin	Destination	2016 Tons	2017* Tons	16-17 Growth	2014 Index	2015 Index	2016 Index	2017 Index*	2014-2017 CAGR	2005-2017 CAGR
1	Qatar	EU	1,042,722	2,311,639	121.7%	220	222	232	207	-2.1%	6.3%
2	Nigeria	EU	1,486,708	2,659,584	78.9%	182	165	157	161	-3.9%	4.1%
3	Egypt	US	1,031,523	1,805,054	75.0%	72	72	65	114	16.6%	1.1%
4	Ukraine	US	1,047,519	1,790,176	70.9%	43	47	45	76	21.1%	-2.3%
5	Morocco	US	1,791,621	2,831,715	58.1%	77	58	64	100	9.4%	0.0%
6	Egypt	EU	5,671,241	7,604,511	34.1%	79	61	83	111	11.9%	0.9%
7	Thailand	EU	3,185,823	4,264,972	33.9%	135	155	155	146	2.7%	3.2%
8	Ukraine	EU	22,244,725	29,422,722	32.3%	95	92	87	76	-7.2%	-2.2%
9	Russia	US	8,535,766	11,242,314	31.7%	175	151	138	182	1.3%	5.1%
10	India	US	6,051,960	7,686,739	27.0%	135	138	124	157	5.1%	3.8%
11	UAE	US	1,808,176	2,282,465	26.2%	176	220	270	340	24.7%	10.7%
12	India	EU	11,062,698	13,697,444	23.8%	114	109	122	150	9.7%	3.5%
13	Turkey	EU	19,935,497	24,121,143	21.0%	69	71	72	76	2.8%	-2.3%
14	Mexico	EU	2,913,183	3,524,803	21.0%	287	377	359	753	37.9%	18.3%
15	Pakistan	US	878,069	1,056,533	20.3%	124	145	134	161	9.1%	4.0%
16	South Africa	US	2,425,724	2,845,424	17.3%	106	87	86	101	-1.6%	0.1%
17	Morocco	EU	5,992,159	6,986,183	16.6%	36	129	68	23	-13.4%	-11.4%
18	Qatar	US	1,384,223	1,613,196	16.5%	194	196	174	203	1.6%	6.1%
20	Turkey	US	6,815,481	7,892,672	15.8%	117	151	187	217	22.8%	6.7%
21	Ecuador	EU	1,574,604	1,810,894	15.0%	106	101	101	116	3.0%	1.3%
22	Venezuela	US	1,001,573	1,145,495	14.4%	26	18	13	15	-17.0%	-14.7%
23	South Africa	EU	11,979,866	13,652,313	14.0%	194	197	211	222	4.6%	6.9%
24	Indonesia	EU	8,450,552	9,606,375	13.7%	139	137	132	150	2.5%	3.4%
25	UAE	EU	1,554,907	1,763,328	13.4%	284	312	314	356	7.9%	11.2%
n/a	All 50 EM	EU	274,626,666	293,184,872	6.8%	111	115	116	124	2.3%	1.2%
n/a	All 50 EM	US	169,663,222	186,282,817	9.8%	107	110	105	115	4.1%	0.4%
n/a	All 50 EM	EU and US	444,289,888	479,467,689	7.9%	109	113	111	120	3.0%	0.9%

Note: 2017* figures are forecasts. Index 2005=100.

Source: Transport Intelligence

Of the 100 possible trade lanes from the 50 emerging markets to the US/EU, only 57 have volumes in excess of 1m tonnes. Of these, 44 are expected to increase their volume in 2017.

There are only eight lanes among the top 25 fastest growers for 2017 which have both 2017 growth and long-run CAGRs in excess of 5%.

Two emerging markets from the Middle East stand out, Qatar and the UAE, because their exports to both the EU and US fulfil the aforementioned criteria.

Qatar-EU is at the head of the table for 2017, although it is unclear exactly what is providing the boost to volumes, with 'other products' denoted in the data as the category that has seen incredible volume growth for the year to date. Qatar-US growth of 16.5%, on the other hand, is being driven by higher organic chemicals tonnage.

UAE-EU growth for 2017 of 13.4% is being driven by ceramics and organic chemicals growth (both have more than doubled for January-July 2017 year-on-year). Export growth of 26.2% to the US, however, is primarily being driven by fertilisers and aluminium products.

The two remaining trade lanes with destinations to the EU that fulfil the 5% short-run and long-run growth criteria are South Africa-EU and Mexico-EU. South Africa's growth of 14.0% in 2017 is mainly being driven by bulk goods such as iron and steel, although automotive goods tonnage is having a good year with tonnage up by 7.3% for the year to date. A similar story holds for Mexico, although its automotive sector is doing far better, with tonnage up 82.9% so far for the year to date.

The remaining two lanes with US destinations are Russia-US and Turkey-US. Russia's exports to the US are anticipated to rise by 31.7% in 2017, as iron & steel (51.7% of tonnage in 2016) and fertilisers (28.8% of tonnage in 2016) volumes have increased by 47.7% and 22.2% respectively for the year to date. The Turkey-US forecast of 15.8% for 2017 is also primarily predicated on strong advances in bulk volumes (iron & steel and salt, sulphur, earths & stone), although automotive goods (55.5%) and carpets (21.8%) are helping to boost volumes too.

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