



Tradescape 2025
Evidence Pack

Tradescape 2025



We will localise. In the future, sustainable growth will require a local capability inside a global footprint.

Jeff Immelt, CEO at GE

Tradescape in numbers



Over 80

Original sources of information read and analysed



700+

GlobalScots and trade support professionals consulted



100

Attendees at 5 workshops across the UK

Why look at the future of trade?

We're living through a period of intense uncertainty. Global growth has slowed, protectionism is on the rise, and individuals are questioning whether the 20th Century globalisation model can continue to deliver benefits for all.

Yet, in spite of the angst felt in many Western countries and institutions the patterns of global trade in the 21st Century are taking shape. There's a slow inevitability to many fundamental forces of global change. Urbanisation continues apace, driven by rising aspirations and consumption, demographic shifts are fundamentally reshaping demand, and technological advances are connecting, shrinking and disrupting markets in unimaginable ways.

Tradescape 2025

Futures thinking is a tried-and-tested approach to helping organisations manage complex change – using insights about tomorrow to inform today's decisions. In *Tradescape 2025* we're deliberately taking an 'outside-in' perspective to identifying what's driving change in the global landscape for trade. Through surveys and in-depth interviews with senior business leaders globally, as well as our own desk research, we've sought insights to help us understand this complex and often confusing business environment.

This short evidence pack summarises the underlying drivers influencing the future of trade over the next decade. It's designed to set the context for the workshop discussions taking place in Scotland, Northern Ireland and London during June 2017.

But far from simply sharing our research we want to *engage* others to identify resilient actions and strategies. Navigating an uncertain global business environment throughout the 2020s will require strategic foresight, new capabilities and agile responses. *Tradescape 2025* aims to inform how Scotland and other parts of the UK can best position themselves to flourish in this changing business environment.



Drivers are underlying issues or trends that share a common theme and will "drive" future change. Examples include demographic changes and new technologies



Black Swans are an unpredictable or unforeseen event, typically one with extreme consequences. Examples include the Arab Spring or the global financial crisis of 2007/08

Project
Partners:



Trade in transition

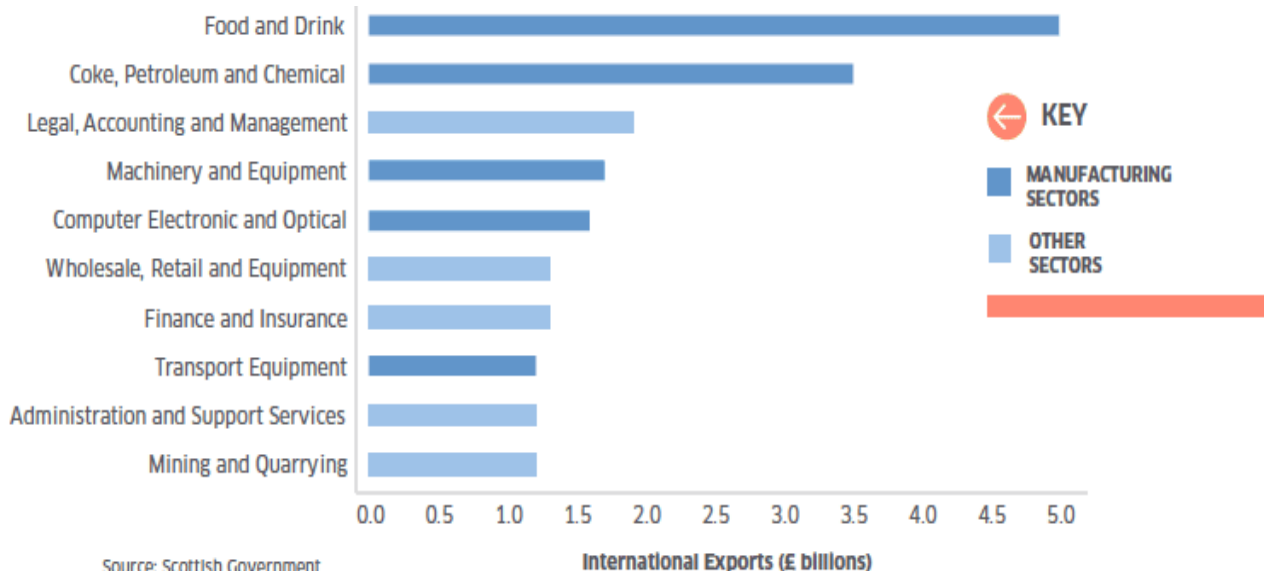
How does Scotland currently perform in terms of international trade?

Trade is a vital driver of sustainable economic growth. As a small, open economy Scotland relies on trading with the rest of the world to grow its businesses, attract investment and skills, and drive productivity growth. Trade presents new market opportunities and also stimulates innovation by exposing companies to global competition.

In the 19th Century Glasgow was arguably the manufacturing capital of the world. Looking to the 21st Century, Scotland's comparative advantages are founded in its sector strengths and assets, its natural resources as well as its values and global reputation. Shipbuilding and jute have given way to data science, whisky and subsea technology.

International exports from Scotland have grown by £5.2bn (+23%) over the last five years. Scotland exports £28.7bn of products and services outwith the UK, £12.3bn to the EU and £16.4bn to the rest of the world. But while international sales have expanded Scotland's export base is fragile:

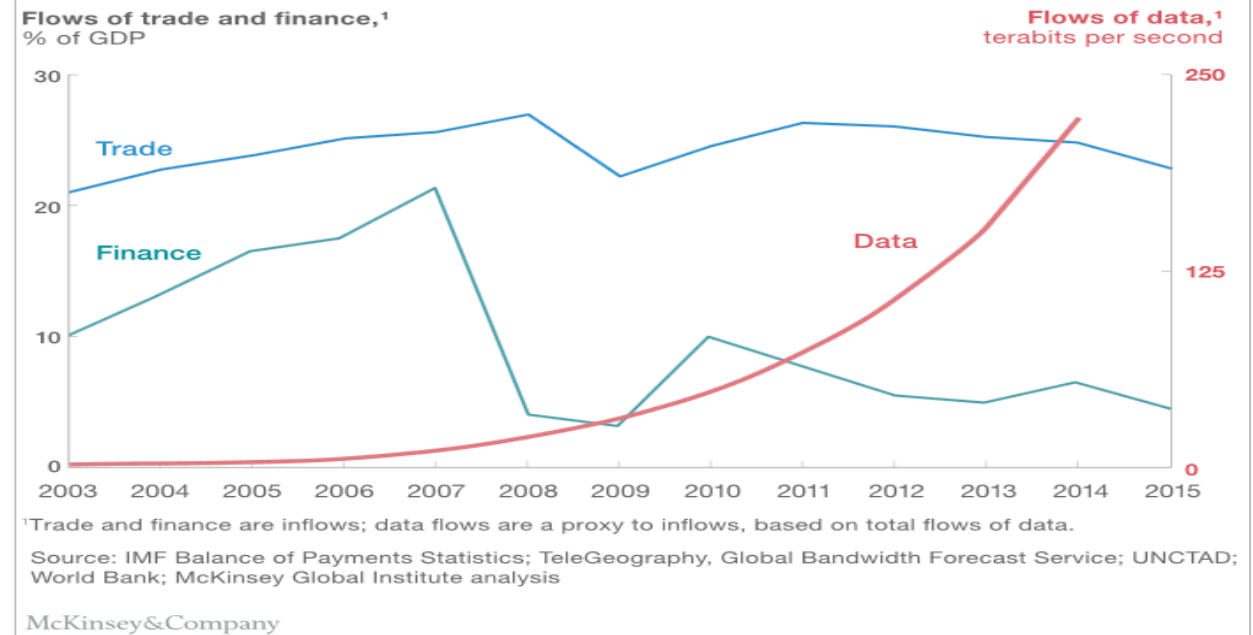
- the number of exporting businesses has declined since 2005 and Scotland's export performance relies on too few firms in too few sectors
- the rate of export growth to newer markets in China, India and Middle East has not matched the rates of GDP growth in these markets
- relatively weak ambition and capabilities may be holding many companies back. Only 3% of non-exporting businesses plan to start exporting. If Scotland had an export rate similar to that of the UK there would be an additional 2,500 exporting businesses.



Source: Scottish Government

Scotland's International exports, top 10 sectors, 2013 (£ billions)
(Scotland's Economic Strategy, 2015)

Global flows of data have outpaced traditional trade and financial flows.



¹Trade and finance are inflows; data flows are a proxy to inflows, based on total flows of data.
Source: IMF Balance of Payments Statistics; TeleGeography, Global Bandwidth Forecast Service; UNCTAD; World Bank; McKinsey Global Institute analysis
McKinsey&Company

How are trade patterns shifting?

Global trade is being shaped by a complex range of drivers. According to some commentators the current 'wave' of globalisation may be faltering, with slowing growth in investment flows and migration since 2008. The benefits of globalisation have been distributed unevenly, with voter/employee discontent reflected in rising protectionism.

Meanwhile, digital innovation is opening companies up to new customers, competition and possibilities. The rise of Alibaba, Amazon and other digital platforms have spurred millions of agile entrepreneurs from Jakarta to Johannesburg. Business models are becoming leaner and more decentralised: according to Jeff Immelt (CEO of GE), **"sustainable growth will require a local capability inside a global footprint"**.

Our evidence pack is structured around three key questions:



What will global trade look like in 2025?

how will the 'rules' of trade change in response to tensions around global integration, resources and trade flows?



Where will we see changes in demand?

how will market demands change in response to shifting demographics, rising global consumption and geographic trends?



How will we trade in the future?

how will organisations change in response to growing competition, technological change and the dynamics of speed, scale and trust?

What will global trade look like?

“ *Global companies will slide as local, SME companies take a lead role in driving global trade* – GlobalScot and Global CEO, Retail Analysis company

Global trade agreements

20th Century institutions (WTO, UN, EU, NAFTA) are becoming dated and risk being superseded or at least challenged by new, 21st Century alliances that reflect a more fragmented and ‘regional’ world. These include China’s Regional Comprehensive Economic Partnership Agreement, Russia’s Eurasian Union and the Pacific Alliance between Chile, Columbia, Mexico and Peru.

Trade integration

Over the last 50 years globalisation has lifted great swathes of populations out of poverty, creating new markets and stimulating innovation as the emerging middle classes have aspired to gain similar standards of living to those in the West. The progressive dismantling of trade barriers has served as a mantra for outward-facing governments and companies.

But now globalisation is being challenged by global regionalism, with drivers such as narrowing labour cost differentials, automation, digital manufacturing and concern over external shocks to global supply chains. Free trade is also being threatened by creeping protectionism, including tariff and non-tariff barriers. Populist political movements have gained ground in many Western economies as the working and middle classes have questioned the benefits of globalisation.

Global value chains and trade in intermediate goods

More than half of the world’s manufactured imports are intermediate goods (inputs that are then used in production of other goods) and over 70% of world services imports are intermediate services. Global value chains have become a dominant feature of world trade. From the sourcing of raw materials to design, production, sales and services, value chains have become dispersed to reflect the competitive cost and quality of skills and materials. The most value is created either at the beginning (design, R&D) or at the customer-facing (marketing, customer services) end of the chain.



Illustration: Boeing’s global supply chain

5,400

supplier factories, including sub-tier suppliers

750 million +

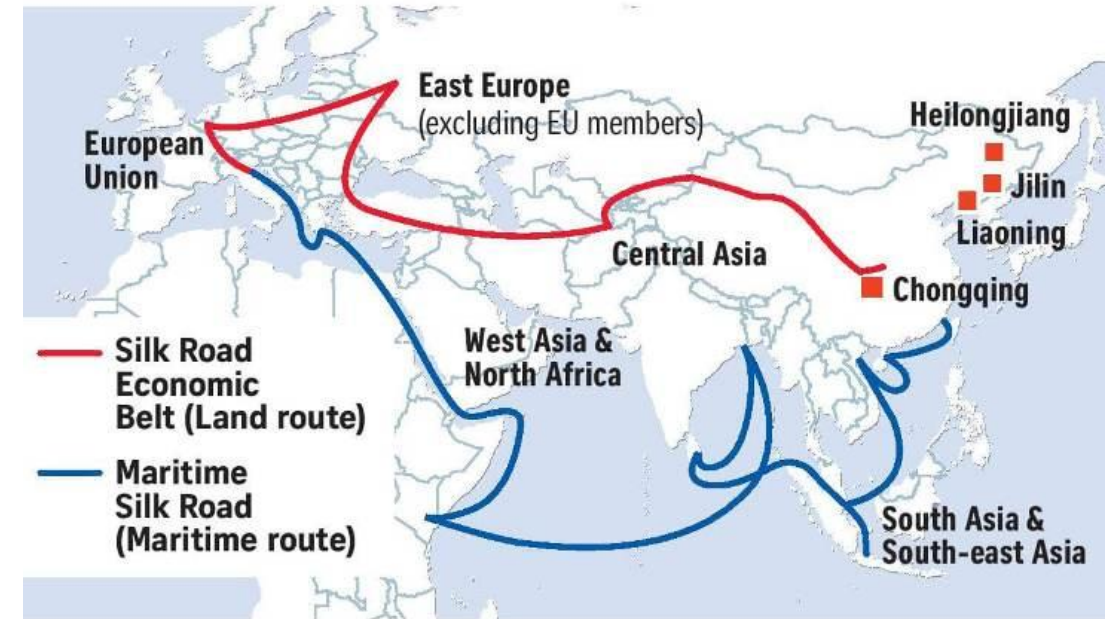
components and assemblies procured in 2012

+500,000

People employed through the Boeing supply chain



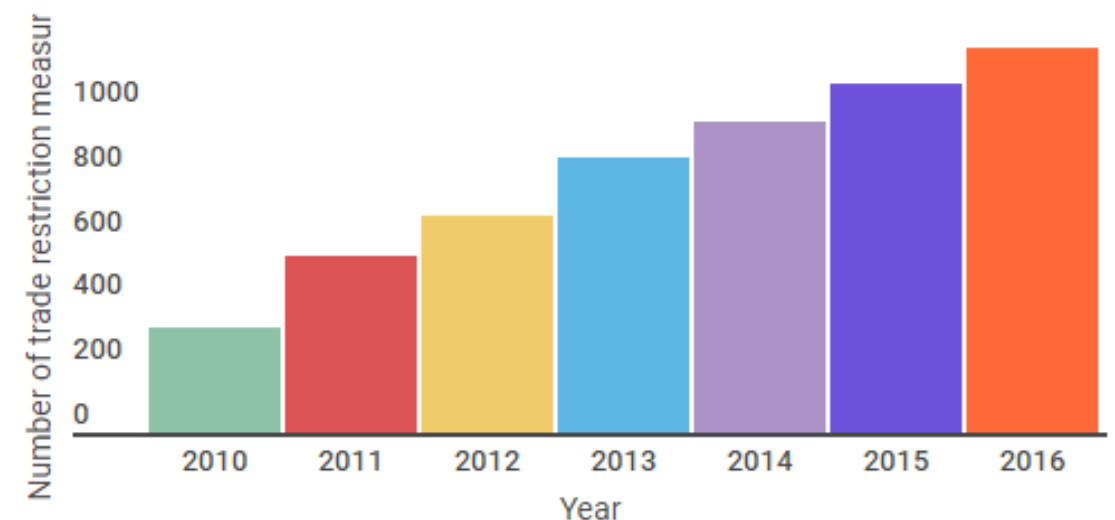
China’s One Belt, One Road initiative



Source: BLOOMBERG STRAITS TIMES GRAPHICS

China’s bold ‘One Belt, One Road’ initiative symbolises its emergence as a global superpower. By land and sea, through transport networks, energy pipelines and industrial hubs, ‘One Belt, One Road’ promises to integrate 60+ countries and 60% of the world’s population.

Trade restrictions rising in the G20



Report on G20 trade measures by OECD-WTO Joint Working Group Oct 2016

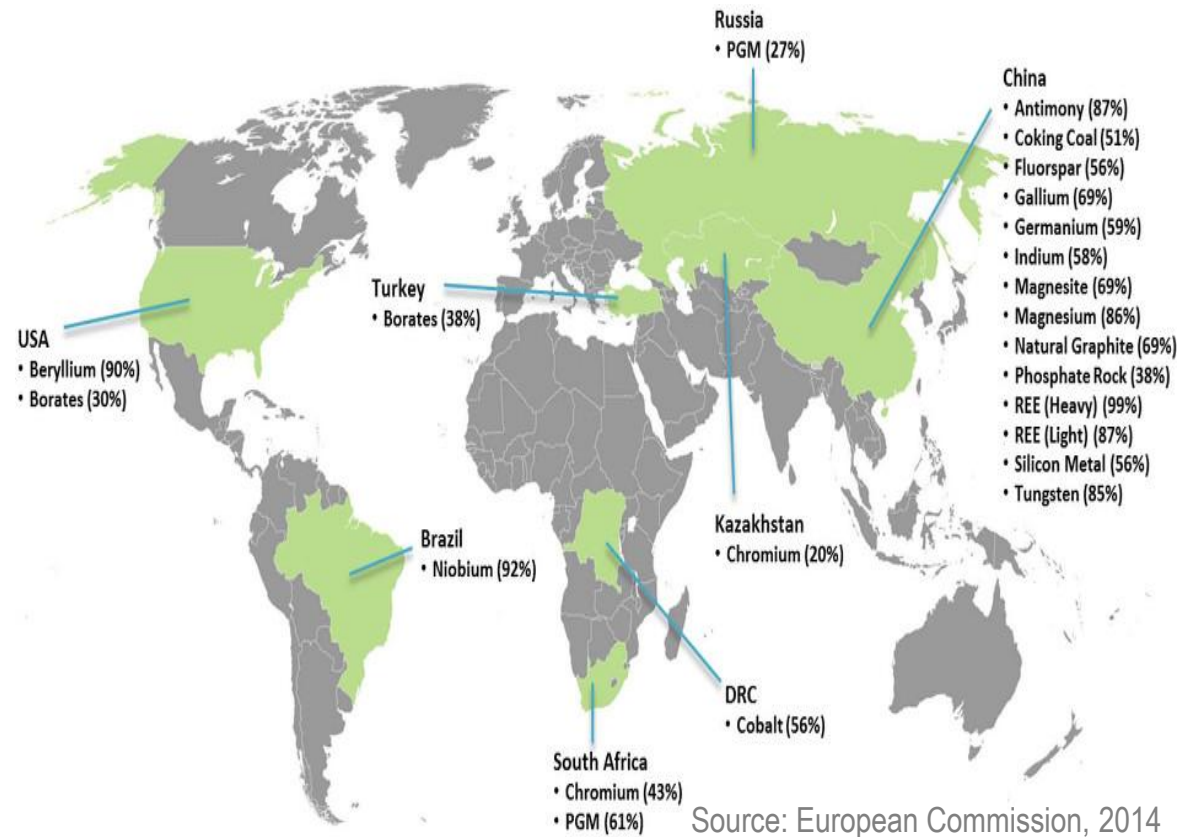
What will global trade look like?

” The world will run out of fresh water long before it runs out of oil, with the potential for major deficits by 2030 - **Peter Brabeck-Letmathe, former Chairman of Nestle**

Resource crunch

Another 800 million people will be added to the world's population by 2025 (to 8.1bn), increasing to 9.6bn by 2050 (UN). From water, energy, copper and many other critical materials such as cobalt (widely used in batteries and high-strength alloys used in jet turbines), the earth's natural resources are under increasing pressure. Many critical raw materials are concentrated geographically, often in politically unstable and protectionist-minded countries.

While technological solutions and substitute materials may partly ease supply-and-demand tensions, the resource crunch could potentially severely disrupt global trade flows. A rise in extreme weather events caused by climate change is also a source of external shocks to supply chains. In 2010, Russia suffered a severe heat wave which resulted in drought and wildfires destroying crops, particularly wheat. Economic losses were estimated at US\$15bn while export restrictions on wheat contributed to global price increases. (PwC). However, Scotland/UK is resource-rich in terms of water and land, and its domestic production is likely to be less affected by the negative impacts of climate change than some countries. These factors may offer opportunities to boost global trade and investment.



From pallets to patents to patients

Trade in services has been driving overall trade growth for some time, driven by data, services and experiences linked to products. Many services can now be delivered digitally, including outsourced data processing and customer service functions in India, and doctors using sophisticated robotics to carry out remote surgery. Trade in services will continue to extend beyond traditional outsourcing into new areas including healthcare and education. The OECD (2012) has projected that, with demographic changes, international student mobility is likely to reach 8 million students per year by 2025. With five universities in the world's top 200 (THE Rankings 2015), Scotland has more world-class universities per head of population than any other country worldwide successfully increasing the trade of education services from £685m in 2014, to £780m in 2015 (Export Statistics Scotland 2015).

Resources under pressure

A 2016 Scottish Enterprise study found 71% of businesses stated that they have been affected by issues relating to material supply in the last two years.

Another study found that the following materials were critical to the Scottish economy; aggregates, cobalt, copper, fish, indium, lead, lithium, palm oil, phosphorous, rare earth elements, timber and tin. Advances in technology and devices are underpinned by critical materials such as tantalum and niobium. 40% of all tantalum comes from Rwanda and the DRC where children as young as five dig for Coltan ore.



5,200,000,000,000

Global water use will increase from 4500 billion M3 per year to 5200 billion M3 in 2025. a 14% increase (UN)



800,000,000

The global population is due to grow by 800 million more people by 2025 (UN)



7kg

There is 7kg of Cobalt in each Tesla Powerwall battery, and DRC provides 55% of the world's supply. This vital material is at constant risk from armed conflict and disrupted supply



Black Swan - With every 1°C increase in global temperature, global wheat yield falls between 2% and 6% (5% is 35 million tonnes). How would this affect Scotland's food and drink sector, where wheat is used to produce whisky?

Where will we see changes in market demand?



” More than 50% of India’s population is below the age of 25 and more than 65% below the age of 35. By 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan.

The Hindu, 2013

Shifting demographics

It is estimated that one billion people in rapidly growing emerging-market cities will become consumers by 2025. In addition, owing to higher consumption and investment in physical capital growing cities could inject up to \$30 trillion a year into the world economy by 2025.

While China’s population has increased rapidly as a result of its one-child policy it will age rapidly from about 2025; India’s population will continue to grow. Other countries with fast-growing populations include Brazil, Indonesia and Mexico. Half of global population growth between 2015-50 will be in sub-Saharan Africa (UN).

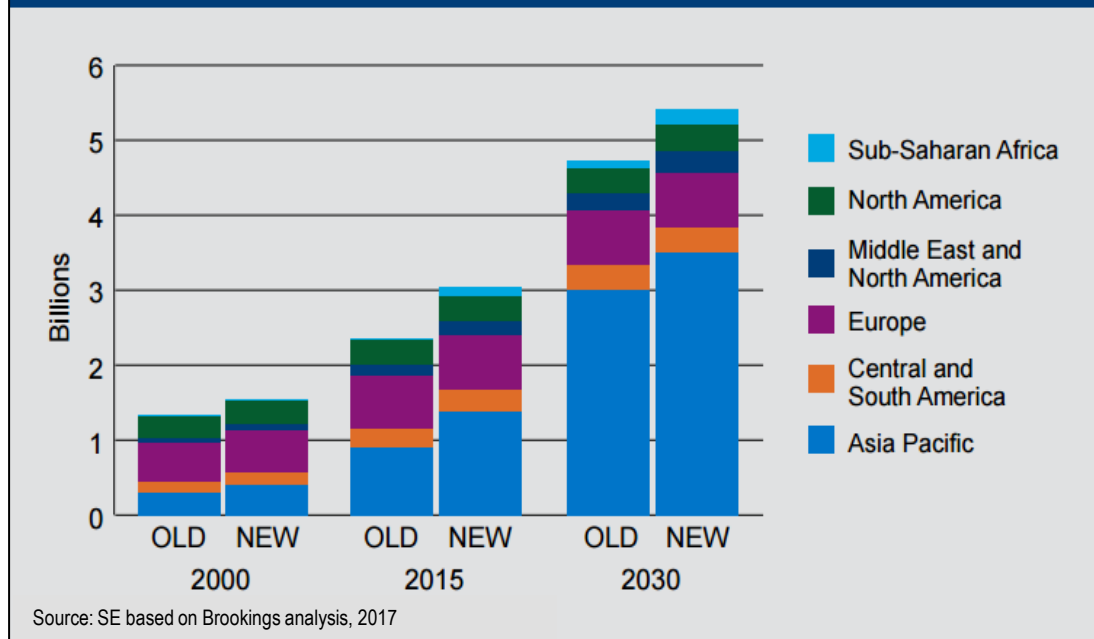
Rise of the consumption class

In 2025 most of the global consuming population will be urban. They will also be slightly older, since growth among ageing populations in developed markets is outpacing growth in the younger demographic in emerging countries. About 75% of the 8.5 billion people projected to be alive in 2030 will have both mobile and internet access. The middle class in emerging markets will be substantially bigger and its members better off than their parents

By 2025, emerging economies are predicted to make up a greater share of global economic activity than the advanced economies of Europe and North America. Economic development in emerging markets is expected to be particularly resource intensive due to industrialisation and increased demand for grain. Demographic shifts are changing the shape of global demand. Already, about 140 million are joining the middle class annually and this number could rise to 170 million in five years’ time. An overwhelming majority of new entrants into the middle class – 88% of the next billion – will live in Asia.

” **Asia will become the powerhouse of the global economy**
- GlobalScot, Property Lead, Indonesia

Figure 4. The size of the global middle class, 2000, 2015, and 2030 (billion people)



The data above shows where the emerging middle class will grow around the world. The bar chart consists of old projections, made in 2010 and new projections from 2017. The new projection shows a near doubling of the middle class from now, with growth in Asia Pacific, Africa and Central and South America. Brookings 2015



\$30tn

One billion people in rapidly growing emerging-market cities will become consumers by 2025, and through a combination of consumption and investment in physical capital, growing cities could inject up to \$30 trillion a year into the world economy by 2025.



\$50bn

Online Groceries will be a \$150bn global industry, grown from 4% value share today to 9%. South Korea and China are the main markets



75%

About 75 percent of the 8.5 billion people projected to be alive in 2030 will have both mobile and Internet access



Black Swan - With China increasingly turning to providing goods and services to its own domestic market will this reduce the export market for Scotland in China and Asia Pacific overall?

Where will we see changes in market demand?



UK companies often have an obsession with ‘product’ that outweighs a commercially-driven mindset focused on accessing and growing international markets. They often need to get out of an export mentality and place a new priority on exporting our know-how rather than pallets.

UK-based GlobalScot with extensive experience in global retail markets

New dynamics of global growth

Companies will need to respond differently as market demands shift. Ageing populations in Japan, China and much of Europe will present opportunities where companies can export products and services that meet growing ageing markets domestically.

The fastest growth in the world’s megacities by 2030 will take place in Asia and sub-Saharan Africa. Meanwhile, as the pace of growth has faltered in Brazil and Russia, the BRICs have given way to ICASA – India, China, Africa and SE Asia (McKinsey, 2017).

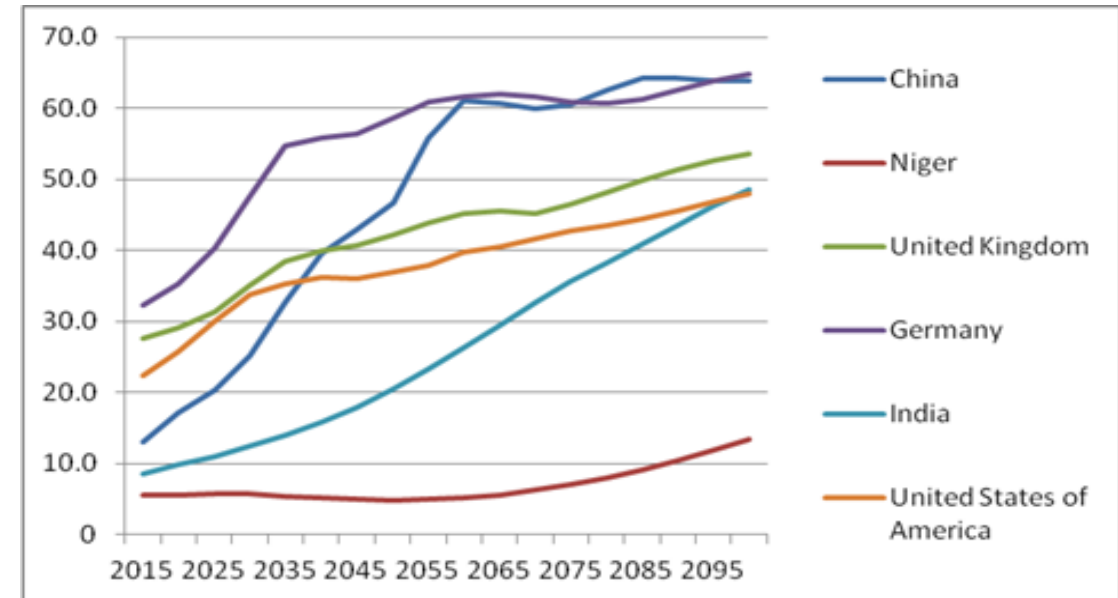
Cultural awareness is increasingly important for companies operating internationally. One-size-fits-all strategies are unlikely to be effective as demand increases for products that are tailored to meet specific needs and price points. **This implies that overseas partnerships will become an effective market-entry strategy.** Gaining increased access to markets through collaborative partnerships not only gives reach and opens up opportunities for the development of localised services but can also raise challenges around IP protection and quality control.

Since the 2008 recession global economic growth has slowed. In fact, there has been little or no growth in Europe, slow growth in North America and slowing growth in Asia, the Middle East and Africa. **In this environment, steal/share strategies can often be more effective than those based on riding growth waves.** In fact, mergers and acquisitions have been the prime growth strategy for the new ‘super companies’ (eg Walmart, Google, Apple), gaining access to talent and technology across many sectors and global markets.

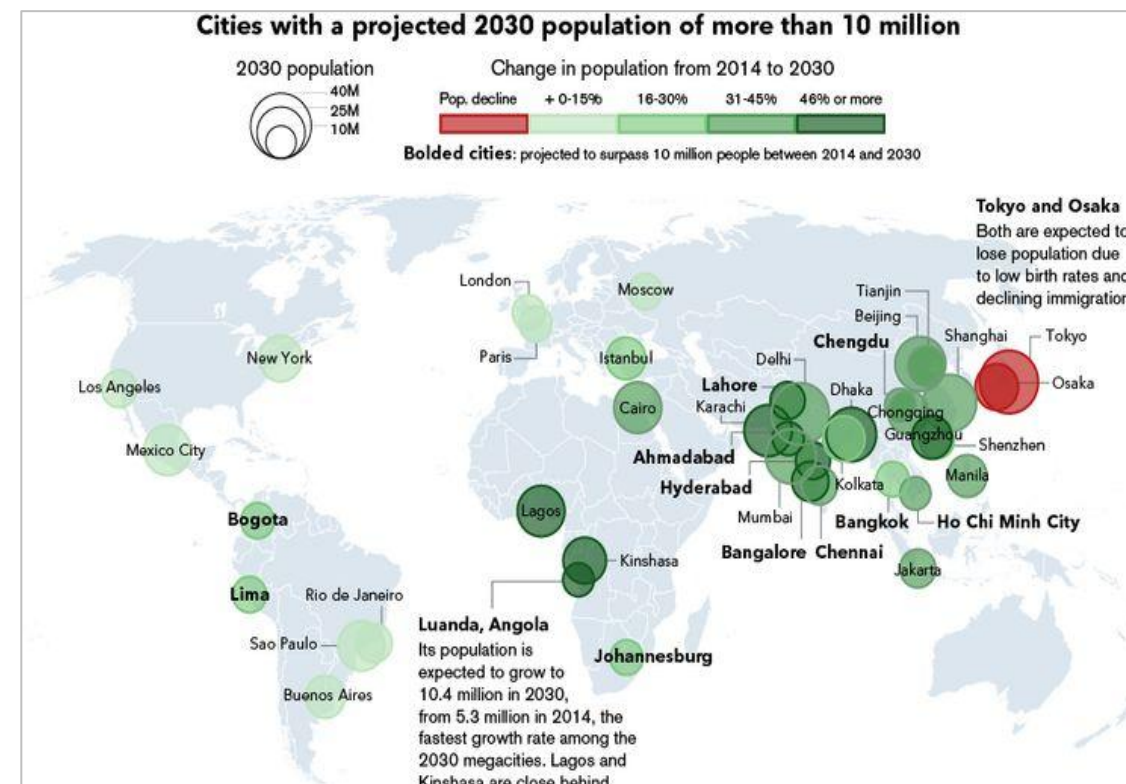


The trade of services is the future and the way we define world trade volumes will need to be changed as a result. If we look at smartphones, only a percentage of the work that goes into this product is hardware. The services which are provided in terms of software updates also need to be accounted for”

GlobalScot and Global head of Trade and Receivables Finance



This UN chart shows the ratio of population 65+ per 100 population 15-64. China, a current powerhouse of international trade will experience a large increase in elderly dependency and a reduction in the working age population, which will cause large problems for its economy. In only 20 years the ratio will be the same as the UK’s. This means higher welfare spending and slowing productivity growth. Germany is even now facing greater ratios than the UK, US and India.



How will we trade?



The speed of automation can be danger. It's outpacing the creation of replacement jobs and potentially contributing to a larger leisure class.

US-based GlobalScot in the global banking industry

Digital everywhere

Digital innovation will continue to provide opportunities and risks for businesses and individuals. New technologies create fresh products and business models that can be adapted for different markets, undermining the importance of location. Increasingly interconnected economies will bring rapid change and transmission of ideas around the world.

By 2025, companies will be increasingly digitised:

- product design, manufacturing and delivery processes will be highly integrated and efficient
- digital manufacturing technologies will allow products to be tailored to specific user needs and delivered 'close to customer'/at the point of purchase.

Beyond 2025 blockchain and other decentralised systems may enable true P2P trading environments to emerge at scale. But given only 64% of UK SMEs currently have a website (UK HMG, 2015) the pace of technological progress will continue to leave many firms behind.

Tech transformation

The convergence of computing, web, automation and sensor technologies promises to deliver breakthroughs that radically alter how trade takes place. This tech transformation is already accelerating trade in services, connecting digital supply chains ever more closely, and providing real-time production and sales data. Technology enables a fast time-to-market mindset – an "always-on" global economy.

The 'industrial internet' is forecast to grow to \$10-15bn by 2035 (GE), with up to 50bn IoT devices helping to automate production in factories connected globally via the cloud. Predictive analytics will enable more efficient targeting of consumers while 3D printing could move beyond small-batch production to deliver customised and localised manufacturing.

A flatter competitive playing field

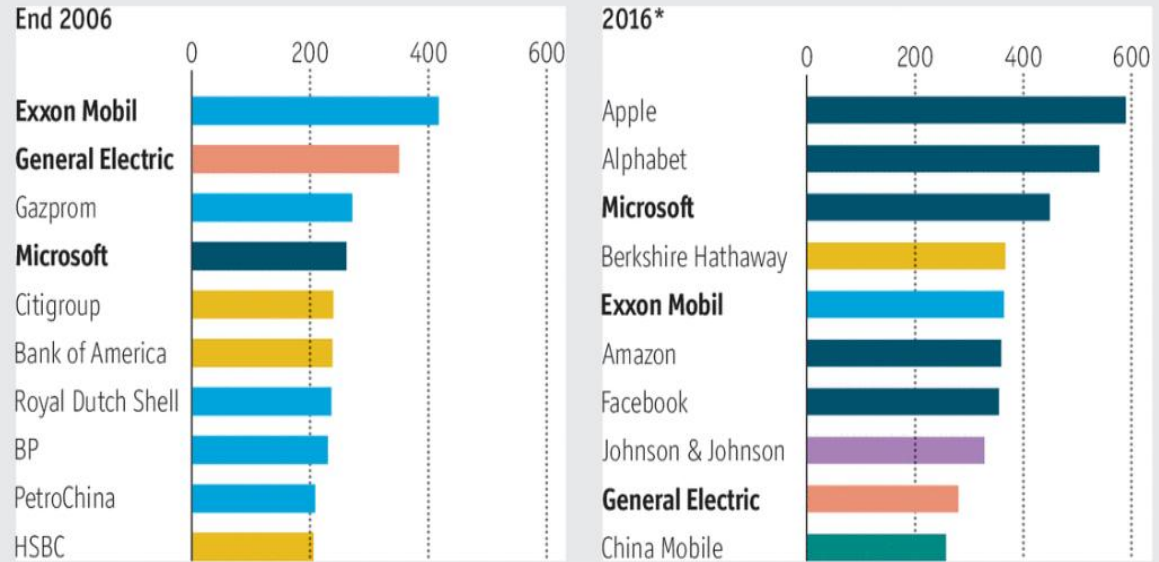
Digital disruption and tightly connected global networks are levelling the competitive playing field between SMEs and larger firms. New technologies will enable smaller players to deliver products anywhere in the world.

Digital platforms and aggregators such as Alibaba and Amazon are overcoming the cost barriers that previously held SMEs back from trading small goods internationally. These platform 'super-companies' will be the next drivers of seismic change in trade over the next decade, providing fast, direct routes to market for new players. Aggregators will increasingly drive change in how people consume, providing the means to convert goods (such as car ownership) to services (such as car subscription services).

A virtually new world

World, largest listed companies by market capitalisation, \$bn

Sector: ■ Energy ■ Financials ■ Health care ■ Industrials ■ IT ■ Telecoms



Source: Bloomberg

*At August 24th 2016

Source: Economist.com

Over the last decade digital and web-based companies have emerged as the 21st Century 'super companies' driving global innovation.



17 Years

The average lifespan of a company on the S&P 500 is expected to half by 2030 from 35 years in 1965 to 17 years in 2030



7,500,000

In the UK between 2012 and 2022 an estimated 12.5 million jobs will be opened up through people leaving the workforce and an additional 2 million new jobs will be created, yet only 7 million new younger people will enter the workforce to fill these jobs over this time. (Foresight, 2016)



70%

Recent research suggests that almost half of total employment could be at high risk (with a probability of more than 70%) of becoming automated over the next two decades (OECD, 2015).



Black Swan - If automation and 3D printing converge will this localise manufacturing supply chains and fundamentally change the geography of production?

How will we trade?



” Everyone’s an individual trader here. There’s a much younger population – 60% of people are under 30 years old – and they’re very quick to adopt new technology. Together, this means you’ve potentially got 200 million disruptors in this market.
GlobalScot based in Indonesia

Agile and lean organisations

Traditionally, company strategies have featured a trade-off between scale and customer intimacy. Until now, effective globalisation strategies have focused on achieving scale and reach, compromising tailored offerings that meet specific customer needs. But now, many global firms are desperately reinventing themselves to deliver a ‘local’ face while backed by global resources. Agile, flat structures are in vogue.

Digital networks and manufacturing processes enable them to do this, changing the dynamics between scale, speed and customer intimacy. But these same enablers are being used by small innovators. Both in advanced and emerging economies we see the rise of micro-multinationals, companies that can quickly command presence in new markets. In Asia in particular, the competitive stakes are being raised significantly. Chinese retail consumers would much prefer to buy Chinese rather than Western brands – as long as the brand quality and ‘cachet’ is there. Given fierce domestic competition, many Asian companies are fast out-growing domestic markets and expanding globally (eg Huawei, Uniqlo).

Trust and values

While many people in distant markets lack awareness of its individual nations, the UK nevertheless carries a strong reputation, founded on trust, fairness, quality and the rule of law. Provenance also provides a comparative advantage for UK companies, encompassing heritage, quality and traceability. While the ‘tartan and shortcake’ image of Scotland is well past its sell-by date at home, the power of the backstory holds strong resonance for many 21st Century products too.

Tackling society’s big challenges

With 10% of the world’s population still in poverty (living on <\$1.90/day) and another 50% on low incomes (<\$10/day) (World Bank), trade plays a vital role in delivering economic progress to poorer countries. There is vast potential for Western companies to develop appropriate products and services. But there are real risks too; the rapid transitions being experienced in China and India are not easy for external companies to manage.

How companies act when trading in overseas markets matters hugely. Indeed, in a 2015 survey more than 80% of employees agreed that a business can “take specific actions that both increase profits and improve the economic and social conditions in the community where it operates” (Edelman Trust Barometer).

” *Don’t go it alone ... form effective partnerships*

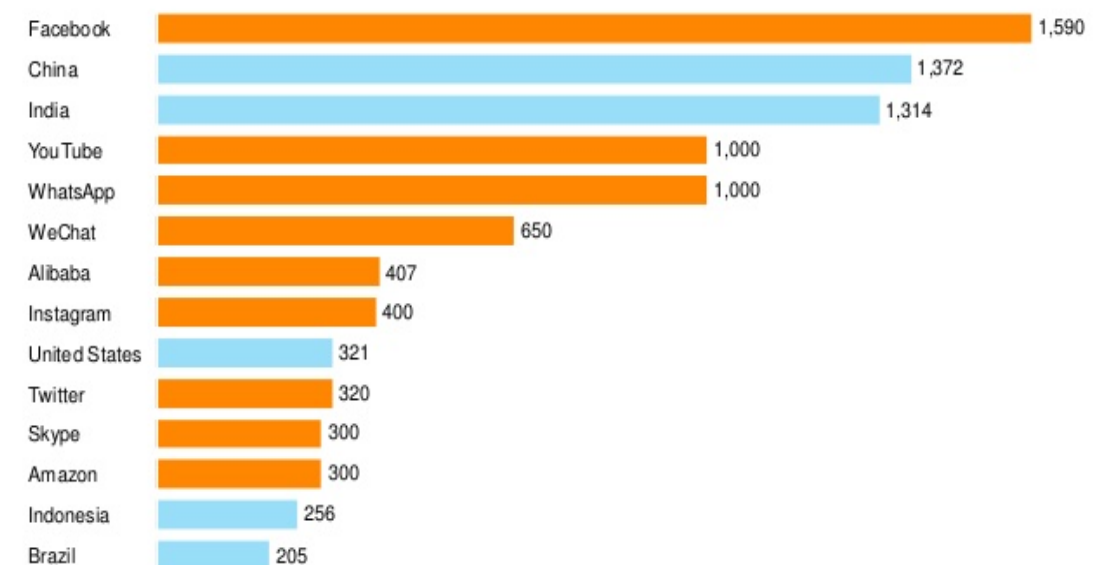
” *More Scottish companies should try to become part of global value chains despite the reversal from globalisation*

” *Social media is speeding up global consumption, with products and services going global faster and everyone wants similar things at the same time ... Companies must be willing to meet the demands of all customers worldwide and see all markets as having potential. Launch globally to avoid customers feeling they are second best ...*

Responses from the survey of GlobalScots, May 2017

The biggest online platforms have user bases on par with the populations of the world’s biggest countries

Active users of online platforms vs. country population
Million



1 4Q15 or latest available.
2 2015 population.

SOURCE: Facebook; Twitter; Alibaba; Fortune; Statista; Population Reference Bureau; McKinsey Global Institute analysis | McKinsey & Company | 3

The strategic tensions shaping global trade

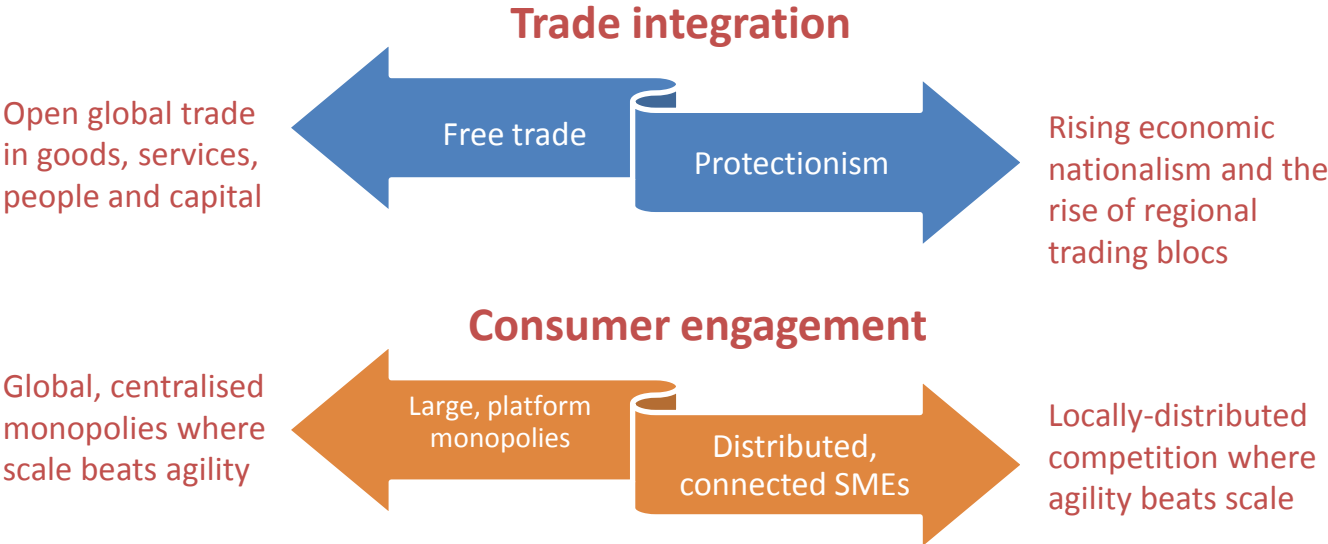
Our evidence pack summarises the many complex drivers of change shaping the global tradescape in 2025. We have focused on the key trends highlighted by our interviews and surveys with senior global business leaders and trade support professionals working across the world.

Behind the ‘noise’ of turbulent, short-term change, some deeper shifts will continue over the next decade and beyond. These are the predetermined trends, the fundamental shifts that are ‘locked in’. Fundamentally, these are driven by a growing population and the transition to a global economy where value is increasingly embedded in services and digital content:

- demographic change
- rising consumption and urbanisation
- pressure on natural resources
- increased global economic competition
- a growing supply of well-educated and highly-skilled workers worldwide
- the growing importance of innovation, speed, agility and flexibility
- the digital revolution.

Huge uncertainties still remain. Will the 20th Century model of globalisation now take a different course, increasingly questioned by voters in many Western countries yet prized by aspiring economies elsewhere? Will different ‘rules of trade’ emerge, driven by new, regional alliances? How will digital and automation technologies reshape global production and trade? And how will companies respond to the consequent threats and opportunities?

Two strategic tensions stand out from our analysis. The first relates to how global trade is organised in the future and the second is driven by how companies are structured and use technologies to respond effectively in a changing world.



Next steps

Our *Tradescape 2025* workshops involve companies, trade bodies and policy makers in anticipating how these strategic tensions may play out during the 2020s.

This is not about predicting what *will* happen but rather, what *might* happen. Rehearsing how we would respond helps us become better prepared.

- ***What actions would we take if certain circumstances unfolded?***
- ***Would our strategies remain effective across a range of plausible scenarios?***
- ***What decisions do we need to take now to be well prepared?***

Through the *Tradescape* project we want to identify insights and practical actions to inform strategic planning, and develop practical tools that can help us manage future change more effectively.

To keep in touch with the project as it develops please contact:

Ewan.Mearns@scotent.co.uk
Andrew.Staines@scotent.co.uk

“ Global companies will slide as local, SMEs take a lead role in driving global trade”
GlobalScot and Global CEO, Retail Analysis firm