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DRIVING GLOBAL **GROWTH:**

Key industries in emerging markets by 2050

WRITTEN BY

ECONOMIST IMPACT

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ADAPTING TO GLOBAL ECONOMIC TRANSFORMATION

Foreword by Arantxa Tapia Otaegi, Minister of Economic Development, Sustainability and Environment, Basque Government

The global economic scenario in 2050 will be determined by how we respond to a range of technological and socio-economic challenges. Emerging markets will undoubtedly gain importance in world trade, and the economic axis will gradually shift towards Asia. To meet these challenges and remain competitive, it will be essential for all regions and countries to adapt to new developments in the key



industries that will drive the global economic transformation that is already underway. In this respect, Euskadi-Basque Country is already focused on key transitions in the areas that are destined to shape the future of the economy: energy and climate, technology and digitalisation, and health and social care. For decades, Euskadi-Basque Country has been working to adapt to and lead major changes in industry. As a result of this intense and continuous work, we can now confidently say that Euskadi-Basque Country is a European benchmark in industrial transformation, driven by strong public-private collaboration, which has enabled us to evolve from an economy based on heavy industry to an industrial economy driven by knowledge and technology. The result is that we now enjoy one of the highest levels of social welfare in the world.

Today, Euskadi-Basque Country is one of the most open economies in Europe, with more than 5,000 exporting companies and production facilities on all five continents. Moreover, it has become a benchmark for technology, and is home to several global leaders' head offices.

The Basque Government is currently focused on promoting a model of economic development that embraces sustainability as a lever of competitiveness. Our aim is for Euskadi-Basque Country to reach "net zero" by 2050 as we continue on our path towards technological excellence. For all of these reasons, we firmly believe that we will be a reliable partner for the development of other countries and regions, contributing to the creation of richer, fairer, more sustainable and inclusive societies—both in emerging economies and in our own.

INTRODUCTION

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Outperforming economies have pursued a pro-growth agenda across both the public and private sectors, taking steps to improve the business environment through opening up to foreign investment and deepening foreign trade linkages. Defining emerging markets is no easy task. The Economist has labelled these economies as "not too rich, not too poor and not too closed to foreign capital". It is also a classification that changes significantly over time. When the MSCI Emerging Markets Index, a selection of stocks that tracks the financial performance of key companies in fast-growing emerging economies, was first created in the late 1980s, it included just a handful of countries; it expanded in the 1990s to include economies such as Portugal and Greece, which were subsequently reclassified as part of its Developed Markets World Index. Others that showed promise at the time, such as Sri Lanka and Venezuela, have slipped: Sri Lanka is now classified as a "frontier market", implying less development and higher risk; Venezuela has been removed altogether amid economic collapse.

As larger numbers of countries began to be included in the emerging-markets grouping, select sub-groupings began to hit the headlines. The BRIC countries (Brazil, Russia, India and China), MINT¹ (Mexico, Indonesia, Nigeria and Turkey) and CIVETS² (Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa) came in and out of fashion, depending on economic prospects at that particular time.

Comparing nominal GDP over the past two decades shows how emerging markets have

often outperformed developed markets. Rapid growth has meant that emerging markets' share of global GDP has risen steadily in many cases, while developed economies have seen their share fall, particularly in Western Europe. The trend in Asian emerging markets is particularly noteworthy: even aside from China's (and, to a lesser extent, India's) meteoric rise, countries like South Korea and Indonesia have consistently outperformed. Trends in non-Asian emerging markets have been bumpier: after surging in 2000-10, Brazil, Russia and Turkey have all slid back since then.

There is no single explanation as to why emerging markets as a group have experienced such firm growth. China's recipe for success-based on growth of resource-intensive manufacturing and exports, facilitated by favourable dynamics (specifically a huge pool of low-cost labour)—is very different to India's experience, where growth has been fuelled mainly by services. The dynamic is different still in emerging markets in Latin America and Europe. That said, there are some common factors that explain why some markets have outperformed developed economies. Outperformers have pursued a progrowth agenda across both the public and private sectors, taking steps to improve the business environment through opening up to foreign investment and deepening foreign trade linkages.



CHART 1 Top 5 economies and selected emerging economies in 2020 and 2050 (forecasts)

Source: The Economist Intelligence Unit

¹ https://guides.loc.gov/mexico-indonesia-nigeria-turkey

² https://www.investorschronicle.co.uk/2011/09/08/your-money/move-over-brics-sYbgo8W4A3AZ2tsSA3aZkO/article.html

PROSPECTS FOR EMERGING MARKETS IN 2050

By 2050, 28 economies will have annual GDP in excess of

US\$2trn,

and of these only ten will be developed economies Catch-up by emerging markets will become even more pronounced over the next three decades. According to Economist Intelligence Unit (EIU) forecasts, by 2050, 28 economies will have annual GDP in excess of US\$2trn, and of these only ten will be developed economies. Growth in emerging markets is forecast to slow in the longer term, but it will still outpace the expansion in developed economies. Most emerging economies in Asia are set to grow by 2-3% per year in 2021-50; by contrast, the pace of growth is forecast to average just 0.5-1% in the US, the UK, France and Germany. China will overtake the US as the world's largest economy in the early 2030s. Indonesia is set to overtake Japan in the late 2040s and Mexico will eventually shed its reputation as a junior partner in the United States-Mexico-Canada Agreement (USMCA), the trade pact that recently replaced NAFTA—overtaking Canada in the mid-2040s. Rapid growth in Vietnam and Bangladesh will propel both countries into the ranks of the world's 15 largest economies. As emerging markets continue to grow firmly, developed economies shrink in terms of relative importance. The 27 countries in the EU accounted for 22% of global GDP in 2000; by 2020 this had fallen to 18% and by 2050 it is likely to drop to little more than 10%. Below are the top seven emerging economies that are most likely to be driving global growth in 2050.

CHINA

Although the Chinese economy grew by nearly 9% a year on average in the past two decades, it will not be able to sustain such a stellar pace of growth in the next thirty years. Underpinning high growth was an expanding labour force and the influx of young rural workers to the cities, drawn by higher wage levels. The "demographic dividend" that supported growth will weaken gradually in the long term. Worker shortages will put upward pressure on wages, which will need to be matched by gains in productivity. The Chinese market will remain highly attractive by virtue of its market size, however. Rising incomes (albeit from a low base) will create opportunities for consumerfacing industries, boosting services. China's large industrial base and developed logistics will also continue to secure investment in manufacturing, including in the automotive sector and in green technology. Incremental reform of the foreign-investment regime will provide opportunities in financial services and automotive manufacturing, and green development plans will create opportunities in environmental protection.

CHART 2 Long term outlook for GDP growth in selected economies



Source: The Economist Intelligence Unit

INDIA

India has not grown as rapidly as China in recent decades, but it is likely to outperform China in the next 30 years. The country's economic progress will reflect a shift up the value chain in IT, manufacturing, business and information services, as well as other sectors. Continued government-led investment to upgrade infrastructure will improve the business environment and help to enhance the performance of the economy. Improvements in agricultural procurement practices and greater supply-chain efficiency will make rural India more resilient to weather shocks. A stronger agricultural sector will temper the movement of Indians from rural to urban areas, and the urban population will overtake its rural counterpart only by the middle of this century. However, the shift of the workforce from rural labour into more productive urban jobs will remain the main driver of India's economic expansion in the period to 2050.



INDONESIA

Indonesia will maintain a healthy economic expansion in the coming decades. Its population is relatively young, which will drive expansion of the workforce. The consumer market is one of the largest in South-East Asia, with a favourable demographic profile for consumer-oriented sectors in the medium to long term. However, GDP per head will remain modest, ensuring that demand will be greatest for low-cost goods. Urbanisation will continue, although this will increase the pressure on urban infrastructure, which remains inadequate to meet the needs of the population. Steady progress in improving the business environment, notably in easing regulations, will boost investment and increase productivity. Indonesia's large market will lead to an economic shift from exports of raw commodities towards more manufacturingand services-oriented growth (the authorities are prioritising areas such as automotive and transport equipment, as well as high-tech sectors like robotics). However, successive governments will not only need to continue with the current focus on improving the business environment; they must also invest in human development factors, especially education and healthcare, to ensure sustainable long-term expansion.

MEXICO

The past two decades have been characterised by a volatile growth pattern, including three recessions and two boom periods, reflecting both homegrown factors and exposure to global markets (the economy is highly integrated into the US business cycle). Geographical advantages offer significant scope for developing infrastructure links and helping Mexico to become a logistical hub between the US and the rest of the Americas, as well as a major manufacturing centre for investors focused on North American and Latin American markets. Automotive manufacturing is already well-developed, but the authorities will seek to promote more advanced manufacturing, including developing the nascent aerospace sub-sector. Mexico will benefit from significant demographic advantages: around a quarter of the population is aged under 15, implying massive growth of the labour market in the long term. However, improving institutional effectiveness will be challenging. The quality of the bureaucracy can be expected to improve in the long term, but rooting out endemic corruption (which is most evident at subnational levels and in law enforcement) will be difficult. As a result, although average GDP growth will accelerate in 2021-50 compared with recent decades, it will remain weaker than in emerging Asia.

BRAZIL

Like Mexico, long-term economic growth in Brazil will trail the pace of expansion in Asia. Brazil's advantages of vast natural-resource potential and a young labour force are mitigated by a series of structural constraints, including weak political effectiveness, a generally low level of education and skills. income disparities, low savings rates, chronic underinvestment in infrastructure, and heavy public debt. In the long term, improvements in some of these (most likely infrastructure and education) will mitigate slower labour force growth and help to sustain productivity. Opportunities related to industrial production of durable and semi-durable goods in the Manaus Free-Trade Zone (in the North region), and agriculture and mining (in the Northeast region) will attract investment. But for many years, performance will continue to fluctuate with commodity cycles, as agriculture and natural resource extraction will continue to play important roles in the economy. The country's political system makes it hard to advance structural reforms. Political reforms could alter this, although these appear intractable. In addition, climate change will crimp agricultural growth, despite technological advances to make crops resistant to warmer temperatures.

VIETNAM

Vietnam has succeeded in positioning itself as the main low-cost regional alternative to China for export-oriented industrial production. This will also ensure that investment growth in the country remains strong, with the economy gaining ground in higher-value-added manufacturing, such as electronics. Meanwhile, its participation in several major free-trade agreements will help to slow the erosion of its competitiveness against other countries in the region in some longer-established industries, such as footwear production. This will drive growth in exports. Medium-term gross fixed investment will be boosted by governmentfunded construction of new infrastructure that will be needed to support the expansion of new export-oriented manufacturing industries, including machinery and electronics. The partial retreat of state-owned enterprises will be an important catalyst for growth in the long term, opening up industries to greater competition. Favourable demographics and deeper integration with the global economy will also support long-term prospects.

BANGLADESH

Like Vietnam, Bangladesh will benefit from a shift in trade away from China as firms diversify sourcing, strengthened by commercial ties with its trading partners. The overall pace of growth will be among the most rapid of large emerging markets in the long term. At a time when the working-age share of the population is shrinking in most Western and many East Asian economies, Bangladesh's share is forecast to grow. This will set the scene for an increase in employment, savings, investment and firmer economic growth, although Bangladesh's ability to capitalise on this demographic trend will be limited to some extent by the sluggish improvement in the quality of education of the workforce and infrastructure. Difficulties in raising the quality of its workforce will hamper efforts to diversify away from the manufacture of garments and textiles (in order to move up the export value chain). The prospects of export-oriented sectors will hinge on the government's ability to secure bilateral trade deals to replace the loss of preferential trade privileges associated with the UN's leastdeveloped country status by the turn of the next decade (our forecasts assume that it will manage to secure such agreements).

Long-term economic growth is driven by three main factors: demographics (labour force productivity), investment (accumulation of capital stock) and technological advancements (total factor productivity—TFP).

Additional factors like the business environment, a country's security environment and the extent of corruption also impact on long-term growth. However, economies do not have to fare well across all of the latter metrics to enjoy solid rates of expansion. The EIU's Business Environment Rankings assess how supportive underlying government policy is towards private investment; of the 12 largest economies in 2050, six fall in the lower half of our business environment rankings, implying that the investment climate is difficult to navigate. China is ranked 50th (out of 82 countries), while Indonesia and India sit even lower.

Links between operational risk on the ground and long-term growth are also looser than might be assumed. Although none of the world's largest economies in 2050 are highrisk (which tends to imply scores upwards of 60 in our index), there is still a medium level of operational risk in some large fast-growing emerging markets, including Bangladesh,

China is ranked **50th / 82**

in the EIU's Business Environment Rankings, while Indonesia and India sit even lower



CHART 3 Business environment heatmap

Corporations willing to put up with the inconvenience of difficult operating conditions in exchange for the huge potential rewards that come with a large

domestic market.

Brazil, India and Indonesia. Data from the Corruption Perceptions Index produced by Transparency International (TI) paint a similar picture, with many large emerging markets remaining plagued by rampant corruption but still managing to post impressive growth. Amongst the world's largest economies in 2050, Bangladesh, Russia, Mexico and Indonesia all rank relatively poorly in TI's index.

The business environment, the security situation and factors such as corruption are not unimportant in terms of growth in

emerging markets. But the reality is that market size and opportunities are more crucial, with corporations willing to put up with the inconvenience of difficult operating conditions in exchange for the huge potential rewards that come with a large domestic market. It is likely that constraining factors hamper potential GDP growth, implying that fast-growing emerging markets would be able to expand even more rapidly if they made greater progress on improving the investment climate and security situation, as well as stamping out corruption.



KEY INDUSTRIES

Headline nominal GDP forecasts help to identify which markets will grow most rapidly, but developments in a number of specific sectors will drive much of this momentum.

FRONTIER TECHNOLOGIES

Chart 4 Predictions of growth in total

factor productivity 2021-50

The EIU's long-term forecasts show that in most cases, growth in TFP will be stronger in the next three decades than it has been in the past two, implying that technology will become even more critical to economic growth. Moreover, TFP will generally be stronger in emerging markets than in developed economies (in North America and Western Europe, it will generally average less than 1% per year).

Vietnam Bangladesh India Indonesia China Mexico Germany



Source: The Economist Intelligence Unit

The arrival in the 1950s of the so-called third industrial revolution-which involved the broad-based introduction of electronics and technology-prompted significant shifts in services, processes and production. And, more recently, the fourth industrial revolution has built upon the third, including through the adoption of digital technology and artificial intelligence (AI). The speed, scope and impact of recent technological change marks a new fundamental break with the technological developments seen at the end of the 20th century. The universal adoption and integration of new technology across

all sectors arguably blurs the lines between particular drivers of long-term growth. For example, infrastructure and urbanisation are increasingly linked to tech developmentsthe EIU's Smart Cities concept assesses how governments can provide better city services more efficiently, investing in smart infrastructure and creating ecosystems that allow urban innovation to flourish.

The speed of technological change is facilitated by expansions in processing power and storage capacity, as well by the rapid spread of internet and mobile-phone coverage. Greater connectivity fosters innovation, as new developments can be rolled out more quickly on a larger scale. The scope of change is another defining feature of the fourth industrial revolution. There is not one main driver of change but several, including high-speed mobile internet, AI, big-data analytics, cloud technology, blockchain, biotechnology and the Internet of Things (IoT). Emerging markets are focusing on upgrading physical infrastructure in order to expedite the adoption of these developments-many have national plans in place designed to promote 5G, for example.

The impact of change is a characteristic of the fourth industrial revolution: the interconnectivity of modern society through mobile devices and the emergence of new technologies is changing the system of production. As a result, the number of new start-ups seeking to take advantage of these developments has proliferated. Many of these either operate in the tech space or offer tech services to firms in other sectors.

These transformations raise important questions for governments, companies and citizens. How will the fourth industrial revolution impact the future of work? How will firms employ technological advances to change how they operate, and what impact will this have on skills requirements from their staff? How will greater automation affect supply-chain management and the underlying geography of where goods and services are made and consumed? (This is discussed in the 'Advanced manufacturing' section below.) How will these shifts impact on company and government budgets, and how should investments be made in order to boost productivity and innovation? Consumer habits will change, with quality, speed and price increasingly important, but how will purchasing power patterns evolve? And

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how should governments reform education provision to ensure that their citizens are well placed to meet the skills of the rapidly changing workplace?

Although all of the world's largest economies are forecast to reap the rewards of these developments (there are no forecast contractions in TFP in the long term), some will benefit more than others, depending on the response to these questions above. The EIU's Tech Readiness Index measures this, assessing how well prepared countries are for technological change. This is done across three categories: access, across both internet and mobile telephony; digital economy infrastructure, looking at e-commerce, e-government and cyber-security; and innovation, including patents, R&D and research infrastructure. In recent years, countries in Western Europe, North America and advanced Asia have been towards the top of the rankings. Although many of these countries will continue to do well, they will see their positions slip as emerging markets make more substantive improvements. Almost all nations in emerging Asia are set to see their rankings improve in the coming years.

BASQUE TRADE AND INVESTMENT COMMENT:

The development and adaptation of new technologies-and the capacity to innovatewill be key to the success of companies and regions in the immediate future. In a world in which digitalisation and the use of the internet have had an impact on all sectors, innovation strategies and the commitment to new technologies will be decisive. In this sense, emerging markets can take advantage of the consolidated experience of more developed regions and economies in public-private collaboration. Clear examples are available of how cooperation between government, technology centres, the academic world and companies can drive technological development, innovation and the digitalisation of the business sector.

In Euskadi-Basque Country, an innovation ecosystem has been set up in which the public sector plays a driving role, but in which the company is the key player. Examples such as the Basque Digital Innovation Hub, a publicprivate initiative promoted by the Basque Government. BDIH has been recognised by the president of the European Commission, Ursula von der Leyen, as a European example of accelerating the development of digital technologies in the fields of additive manufacturing, flexible robotics, advanced materials, smart machines and cybersecurity. Another notable example is the Basque Research and Technology Alliance (BRTA), an alliance of 16 technology and research centres working on business application projects. Both the BDIH and BRTA are models that can be imported by other countries seeking to promote technological research, development and innovation. Other cutting-edge technology initiatives include the Basque Cybersecurity Centre and the Basque Artificial Intelligence Centre, both of which can act as role-models for those regions looking to develop publicprivate collaboration models to promote disruptive technologies.

ADVANCED MANUFACTURING

As emerging markets develop, they tend to see manufacturing slip as a percentage of GDP, while the relative importance of services increases. This reflects the fact that as disposable incomes rise, consumer spending increases, boosting demand for things like retail, financial and leisure services. Services tend to account for 70-80% of GDP in developed economies, compared with generally between 40-60% in emerging markets. Although many governments in emerging markets are specifically seeking to bolster services activity, industrial production is by no means being neglected.

However, industrial policy is evolving in response to global shifts, implying changes for the manufacturing sector in the coming decades. One broad trend is that emerging markets are seeking to move up the value chain in order to shift from low-wage re-assembly work to the production of more complex (and profitable) goods. Many countries have seen how countries like Singapore and Germany had benefited from their advanced manufacturing capacity, including the creation of higherpaying jobs, as well as gains in cross-border trade and investment. These developments can create a virtuous circle, in which governments and firms invest in education, R&D and infrastructure to create a supporting ecosystem, which in turn increases the pool of skilled labour and widens sources of finance.

This trend is already in evidence but will accelerate in the next three decades. Advanced manufacturing clusters have grown in Malaysia and Vietnam (mainly electronics), while Thailand is prioritising its Eastern Economic Corridor, which targets growth in several advanced manufacturing sub-sectors (including automotive, smart electronics and biotechnology). In Mexico, where manufacturing has traditionally been dominated by goods re-assembly for export to the US, ProMéxico, the country's investment



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Sub-sectors that are likely to register particularly firm growth in the coming decades are telehealth, diagnostics, and cell and gene therapies, while developments in AI will accelerate drug discovery and diagnosis. promotion agency, has been focused on developing higher value-added manufacturing industries such as aerospace.

The focus on moving up the manufacturing value-chain is also a reflection of the challenges posed by automation. Low-skilled jobs in goods-producing sectors are at greatest risk; in manufacturing, jobs will shift from the factory floor to offices nearby, where designers, engineers, IT specialists, logistics experts and other skilled support staff will play a greater role. Employment creation will be focused on highly-skilled positions or jobs in which soft skills are important. This raises another key trend that will be evident in the sector: the "servicification" of manufacturing, which refers to rising consumer demand for manufacturing products that require greater input of services, such as design, consultancy, engineering, logistics or communications. An expanding middle class in emerging Asia will boost demand for these types of products. According to EIU forecasts, private consumption per head will rise from an average of US\$4,000 in China in 2020 to over US\$31,600 by 2050; in India, growth will be even more rapid (although from a lower base), rising from US\$1,100 per head to US\$13,800 over the same period. Private consumption per head is forecast to rise by between five- and six-fold in many other countries in the region, including Indonesia, Malaysia, the Philippines and Thailand.

The percentage of services value-added content in total manufacturing output is high in developed economies (generally around 50%) but is lower in emerging markets, at 30-50%. Both shares are forecast to rise in the next three decades, with research from the IMF suggesting that the transport, machinery and textiles subsectors have scope for particularly firm growth. Many of these services have traditionally been provided by manufacturers, but these are increasingly unbundled and outsourced, providing options for service providers located abroad. The type of services that are being outsourced is changing: traditionally, these tended to be clerical roles characterised by routine tasks, but new technology is altering this. Roles that are non-routine and require specialist knowledge but can be carried out digitally (including a range of higher-skilled jobs, including design and engineering) are being increasingly outsourced.

Over time, the line between manufacturing and services is likely to blur. A shift from traditional manufacturing to the servicification of manufacturing may well give way to a third stage, with the emergence of an entire new manufacturing services sub-sector. Traditional manufacturing will still exist, with some countries continuing to focus on the production of basic goods, but countries that have managed to shift up the value chain will be well-placed to ride this new wave, embedding services within the production chain thanks to expanding chip technology.

BASQUE TRADE AND INVESTMENT COMMENT:

Delivering industrial development objectives requires companies and regions to be at the leading edge of advanced manufacturing, which effectively means being able to apply the latest available technologies in manufacturing. To this end, the development of the machine tool sector is key to equipping industry with the machinery required to apply those technologies—effectively, this sector is increasingly becoming a high-tech industry. Through collaboration with institutes of technology, Basque companies in the machine tool sector have developed technological solutions, such as DAS+, a smart system that oversees the machining process and automatically selects the best technological alternatives to eliminate chatter in real time, or automated dry material placement (ADPM) technology, which provides automation solutions for the manufacturing of composite structural parts.

Euskadi-Basque Country is also home to several technology institutions. Two such examples are the Basque Research and Technology Alliance and IDEKO, where smart machine technologies have been developed using sensorisation, which not only monitors what a machine is doing (and the behaviour or state of its components), but also, by using actuators or changes in its operating parameters, is capable of modifying or improving its behaviour in real time. Another field in which work is being done is digital twin technology, which, by means of a virtual replica, makes it possible to predict how a product, machine or production process is going to operate before its start-up or even before its design and manufacture. This provides a clear competitive advantage in terms of enabling possible errors to be anticipated and, therefore, bringing about cost savings.

HEALTHCARE

Healthcare has become a priority during the coronavirus pandemic as hospitals have struggled with capacity issues and the pharmaceutical industry has undertaken the fastest-ever development and deployment of a vaccine. However, the pandemic has also caused delays to non-Covid care, as well as lockdowns and economic recessions that have dented consumer spending on health. Although the short-term priority in many 66

The sheer size of the newly expanding middle classes in these markets will offer huge potential opportunities to firms able to provide innovative solutions in terms of financial services provision emerging markets will be to accelerate the vaccination roll-out, which has generally lagged behind that of developed economies, the sector will have to address the backlog of treatments in the coming years.

During lockdowns, most countries across the world have cancelled elective surgeries to alleviate pressure on their healthcare systems. This has been accompanied by a drop in diagnostic testing, the delay of which will have stark effects for developing conditions such as heart disease and cancer, where early intervention is crucial. One solution lies in the greater adoption of technology—a trend that has accelerated during the pandemic. Social distancing measures have already forced many general practitioners (GPs) and other providers of outpatient care to turn to remote healthcare for scheduled appointments.

In the coming years, we expect to see a paradigm shift, in which digital and virtual care become a core part of health services, rather than supplementary technology. Sub-sectors that are likely to register particularly firm growth in the coming decades are therefore telehealth, diagnostics, and cell and gene therapies, while developments in AI will accelerate drug discovery and diagnosis. This also has implications for the medical devices sub-sector. Innovative technology such as smart sensors and devices generate data that helps monitor conditions and aid diagnosis without human intervention. There is scope to improve patient outcomes, cut costs and boost efficiency.

Currently, the world's largest exporters of medical devices are mainly developed economies. As large emerging markets develop more advanced manufacturing capacities, they will be well positioned to expand production into this subsector. They will be driven by the desire both to lift export capacity and diversify their industrial base and meet growing domestic demand. In these countries, lifestyle factors such as increasing life expectancy, urbanisation and rising obesity will all increase the incidence of non-communicable diseases. These are critical, structural issues that will need to be addressed in the longer term once the coronavirus pandemic has eased. Tackling these challenges will require increased public and private investment in order to widen healthcare coverage and improve standards of provision. Governments in many emerging markets are seeking to increase public-sector healthcare provision, while rising income levels in these countries will boost demand for private healthcare insurance. The pandemic has meant that there has been less of a focus on these trends, but they remain present and will continue to drive growth in the sector in the long term.

INSURANCE AND DIGITAL FINANCE

Traditional financial services activity is overwhelmingly concentrated in developed economies. Banking sector penetration is much lower in emerging markets, which have urgent needs for greater financial inclusion in payments, banking, basic insurance and capital-markets financing. China has been and will continue to be the most promising market both in size and in adoption of financial innovations. The industry will seek to drive comparable dynamism in other emerging markets, particularly in Asia. The sheer size of the newly expanding middle classes in these markets will offer huge potential opportunities to firms able to provide innovative solutions in terms of financial services provision. We expect a continued rise in provision of financial services by firms outside of traditional licensed providers, such as e-commerce platforms, payment players, messaging services, chain stores, post offices and telecommunications providers. These challengers are likely to use apps on mobile handsets to offer financial services, primarily to retail customers, among a range of other products. New payment methods, some pioneered by fintech firms, will drive the proliferation of digital transfer channels between individuals, firms and governments. There will be a relentless decline in use of cash as a mode of payment and the infrastructure to handle it in the next three decades.

The insurance sub-sector will become much more prominent in emerging markets over the next three decades. Currently, insurers are overwhelmingly reliant on developed economies, which account for over 80% of the industry's global premiums, according to data from Swiss Re, a Zurich-based insurer. This will gradually change in the coming years. Populations in emerging markets are set to age rapidly in economies that have only limited state health and pensions provision, which will spur citizens to turn to private providers for medical insurance and savings products. In the meantime, a rising middle class will be eager to acquire vehicles and homes, two types of property that usually come with both mandatory and voluntary insurance policies. In China and developing Asia, large infrastructure projects will drive demand for property and liability coverage. There is also likely to be an expansion of climate-related insurance, as well as innovations in new policy provision-for example, there will be growing demand from companies for coverage of cyber-risks.

AREAS TO WATCH

Aside from these main drivers of long-term growth, a number of trends in niche sub-sectors will have important ramifications in many emerging markets.

SUSTAINABILITY AND RESILIENCE

The belief that you cannot have strong economic growth without sustaining environmental damage is long-gone. With the appropriate public policy framework, countries have been able to roll out technology to reduce carbon emissions, while at the same time registering firm growth. The UN's Agenda 2030 programme encapsulates this dual focus, setting out 17 Sustainable Development Goals to build a better future. Indeed, the debate about decoupling environmental damage and economic growth has shifted entirely; there is now a common consensus that the impact of climate change is making the world poorer. Hotter temperatures, rising sea levels and more frequent bouts of extreme weather cause physical damage to infrastructure, hamper supply chains and productivity, and affect agricultural output.

Growing demand for energy places will place pressure on generation and supply. Climate change policies will accelerate a shift away from fossil fuels and towards less polluting forms of energy. The net result will be a significant surge in demand for power, which in turn raises challenges related to how to store this electricity. This is a particular challenge for many renewable energy sources, such as wind and solar power, as supply tends to be uneven and intermittent. Significant investment is required to increase energy storage and upgrade to "smart grids" (electricity supply networks that use digital technology to detect and react to local changes in usage). However, the International Energy Agency has found that global installation of energy storage technology has been sluggish in recent years, running well behind the double-digit growth needed to keep pace with demand.

BASQUE TRADE AND INVESTMENT COMMENT:

Euskadi-Basque Country has launched the Basque Green Deal, a strategy to consolidate a fair and sustainable model of economic development. As part of this model, the reduction of emissions and the generation and use of renewable energies are of particular importance. Two key elements are the development of smart grids and the integration of storage solutions to address and enable not only the incorporation of renewable power but also the use of electric vehicles, which will involve a combination of a wide range of technologies (power electronics, digitalisation, cybersecurity and so on). In this respect, co-operation between companies, especially between utilities and suppliers of electrical transmission and distribution equipment, is essential. With this in mind, and with the support of the industrial sector, the Global Smart Grids Innovation Hub, a centre for innovation and knowledge that is designed to meet the challenges of the energy transition, has been launched in Euskadi-Basque Country. It aims to be a world benchmark in smart-grid development.

With natural resources being depleted rapidly in many emerging markets, the multiplier effect of consumption growth has even more severe longerterm implications.

CHART 5 Loss in real GDP as result of climate change in 2050 according to EIU's Climate Resilience Index



Source: The Economist Intelligence Unit

The EIU has developed a Climate Change Resilience Index to estimate the impact of climate change on long-term economic growth across the world's largest emerging and developed markets. The results are important because they show that poorer countries, including many of the world's major emerging markets, will be disproportionately hit by the impact of climate change. As a region, Africa will be worst affected, while Asia will also be severely impacted, as it is especially vulnerable to the loss of physical capital from the increasing number and intensity of natural disasters. In Bangladesh, we forecast that real GDP will be 5.4% lower in 2050 than would be the case without the impact of climate change; in India this figure is 3.7%, in Indonesia, real GDP will be 3.5% lower, while in China the economy is forecast to be 2.1% smaller. With natural resources being depleted rapidly in many emerging markets, the multiplier effect of consumption growth has even more severe longer-term implications.

Depending on the policy response, countries can take action to mitigate or adapt to the impact of climate change on long-term economic growth, even turning it into an area of competitive advantage. Such policies are wide ranging and country-specific but may include building flood defences, investing in cleaner energy provision such as wind and solar power, improvements in water storage, protection of energy and public infrastructure, improvement in agricultural infrastructure, and marine forecasting and early warning systems for aquaculture industries. Governments that are particularly pro-active in this area will succeed in attracting foreign direct investment into these projects, with positive spillover effects across sectors.

BASQUE TRADE AND INVESTMENT COMMENT:

If sustainable renewable-power generation is to be delivered, a firm commitment to the development of new power sources that ensures a balanced use of land with other activities, especially sustainable agriculture, will be required. In this context, the development of marine energy, still at a stage of technological uncertainty, is an essential element to address this challenge. For this reason, Euskadi-Basque Country is fully committed to developing wave energy and floating offshore wind solutions in deep waters-for example, major R&D activity has led to the development of three prototype solutions for floating wind. Likewise, if we want to be able to develop these technologies, it is essential to have testing infrastructures that enable these technologies to be scaled up to industrial scale. The Biscay Marine Energy Platform, a test site for floating wind energy and tidal generation based off the Basque coast, is one such facility.



EDUCATION AND SKILLS DEVELOPMENT

Rapid digitalisation is changing how people live, work and study. In terms of education, the pandemic has forced many institutions to suspend face-to-face teaching and shift to online classes. Even after the pandemic subsides, the ripple effects will have a permanent impact on the education landscape, with growing digitalisation providing a wider range of provision for students. In terms of the impact on work, there is significant debate about the extent to which AI will automate white-collar jobs and to what degree new and better jobs will be created. However, the recognition that this development is happening—and will continue to do so-is undisputed. Jobs that feature large amounts of structured, repetitive tasks will be most affected. Countries that are best prepared to tackle these challenges are those where education policy adapts rapidly in response, where institutions (both public and private) re-think what to teach and how to teach it. Training for those already in the labour force will also need to adapt.

Technological factors and demand for new skills will see lifelong learning become the central component of education and training systems in the long term. Many governments are increasing their focus on teaching science, technology, engineering and maths (STEM) programmes, as well as integrating STEM teaching into other programmes. However, technology is constantly evolving, and nobody can predict with any real accuracy the technical skills that will be most in demand in a rapidly evolving, AI-enabled future. Indeed, certain STEM skills are among those most at risk of automation, and the skills gap for employees with hybrid skill sets, such as programming, communication and project management, is outpacing that for pure technical skills. Institutions must therefore also focus more on imparting softer skills such as collaboration and creativity, which are more difficult to automate.

CONCLUSION

Countries develop and economies grow in a multitude of different ways and for a range of different reasons over time, relating to both domestic and external factors. There is no one-size-fits-all model that governments can replicate in order to ensure solid and sustained economic growth. That said, there are clear winners and losers in terms of the long-term economic outlook. Our forecasts envisage that developed economies in North America and Western Europe will continue to grow. The US will boast a US\$69trn economy by 2050, up from just under US\$21bn in 2020. Germany and the UK will remain the largest economies in Europe, more than trebling in size over the course of the next three decades.

However, one of the most notable features of our long-term forecasts is the extent to which emerging markets close the gap with these developed economies. China will be the largest economy in the world by some margin by 2050, standing at nearly US\$93trn. India's growth will also be stellar; it will be the third-largest market, over three times the size of Germany and the UK (in fourth and fifth place, respectively). Catch-up by Indonesia, Vietnam and Bangladesh will also be notable; Mexico and Brazil will also fare well, but the emerging world will become even more heavily dominated by emerging Asian economies.

Understanding which sectors will drive economic growth in emerging countries will help to identify investment opportunities for foreign firms in these markets. In broad terms, the adoption of new technology and its integration across the economy will be a critical factor to long-term growth. Countries that are quick to adopt high-speed mobile internet, AI, big data analytics, cloud technology, blockchain, biotechnology and IoT will be particularly well-placed.

These developments will have a spill-over effect on other sectors outside telecoms. Smart technology will help to improve crop management in food production, which will be particularly relevant to opportunities in economies like China, India and Mexico, which all have large agricultural sectors. Growth in digital financial services and fintech will help to improve credit provision to both businesses and households, creating opportunities in markets where fintech is surging (or where there is scope for it to do so), including Indonesia, the Philippines and Vietnam. Meanwhile, greater e-healthcare provision will help to tackle the huge backlog of care that has accumulated during the coronavirus pandemic. Perhaps one of the most major impacts will come in the industrial sector, facilitating a move up the value-chain for many emerging markets manufacturers. A common theme across many fast-growing economies, particularly in Asia, is a focus on automotive production, machinery and robotics. The "servicification" of manufacturing production also creates opportunities in Asia for tertiary services such as R&D in third-party countries.

However, there are several issues that have implications for all key sectors of the economy. How governments and businesses deal with these will have an important influence on longterm growth. The impact of climate change will be disproportionately felt by emerging markets and will shave several percentage points off long-term nominal GDP projections. Another challenge is education and training, as institutions and firms need to ensure that job skills evolve in line with a rapidly-changing world. If there is little action to mitigate or address these issues, emerging markets may register weaker growth in the long term; conversely, if progress is particularly rapid, they could widen the gap over developed economies.

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