



UK Government

# Global Trade Outlook

February 2023

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## PREFACE

The Department for Business and Trade's *Global Trade Outlook* explores the long-term trends that will shape the global economy and international trade in the coming decades.

This is the second edition of the *Global Trade Outlook*, which has been updated for economic developments over the past 18 months – including the post-pandemic recovery and the war in Ukraine. As before, the *Outlook* sets out the broad contours of how global GDP and trade could evolve out to 2050 (in Chapters 1 & 2). In addition, this version explores how the world economy has changed since the first edition of the *Outlook* was published in September 2021 (Chapter 3).

The long-term projections in the *Outlook* are not predictions of what will happen, nor what HM Government (HMG) would like to happen – the *Outlook* does not include judgements about the future efficacy of HMG policy. Rather, the projections are one possible future that could emerge based on an informed analysis and neutral extrapolation of the trends observed today. They are a rough guide to how the world could evolve – not a definitive road map it will follow.

As the *Outlook* is focused on the longer term, we abstain from making judgements about the near term by tying our 2022-2027 projections to the International Monetary Fund's October 2022 World Economic Outlook forecasts. In addition, all UK projections are consistent with the independent Office for Budget Responsibility's November 2022 forecasts in the near term and July 2022 long-term economic determinants to 2050 to avoid making judgements about HMG policy.

The *Outlook* has been produced to help inform policymakers and strategists and contribute to the wider debate about the future of trade – including around the likely challenges and opportunities that the world may face in the years to come. But it is just one source among many. The Department for Business and Trade continues to draw on a wide range of analysis and information when formulating its strategy.

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# EXECUTIVE SUMMARY PART 1

## The Economic Outlook

Global GDP will continue to expand over the coming decades, but at a slowing rate. Growth is projected to fall from 2.7% per year prior to the pandemic, to 2.3% in the 2030s and 1.8% in the 2040s. Slower population growth and ageing workforces are partly to blame for this decline.

The world's economic centre of gravity will continue to shift eastward. 7 of the largest emerging economies are projected to overtake the G7 in economic size during the 2030s.

The industrial structure of the global economy is expected to gradually become more services-oriented, as rising incomes in emerging markets shift spending patterns. By 2035, service sectors are expected to account for 77% of global GDP, up from 75% in 2021.

As living standards rise, the number of high-income countries could go up from 58 in 2021 to 90 by 2050. The world's middle class will be a key source of demand. The number of middle-class consumers could almost double to 3.5 billion by 2050, with 90% of growth from outside Europe and North America.

The UK was the 6<sup>th</sup> largest economy in the world in 2021 and is projected to remain in that position out to 2050. As the rest of the world grows richer, the UK's relative economic weight will tend to fall – the UK's share of global GDP is projected to fall from 3.3% in 2021 to around 2.7% by 2050. However, the opportunities for the UK to grow via trade will increase.

## What's changed since 2021?

The outlook has dimmed. Surging inflation – caused in part by pandemic-related supply disruptions and higher commodity prices from the war in Ukraine – are squeezing living standards. Longer-term growth has also been marked down due to a major shift in China's demographics.

Weaker growth in China will slow the eastward shift in economic gravity. China is still destined to overtake the US, but its progress is slowing. China's population is now thought to have peaked in 2022 and its forecast for 2050 has been cut by 90 million people.

The war-induced spike in commodity prices has caused the value of commodity-intensive goods to surge. This will squeeze spending on other sectors in the short-term, temporarily interrupting the decades-long servicification of the global economy, which will gradually re-emerge.

The weaker economic outlook will not materially affect the growth in the number of people in the global middle class, but it will affect their average income levels. The average global citizen will be \$900 poorer per year by 2050 (in real terms) as a result of the downgrades to the outlook.

The UK's economic prospects have been downgraded in the short term as global demand has weakened, inflation has surged, and living standards have been squeezed. By 2050, the downward revisions to UK growth closely match those of the world economy, meaning the UK's relative long-term prospects do not shift materially. The UK is expected to remain the 6<sup>th</sup> largest economy in the world.



# EXECUTIVE SUMMARY PART 2

## The Trade Outlook

## What's changed since 2021?

Global trade is projected to grow broadly in line with global GDP over the next 30 years. By 2050, it is expected to double in real terms and almost quadruple in dollar terms to reach close to \$100tn.



As with GDP, global trade prospects have deteriorated. Surging inflation has curtailed near-term demand, while downgrades to China's growth prospects and, to a lesser extent, Russia's economic isolation from the West weigh on trade further out.

Emerging economies are likely to account for a growing share of trade as economic power shifts east. 7 of the largest emerging economies are projected to match the G7's import market size by 2050.



Growth prospects among emerging economies have shifted slightly – China and Russia are worse off, while India, Asia Pacific and the Middle East are better off. This raises the gains of agreeing trade deals with those latter three regions (as the UK is attempting with India, the CPTTP and GCC).

The industrial structure of global trade is very different to GDP – goods sectors dominate trade. But global trade is expected to gradually become more services-oriented over time. Service sectors are expected to account for 28% of global trade by 2035, up from 25% pre-pandemic.



Higher commodity prices (from the war in Ukraine) and a weak travel sector (from the pandemic) will temporarily cause global trade to become more goods-intensive. But as these shocks dissipate, the long-term reorientation of global trade toward services should resume.

Global trade is concentrated among high-income countries. In 2021, almost 70% of global import demand came from the world's 58 high-income countries. By 2050, as prosperity spreads and 32 more countries graduate to high-income status, this share could rise to 84%.



Slower economic growth means there will be around 130 million fewer people on 'very high incomes' by 2050 than previously thought. This group of consumers – who have the same purchasing power as the average UK citizen – are a key source of demand for high-value imports. Fewer rich consumers means the market for consumer goods will be more competitive.

The UK should remain one of the top 10 trading nations out to 2050. UK exporters are well-placed to capitalise on an expanding global middle-class, as richer populations tend to buy high-value goods and services that UK businesses specialise in. But rapid trade growth elsewhere means that, if past trends continue and absent policy changes, the UK share of global exports is likely to fall. By 2050, the UK is expected to account for 2.5% of global exports, down from 3.1% in 2021.



Changes to the UK's trade prospects broadly track those of the world at large, ensuring it maintains its relative position in the global economy. But the outlook remains highly uncertain. While the UK has many sectors of strength, it has lost ground in others recently (e.g. the automotive sector). In the long term, UK trade prospects will depend on whether UK firms can adapt to a fast-changing and increasingly competitive global trading environment.



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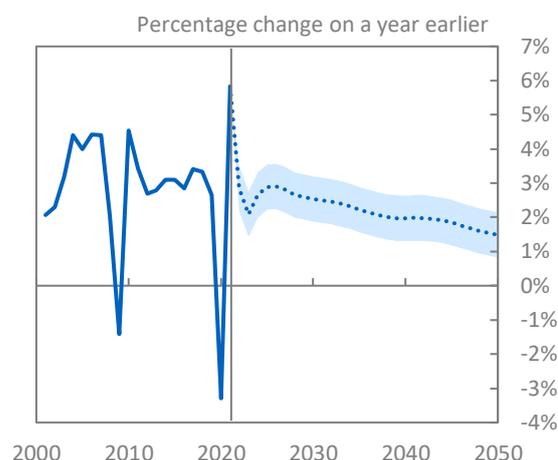
# Global Economic Backdrop

# Global GDP will continue to expand over the coming decades, but at a slowing rate

- Global GDP matters for trade.** The larger the global economy, the more goods and services available for trade.
- Global GDP grew by around two-thirds in real terms between 2000 and 2020 – or 2.7% per year on average.** The past two decades have been a volatile period in the world’s economic history, punctuated by the Global Financial Crisis and the Covid-19 pandemic (Chart 1). Excluding crisis years, growth averaged 3.5% per year in the 2000s (2000-2007) and 3.0% per year in the 2010s (2011-2019). This declining trend reflects a range of factors, including slower growth in the world’s population; a slower pace of catch-up of emerging markets to the technological frontier; and weaker economic dynamism at the frontier itself – partly reflecting a slower pace of globalisation.
- Global GDP has rebounded from its pandemic-induced lows but faces a period of slower growth as inflation – fuelled by the war in Ukraine – squeezes incomes.** The 2022-2027 projections in this report are conditioned on the IMF’s October 2022 forecasts, which predict a gradual return to pre-pandemic growth rates (see Section 4).
- Over the coming decades, the underlying pace of global growth is expected to slow – averaging 2.3% per year in the 2030s and 1.8% in the 2040s.** These projections assume the factors that have caused global growth to slow in the first twenty years of this century will persist in the decades ahead. However, these projections are subject to wide bands of uncertainty both to downside risks (if further economic shocks materialise) and upside surprises (if technological progress accelerates) – as discussed in Section 4.
- In dollar terms, the global economy is expected to be worth \$370tn by 2050, up from \$95tn in 2021.** This near-fourfold increase partly reflects real economic growth (accounting for a third of the increase), with the rest reflecting significant changes in prices and market exchange rates (Chart 2).

*Global economic growth is expected to slow in the decades ahead*

**Chart 1: Global GDP growth in real terms**

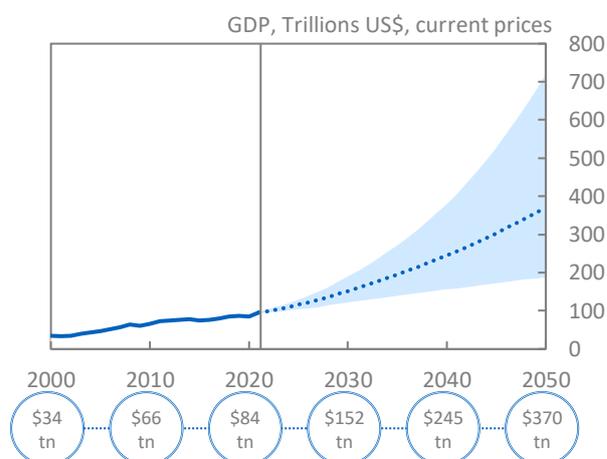


Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Data refer to real GDP growth for the world economy in 2021 prices converted using 2021 market exchange rates – not Purchasing Power Parity (PPP). As discussed in Section 4, all projections in this report are expressed in market exchange rates (either 2021 exchange rates for real GDP or time varying exchange rates for nominal GDP) unless stated otherwise because market exchanges rates are the more relevant metric for international trade. The uncertainty band represents one standard deviation around the projection based on 2010-2019 GDP outturns.

*In dollar terms, global GDP is expected to nearly quadruple between 2021 and 2050*

**Chart 2: Global GDP in nominal terms**



Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates). The uncertainty band represents one standard deviation around the projection based on 2010-2019 GDP outturns.

# The world's economic centre of gravity will continue to shift eastward in the decades ahead

Rapid growth in the Indo-Pacific region will pull the world's centre of economic gravity further east

**Chart 3:** Global economic centre of gravity, 2000-2050



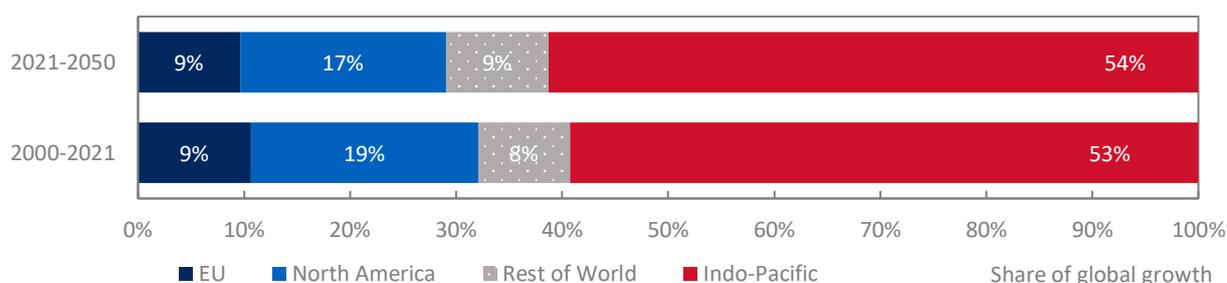
Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: The global economic centre of gravity has been calculated by taking the geographic coordinates (latitude and longitude) of 182 countries and weighting them by nominal GDP figures expressed at market exchange rates for each year shown above.

- The world's economic centre of gravity has been shifting east for decades – causing trade patterns to shift as it moves (Chart 3).** This eastward shift is due to rapid growth in the Indo-Pacific. Between 2000 and 2021, the Indo-Pacific accounted for 53% of GDP growth in real terms. By contrast, the EU contributed 9% of growth over that period (Chart 4), as its share of global GDP fell from 25% to 18%.
- This eastward shift in global demand is projected to continue out to 2050.** Over that time, 54% of global growth is expected to come from the Indo-Pacific, as its share of global GDP rises, compared with a quarter from the EU and North America combined (Chart 4). Growth within the Indo-Pacific is also expected to rebalance over time, with South Asia's contribution (driven by India) rising.

The Indo-Pacific region is expected to continue to account for more than half of global growth

**Chart 4:** Regional drivers of global economic growth in real terms



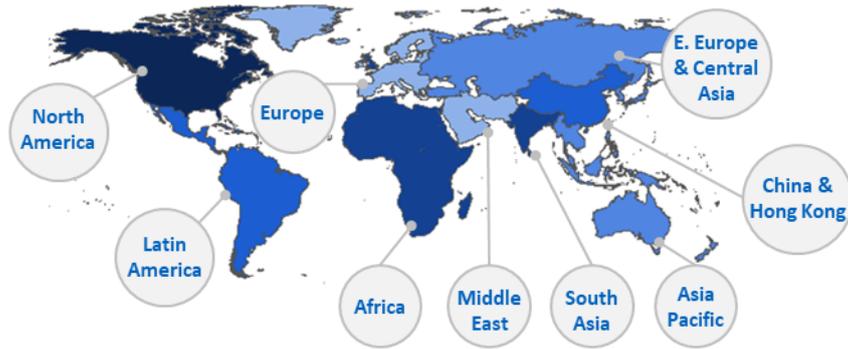
Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Figures show the contribution of different regions to global GDP growth in real terms (expressed in constant 2021 prices and exchange rates). The Indo-Pacific region is defined as three DBT HM Trade Commissioner regions: South Asia, Asia Pacific and China & Hong Kong. 'Rest of world' includes the UK, non-EU Europe, Eastern Europe & Central Asia, Latin America, Middle East and Africa.

### GDP TRENDS BY REGION

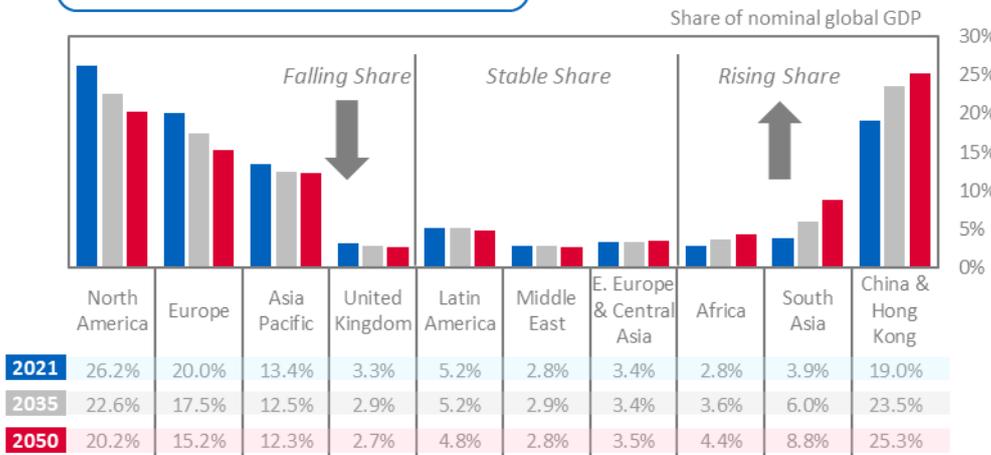
DBT organises its operations into nine overseas regions and the United Kingdom.

Each region will see significant growth over the next 30 years, but at markedly different rates.



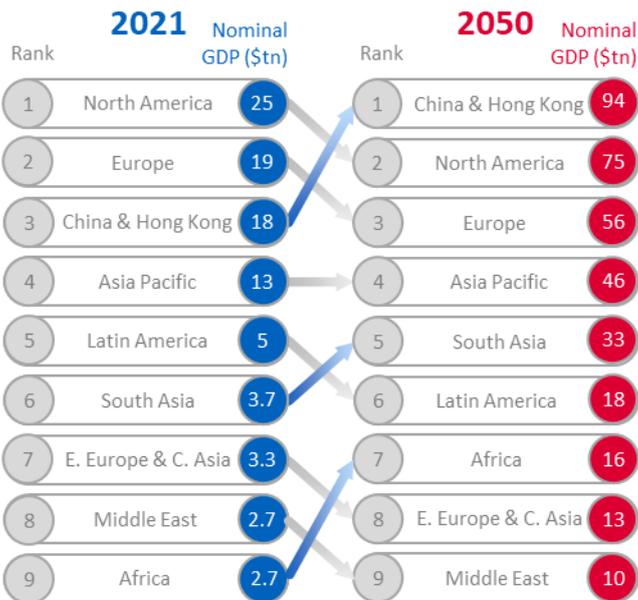
The 9 overseas regions of the world around which DBT organises its international operations. Note: the UK is always treated separately from Europe in the Outlook.

### SHARE OF GLOBAL GDP



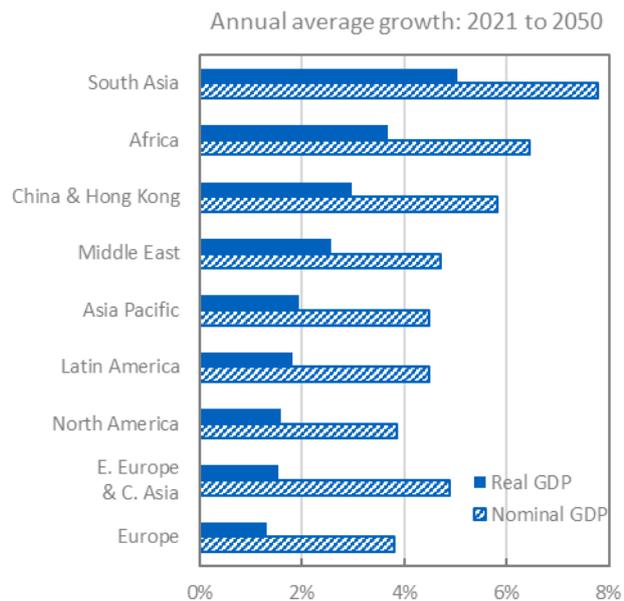
Fast-growing emerging markets will account for a growing share of the global economy in the years ahead. South Asia's share will more than double by 2050, while Africa and China's share will also grow quickly. By contrast, more developed regions will see their share decline.

### REGIONAL RANKINGS



By the mid-2030s China will have leapfrogged Europe and North America to become the largest region in the world, while South Asia will have overtaken Latin America to become the 5<sup>th</sup> largest region. Africa should also outgrow two regions to become the 7<sup>th</sup> largest region by 2050.

### GROWTH RATES



Emerging markets in Africa and South Asia with fast-growing populations, high catch-up potential and low relative prices will grow the fastest in real and nominal terms. By contrast, stable markets in the North Atlantic that are close to the technological frontier will grow more modestly.

Sources: IMF World Economic Outlook October 2022 and DBT calculations

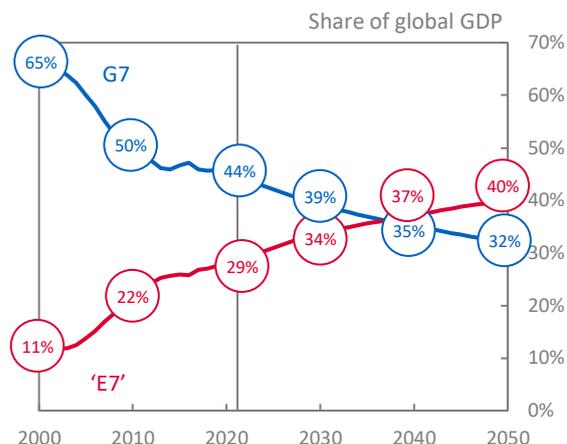
Notes: Figures in the "share of global GDP" chart shows the change in each region's share of global GDP in US dollars converted at time-varying market exchange rates.

# The world's largest emerging economies will be a growing source of economic power

- Economic power is expected to continue to shift from the G7 to the largest emerging economies.** In the first two decades of this century, labour productivity growth (the main driver of higher living standards) was three times faster on average across seven of the largest emerging economies than across the G7. As a result, the G7's share of global GDP fell from 65% in 2000 to 44% in 2021, while the 'E7's' share rose from 11% to 29% (Chart 5). Over the next thirty years, labour productivity growth across the E7 is expected to grow at roughly twice the rate of the G7, with the E7 overtaking the G7 in economic size during the 2030s. This shift in economic power is likely to mean emerging economies will play a growing role in the global trading system (see Section 2).
- China is a major driver of this economic shift as it is expected to become the world's largest economy in the early 2030s.** China displaced the US in Purchasing Power Parity (PPP) terms (which account for differences in local prices) in the mid-2010s. But based on market exchange rates, which are more relevant for trade (as discussed in Section 4), the overtake is expected to happen in the early 2030s (Chart 6), when both countries should account for 22% of global GDP.
- Other emerging economies, particularly those with large populations like India and Indonesia, are also expected to rise up the economic rankings.** Emerging economies are generally expected to grow faster than more established markets as they can rapidly raise productivity by adopting best practice techniques from overseas. However, while emerging economies have significant 'catch-up' potential, they also face major challenges – including the need to shift from imitation to innovation to escape the middle-income trap, tackle indebtedness, and rebound from the pandemic. Given these challenges, the long-term projections in this report are subject to high degrees of uncertainty – particularly the relative rankings of emerging economies in 2050 (Chart 7).

The 7 largest emerging economies are expected to overtake the G7 in economic size during the 2030s

Chart 5: G7 and 'E7' share of global GDP

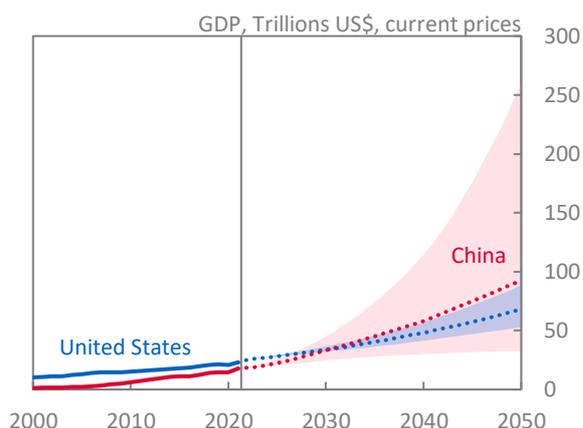


Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates) for the G7 (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States) and the E7 set of largest emerging markets in 2050 (Brazil, China, India, Indonesia, Mexico, Russia and Turkey).

China is expected to become the world's largest economy in the early 2030s

Chart 6: US and Chinese GDP in dollar terms

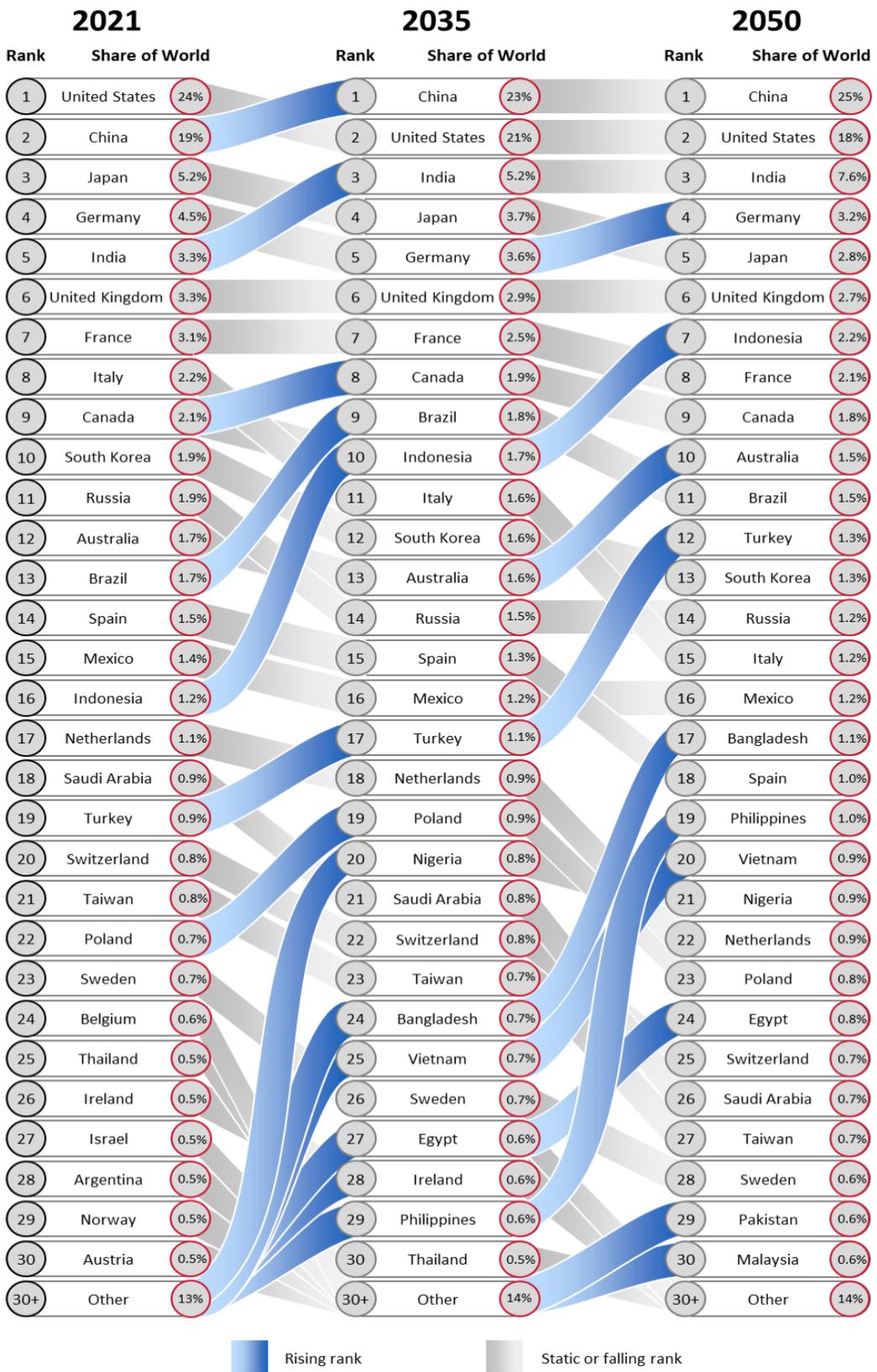


Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates). The uncertainty bands represent one standard deviation around the projections based on 2010-2019 GDP outturns.

The ranking of the world's 30 largest economies will shift over the next 30 years as heavily populated emerging economies like China, India and Indonesia leapfrog more established markets

Chart 7: The world's largest economies, 2021-2050



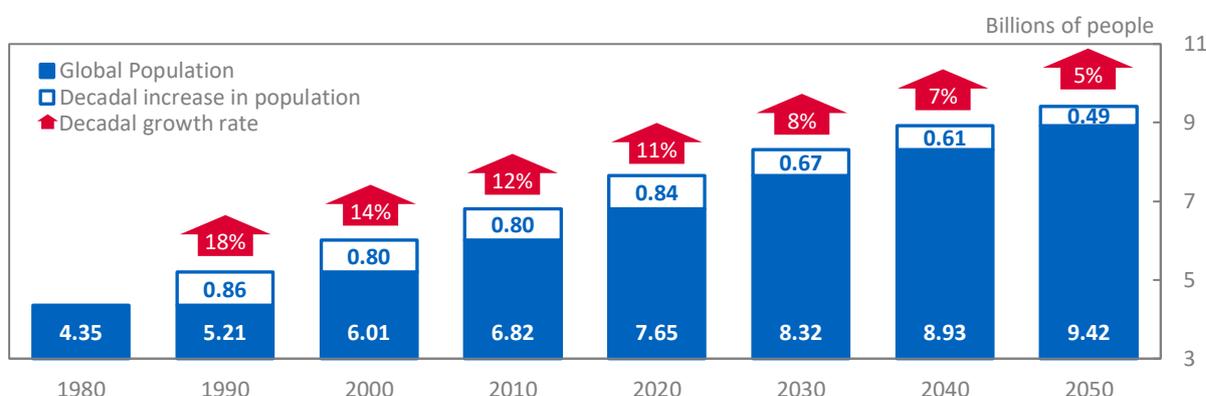
Sources: IMF World Economic Outlook October 2022 and DBT calculations

Notes: Rankings are based on nominal GDP expressed in percentage of global nominal GDP (inclusive of inflation and converted using time-varying exchange rates). Totals may not equal 100% due to rounding.

# The world's growing population will continue to boost economic growth but by less than in the past

The world's population will continue to grow but at a slowing rate – rising by 1.8bn between 2020 and 2050

**Chart 8:** Changes in the world's population, 1980-2050



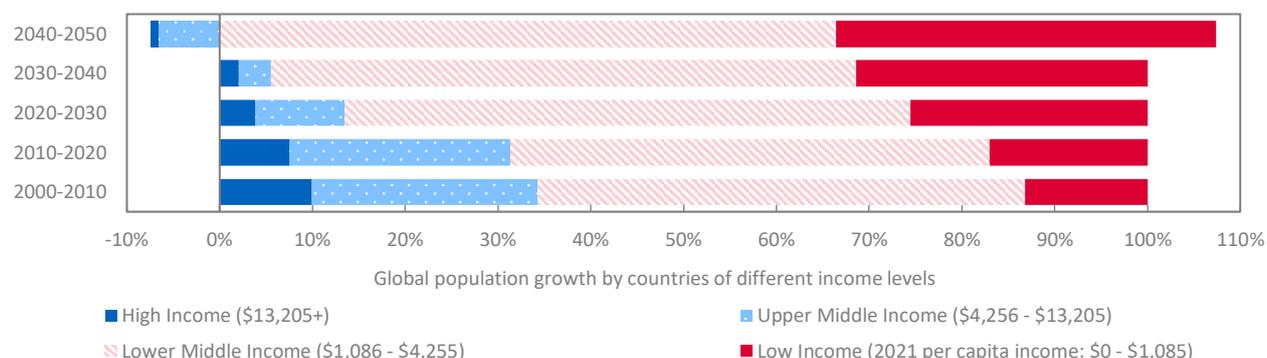
Sources: UN World Population Prospects (2022) and DBT calculations

Notes: Global figures exclude population estimates for countries with limited data including Cuba, North Korea and some small island states.

- The world's population is expected to rise by 670 million this decade to 8.3bn by 2030.** While substantial, this is the smallest decade-long rise since the 1960s. Global population growth has been slowing for decades as populations in advanced economies have plateaued and birth rates in emerging markets have tapered. Slower population growth tends to result in slower economic growth (after 15-20 years) as there are fewer new workers, entrepreneurs and consumers to drive economic activity and demand.<sup>1</sup> Global population growth is expected to continue to ease out to 2050 – when there should be 9.4 billion people on the planet, 1.8 billion more than in 2020 (Chart 8).
- Most of the world's population growth will come from lower income countries in Africa and Asia.** Countries with per capita incomes of less than \$4,255 in 2021 (the World Bank threshold for lower-middle income countries) will steadily rise, accounting for all global population growth by the 2040s and offsetting population decline in higher income countries (Chart 9). Some lower income countries may exploit their demographic booms and grow quickly, but gaps in education, employment and infrastructure opportunities will weigh on others. So, while population growth will support global GDP, it is likely to provide less of a boost than when populations in high-productivity countries were growing quickly.

Most of the growth in the world's population will be driven by lower and lower-middle income countries

**Chart 9:** Sources of global population growth by country-income grouping



Sources: UN World Population Prospects (2022), IMF World Economic Outlook October 2022 and DBT calculations

Notes: Figures show the contribution of different country-groups to global population growth based on their per capita income level in 2021 compared with the World Bank's income thresholds.

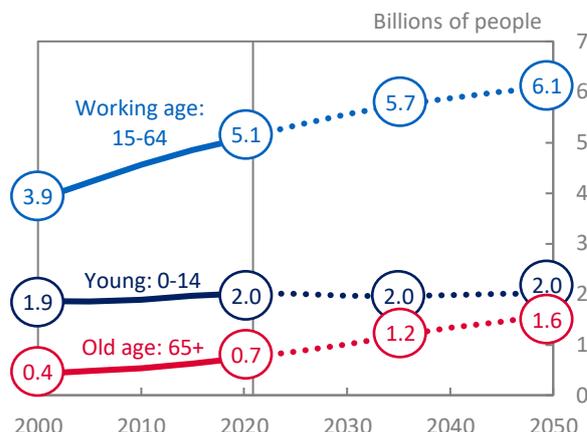
<sup>1</sup> Kuznets S (1960) 'Population change and aggregate output'

# Ageing workforces will hold back growth, while urbanisation will continue to provide a tailwind

- By 2035, there will be 1.2 billion people over the age of 65.** This grey cohort will continue to grow out to 2050 (Chart 10) and will have different consumption preferences to the rest of society. This will create new opportunities (e.g. for healthcare and leisure services) as well as risks for trade.
- Ageing societies will face economic headwinds that could hold back economic growth and trade.** As countries age and their populations decline, a shrinking workforce must shoulder the welfare costs of more people. All else equal, as the dependency ratio rises there will be less disposable income for consumption. 34 countries are expected to see their populations shrink in the 2020s (including China, Germany, Russia and Japan) and that number rises to 54 in the 2040s. At a regional level, workforces are expected to shrink in Europe and China & HK over the next decade or so, weighing on growth in those regions (Chart 11).
- The urbanisation of the global economy is expected to continue, with an additional 2 billion people moving to cities in the three decades to 2050.** In 2020, 4.4 billion people lived in urban areas – 56% of the world’s population. By 2030, this figure could reach 5 billion (60%) and, by 2050, 6.4 billion (68%) (Chart 12). Urbanisation is linked to higher productivity and higher living standards as cities offer economies of scale, agglomeration benefits and act as hubs for trade. Assuming those benefits remain consistent, rising urbanisation rates are expected to continue to provide a tailwind to economic growth in the decades ahead.

*The world is growing older – by 2050 1 in 6 people will be over the age of 65*

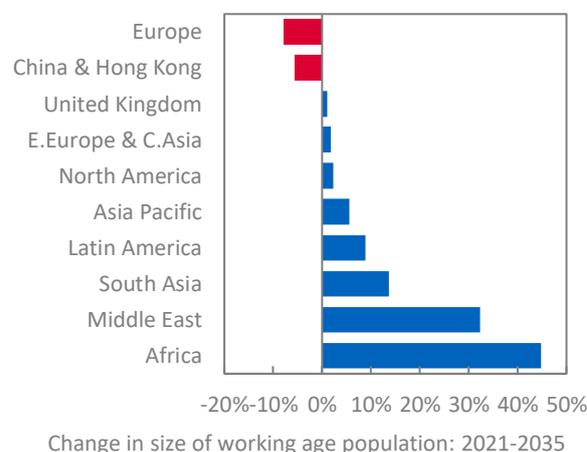
**Chart 10:** World population by age group, 2000-2050



Sources: UN World Population Prospects (2022) and DBT calculations

*Ageing populations will see workforces shrink in Europe and China & HK in the coming decades*

**Chart 11:** Change in workforce by region, 2021-2035

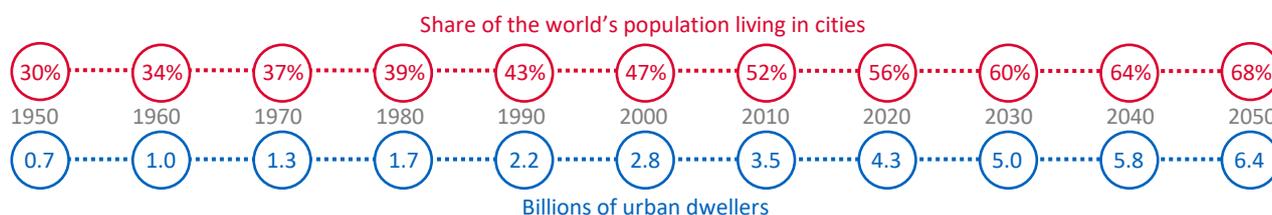


Sources: UN World Population Prospects (2022) and DBT calculations

Notes: The workforce is defined as the population aged 15-64.

*The global urbanisation wave is expected to continue out to 2050*

**Chart 12:** Global urbanisation rate, 1950-2050



Sources: UN World Population Prospects (2022), UN Urbanization Population Prospects (2018) and DBT calculations

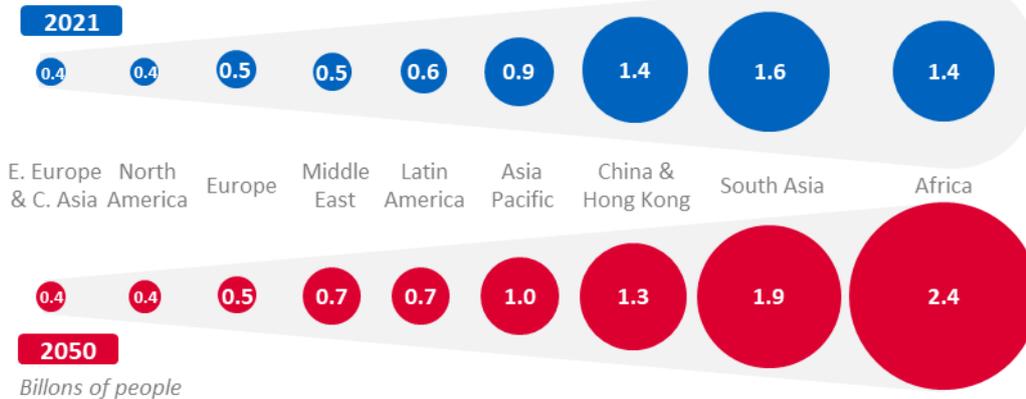
## REGIONAL DEMOGRAPHIC TRENDS

Each region will see significant changes to the size, age structure and location of their populations over the coming decades.



The 9 overseas regions of the world around which DBT organises its international operations. Note: the UK is always treated separately from Europe in the *Outlook*.

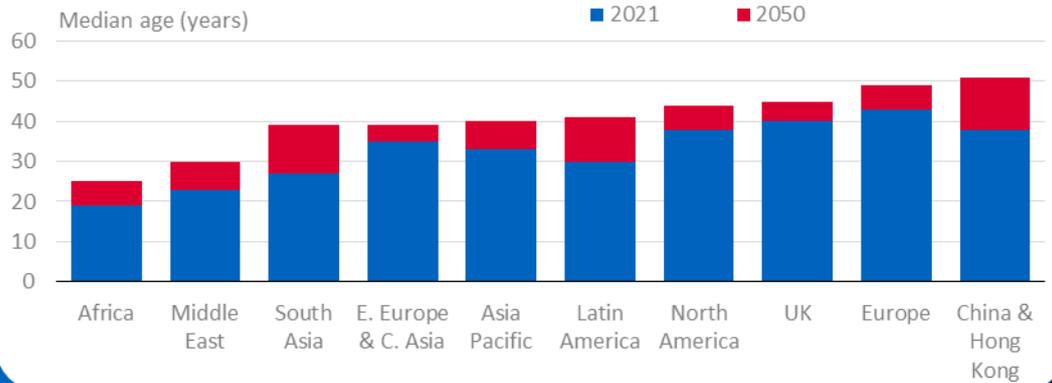
## POPULATION



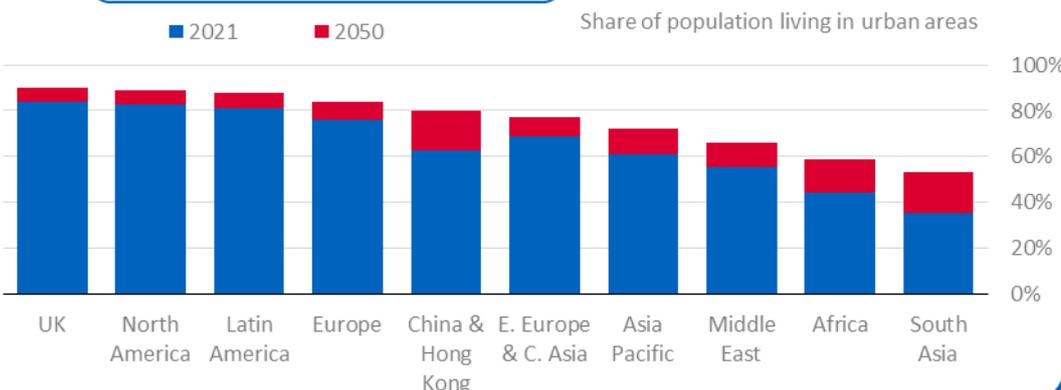
Global population growth will be dominated by Africa over the next 30 years. By 2050, there are expected to be an extra 1.8 billion people on the planet – over half of whom will be African. By contrast, populations in Europe and China are expected to shrink slightly over the same period.

Average ages differ widely across regions – from 19 in Africa to 43 in Europe. All regions will see their populations age over the next thirty years, but at different rates – China’s population will rise by 13 years on average, compared with just 6 years in North America.

## AGEING POPULATIONS



## URBANISATION



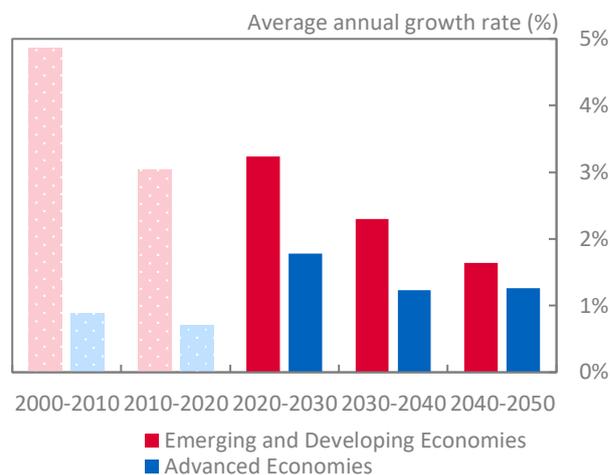
Urbanisation rates are expected to rise in all regions. Urban populations are expected to rise fastest in Africa and Asia as their economies develop and shift away from primary industry.

## Advances at the technological frontier and ‘catch-up’ potential will boost global growth

- Productivity growth at the technological frontier is expected to rise by 1.4-1.5% per year out to 2050.** One of the fundamental drivers of global economic growth is how fast innovation at the technological frontier – typically proxied by labour productivity growth in the United States – is advancing. New technologies could see productivity growth surge forward in the decades ahead, while other factors – such as rising inequality, public indebtedness, and lower R&D spending could all weigh on growth.<sup>2</sup> Given the wide bands of uncertainty, the projections in the *Outlook* take a neutral view and assume that US real GDP growth per worker will average 1.5% per year for the rest of the 2020s before edging down to 1.4% between 2030 and 2050. This gradual easing reflects an anticipated plateau in educational attainment – average years of schooling are not rising as quickly as in the past and cannot keep rising indefinitely.
- Living standards in emerging markets will rise much more quickly than in advanced economies but the pace of convergence is expected to slow (Chart 13).** Today’s advanced economies will remain by far the world’s richest countries on a per capita basis, but the gap with emerging economies will shrink as the latter adopt cutting edge technologies from the frontier and benefit from ‘catch-up’ potential. In nominal terms, per capita incomes in the United States in 2050 could remain more than double those in China, four times those in the Asia Pacific region, ten times those in South Asia, and twenty times those in Africa (Chart 14). However, the extent of convergence is highly uncertain. Some countries may struggle to switch from imitation-led growth to innovation-led growth and get caught in the middle-income trap, while others may be successful in developing cutting edge-technologies that enable them to grow even faster.

*Living standards in emerging economies are set to rise much faster than in advanced economies*

**Chart 13:** Growth in real GDP per capita growth

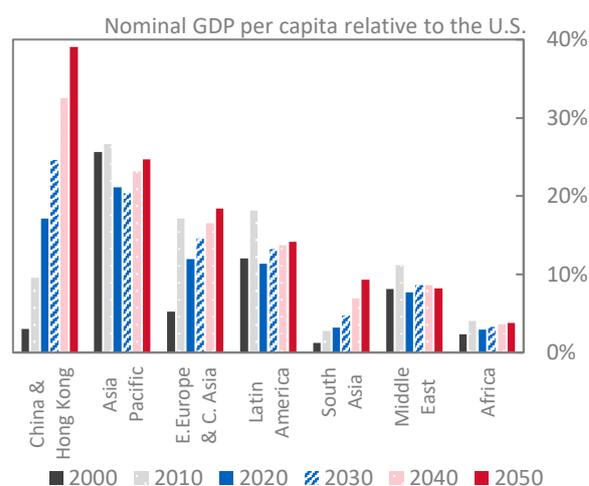


Sources: IMF World Economic Outlook October 2022, UN World Population Prospects (2022) and DBT calculations

Notes: Data are for real GDP (expressed in constant 2021 prices and exchange rates) and divided by aggregate population of the respective group. The classification used for advanced, emerging and developing economies are as of 2022 and are aligned with the IMF WEO’s definitions.

*Living standards in emerging markets will see some catch-up to the technological frontier but will remain well below those in the US even by 2050*

**Chart 14:** Regional living standards relative to the United States



Sources: IMF World Economic Outlook October 2022, UN World Population Prospects (2022) and DBT calculations

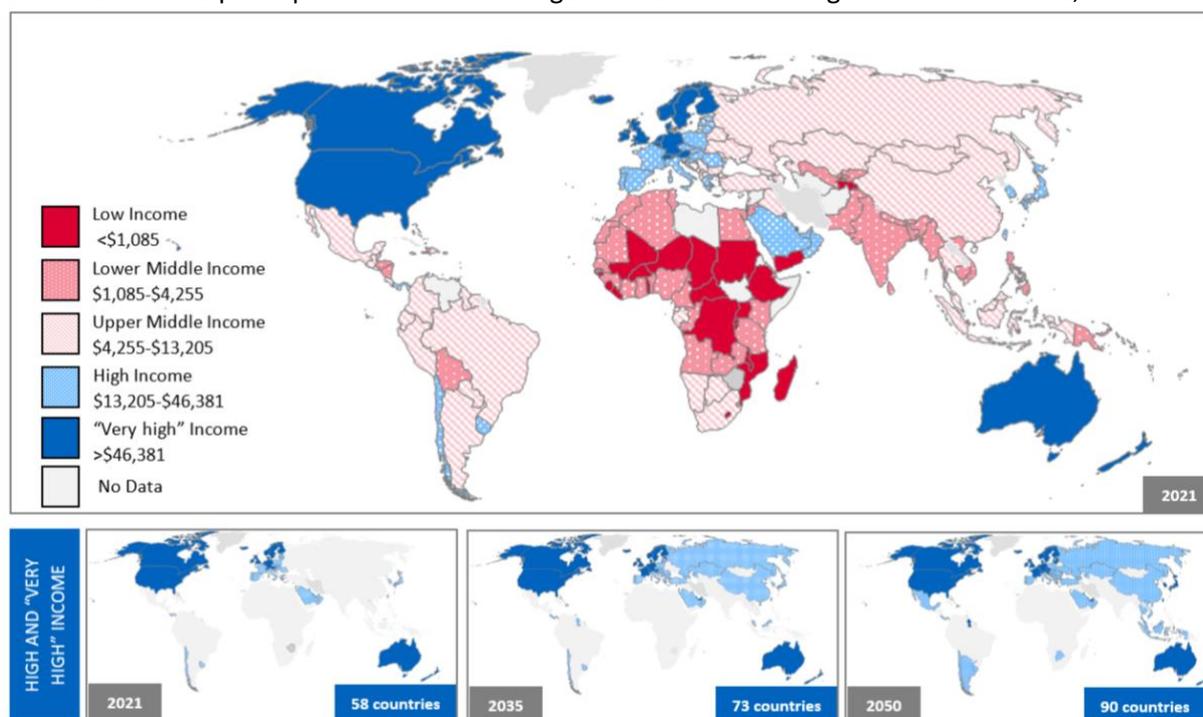
Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates) and divided by total population.

<sup>2</sup> See Rachel and Smith (2015) ‘Secular drivers of global real interest rates’ for a discussion.

# The number of high-income countries will rise over time, increasing demand for trade

By 2050, there could be 90 high-income countries, up from 58 in 2021

**Chart 15:** Income per capita in 2021 and changes in the number of high-income countries, 2021-2050



Sources: IMF WEO October 2022, UN World Population Prospects (2022), World Bank World Development Indicators and DBT calculations

Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates) divided by total population. Income thresholds refer to income per capita levels on a GNI basis and are based on the World Bank's low, lower middle, upper middle and high income categories for 2021. These thresholds values are assumed to grow by around 2.1% each year out to 2050 (in line with the average annual growth rate in GDP deflators for advanced economies). The 'very high' income category is not an official World Bank threshold but is defined as having a per capita income greater than \$46,381 in 2021 prices (and inflated as described), which is in line with per capita income in the UK in 2021.

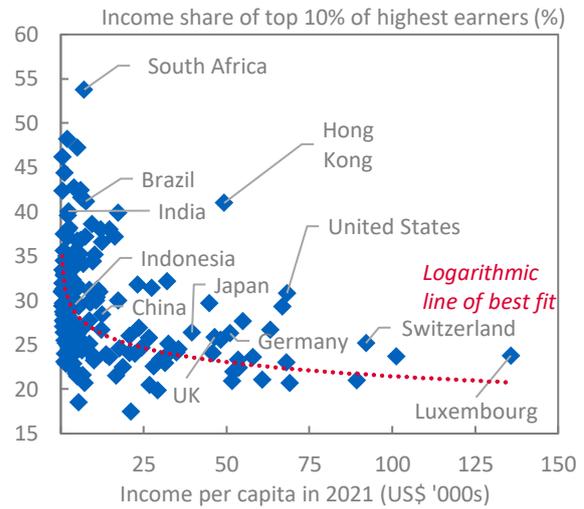
- GDP is not the only thing that matters for trade – income levels, calculated as GDP per head, also matter.** Low-income countries with big populations can have large economies (high GDP), but still represent only small sources of import demand due to their limited purchasing power, different consumption preferences and limited role in global value chains.
- In 2021, over two-thirds of global import demand was concentrated among the world's 58 high-income countries (blue-shaded countries in Chart 15).** The richest 22 of these markets had average per capita incomes over \$46,381 - on a par or richer than the UK. Global import demand is particularly concentrated among these high-income countries – they accounted for around 70% of global imports in 2021.
- The number of high-income countries is likely to increase to 73 by 2035 and these countries could account for over four-fifths of global import demand.** Newly classified high-income countries are likely to include China, Malaysia, and Turkey that will all see significant increases in living standards.
- By 2050, there could be 90 high-income countries, while a handful of countries could become as rich as the UK is today (in real terms).** South Korea, Taiwan and a handful of Eastern European countries could see their per capita incomes rise above \$46,381 (2021 prices) by 2050, providing a further crop of 'very high' income markets to spur demand for imports (See p.37 for why this expanding group of very-high income consumers matters for UK trade).

# The world's growing middle class will be a key source of global demand

- A country's average per capita income can mask significant variations in income within a country.** In countries where income inequality is high (such as South Africa) the top 10% of earners can account for over 50% of the country's income (Chart 16). Income inequality affects the size of the middle class in each market, and hence the level of demand for high-value traded consumer goods and services.
- In 2021, there were around 1.8 billion middle class consumers in the world – equivalent to one in every five people (Chart 17).** The size of the global middle class is calculated by analysing income distributions within countries and calculating the number of individuals within each country with an annual income of at least \$13,205 (the World Bank's definition of 'high income'). As living standards rise and households have more disposable income, their consumption patterns tend to shift away from necessities towards more luxury goods and services. Low-income households tend to spend most of their income on essentials such as food and clothing, whereas high-income households tend to spend significantly more on housing, transport, leisure services and high value consumption goods. So as the world becomes richer, demand for higher-value traded goods and services is likely to rise.
- By 2035, the size of the global middle class could reach 2.7 billion – or around 30% of the global population.** In that period, China is expected to account for the bulk (0.5 billion) of the 0.9 billion increase in the global middle class, while four other regions – South Asia, Asia Pacific, Latin America, and Eastern Europe & Central Asia – are each expected to add a further 50-80 million.
- By 2050, the global middle class could reach 3.5 billion people – equivalent to more than one in every three people.** Over half of these consumers are likely to live in China and the Indo-Pacific (see overleaf).

*Average per capita incomes can mask significant differences in incomes within countries*

**Chart 16: Income inequality within countries**

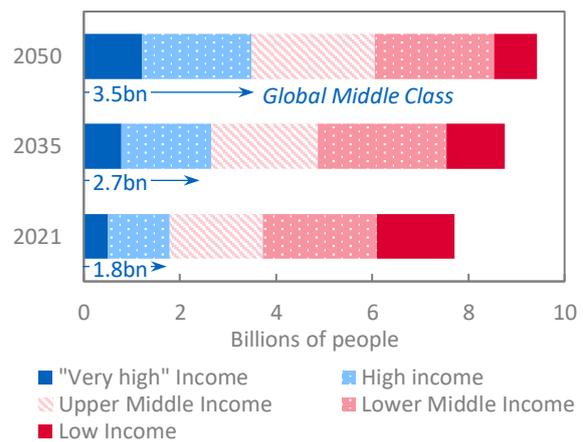


Sources: IMF World Economic Outlook October 2022, UN World Population Prospects (2022), UN World Income Inequality Database and DBT calculations

Notes: Data on income distributions are for the latest year available (usually 2018-2020) for 180+ countries.

*The number of middle-class consumers on the planet could almost double between 2021 and 2050*

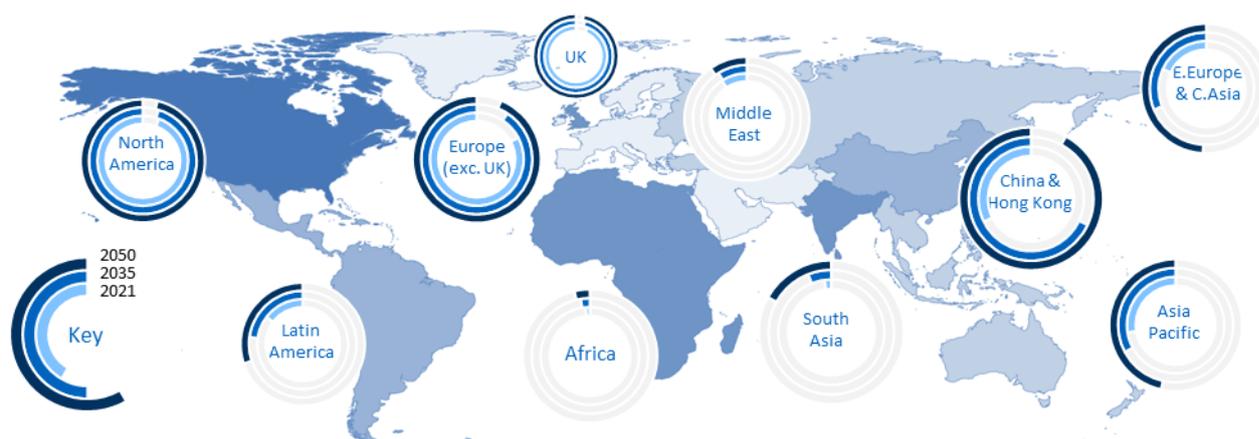
**Chart 17: World population by income threshold**



Sources: IMF World Economic Outlook October 2022, UN World Population Prospects (2022), UN World Income Inequality Database, World Bank World Development Indicators and DBT calculations

Notes: Figures are calculated by applying current income distributions within each country to projections for nominal GDP per capita and population. Income thresholds are extrapolated forward from the World Bank's 2021 income thresholds, increased by the average annual growth rate in GDP deflators for advanced economies. Although income distributions may change, that risk is two-way so we adopt fixed income distributions as a simplifying neutral assumption. In 2021, the thresholds were: high income = \$13,205+, upper middle income = \$4,255 - \$13,205, lower middle income = \$1,085 - \$4,255; and low income = \$0 - \$1,085. 'Very high' income is not a World Bank category but is defined as income greater than \$46,381 in 2021.

## REGIONAL TRENDS IN THE SIZE OF THE MIDDLE CLASS



Proportion of regional populations with a per capita income above \$13,205 per year (in 2021 prices)

	2021	2035	2050
Africa	1%	2%	4%
South Asia	2%	6%	17%
Middle East	9%	9%	10%
E. Europe & C. Asia	18%	31%	49%
Latin America	15%	23%	30%
Asia Pacific	27%	33%	46%
North America	94%	95%	96%
China & Hong Kong	32%	68%	92%
Europe (exc. UK)	83%	91%	94%
<b>WORLD</b>	<b>23%</b>	<b>30%</b>	<b>37%</b>

'Middle class' individuals – defined as those earning at least \$13,205 per year (in 2021 prices) – are expected to account for a growing share of regional populations across the world. In Europe and North America the majority of people are already classified as part of the global middle class. By contrast, China is expected to see its middle class population rise from less than a third of its 2021 population to above 90% by 2050 – on a par with the shares seen in North America and Europe.

### SIZE OF THE MIDDLE CLASS

	2021	2035	2050
China & Hong Kong	460	960	1215
Asia Pacific	250	325	475
Europe (exc. UK)	400	435	435
North America	355	385	405
South Asia	35	110	330
E. Europe & C. Asia	70	120	190
Latin America	90	150	210
Africa	20	45	90
Middle East	45	55	70
UK	65	65	70
<b>WORLD</b>	<b>1785</b>	<b>2655</b>	<b>3485</b>

Millions of people with a per capita income above \$13,205 per year in 2021 prices, rounded to nearest 5 million

Over 90% of the growth in the global middle class out to 2050 will come from outside North America and Europe, driven by emerging markets with large populations where living standards are rising quickly. China and India are expected to account for three fifths of the increase between 2021 and 2050.

### 'VERY HIGH' INCOME POPULATIONS

	2021	2035	2050
China & Hong Kong	30	115	320
North America	205	260	305
Europe (exc. UK)	140	205	260
Asia Pacific	65	100	145
South Asia	<5	20	55
UK	25	35	50
Latin America	15	25	30
E. Europe & C. Asia	5	10	20
Middle East	10	15	15
Africa	5	5	10
<b>WORLD</b>	<b>500</b>	<b>785</b>	<b>1215</b>

Millions of people with a per capita income above \$46,381 per year in 2021 prices, rounded to nearest 5 million

Within the global middle class there is a group of individuals on very high incomes above \$46,381. This group is expected to more than double in size by 2050 and be a significant driver of high-value trade. This group is concentrated in four regions: Europe, North America, China and Asia Pacific.

Sources: IMF World Economic Outlook October 2022, UN World Income Inequality Database, World Bank World Development Indicators and DBT calculations

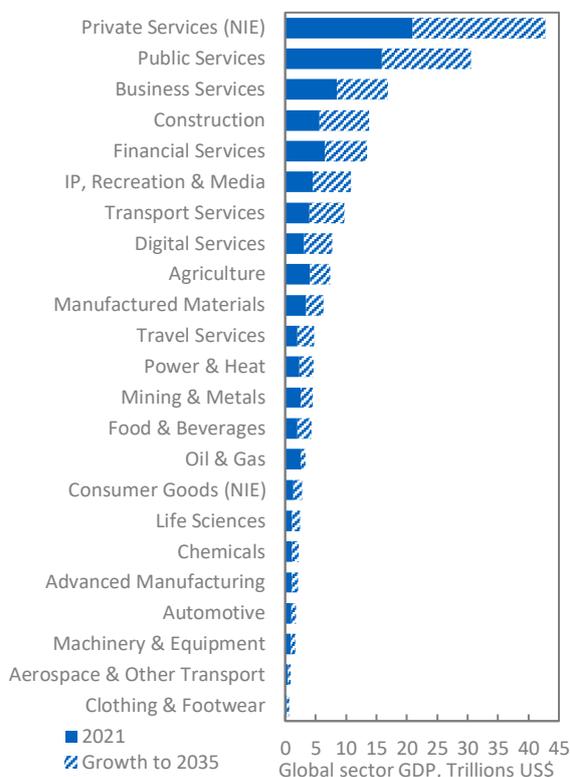
Notes: Middle class populations are defined as people within each country earning above the World Bank's 'high income' threshold of \$13,205 per year in 2021 prices - equivalent to \$18.2k in 2035 and \$24.3k in 2050 in nominal dollar terms (adjusted for inflation). 'Very high' income populations are those earning above \$46,381 per year in 2021 prices.

# The industrial structure of the global economy is likely to become more services-oriented

- **Shifts in spending patterns are expected to gradually change the industrial structure of the global economy.** All sectors will grow out to 2035 (Chart 18), but rising incomes, changing consumer preferences and technological advances will mean some sectors grow faster than others (Chart 19).
- **Rising incomes should see demand for services grow and their share of global GDP rise to 77% by 2035 from 75% in 2021.** Rises in energy and other commodity prices are expected to raise the share of goods in the economy in the near term and push the services share down to 73% in 2022. But as structural trends – such as rising living standards and expanding middle-class populations – reassert themselves, demand for service sectors should rise quickly.
- **Other sectors will see their share of global GDP fall, as shifts in consumer preferences lower demand or technology lowers prices.** The oil & gas sector is projected to grow relatively slowly for the rest of the decade as the green transition accelerates. Meanwhile high productivity growth and technological progress are expected to drive down prices in manufacturing sectors – reducing their share of nominal GDP despite growing in real terms.

*All sectors of the global economy will expand in the years ahead, but at different rates*

**Chart 18:** Global GDP by sector, 2021-2035

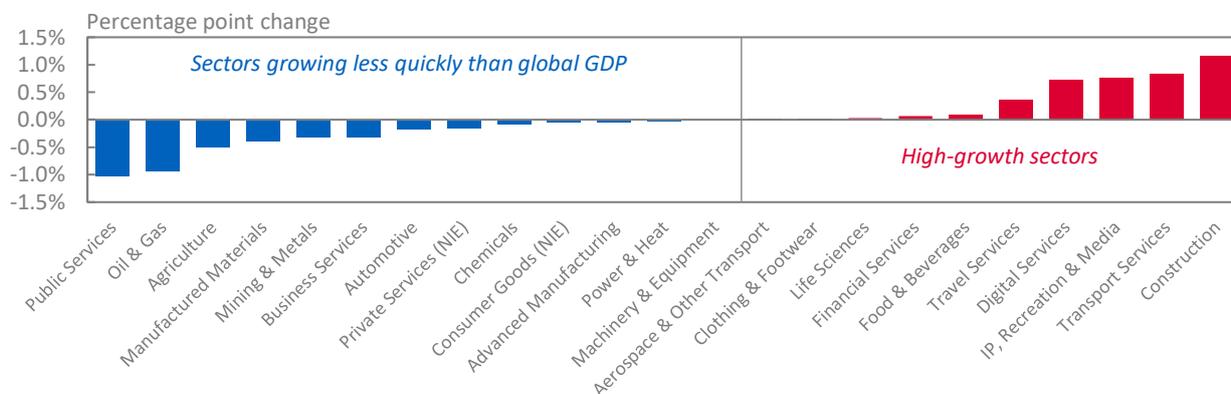


Sources: IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations

Notes: Data are for nominal GDP (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE means 'Not Included Elsewhere'.

*The sectoral mix of the global economy will only shift gradually over the coming years*

**Chart 19:** Change in sectoral shares of global GDP between 2021 and 2035



Sources: IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations.

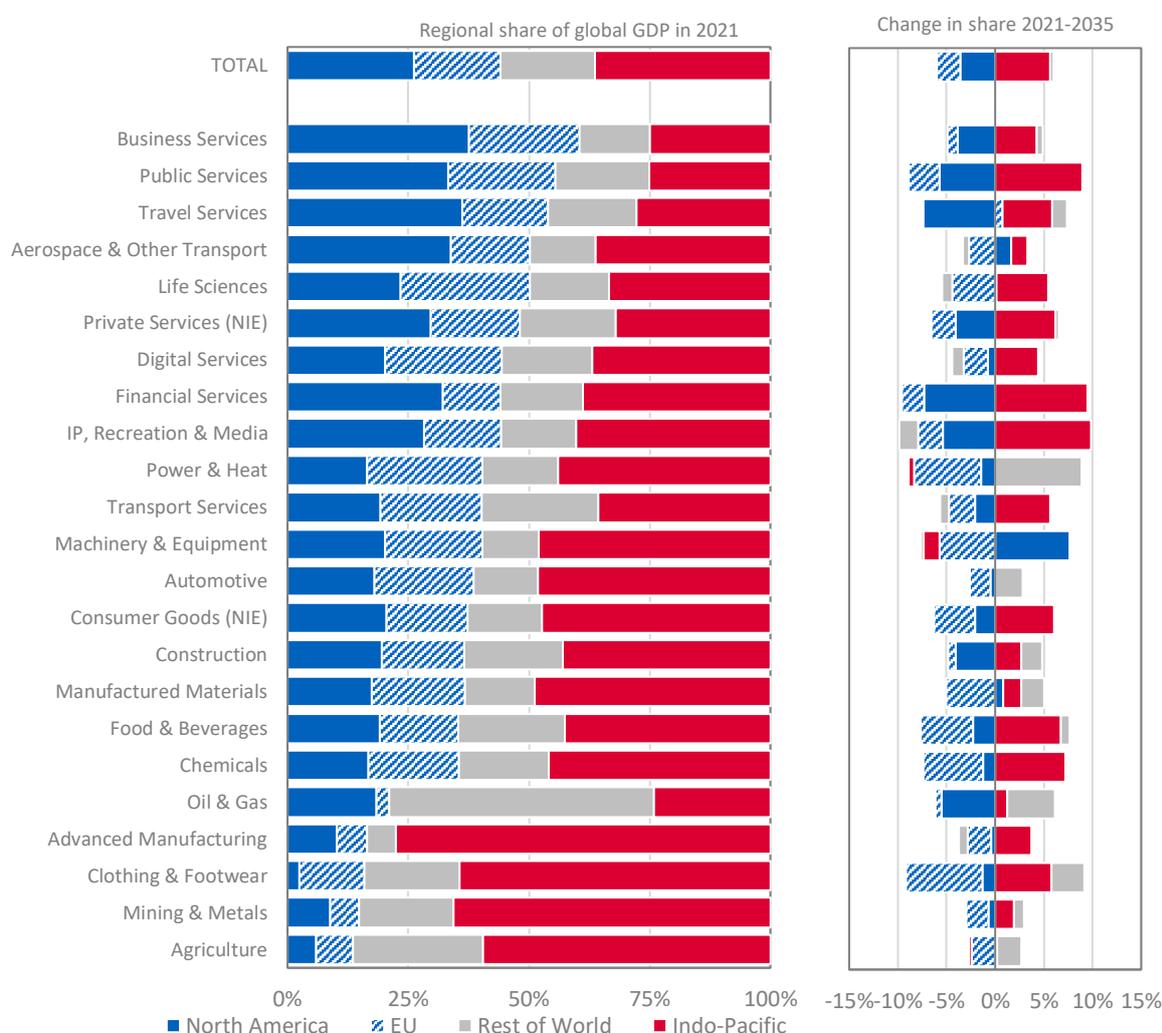
Notes: Data show the change in each sector's share of global GDP (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE means 'Not Included Elsewhere'.

## The US and EU's share of global GDP is expected to fall in almost all sectors

- Different regions have markedly different industrial structures – due to variations in local demand, factor endowments, and sectors of comparative advantage (left panel, Chart 20).** The EU and North America are more specialised in service sectors and some hi-tech manufacturing sectors (such as aerospace), while economies in the Indo-Pacific tend to be more specialised in manufacturing and primary production.
- Rapid growth in the Indo-Pacific should see the US and EU's share of global production fall in almost all sectors out to 2035 (right panel, Chart 20).** The Indo-Pacific's share of global GDP is expected to rise in industrial sectors as its share of global manufacturing continues to expand, as well as in some service sectors – including transport, financial and recreational services – as the rising purchasing power of Asia's growing middle class increases demand.

*The US and EU's share of global production is expected to fall in almost all sectors out to 2035*

**Chart 20:** Sectoral shares of global GDP by region in 2021 and expected change to 2035



**Sources:** IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations.

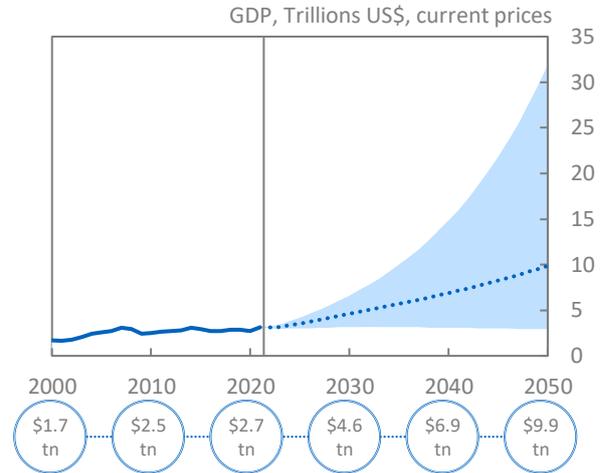
**Notes:** Data are for nominal GDP (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE means 'Not Included Elsewhere'. The Indo-Pacific region is defined as three DBT HM Trade Commissioner regions: South Asia, Asia Pacific and China & Hong Kong. 'Rest of world' includes the UK, non-EU Europe, Eastern Europe & Central Asia, Latin America, Middle East and Africa.

# The UK should remain one of the world’s largest economies despite a falling share of global GDP

- The UK was the 6th largest economy in the world in 2021 and is projected to remain in that position out to 2050.** All UK projections in the *Outlook* are based on the Office for Budget Responsibility’s November 2022 forecasts in the near term and long-term projections out to 2050. These suggest the UK economy will grow by around 30% in real terms between 2021 and 2035 and by almost 60% between 2021 and 2050. In nominal dollar terms – including inflation and the IMF’s exchange rate forecasts – the UK economy could increase from \$3.1tn (£2.3tn) in 2021 to around \$5.7tn (£4tn) by 2035 and around \$9.9tn (£6.9tn) by 2050 (Chart 21).
- The UK’s share of global GDP is expected to continue to edge lower, from 3.3% in 2021 to around 2.7% by 2050.** The UK’s share of global activity has been on a falling trend for decades (Chart 22). This reflects a positive phenomenon – rising living standards overseas. As the rest of the world becomes richer, the UK’s relative economic weight will tend to fall but the economic opportunities for the UK to grow via trade will increase.
- The UK still punches above its weight in economic terms given that less than 1% of the world’s population live in the UK.** The UK’s share of the global population is expected to decline from 0.9% in 2021 to around 0.7% by 2050. Despite that, the UK’s share of global GDP, at 2.7% in 2050, is expected to remain almost four times its population weight. That reflects the UK’s high level of per capita income, which remains much higher than the global average out to 2050. UK per capita incomes are expected to grow by around 1.5% in real terms on average per year over the next three decades. These figures equate to a real term increase in UK average incomes from £34k in 2021, to £42k by 2035 and £52k by 2050 (in 2021 UK prices).

*In nominal US dollar terms, the UK economy could rise to almost \$10tn by 2050*

**Chart 21:** UK nominal GDP in US dollar terms

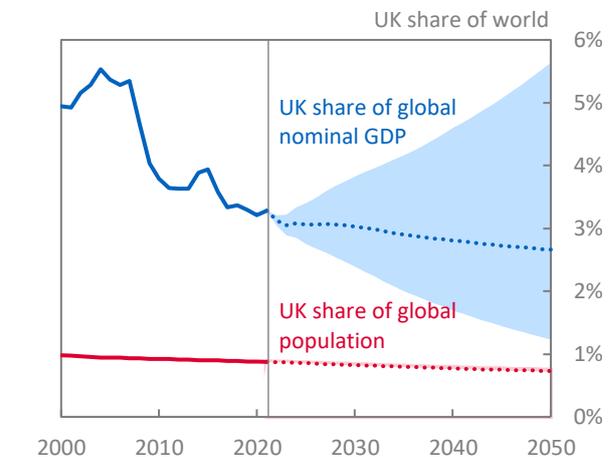


**Sources:** IMF World Economic Outlook October 2022, Office for Budget Responsibility Economic and Fiscal Outlook (November 2022) and Long-Term Economic Determinants (July 2022) and DBT calculations

**Notes:** Data refer to nominal GDP from the Office for Budget Responsibility’s forecasts and projections, converted into US dollars. Exchange rate forecasts are based on: the IMF’s WEO forecast from 2022 (1.26 \$ per £) to 2027 (1.37 by 2027). Then from 2028 the gradual appreciation in the exchange rate seen in the IMF’s forecast is assumed to gradually fade so the exchange rate stabilises by 2035 (at 1.43 \$ per £) and stays fixed at that level out to 2050. This equilibrium level is consistent with other external forecasters. The uncertainty band represents one standard deviation around the projection based on 2010-2019 GDP outturns.

*The UK’s relative economic weight in the world is expected to continue its gradual long-term decline*

**Chart 22:** UK share of global GDP and population



**Sources:** IMF World Economic Outlook October 2022, UN World Population Prospects (2022), Office for Budget Responsibility Economic and Fiscal Outlook (November 2022) and Long-Term Economic Determinants (July 2022) and DBT calculations

**Notes:** The uncertainty bands represent one standard deviation around the projections based on 2010-2019 UK growth outturns.



**2**

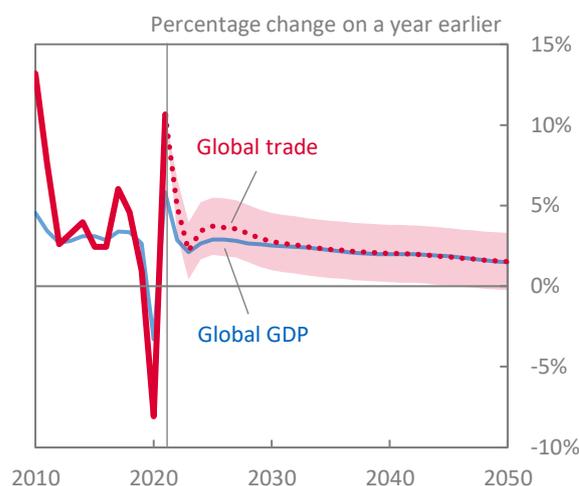
# **The Future of Global Trade**

# Global trade is expected to grow broadly in line with global GDP

- Global trade growth is closely related to GDP growth.** The faster the world economy grows the faster trade tends to grow. However, trade is also more volatile than GDP (Chart 23). This is partly because most trade flows involve manufactured goods, which tend to vary more over the business cycle than the service sectors that dominate global GDP. The outlook for global trade is therefore even more uncertain than for GDP.
- The IMF expect world trade volume growth to settle around 3-4% by the mid-2020s, after recent pandemic-induced volatility.** In the IMF’s October 2022 forecasts – on which the near-term projections in the *Outlook* are based – trade volumes grow a little faster than real GDP. That reflects a somewhat lagged recovery of global trade, relative to GDP, following dual shocks of Covid-19 and, to a lesser degree, the US-China trade war.
- During the 2030s and 2040s, global trade volumes are projected to grow in line with global GDP growth.** There are many factors that could cause trade to grow faster or slower than GDP. These include: stability of the global trading system; political appetite for cross-border integration; business attitudes towards global value chains; and technological change. The projections in the *Outlook* take a neutral view of these factors and assume the status quo is broadly maintained. For example, for the trading system, there is neither a further wave of globalisation nor a sharp turn inward. Different scenarios are clearly possible, so figures in the *Outlook* should be treated with wide bands of uncertainty. See Section 4 for more on assumptions and scenarios.
- By 2050, the value of global trade in dollar terms is expected to be worth around \$99tn, up from \$27tn in 2021 (Chart 24).** That 270% increase is broadly in line with the rise in nominal GDP over that period, with imports accounting for around a quarter of global GDP. Data quality and coverage mean that the *Outlook* focuses on gross trade. For more on value-added trade see [Boxes A & B](#).

*In the long run, global trade is expected to grow in line with global GDP*

**Chart 23:** Global trade growth vs global GDP growth in real terms

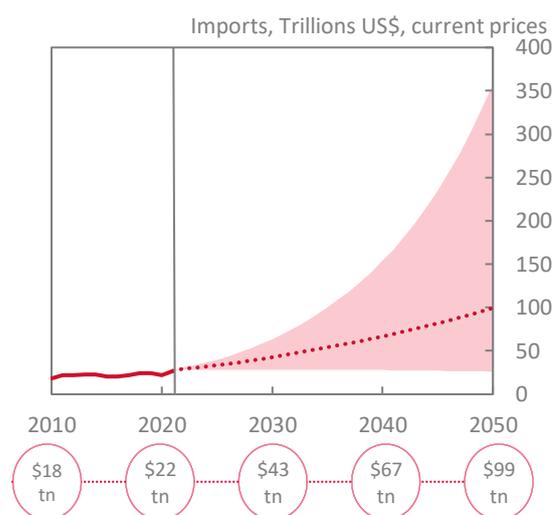


Sources: IMF World Economic Outlook October 2022, UNCTAD and DBT calculations

Notes: Data are for GDP and imports in real terms (converted into US dollars at constant 2021 market exchange rate). The uncertainty band represents one standard deviation around the projection based on 2010-2019 outturns.

*In dollar terms, global trade is expected to nearly quadruple between 2021 and 2050*

**Chart 24:** Global imports in nominal dollar terms



Sources: IMF World Economic Outlook October 2022, UNCTAD and DBT calculations

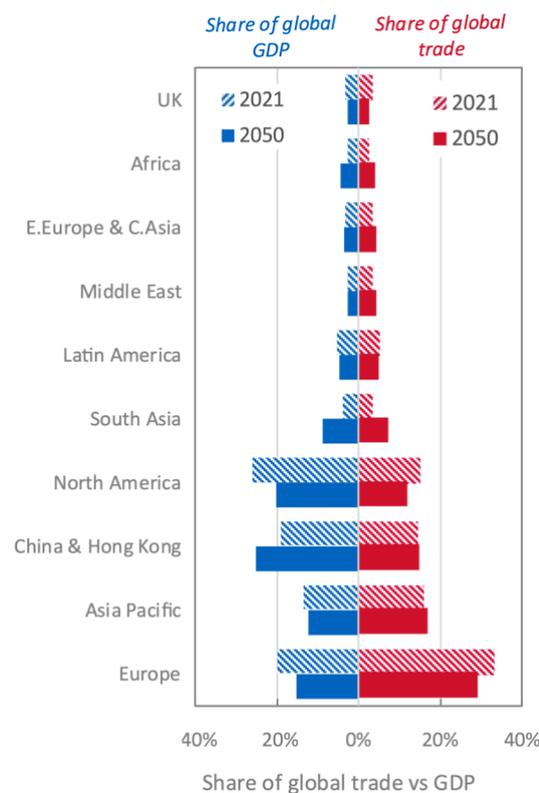
Notes: Data are for nominal imports (inclusive of inflation and converted using time-varying exchange rates). The uncertainty band represents one standard deviation around the projection based on 2010-2019 outturns.

# Global trade will continue to be dominated by four regions of the world

- Four regions – Europe, North America, China and the Asia Pacific – dominate global trade.** In 2021, these four regions accounted for 78% of global imports and GDP (Chart 25).
- But unlike GDP, it is not North America and China that are the biggest regions for trade – that honour falls to Europe and Asia Pacific.** This is because of cross-border supply chains. While a region’s GDP gives a sense of its role as a source of global demand, a region’s role in trade also depends on how often goods and services cross its borders. Differences in demographics, comparative advantage and, resource endowments and create incentives for regional supply chains to develop in Europe and the Asia Pacific – e.g. intra-EU trade tends to account for close to half of total EU trade.
- By 2050, the four biggest regions will continue to dominate global import demand, but South Asia will also play a growing role.** Europe is still likely to be the world’s largest import market in 2050 but its share of global trade is expected to fall due to its slow pace of GDP growth. By contrast, rapid economic growth in the Indo-Pacific – including in South Asia – should see the axis of global trade shift further East (Charts 25 & 26).
- These trends will also affect the relative size of regional trade agreements over time.** For example, the Comprehensive and Progressive Trans-Pacific Partnership’s (CPTPP) import market size (based on its existing 11 members) could reach 54% of the EU-27 market by 2050 – up from 47% in 2021 (see following pages).

*Import demand will remain unevenly distributed across the world - four regions will continue to dominate global trade*

**Chart 25:** Regional shares of global GDP and global imports in 2021 and 2050

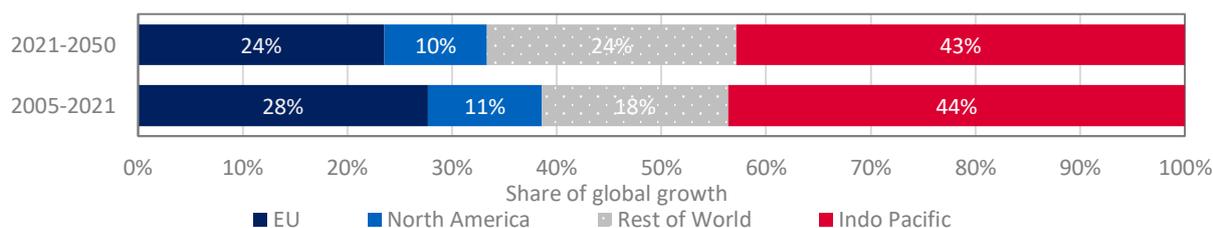


Sources: IMF World Economic Outlook October 2022, UNCTAD and DBT calculations

Notes: Shares of global GDP and imports are expressed in nominal dollar terms (inclusive of inflation and converted using time-varying exchange rates).

*Over three quarters of global growth in import demand is expected to come from outside the EU*

**Chart 26:** Regional drivers of global import growth



Sources: IMF World Economic Outlook October 2022, UNCTAD and DBT calculations

Notes: Figures show the contribution of different regions to global import growth in real terms (converted into US dollars at constant 2021 market exchange rates). The Indo-Pacific region is defined as three DBT HM Trade Commissioner regions: South Asia, Asia Pacific and China & Hong Kong. 'Rest of world' includes the UK, non-EU Europe, Eastern Europe & Central Asia, Latin America, Middle East and Africa.

## REGIONAL TRADE TRENDS

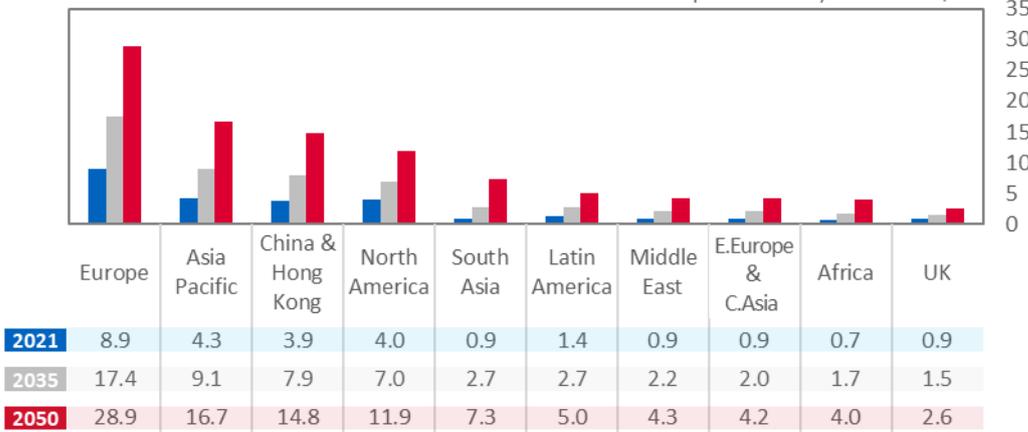


The 9 overseas regions of the world around which DBT organises its international operations. Note: the UK is always treated separately from Europe in the Outlook.

Each region will see significant growth in import market size in the coming decades, but growth will be unevenly distributed. This will cause global trading patterns to shift over time.

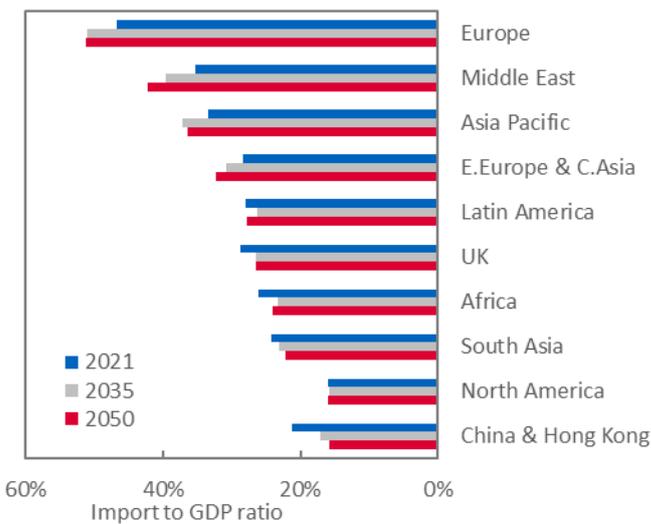
## IMPORT MARKET SIZE

Import demand, Trillions US\$



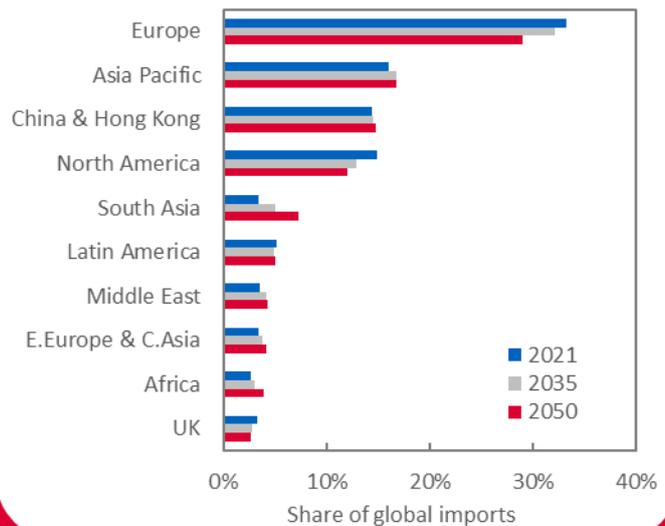
Global import market demand is expected to almost quadruple between 2021 and 2050. Import growth is expected to be below this global average in Europe and North America. By contrast, imports could grow fivefold in Africa and eightfold in South Asia.

## IMPORT INTENSITY



In some regions, particularly those with regional trade agreements like the EU, import growth will partly be driven by further integration into regional value chains. By contrast, import intensity is expected to fall in regions dominated by large emerging markets (China and South Asia) as their economies grow richer and rebalance towards domestic demand.

## SHARE OF GLOBAL IMPORTS

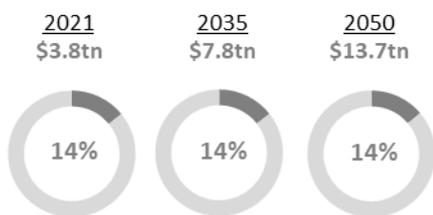


Fast growing emerging markets are expected to account for a growing share of global imports. By 2050, China, South Asia and the Asia Pacific are expected to account for around 39% of global imports, up from 34% in 2021. By contrast, Europe and North America's share of global imports is expected to fall from 48% in 2021 to 41% by 2050.

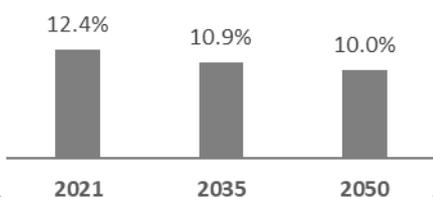
### Comprehensive & Progressive Agreement for Trans-Pacific Partnership

- 11 signatories, founded Mar 2018
- Rising levels of integration into global value chains keeps CPTPP members' share of global trade high

#### Share of global imports



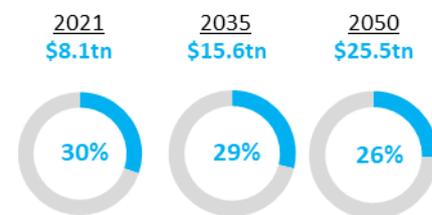
#### Nominal share of global GDP



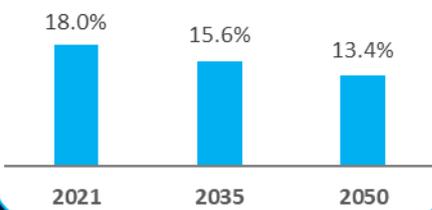
### European Union

- 27 signatories, founded Nov 1993
- The EU's high and rising levels of trade integration mean EU members still account for a high share of global trade in 2050 despite slow GDP growth

#### Share of global imports



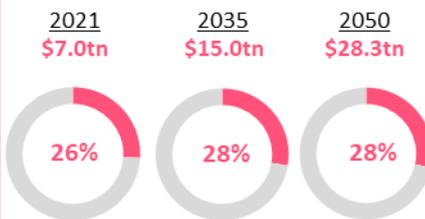
#### Nominal share of global GDP



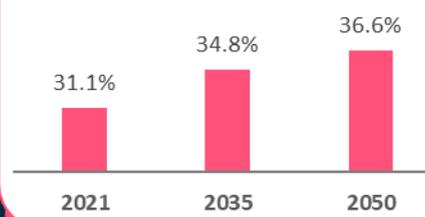
### Regional Comprehensive Economic Partnership

- 15 signatories, founded Nov 2020
- RCEP economies are expected to grow quickly and account for a rising share of global GDP and trade

#### Share of global imports



#### Nominal share of global GDP



## REGIONAL TRADE BLOCS



Many nations belong to regional trade agreements. The six blocs shown here are some of the broadest agreements in the world. With the exception of the EU, all are expected to account for a growing or stable share of global trade in the decades ahead.†

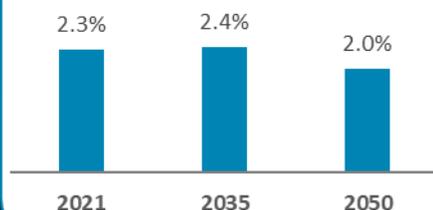
### Mercosur\*

- 4 current members, founded Mar 1991
- Mercosur members are expected to account for a stable share of global trade despite slow GDP growth as members become more open to trade

#### Share of global imports



#### Nominal share of global GDP

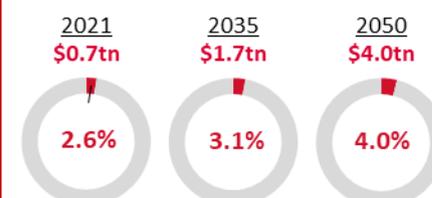


\* excludes Venezuela (suspended membership)

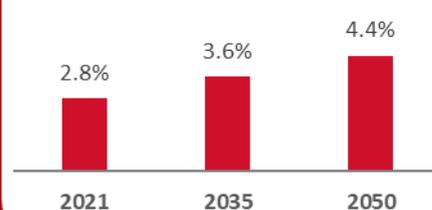
### African Continental FTA\*

- 54 signatories, founded Mar 2018
- After a partial recovery from Covid-19 AfCFTA members are expected to grow rapidly and account for a rising share of global GDP and trade

#### Share of global imports



#### Nominal share of global GDP

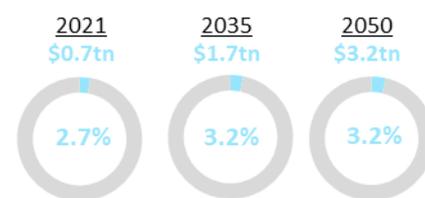


\* all nations assumed to ratify by 2030

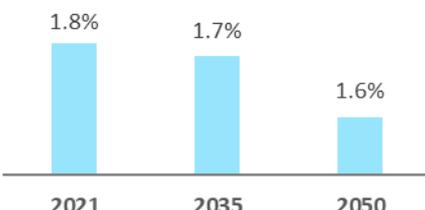
### Gulf Cooperation Council

- 6 signatories, founded May 1981
- GCC members are expected to account for a stable share of global trade even as their share of global GDP falls as members become more open to trade

#### Share of global imports



#### Nominal share of global GDP



Sources: IMF World Economic Outlook October 2022, UNCTAD and DBT Calculations

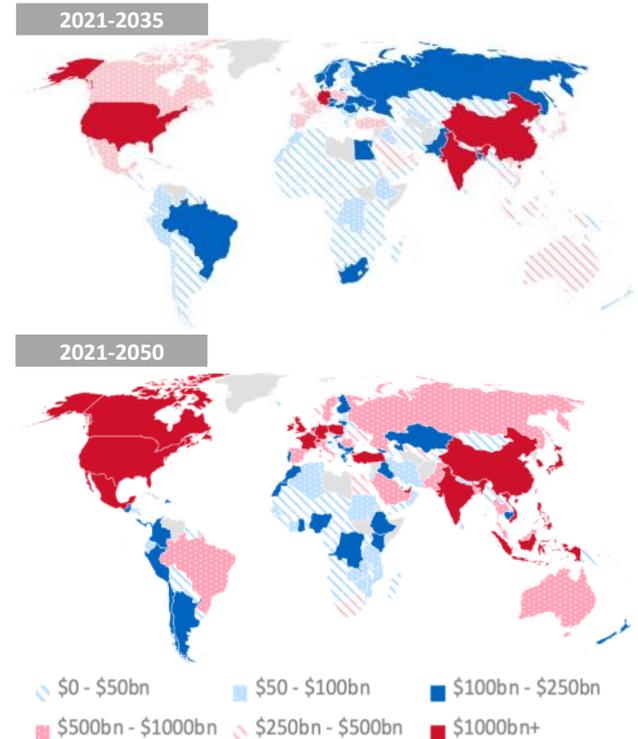
Notes: †All trade figures above include both intra- and extra-bloc trade (i.e. the sum of all member states trade with all trading partners). Where countries are members of both CPTPP and RCEP, that is indicated by a combination of grey hatching and pink.

# Emerging economies are likely to account for a growing share of trade as economic power shifts East

- Global trade is concentrated – the top 30 markets accounted for over 80% of global import demand in 2021.** Within this group, the 10 largest importers accounted for over half of global import demand.
- Growth in global imports is expected to be similarly concentrated in the coming decades.** More than three-quarters of the growth in global import demand out to 2050 is expected to come from the current 30 largest markets. This includes four countries – the US, China, India and Germany – whose import markets are each expected to grow by over a trillion dollars by 2035 (Chart 27) and who together generate a third of global growth out to 2050.
- Over the next decade, China is expected to overtake the US to become the world’s largest importer despite China gradually becoming less reliant on trade.** China is already the world’s largest exporter, and its share of global trade is expected to keep growing as its economy expands. However, as Chinese consumers become wealthier and Chinese production becomes more advanced, China’s economic structure is expected to shift – with more domestically produced goods and services consumed at home. As a result, import demand is expected to fall as a share of China’s GDP from 17% in 2021 to 14% in 2050 – similar to the US’s current level of openness.
- The role of emerging economies in the trading system will rise over time, consistent with their growing weight in the global economy.** The ‘E7 group’ of 7 of the largest emerging economies – China, India, Brazil, Russia, Indonesia, Mexico and Turkey – are expected to approach the G7’s share of global import demand by 2050 (Chart 28). However, while the E7 are the biggest emerging markets in terms of GDP, they are not the biggest importers in the emerging world. Other economies – such as Vietnam and the Philippines – are expected to grow more rapidly in the coming decades and rise up the global import rankings as they become more integrated into global value chains (Chart 29).

*The top 30 import markets are expected to account for over three-quarters of global import growth*

**Chart 27:** Growth in nominal import market size between 2021, 2035 and 2050 in US dollar terms

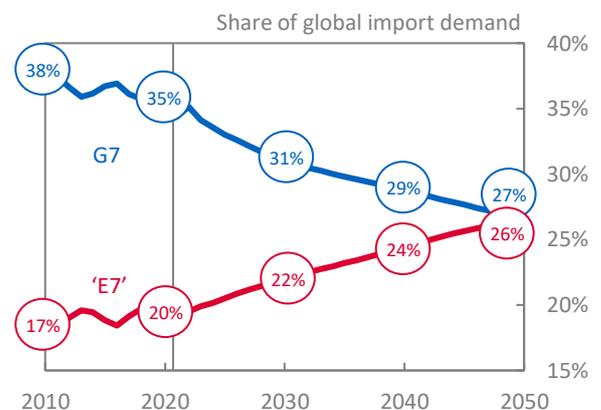


Sources: IMF WEO October 2022, UNCTAD and DBT calculations

Notes: Data are for nominal imports (inclusive of inflation and converted using time-varying exchange rates).

*The 7 largest emerging economies are expected to match the G7’s import market size by 2050*

**Chart 28:** G7 and ‘E7’ shares of global imports

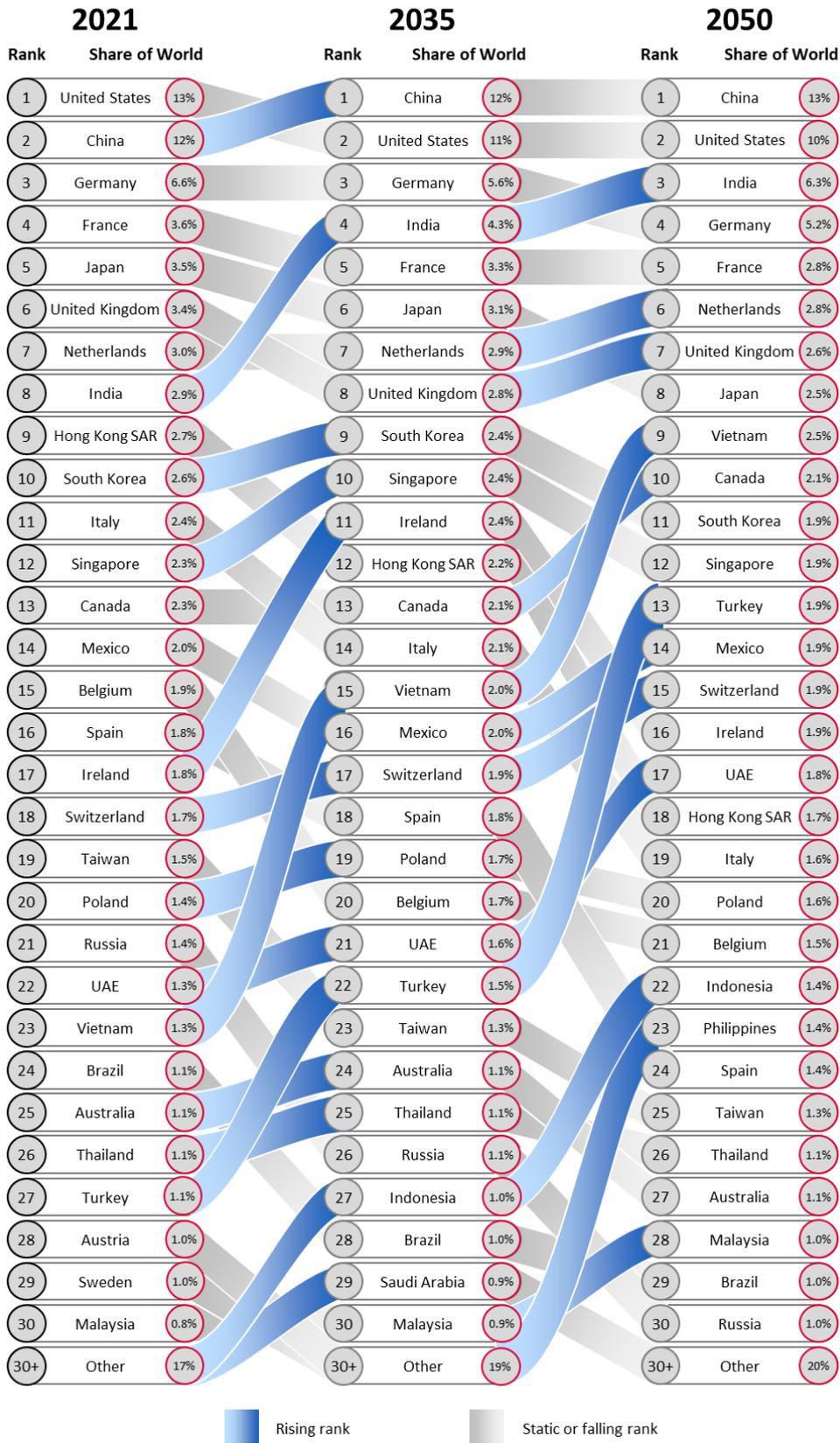


Sources: IMF WEO October 2022, UNCTAD and DBT calculations

Notes: Nominal imports (inclusive of inflation and converted using time-varying exchange rates) for the G7 (Canada, France, Germany, Italy, Japan, the UK and US) and the E7 largest emerging economies in 2050 (Brazil, China, India, Indonesia, Mexico, Russia and Turkey).

The world's top 30 import markets in 2035 and 2050 are expected to be similar to the largest import markets in 2021, albeit with some changes in ranking as emerging Asian economies rise up

Chart 29: The world's largest importers, 2021-2050



Sources: IMF World Economic Outlook October 2022, UNCTAD, Office for Budget Responsibility and DBT calculations

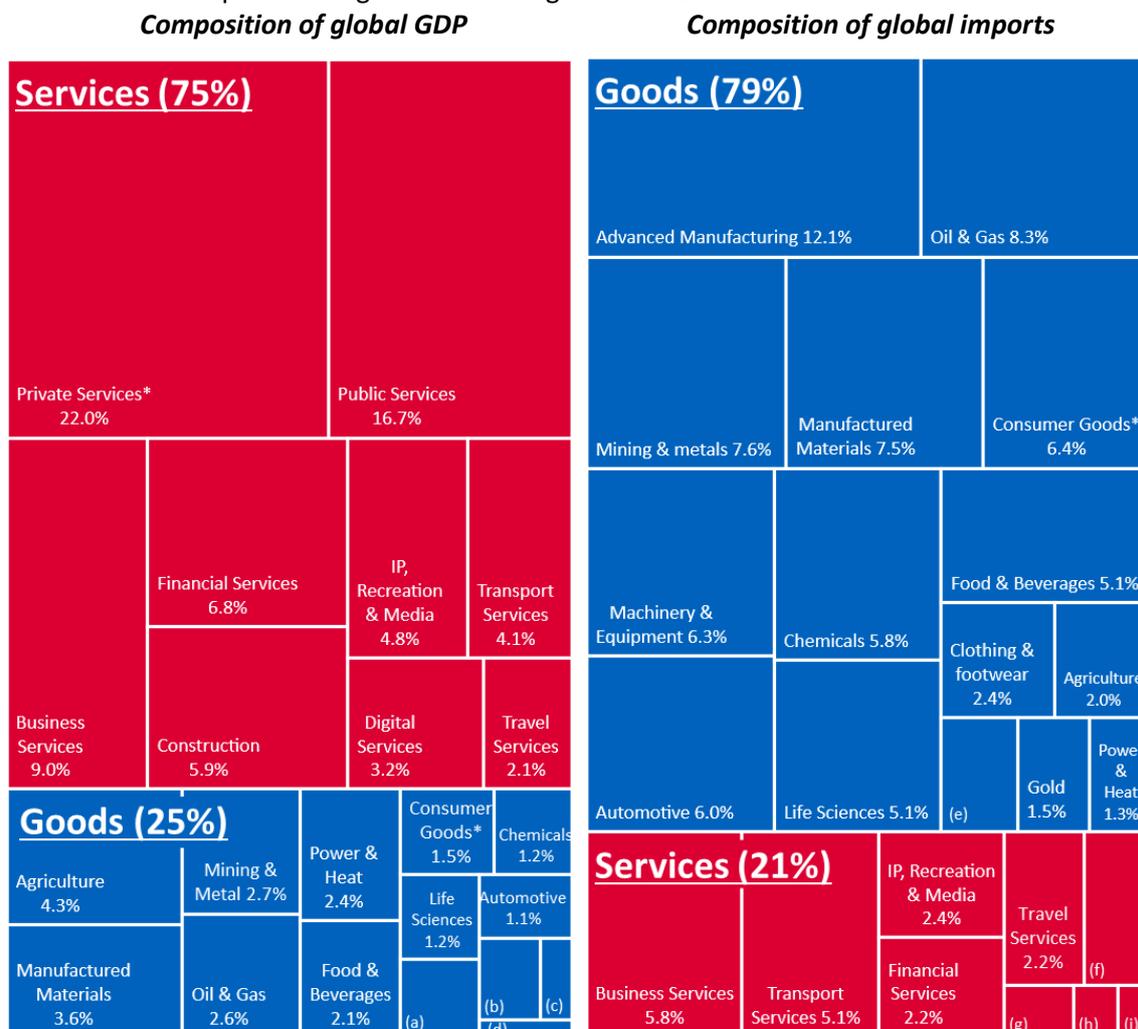
Notes: Rankings are based on nominal imports (inclusive of inflation and converted using time-varying exchange rates). 2021 figures for all countries (except the UK) are calculated using UNCTAD's balance of payments data (which were released in August 2022). UK figures have been converted from the Office for Budget Responsibility's November 2022 near term forecast and July 2022 long-term economic determinants into US dollars.

# The sectoral structure of global trade is currently dominated by goods sectors, unlike global GDP

- **The sectoral mix of global trade is very different to GDP.** In 2021, goods sectors accounted for 25% of GDP but 79% of trade flows (Chart 30). This difference partly reflects data definitions – GDP is measured on a value-added basis while most trade data refer to gross flows, which include the cost of inputs as well as value added (see Box A). This difference over-weights the role of goods, whose supply chains cross borders many times, and under-weights the value of services embedded in goods trade.
- **The goods-heavy mix of global trade partly reflects differences in tradability and market access barriers for services.** As well as data definitions, some services (e.g. hairdressers) are inherently less tradable than goods, which reduces their share in global trade. In addition, trade liberalisation efforts have historically tended to favour goods sectors. The WTO estimates that in 2019, barriers to goods trade were around half those of services.

*Differences in tradability mean that the sectoral mix of global GDP is very different to global trade*

**Chart 30:** Sectoral composition of global GDP and global trade in 2021



**Sources:** IMF World Economic Outlook October 2022, Oxford Economics, UNCTAD and DBT calculations  
**Notes:** Sectors are defined in Section 4. \* indicates 'Not Included Elsewhere'. Figures show share of global GDP (left panel) and imports (right panel) in US dollar terms in 2021. Sectors not displayed on chart include: (a) Advanced Manufacturing, 1.1%; (b) Machinery & Equipment, 0.9%; (c) Aerospace & Other Transport, 0.5%; (d) Clothing & Footwear, 0.3%; (e) Aerospace & Other Transport, 1.6%; (f) Digital Services, 1.9%; (g) Private Services (NIE), 0.7%; (h) Public Services, 0.4%; (i) Construction, 0.3%.

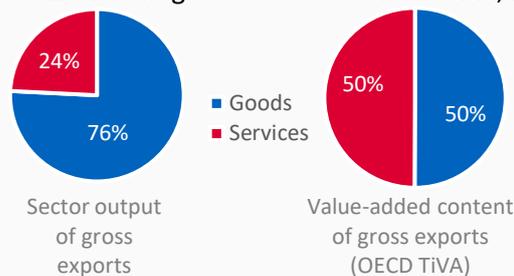
## Box A: How global trade differs when measured on a value-added basis

- Conventional ('gross') trade statistics can give a distorted view of the global trading system by masking the effect of Global Value Chains (GVCs).**<sup>3</sup> This can lead to double counting of trade flows, which can over-estimate the importance of some countries or sectors that are at the end of value chains.
- Trade in Value Added (TiVA) is an innovative OECD dataset that makes it possible to examine the role of GVCs in global trade.** The novelty of the TiVA dataset is that it regards trade as flows of value added rather than gross flows of final goods and services. This has many advantages in terms of analysing trade, particularly as the role of GVCs has grown. But the TiVA dataset also has key limitations, including: its timeliness (as of February 2023, the latest full estimates were for 2018); coverage (latest estimates cover 66 countries); and robustness (TiVA estimates are still experimental and based on several assumptions). Given these drawbacks, the *Outlook* relies on conventional trade statistics as the basis for its projections but uses TiVA data as a complementary source to understand the role of GVCs.
- TiVA data suggest around a fifth of the value of gross global trade consists of intermediate inputs that are double counted as they cross-borders in GVCs (Chart A1).**
- Services account for almost half of global trade when measured on a value-add basis, versus a quarter based on conventional statistics. (Chart A2).** This reflects the value of embedded services in goods trade, which are not easily captured in gross trade measures.
- The world's top 20 exporters differ materially when measured on a value-added basis (Chart A3).** Trading hubs – such as Singapore, Hong Kong and the Netherlands – drop down the list due to the high proportion of their exports made up of re-exported inputs, while primary commodity producers – such as Russia and Saudi Arabia – rise up the rankings due to the high value-added content of their exports.

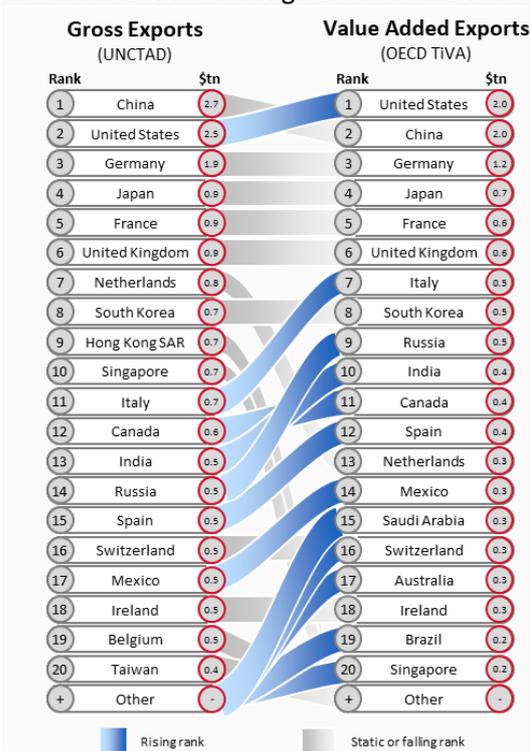
**Chart A1:** Share of value-added in gross global trade



**Chart A2:** Role of goods and services in trade, 2018



**Chart A3:** Difference in top 20 exporters in 2018 between value added and gross trade measures



Sources: UNCTAD, OECD Trade in Value Added and DBT calculations

**Notes:** All data refer to 2018. In panel A2, the share of services in global exports is higher in the OECD's TiVA dataset than UNCTAD's gross export data for methodological and coverage differences, in particular: 1) the value of embedded services in goods trade is significant; 2) the TiVA dataset only covers 66 of the largest countries in the world, many of which are more service-oriented than the global average; 3) gross exports in the TiVA dataset are valued at basic prices, not producer prices, so domestic distribution margins (inherent in exports at producer prices) are reallocated to exports of services.

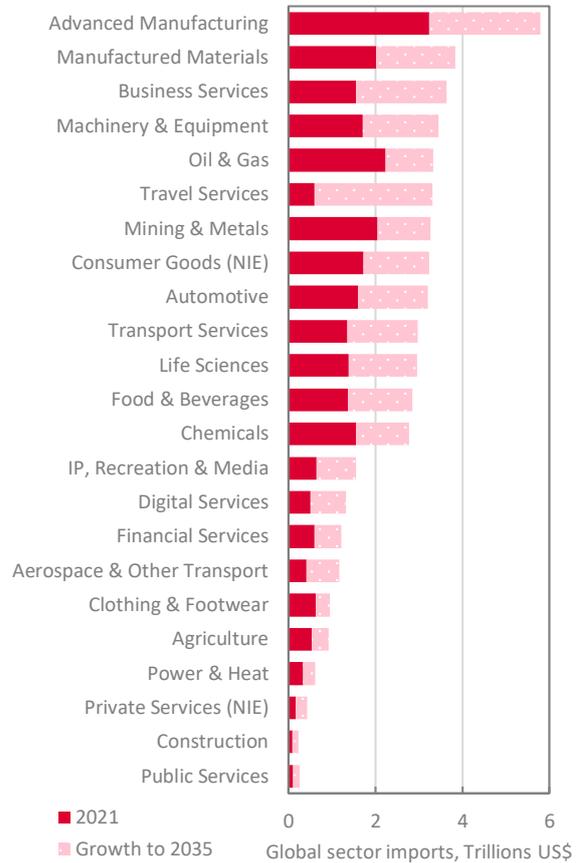
<sup>3</sup> Traditional (gross) trade data are recorded in gross value terms (i.e. the entire value of a product is recorded as an export, including the value of intermediate inputs embodied in its production). By contrast, TiVA records as an export only the value a country/sector has added in the production of this export (i.e. it nets out the value of intermediate inputs embodied in the production of the export).

# The sectoral structure of global trade is likely to become more service-oriented over time

- As with global GDP, the industrial structure of global trade is expected to evolve gradually over time.** The *Outlook's* sectoral projections are based on extrapolations of historical trends and assume a steady evolution of the economic, political and technological forces that shape global trade. However, there are risks to the outlook, particularly from technologies that could change what we trade and how it is traded. Uncertainty scales with time so we do not present sectoral projections beyond 2035.
- All sectors are expected to grow, but rising incomes, changing consumer preferences and technological advances will see some sectors grow faster than others (Charts 31 & 32).** Service sectors' share of trade is projected to rise to 28% by 2035 from 21% in 2021. That partly reflects post-Pandemic recovery – services' share fell from 25% to 21% between 2019 and 2021. But longer term, rising incomes should see global trade become more service-oriented, as an expanding global middle-class increases its demand for discretionary services. Travel services particularly benefits from that twin boost, quintupling in size from pandemic lows. By contrast, demand for oil & gas is likely to be sluggish as the green transition gathers pace, with heightened concerns around energy security in the wake of the war in Ukraine accelerating that process.

*All sectors of global trade will expand in the years ahead, but at different rates*

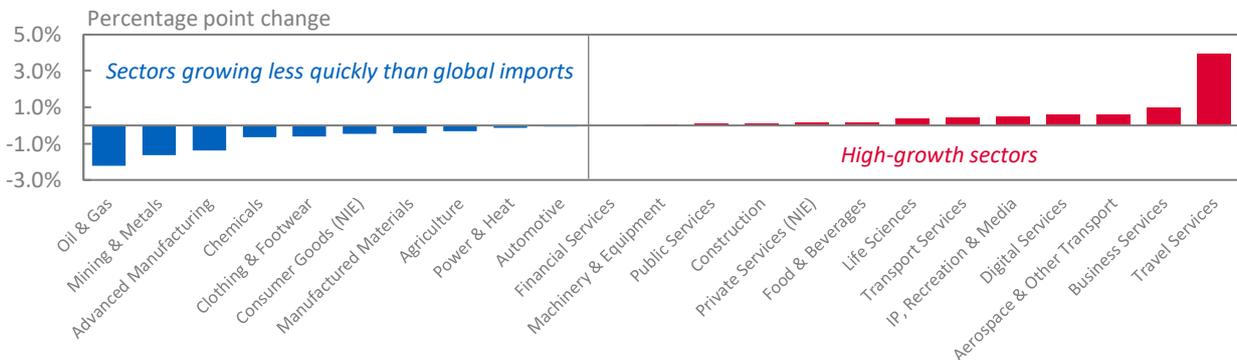
**Chart 31:** Global imports by sector, 2021-2035



Sources: IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations  
 Notes: Data are for nominal imports (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE = 'Not Included Elsewhere'.

*The sectoral mix of global imports will shift gradually towards services over the coming years*

**Chart 32:** Change in sectoral shares of global imports, 2021-2035



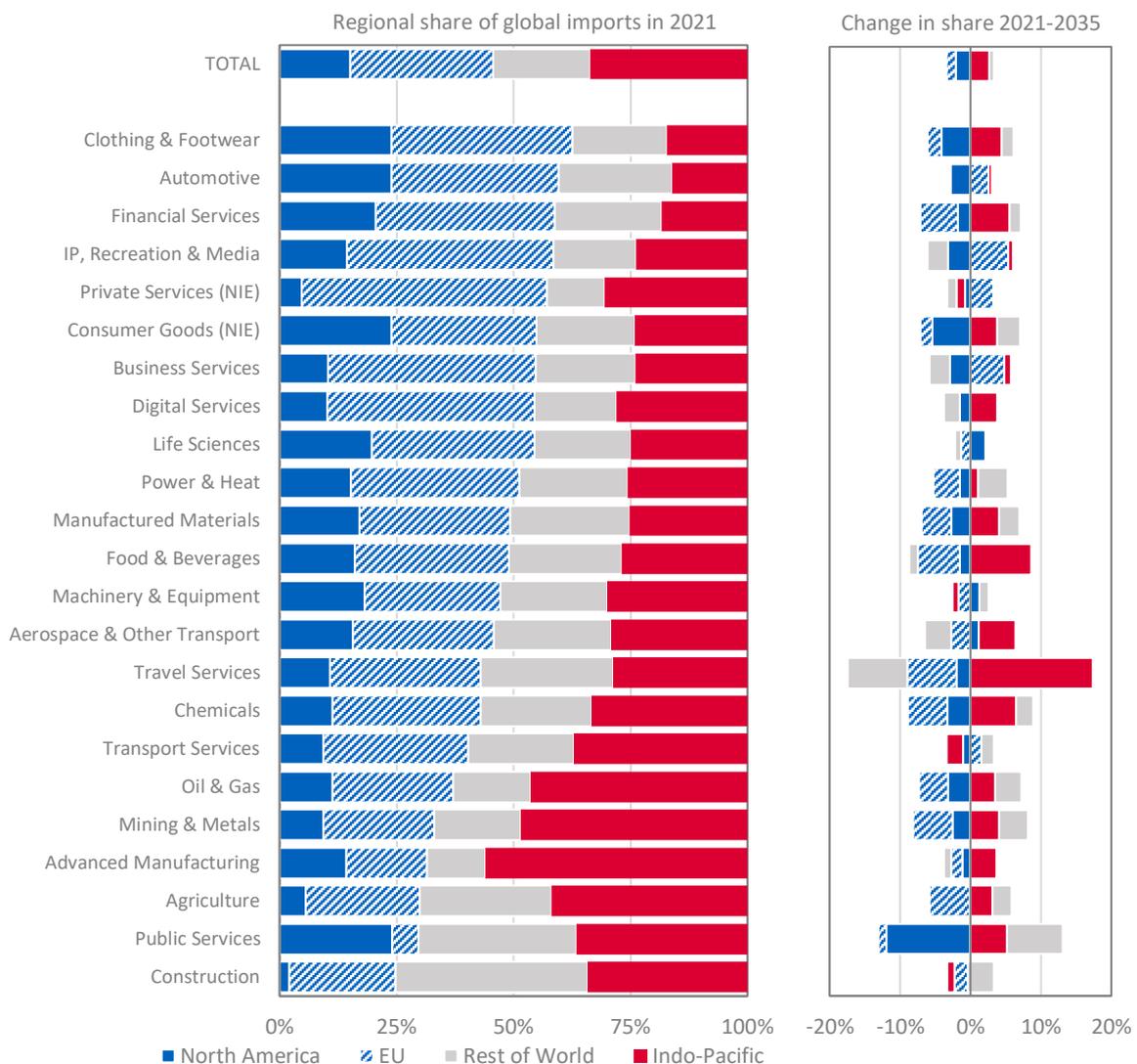
Sources: IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations  
 Notes: Data show the change in each sector's share of global imports (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE = 'Not Included Elsewhere'. Note that the change in travel services is inflated as it captures the recovery from the effects of pandemic-related lockdowns on travel services in 2020-22 – relative to 2019, the rise is 0.4pp.

## The US and EU's share of most import sectors is expected to decline out to 2035

- Different regions account for markedly different shares of global imports – due to variations in income, factor endowments, comparative advantage, and positions in global value chains (left panel, Chart 33).** While the EU and North America tend to import a higher share of the world's finished goods and services, emerging markets tend to import more industrial inputs, reflecting their role as global manufacturing hubs.
- The US and EU's share of most import sectors is expected to decline out to 2035 as the growing purchasing power of Asia's middle class accounts for a rising share of global import demand (right panel, Chart 33).** This change is particularly marked in the food, travel and digital services sectors where larger and increasingly wealthy populations in the Indo-Pacific are expected to consume more discretionary goods and services.

*The Indo-Pacific's share of global imports is expected to rise in most sectors over the coming decade*

**Chart 33:** Sectoral shares of global imports by region in 2021 and expected change by 2035



Sources: IMF World Economic Outlook October 2022, UNCTAD, Oxford Economics and DBT calculations

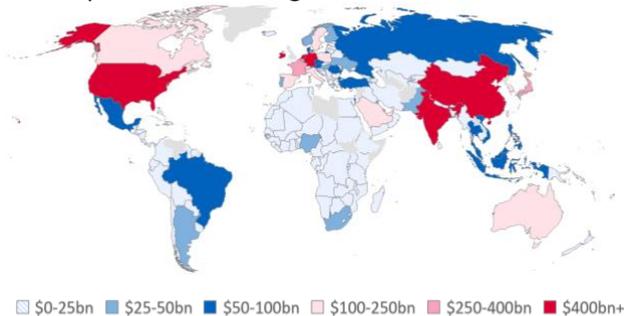
Notes: Data are for nominal imports (inclusive of inflation and converted using time-varying exchange rates). Sectors are defined in Section 4. NIE = 'Not Included Elsewhere'. The Indo-Pacific region is defined as three DBT HM Trade Commissioner regions: South Asia, Asia Pacific and China & Hong Kong. 'Rest of world' includes the UK, non-EU Europe, Eastern Europe & central Asia, Latin America, Middle East and Africa.

# The UK is specialised in service sectors and high-tech goods sectors that are projected to grow quickly out to 2035

- The UK has several sectors of comparative advantage.** The UK is particularly specialised in exporting services (Chart 34). This strength in services is even more marked when trade is measured in value-added terms (see Box B) due to the high services-content of goods exports. This suggests the UK should be well placed to capitalise on the global shift to more service-oriented trade over time.
- Import demand for the UK’s specialist sectors is expected to grow faster than the global average out to 2035.** Though subject to uncertainty, global import demand for UK specialist sectors grows from \$6.1tn (£4.4tn) in 2021 to \$16.1tn (£11.2tn) by 2035. This 165% increase is faster than the doubling in global import demand across all sectors, in part as services’ sectors recover from pandemic lows. Among the UK’s specialist sectors, demand for life sciences (114%), business services (134%), IP, media & recreation (141%), digital services (161%), aerospace (176%), and travel services (449%) expands substantially (Chart 35).
- 78% of the growth in global import demand for the UK’s specialist sectors is expected to come from just 22 countries.** These markets – marked in shades of red on Chart 36 – are concentrated in North America, Europe, and the Asia Pacific as well as China and India.

*Demand growth is expected to be concentrated in large emerging markets and advanced economies*

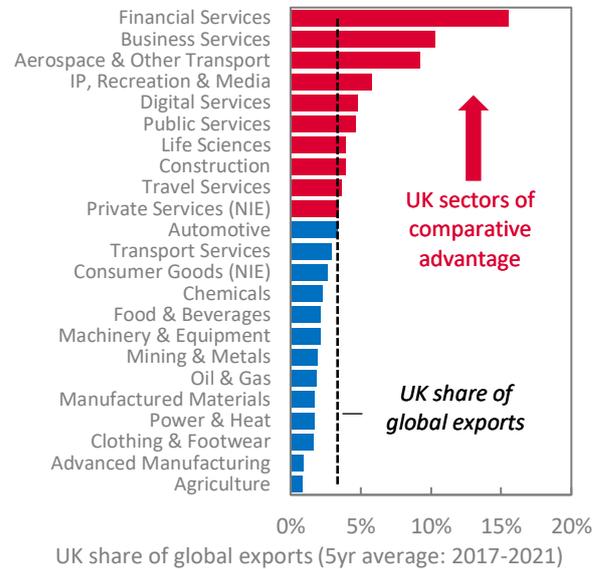
**Chart 36:** Growth in import demand for UK sectors of comparative advantage, 2021-2035



**Sources:** IMF World Economic Outlook October 2022, UNCTAD Statistics, UN World Income Inequality Database and DBT calculations  
**Notes:** Figures show growth in nominal imports (inclusive of inflation and converted using time-varying exchange rates).

*The UK has several sector specialisms*

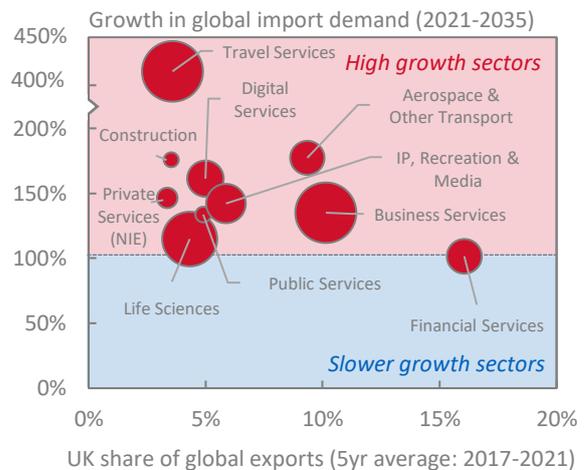
**Chart 34:** UK sectors of comparative advantage



**Sources:** UNCTAD, Office for National Statistics and DBT calculations  
**Notes:** Sectors are defined in Section 4. NIE = ‘Not Included Elsewhere’. Comparative advantage is calculated by comparing the UK’s share of global exports for a sector with its total share of global exports. Sectors in which the UK’s share of global exports exceeds 3.3% (UK export share in 2017-21) are sectors of revealed comparative advantage (RCA). That rearranges the typical equation for RCA, where a sector is of RCA if that sector’s share in a country’s exports exceeds its share in global exports.

*Global import demand for UK specialist sectors is expected to grow relatively quickly*

**Chart 35:** Global import demand growth for UK sectors of comparative advantage

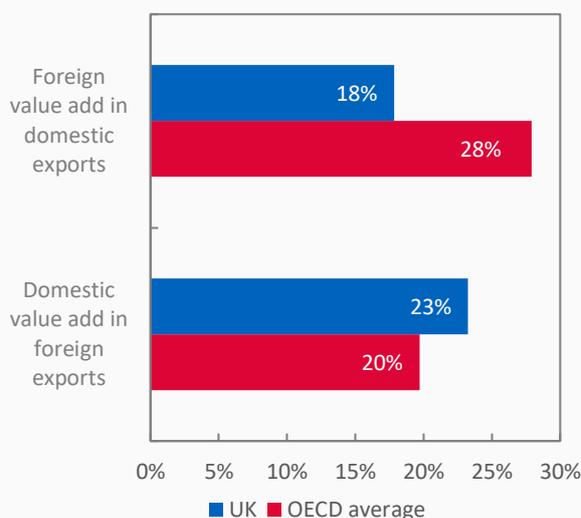


**Sources:** IMF World Economic Outlook October 2022, Oxford Economics, UNCTAD Statistics and DBT calculations  
**Notes:** Data are for nominal imports (inclusive of inflation and converted using time-varying exchange rates). Bubbles indicate 2021 sector size.

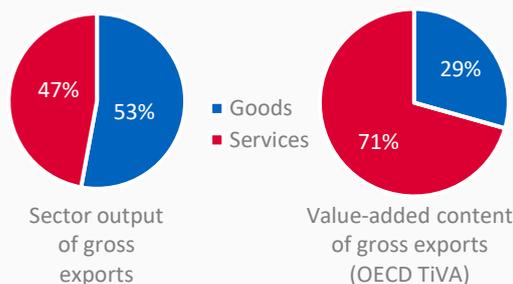
## Box B: How UK trade differs when measured on a value-added basis

- Conventional measures of UK exports are affected by the UK's participation in Global Value Chains (GVCs).** This reflects the UK's role both as a user of foreign inputs (backward linkages in GVCs) and a supplier of inputs to foreign businesses (forward linkages).
- Relative to most countries, the UK's use of foreign inputs in its own exports is low.** In 2018 only 18% of the value of the UK's gross exports was from foreign inputs (Chart B1), below the OECD average (28%). The UK's relatively low backward linkages to GVCs partly reflects its specialisation in services exports which tend to have lower import content relative to manufacturing exports.
- By contrast, the role of UK inputs in foreign exports via GVCs is relatively high.** In 2018, 23% of UK gross exports were used as inputs in overseas production to make exported goods and services (Chart B1), above the OECD average (20%). UK service sectors – such as business and financial services firms – are the main suppliers of UK inputs to foreign exports in value terms.
- The importance of service sectors to the UK's export performance is amplified in value-added terms.** In 2018, service sectors accounted for over two thirds of the value-added content of UK gross exports, compared with less than half the value of gross exports when measured using conventional statistics (Chart B2). This is partly due to the high level of UK services content embodied in the UK's goods exports. For example, a third of the value added of UK manufacturing exports is from embodied services content, the majority of which is supplied domestically by UK service sector firms (Chart B3). Regional shares also change on a value-added basis, with the share of US and China in UK exports a little higher, at the expense of the EU.
- For more information on the structure of UK trade on a value added basis, see recent [Research on Trade in Value Added](#).**

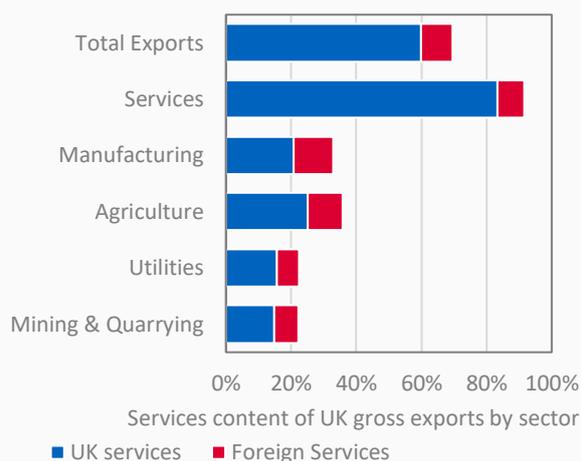
**Chart B1:** The UK's forward and backward linkages in global value chains as a share of gross UK exports



**Chart B2:** Role of goods and services in UK exports



**Chart B3:** Services content of UK exports by sector



Sources: UNCTAD, OECD Trade in Value Added & DBT calculations.

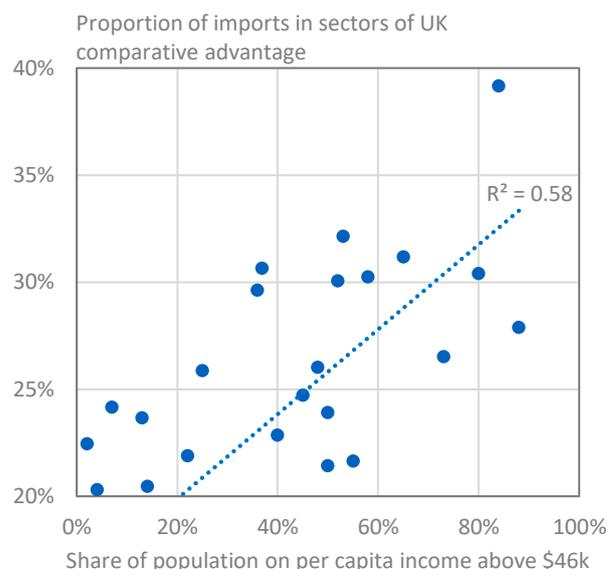
Notes: All data in charts B1-B3 refer to 2018. In chart B2, the share of services in global exports is higher in the OECD's TiVA dataset than UNCTAD's gross export data for three reasons: 1) the value of embedded services in goods trade is significant; 2) the TiVA dataset only covers 66 of the largest countries in the world, many of which are more service-oriented than the global average; 3) gross exports in the TiVA dataset are valued at basic prices, not producer prices, so domestic distribution margins (inherent in exports at producer prices) are reallocated to exports of services.

# Rising incomes overseas and the growth of the middle class should create further opportunities for UK trade

- UK export opportunities are closely related to the size of populations on ‘very high’ incomes in other countries.** Since the UK’s population is already classified as ‘very high’ income (per capita income above US\$46,381 on average), UK businesses tend to be more specialised at producing goods and services that are tailored to other high-income markets. The more people earning over US\$46,381 in a country, the higher the share of imports for the UK’s sectors of comparative advantage tends to be (Chart 37).
- The world’s growing middle class should create new opportunities for UK businesses.** Notwithstanding considerable uncertainty, the number of people with per capita income above US\$46,381 (in 2021 prices) is projected to expand by around 300 million between 2021 and 2035 and by a further 400 million by 2050. Most of the increase over the next decade is expected to come from the four regions that dominate global trade – China, Europe, North America, and the Asia Pacific (Chart 38). However, by 2050, rising prosperity in other regions – particularly in South Asia (driven by growth in India) – should create an additional centre of demand for high-value consumer goods and services.

*Richer populations tend to buy relatively more goods and services that the UK specialises in exporting*

**Chart 37:** Correlation between very high-income populations and UK sectors of specialism

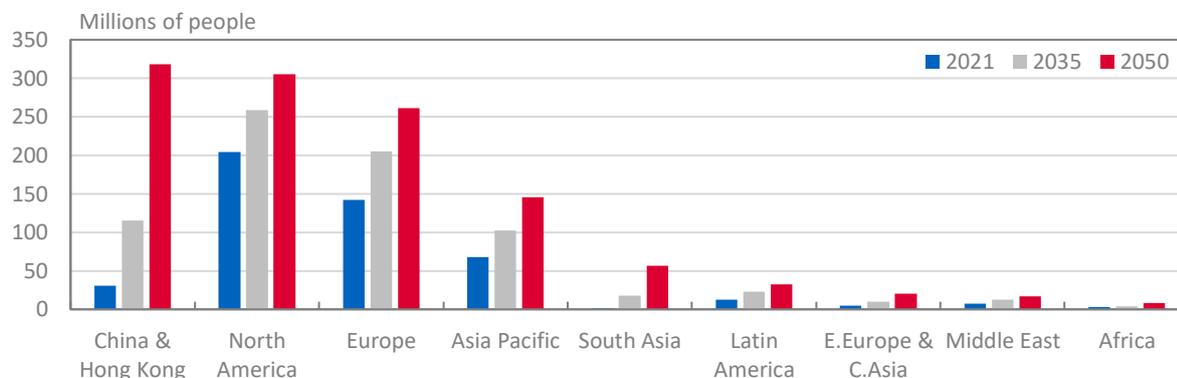


**Sources:** IMF World Economic Outlook October 2022, UNCTAD Statistics, UN World Income Inequality Database and DBT calculations

**Notes:** Figures show correlation between the share of imports in the UK’s sectors comparative advantage and the share of the population earning over US\$46k in 2021 in OECD member countries (excluding trading hubs). The R-squared value shows the proportion of the variation in imports (y-axis) that can be explained by differences in very high-income populations (x-axis).

*The number of people on very high incomes – earning above \$46k (in 2021 prices) - is expected to grow in the coming decades, creating new opportunities for UK exporters*

**Chart 38:** Regional populations on ‘very high incomes’



**Sources:** IMF World Economic Outlook October 2022, UN World Population Prospects (2022), UN World Income Inequality Database, World Bank World Development Indicators and DBT calculations

**Notes:** Figures are calculated by applying current income distributions within each country to projections for nominal GDP per capita (inclusive of inflation and converted using time-varying exchange rates) and population. ‘Very high’ income is defined as having a per capita income greater than US\$46k in 2021 prices – broadly in line with UK per capita income.

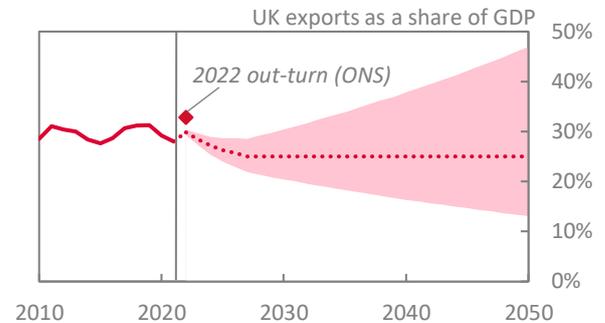
# The UK should remain one of the world's largest trading nations despite rapid growth elsewhere

- UK projections are conditioned on the Office for Budget Responsibility's (OBR) forecast.** The OBR produce UK export projections out to 2027, which suggest that UK exports in 2027 will be 4% higher in real terms than in 2021. The OBR does not publish export projections beyond 2027. To create a neutral UK export path that avoids judgement about the efficacy of UK policy, the *Outlook* assumes exports grow with the OBR's long-term GDP forecast. That means the UK's export-to-GDP ratio remains flat at around 25% from 2027 onwards (Panel A, Chart 39). These projections imply that UK nominal exports could reach £1tn by the mid-2030s (Panel B, Chart 39).
- There is much uncertainty around the UK's export prospects.** The latest ONS data have been revised up since the OBR produced their forecast – UK exports are now estimated to be £813bn in 2022, compared with £739bn expected by the OBR – suggesting a higher starting point. Another uncertainty is the impact of UK policy – these projections assume the status quo persists, but UK trade policy and DBT's trade promotion activity could unlock faster growth. For example, DBT's Export Strategy is designed to raise the pace of UK export growth so that the £1 trillion crossover point occurs by 2030. Such an outcome could be achieved if exports were to grow at around 2.6% per year from the higher ONS starting point (compared with 3.9% during 2012-19). Business behaviour is also uncertain – if UK firms can capitalise on trends in income growth overseas and the shift in global import demand towards UK sectors of strength, UK exports could be higher. Equally, exports could be lower if global trading conditions weaken, for example, due to geopolitical tension.
- The UK's share of global exports is expected gradually decline from 3.1% in 2021 to 2.5% by 2050 (Panel C, Chart 39)** as emerging markets expand their share. The UK's export share in 2050 is expected to be broadly in line with its weight in world GDP (2.7%). Moreover, the UK is expected to remain one of the world's top 10 traders out to 2050.

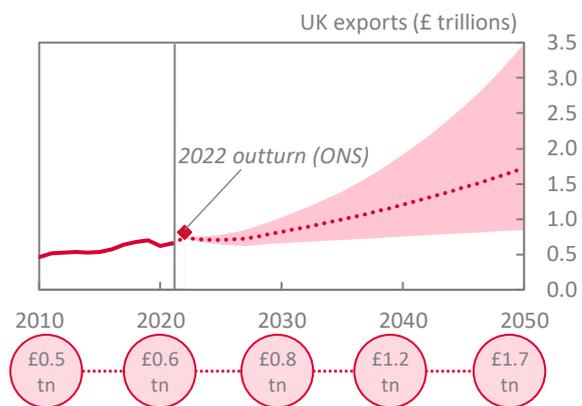
*The outlook for UK exports is uncertain*

Chart 39: UK export projections

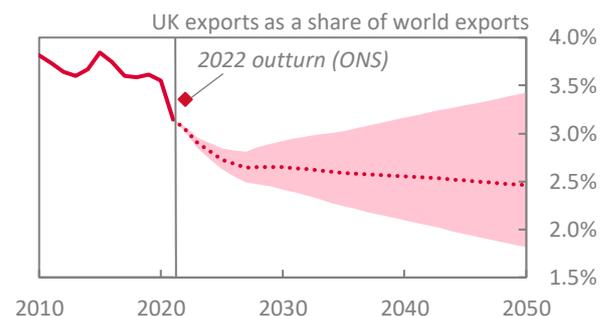
A) UK export-to-GDP ratio



B) UK nominal exports (in British pounds)



C) UK share of global exports



Sources: IMF World Economic Outlook October 2022, Office for Budget Responsibility Economic and Fiscal Outlook November 2022 and Long-Term Economic Determinants, UNCTAD and DBT calculations

Notes: Data to 2027 refer to nominal exports (and GDP) from the Office for Budget Responsibility's forecasts. Diamonds indicate the latest ONS datapoint for 2022 which is not captured in the OBR's November forecast. From 2028, UK nominal exports are assumed to grow in line with nominal GDP. The UK's share of global exports is calculated by converting the OBR's export forecast into dollars using the IMF's dollar-pound exchange rate projection out to 2027 and then assuming the exchange rate evolves in line with the methodology outlined in Section 4. US\$/£ exchange rate is 0.73 in 2021, and 0.70 in 2035 and 0.70 in 2050. The uncertainty bands are DBT calculations and represent one standard deviation around the projections based on 2010-2019 outturns.



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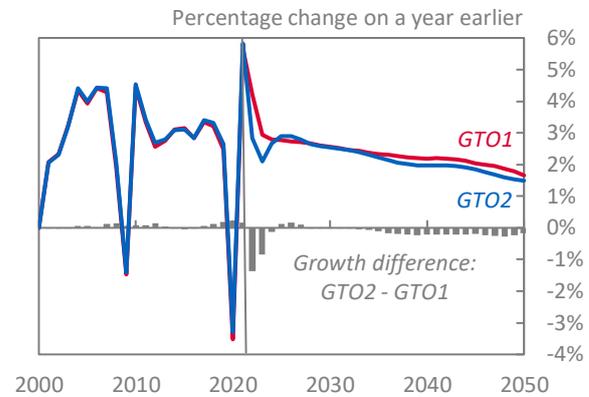
## Changes to the Outlook

# The global economic outlook has deteriorated

- Global GDP growth is expected to be weaker over the coming decades than projected 18 months ago in the first edition of the Global Trade Outlook (GTO1).** From 2021 to 2050, GDP growth is expected to average 2.3% vs 2.5% in GTO1 (Chart 40).
- Part of this downward revision reflects a weaker short-term outlook, caused by surging global inflation.** In 2022, global inflation rose to around 8% - its highest level this century and more than 5pp higher than predicted in GTO1 (Chart 41).
- Inflation has risen due to two factors: 1) ongoing supply chain disruptions from Covid-19; and 2) higher commodity prices caused by the war in Ukraine.** Rising prices have squeezed household incomes and forced central banks to tighten monetary policy, both of which are slowing global demand. By 2025, the level of global GDP is expected to be around 2% lower in real terms than in GTO1, while the global price level is expected to be 10% higher.
- Global growth is also expected to remain weaker in the long-term due to revisions in China and Russia.** By 2050, the level of global GDP is expected to be 5% lower in real terms than GTO1 (Chart 42). China accounts for the bulk of this downgrade, due to its worsening demographic prospects. New Chinese census data has prompted the UN to revise its estimate of China's population significantly. Previously, China's population was expected to peak at 1.46 billion in 2030 and then fall back to 1.4 billion by 2050. Now, China's population is thought to have already peaked at 1.43 billion in 2022 and is expected to fall to 1.31 billion by 2050 – 90 million lower than previously thought. Fewer workers and a higher ratio of dependents to workers are expected to weigh on China's growth in the long-term. Russia's economic prospects have also been marked down significantly following the war in Ukraine as its economic links with many countries have been cut by sanctions. By 2050, Russia's economy is expected to be a third smaller in real terms than in GTO1.

*Global GDP growth has been marked down...*

**Chart 40: Global GDP growth in real terms**

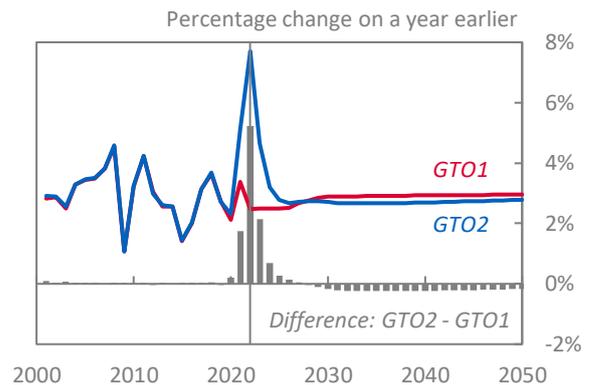


Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

Notes: Data refer to GDP growth in real terms (expressed in constant 2021 prices and exchange rates) for the world economy.

*...as inflation has surged and as...*

**Chart 41: Global inflation**

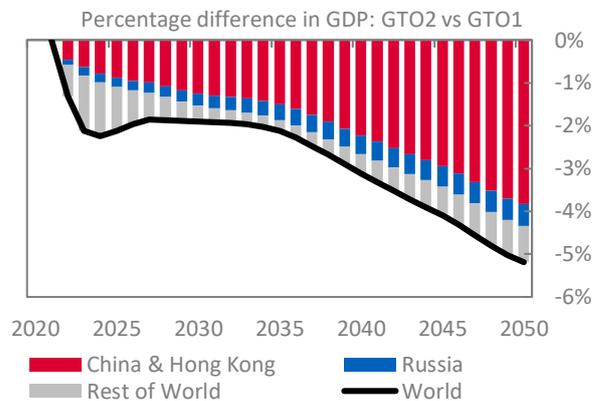


Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

Notes: Global inflation is measured based on changes in the GDP deflator for 182 countries, weighted together based on nominal GDP weights in US\$ converted at time varying exchange rates.

*...growth prospects in China and Russia have fallen*

**Chart 42: Contributions to changes in real GDP**



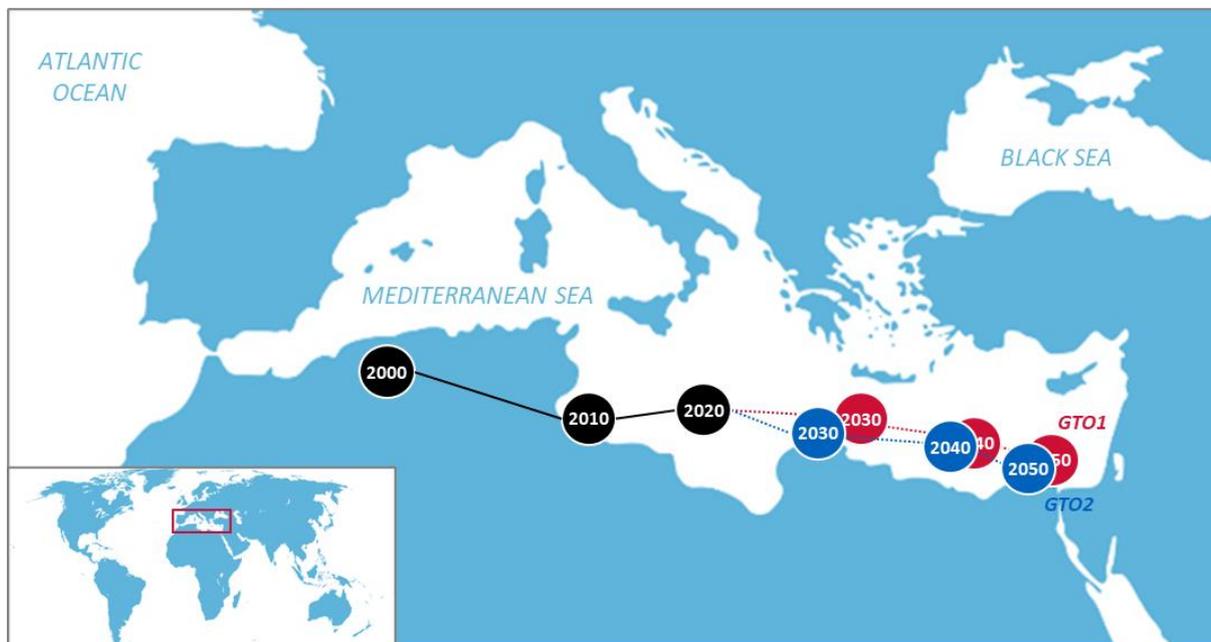
Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

Notes: Data show news in the level of global GDP between GTO2 and GTO1 based on 2021 prices and 2021 market exchange rates.

# Weaker growth in China will slow the eastward shift in the world's economic centre of gravity

The world's economic centre of gravity is still projected to shift east, but at a slightly slower rate

**Chart 43:** Global economic centre of gravity – current outlook vs GTO1



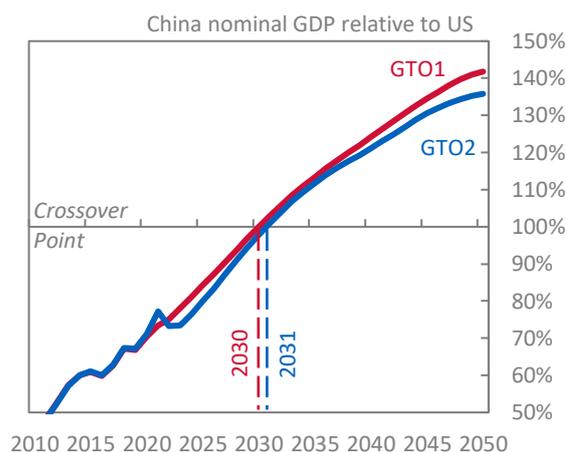
Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

Notes: The global economic centre of gravity has been calculated by taking the geographic coordinates (latitude and longitude) of 182 countries and weighting them by nominal GDP figures expressed at market exchange rates for each year shown above.

- **Rapid growth in the Indo-Pacific is expected to pull the world's economic centre of gravity east, but to a slightly lesser extent than in GTO1 (Chart 43).** The Indo-Pacific is now projected to account for 54% of global growth from 2021 to 2050 (vs 56% in GTO1).
- **A weaker outlook for China is responsible for this slower shift.** China is now projected to account for 29% of global growth from 2021 to 2050 (vs 32% in GTO1).
- **This will delay the point at which China overtakes the US to become the world's largest economy.** There is much uncertainty over when this will occur, but the updated projections now suggest a crossover in 2031 rather than 2030 (Chart 44). In addition, weaker Chinese growth in the longer-term means that the gap between the two economies is expected to stabilise rather than continue widening. By 2050, China is projected to be around a third bigger than the US – the mirror image of their relative positions in 2022.

China is still projected to overtake the US but slightly later than previously thought

**Chart 44:** China's GDP relative to US GDP



Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

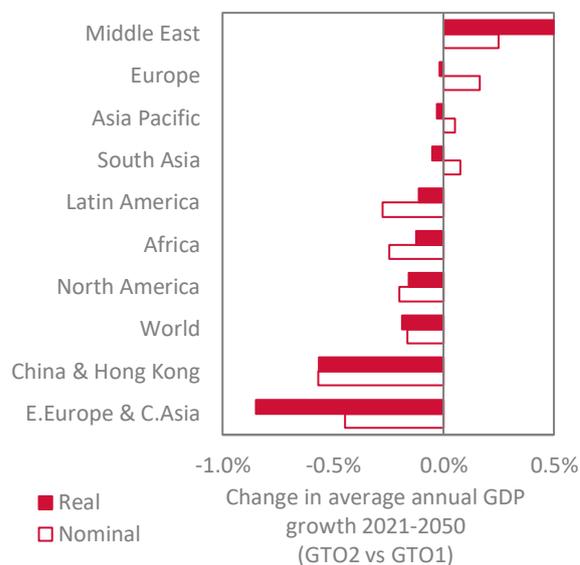
Notes: Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates). 100% on the chart means that China's economy is equal in size to the United States.

# The war in Ukraine will have a disparate impact on regional growth prospects

- **The war in Ukraine, together with longer-term revisions to population growth and idiosyncratic short-term shocks, have had a varied impact on regional growth prospects.**
- **The Middle East is the only region projected to experience higher growth than in GTO1.** Growth has been revised up in the short-term as higher oil and gas prices – caused by the war in Ukraine – are expected to boost the region’s export revenues. In addition, faster growth in the region’s working age population (which the UN has revised up to 448 million in 2050 from 426 million) is expected to boost long-term growth. Between 2021 and 2050 real GDP growth in the Middle East is now projected to be 0.5pp higher per year than in GTO1 (Chart 45).
- **Growth prospects in Europe, Asia Pacific and South Asia are little changed.** All three regions contain major commodity importers that suffer a short-term hit to growth and a spike in inflation from the war-induced surge in commodity prices. But beyond the mid-2020s, growth prospects are largely unaffected, which translates to a slight rise in each region’s share of global GDP given weaker prospects elsewhere (Chart 46).
- **Growth in the Americas and Africa is slightly lower, partly due to slower population growth.** In addition, growth in Africa is expected to be lower in the short-term due to an uptick in geopolitical instability – linked to conflict (e.g. in Ethiopia) and rising poverty from the war-induced surge in food prices.
- **Growth in China is significantly lower due to its shrinking population.** In addition, growth in the short-term is expected to be held back by the downturn in China’s housing market.
- **Growth in Eastern Europe & Central Asia has been marked down significantly due to the war in Ukraine.** This downward revision reflects the projected long-term isolation of Russia’s economy from the West, which spills over to growth in the wider region.

*Higher growth in the Middle East contrasts with weaker growth elsewhere*

**Chart 45:** Revisions in regional GDP growth

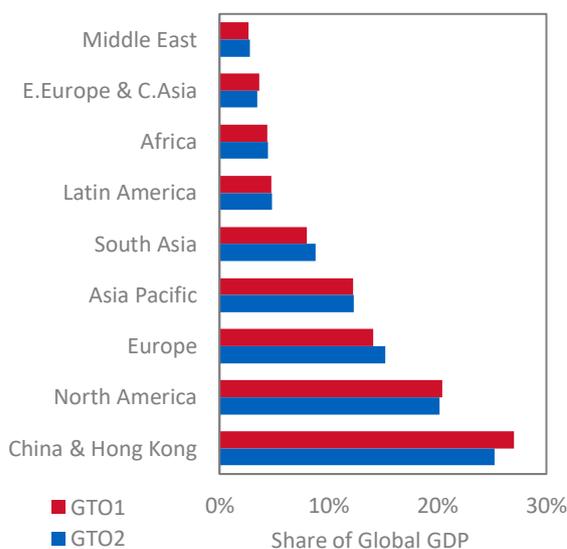


Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

Notes: Real GDP data are based on 2021 prices converted into common currency using 2021 market exchange rates. Nominal GDP data are based on time-varying prices and market exchange rates.

*By 2050, these changes lead to a small rebalancing in economic power away from China and Russia to the rest of Asia, Europe and the Middle East*

**Chart 46:** Revisions in regional shares of global GDP in 2050



Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations

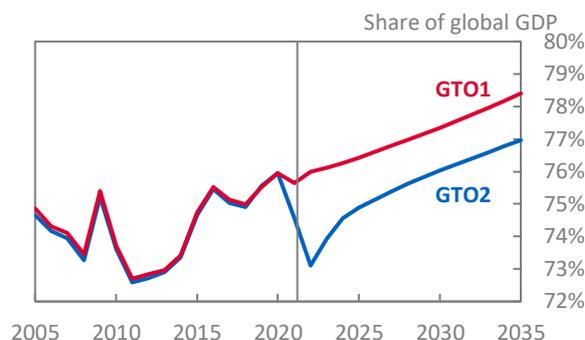
Notes: Each region’s GDP is shown relative to global GDP measured in US dollars in 2050 accounting for price and exchange rate moves.

# Spiking commodity prices have made the global economy more goods-intensive in the short term

- The war in Ukraine has prompted a shift in the structure of the global economy and interrupted the decades-long rise in services as a share of global GDP.** Services accounted for 76% of GDP in 2019 but are estimated to have fallen to 73% in 2022 (Chart 47).
- The war has caused the price of commodity-intensive goods to surge, increasing their share of global GDP.** The IMF's global commodity price index (which covers a range of energy, food and industrial metal commodities) was 75% higher in 2022 than predicted at the time of GTO1. Higher prices will dampen demand for commodity-intensive goods somewhat (e.g. Europe has already cut its consumption of natural gas significantly), but there are limits to how far demand for food and energy can be squeezed. As a result, commodity-intensive goods sectors are expected to see their share of global GDP rise by almost 3pp in 2022 before gradually falling back as prices ease (blue bars, Chart 48). Other goods sectors are also projected to account for a slightly higher share of global GDP in the medium-term (white bars, Chart 48). This partly reflects higher demand for renewable energy technologies and their supply chain inputs (e.g. metals) which have been boosted by high fossil fuel prices and green investment incentives in the US and EU.
- The service sector is expected to return to its rising share of global GDP from 2023.** The long-term 'servicification' of the global economy is expected to re-emerge as a structural trend, albeit at a lower level than before. By 2035, services are expected to regain their pre-pandemic peak and account for 77% of global GDP. In the interim, weaker demand for services is expected to fall mainly on public services – due to fiscal consolidations – as well as on domestically-focused service sectors that feel the brunt of the economic downturn in the short-term (e.g. the real estate sector) (Chart 49).

The industrial structure of global GDP is expected to be less services-intensive in the short-term...

Chart 47: Service sector share of global GDP

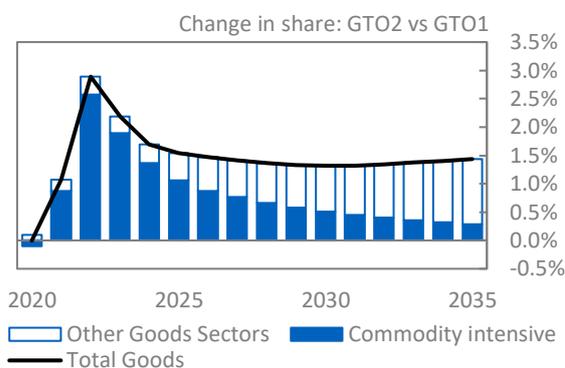


Sources: IMF WEO Apr 21 & Oct 22, Oxford Economics and DBT calculations

Notes: Data show the ratio of services output to global GDP in nominal terms (inclusive of inflation and converted using time-varying exchange rates).

...as a result of surging commodity prices and...

Chart 48: Change in goods share of global GDP

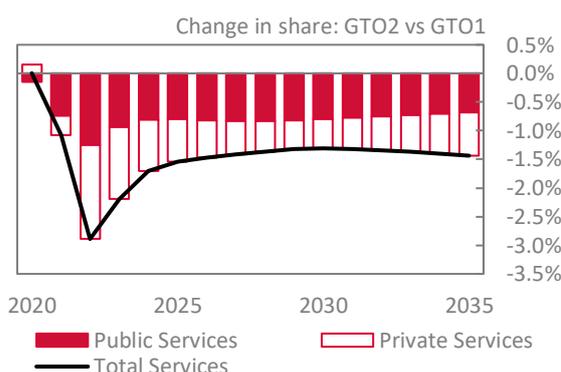


Sources: IMF WEO Apr 21 & Oct 22, Oxford Economics and DBT calculations. Sectors are defined in Section 4.

Notes: 'Commodity-intensive' sectors include: Oil & Gas; Agriculture; Food & Beverages; Metals & Mining. See Section 4 for definitions.

... fiscal contractions that squeeze public services

Chart 49: Change in services share of global GDP



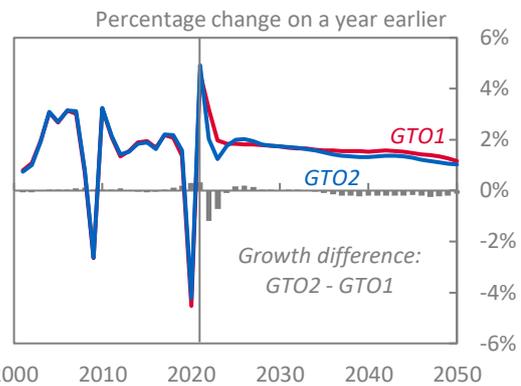
Sources: IMF WEO Apr 21 & Oct 22, Oxford Economics and DBT calculations. See Section 4 for definitions.

# The global middle class is projected to expand as expected but average incomes are lower

- Weaker global growth prospects will stymie growth in average living standards.** In real terms, global GDP per capita is projected to grow by 1.6% on average per year between 2021 and 2050, down from 1.8% in GTO1 (Chart 50). By 2050, this difference means that average per capita incomes will be 5% lower than in GTO1 – equivalent to every global citizen being \$900 worse off than previously thought (in 2021 prices).
- The size of the global middle class remains similar, but that cohort is expected to be poorer on average than in GTO1.** There will be 170 million fewer individuals on ‘very high’ incomes (\$46k, equivalent to UK average income in 2021 prices), shading down demand for high-value trade over the long term. Similarly, despite around 90 countries classified as high income by 2050, average incomes across those countries will be around \$1,100 less in real terms and fewer projected to be as wealthy as the UK today than previously expected (36 vs 38).
- Weaker real income growth slows the increase in ‘very high’ income consumers beyond more established markets in North America and Europe.** The latter account for almost half of ‘very high’ income consumers in 2050, compared to 43% in GTO1 – largely reflecting downward revisions to income projections in China (Chart 52).

By 2050, average per capita incomes are projected to be around \$900 lower than expected...

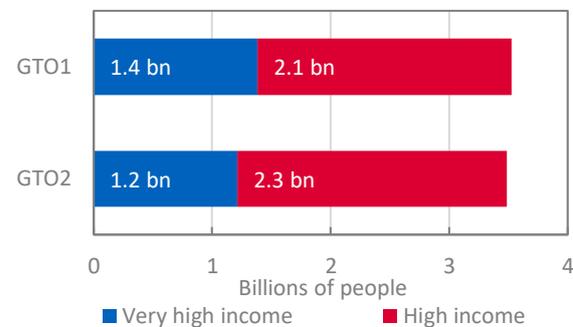
**Chart 50:** Global GDP per capita growth in real terms



Sources: IMF WEO Apr 21 & Oct 22 and DBT calculations  
 Notes: Data show news in the growth of global GDP per capita between GTO2 and GTO1 based on 2021 prices and 2021 market exchange rates.

...with fewer consumers on ‘very high’ incomes

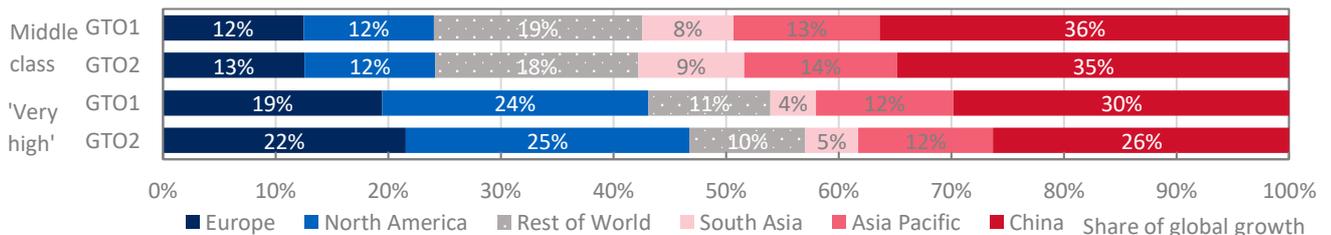
**Chart 51:** Global middle class by income threshold



Sources and notes: See Chart 52

The share of individuals on ‘very high’ incomes – earning above \$46k (in 2021 prices) – will be more concentrated in Europe and North America than previously expected

**Chart 52:** Regional share of middle class and ‘very high’ income consumer market



Sources: IMF World Economic Outlook April 2021 & October 2022, UN World Population Prospects (2019, 2022), UN World Income Inequality Database, World Bank World Development Indicators and DBT calculations.

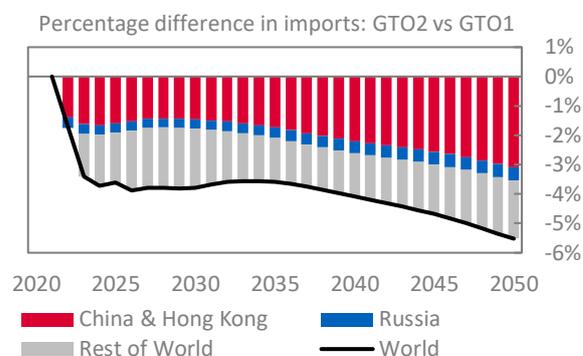
Notes: Figures are calculated as described in Chart 17. Income thresholds for GTO1 and GTO2 are extrapolated forward from the World Bank’s income thresholds in 2019 and 2021 respectively. Middle class populations are defined as people within each country earning above the World Bank’s ‘high income’ threshold, while ‘Very high’ income populations are a subset of that group earning above \$46,381 per year in 2021 prices.

# Near term disruption and long-term revisions dim the prospects for global trade

- As with global GDP, global trade is expected to grow less quickly over the coming decades than previously thought. From 2021 to 2050, global real import growth is expected to average 2.7% per year (vs 2.9% in GTO1). The pattern of revisions to global trade largely mimics those for GDP, with downgrades to China and Russia accounting for most of the news (Chart 53).
- Ongoing supply disruptions from COVID19 and higher commodity prices from the war in Ukraine have raised the price of traded goods and services in the short-term. Global import price inflation is now expected to average 5.7% per year between 2020 and 2025 (vs 2% in GTO1).
- Global import prices are projected to rise at around double the rate of prices in the wider economy due to the greater role of commodities in trade. By 2025, import prices are expected to be around 20% higher than in GTO1, against 10% higher for prices in the wider economy (Chart 54). This partly reflects the fact that commodity-intensive goods sectors (like Oil & Gas, Metals & Mining, Agriculture) account for a fifth of global trade vs a tenth of global GDP (in 2019). As such, commodity price spikes have an outsized impact on trade prices. Transport costs also typically account for a higher share of internationally traded goods prices than locally produced products (given transport distances involved), so rising oil prices further increase the relative price of imports.
- Shifts in relative prices mean the global economy will become more trade intensive in the short-term. In the decade prior to the pandemic, imports were falling as a share of GDP (Chart 55). But the recent surge in import price inflation is likely to reverse this trend and see global import intensity rise to 30% in 2022 – its highest level since the Global Financial Crisis in 2008. This near-term spike is projected to gradually unwind as commodity prices fall and import prices re-align with prices in the wider economy.

Global trade prospects have fallen with GDP...

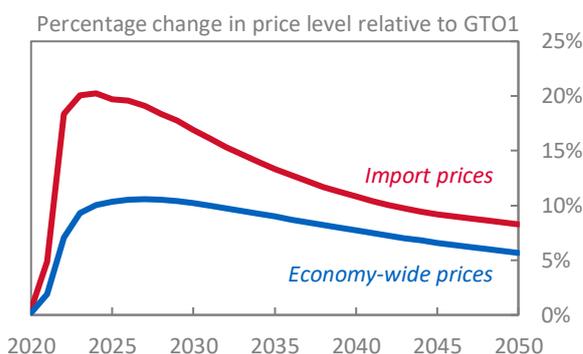
Chart 53: Contributions to changes in real imports



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Data show changes in the level of global GDP between GTO2 and GTO1 based on 2021 prices and 2021 market exchange rates.

...but the price of traded goods and services has risen even faster than economy-wide inflation...

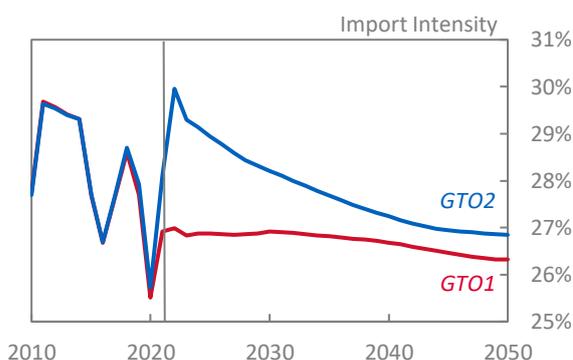
Chart 54: Price level revisions relative to GTO1



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Data refer to changes in the global import price deflator and GDP deflator relative to GTO1. Global deflators for imports and GDP are calculated by weighting together individual country deflators using time-varying weights for nominal GDP.

...resulting in a higher level of trade intensity

Chart 55: Global import intensity



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Calculated as nominal imports divided by nominal GDP.

# The regional pattern of import demand is projected to edge toward India, the Middle East and Asia Pacific

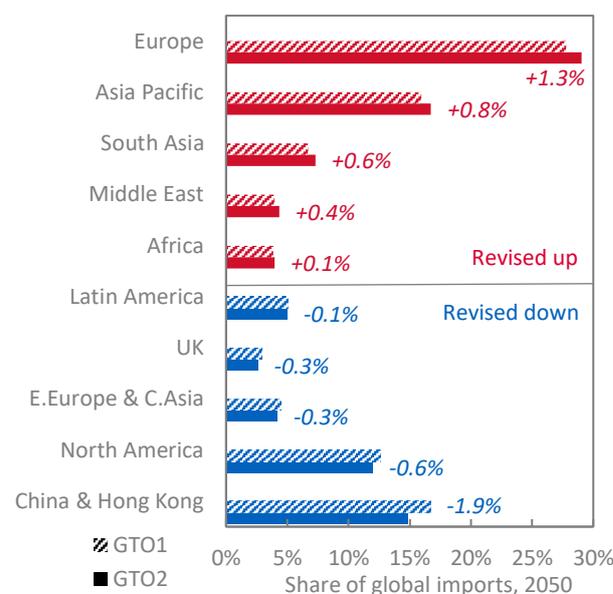
- Changes to the *Outlook* imply only a small shift in the regional pattern of trade – with a modest tilt away from China, Russia and the US toward India, the Middle East and the trade hubs of Europe and Asia Pacific.

China’s shrinking population means its associated HMTC region is now projected to account for 15% of global import demand in 2050 compared with 17% in GTO1. Russia’s economic isolation from many advanced economies is expected to reduce the size of the import market in Eastern Europe & Central Asia, though this effect is offset somewhat by increased trade between Russia and other states. The US also sees a modest downgrade to its 2050 share of global imports (from 10.5% in GTO1 to 9.9%) owing to its slightly lower demographic profile. By contrast, import demand in India, the Middle East, Asia Pacific and Europe is expected to remain robust and each region’s share of global imports is expected to rise slightly as a result (Chart 56).

- The relative improvement in import prospects in India, the Middle East and Asia Pacific increase the potential benefits of agreeing trade agreements with countries in those regions. The UK is currently targeting free trade agreements with a number of countries and trading blocs, including: India, the Comprehensive and Progressive Agreement for Trans Pacific Partnership (CPTPP) and the Gulf Cooperation Council (GCC). In 2021, these three markets accounted for 19.8% of global import demand, but that figure is now expected to rise to 23.3% by 2050, up from 21.8% in GTO1 (Chart 57). In nominal US dollar terms – i.e. taking account of expected changes in prices and exchange rates - that equates to a combined market size of \$23 trillion by 2050, \$1 trillion more than in GTO1.

*Slightly worse trade prospects for China, Russia and the US imply a relative improvement in prospects elsewhere...*

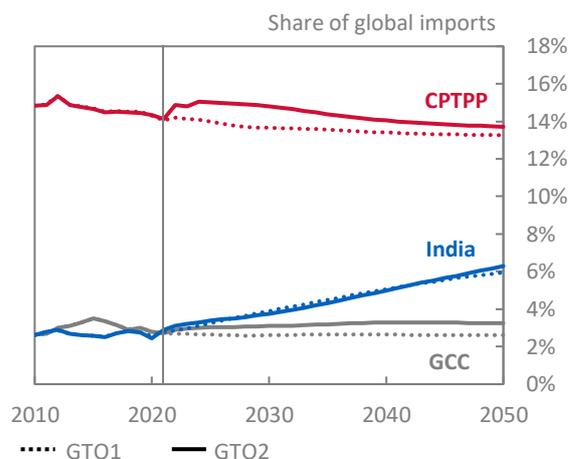
**Chart 56:** Regional shares of global imports, 2050



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Data show each region’s share of global imports in 2050 measured in nominal US dollars (i.e. including changes in prices and market exchange rates). Figures in italics indicate change between GTO1 and GTO2 (with negative figures showing downward revisions)

*...including in some of the UK’s target markets for future free trade agreements*

**Chart 57:** Share of global imports for key markets



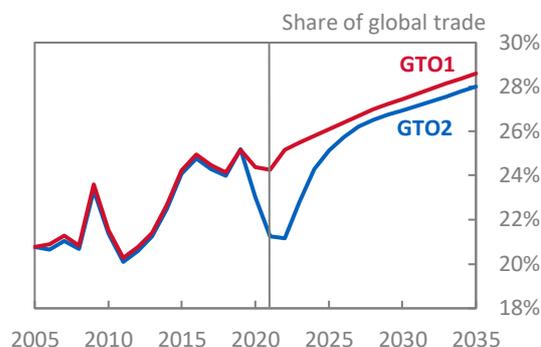
Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Data show each market’s share of global imports in 2050 measured in nominal US dollars (i.e. including changes in prices and market exchange rates). Intra-regional trade is included in global trade totals. CPTPP = Comprehensive & Progressive Agreement for Trans-Pacific Partnership, GCC = Gulf Cooperation Council

# Higher commodity prices and a weak travel sector have temporarily shifted the mix of trade

- As with global GDP, the industrial structure of global trade is projected to become less service-intensive in the short-term. Prior to the pandemic, services had been growing steadily as a share of global trade, but are now expected to fall sharply in the short-term from 25% of trade in 2019 to 21% in 2022 (Chart 58).
- Spiking commodity prices – linked to the war in Ukraine – are responsible for this short-term shift.** Higher prices have raised the value of commodity-intensive goods and squeezed discretionary spending on other sectors. In the short-term, commodity-intensive goods are expected to see their share of global trade rise from 21% in 2019 to 27% in 2022 – their highest share since the Global Financial Crisis and significantly higher than in GTO1 (Chart 59). By 2035 this temporary shift is expected to unwind due to a combination of: falling commodity prices; declining demand for oil and gas as the green transition accelerates; and slightly lower trade intensity of some commodity sectors. The latter effect is small but linked to a rising focus on economic security among some governments, which is incentivising extraction of domestic commodities to reduce reliance on overseas supplies.
- Demand for transport and travel services is projected to remain weak in the short-term due to legacy effects of the pandemic.** The pattern of revisions to global services trade differs from global services output due to the different weights attached to different services sectors. While revisions to global GDP are focused on public services and domestic services like real estate, these are not highly traded and so have little impact on global trade. By contrast, transport and travel services are highly traded and are now projected to take longer to recover from the pandemic than previously thought (Chart 60). Partly this reflects structural changes to the sector, including a reduction in business travel linked to new working patterns and reliance on video calls.

Global trade is projected to become less services-intensive in the short-term...

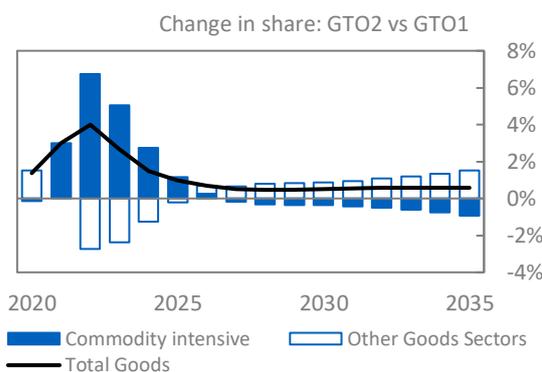
Chart 58: Services as a share of global trade



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: Data show the ratio of services imports to global imports in nominal terms (i.e. including changes in prices and exchange rates).

...due to spiking commodity prices and...

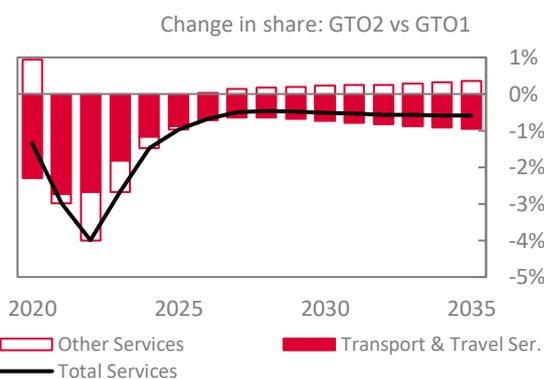
Chart 59: Change in goods share of global trade



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: 'Commodity-intensive' sectors include: Oil & Gas; Agriculture; Food & Beverages; Metals & Mining. See Section 4 for definitions.

... ongoing disruption to travel from Covid-19

Chart 60: Change in services share of global trade



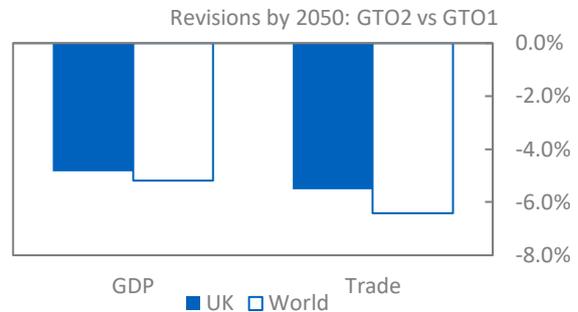
Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations  
 Notes: See Section 4 for definitions.

# Long-term UK prospects shift alongside the global outlook

- Revisions to the UK outlook largely match those to the wider world over the long term.** UK and global GDP and trade are projected to be around 5-6% lower in real terms by 2050 (Chart 61). However, the timing of these revisions differs somewhat. Downgrades to the UK outlook are weighted more to the near-term, in part given greater exposure to higher energy prices caused by the war in Ukraine, compared to the global average. By contrast, downgrades to the global outlook are the product of both near-term revisions linked to the war and a reassessment of long-term growth prospects in major economies – particularly China.
- As a result, the UK is projected to maintain its position as the world’s 6<sup>th</sup> largest economy and top 10 trading nation.** By 2050, the UK’s share of global GDP is projected to fall to 2.7%, as in GTO1, while its share of global trade is projected to fall to 2.5% vs 2.7% in GTO1 (Charts 62 & 63). The downgrade to the UK’s trade prospects reflects the OBR’s assumption that UK trade intensity will fall sharply in the near-term – from 63% of GDP in 2022 to 51% by 2027 (vs 58% in GTO1) – though that is subject to upside risks given data revisions in 2022.
- UK trade prospects are uncertain and will depend heavily on whether the UK can maintain its competitiveness in the fast-growing sectors of the future.** The UK’s industrial mix of exports remain largely unchanged from GTO1. An exception to that is UK’s automotive sector, which has seen its share of global exports fall in recent years and is no longer defined as a sector of comparative advantage, illustrating downside risks to UK trade prospects (Chart 34). But UK sectors of strength remain dominated by service sectors (e.g. financial, business and digital services) as well as high-tech goods (e.g. life sciences and aerospace). Global demand for these sectors is expected to grow rapidly over the next decade, reflecting both long-term trends – as incomes rise and technology facilitates trade – and the recovery from the pandemic, creating upside opportunity for UK exporters.

*UK and global revisions are similar ...*

**Chart 61:** Changes to global and UK GDP and trade by 2050 (in real terms)

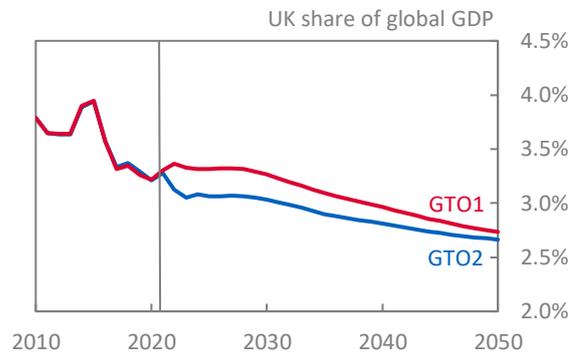


Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations

**Notes:** Data show the difference between the level of GDP (and trade) in 2050 based on growth in the volume of economic activity i.e. holding prices and exchange rates fixed at their 2021 levels. Data from GTO1 have been rebased to match GTO2 figures for 2021, so that all the revisions shown in the chart reflect changes to future growth, not historic data revisions. Trade = exports + imports.

*... resulting in little change to the UK’s economic weight in the world...*

**Chart 62:** UK share of global GDP

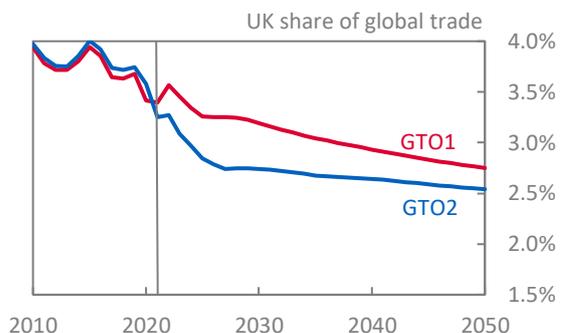


Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations

**Notes:** Data refer to nominal GDP (inclusive of inflation and converted using time-varying exchange rates).

*...nor its significance as a top-10 trading nation*

**Chart 63:** UK share of global trade



Sources: IMF WEO Apr 21 & Oct 22, UNCTAD and DBT calculations

**Notes:** Data refer to the UK’s share of nominal global trade (exports + imports) inclusive of price and exchange rate changes.



**4**

## **Analytical Approach**

# An overview of our analytical approach

- **The *Global Trade Outlook* (GTO) is designed to provide a neutral set of long-term projections to help inform policymakers.** Having a long-term view of the global economy is particularly useful for trade policymakers as trade agreements often take years to negotiate and even longer for their effects to be fully felt.
- **Other external forecasters have produced similar long-term projections in the past, but the main innovations of this report are:**
  - 1) Its near-global coverage – it includes economic projections for 182 countries<sup>4</sup>
  - 2) It includes projections for trade as well as GDP out to 2050
  - 3) It provides sector projections for both GDP and trade out to 2035
  - 4) It is timely and so includes estimates (from the IMF) of the impact of the Covid-19 pandemic and war in Ukraine.
- **The projections in the *Outlook* are underpinned by a wide range of assumptions, methodological choices and historical data.** This section runs through the key elements underpinning the analysis. First, it sets out the conditioning assumptions that have been used to remove politically sensitive judgements from the analysis – this includes matching our near-term projections to the IMF’s forecasts and matching all UK projections to the Office for Budget Responsibilities near-term forecast and long-term projections. Second, it sets out our methodology for projecting long-term GDP and trade, the importance of exchange rates in the calculations, and how other external forecasters compare with the figures in the *Outlook*. Third, it sets out our methodology for mapping those projections onto sector level projections for GDP and trade out to 2035. Finally, it highlights the wide bands of uncertainty around the *Outlook*’s projections and outlines some of the potential risks that could materialise in the decades ahead that could lead to very different outcomes for trade.

## Structure of this section

### Conditioning assumptions

Conditioning on the IMF’s forecast: 2022-2027

Conditioning on the Office for Budget Responsibility’s forecasts for the UK

### Projecting GDP and Trade out to 2050

Method for projecting GDP out to 2050

Measuring GDP: Market Exchange Rates versus Purchasing Power Parity

Country Coverage

The Global Trade Outlook compared with other external projections

Method for projecting trade out to 2050

### Sector projections out to 2035

Method for projecting sector GDP and trade out to 2030

Sector definitions

### Uncertainty and risks

Uncertainty driven by future shifts and shocks

Examples of potential shifts and shocks

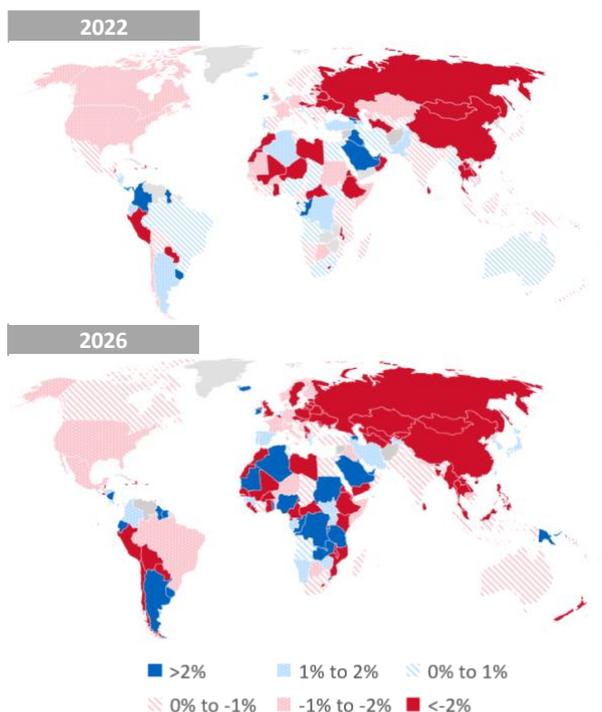
<sup>4</sup> Countries that are missing from the analysis are those that lack historic data either for GDP or trade, often those experiencing a period of conflict. For example, missing countries include Libya, Somalia, South Sudan, Syria, Venezuela and North Korea. See page 56 for more.

# Conditioning on the IMF’s forecasts: 2022-2027

- The Outlook is conditioned on the IMF’s forecasts in the near term.** The IMF’s forecasts are the most comprehensive available. They cover virtually every country in the world and include a range of macroeconomic variables, including GDP and trade. The IMF’s forecasts also take into account the latest economic indicators available and incorporate detailed analysis of the recent surge in inflation as well as broader business cycle dynamics. The *Outlook* draws on this expertise and abstracts from making judgements about the efficacy of policy by matching our projections to the IMF’s October World Economic Outlook forecasts from 2022-2027.
- The IMF expect a combination of high inflation, war in Ukraine, and tighter financial conditions to weigh on global growth.** Those factors are expected to bring the nascent post-pandemic recovery to a halt - both GDP and trade growth slump in 2022 and 2023 (top panel, Chart 64), and the loss of economic output relative to pre-war forecasts persists into the mid-2020s (lower panel, Chart 64). Those effects are broad-based, with most major economies affected. But they compound the lingering impact of the pandemic, whose long-term economic scarring effects are expected to fall largely on emerging markets.
- The IMF’s forecast also factor a substantial rise in prices, as energy and other commodity prices rise.** That means that nominal variables – nominal GDP and the value of trade – are higher over the near term, even if weaker in real terms.
- Taken together, poorer economic prospects weigh on the projections in the Outlook –** setting back growth prospects by several years relative to before the pandemic. Although there is a high degree of uncertainty over the near-term trajectory, the IMF’s forecasts are closely aligned to other reputable forecasters (Chart 65).

*Commodity producers are typically the only countries with greater growth prospects*

**Chart 64:** Differences in real GDP in 2022 and 2026: Apr 2021 forecast versus Oct 2022



Sources: IMF World Economic Outlook October 2022 and April 2021, and DBT calculations

Notes: Each country’s GDP has been rebased to equal 100 in 2021 and then grown forward by the IMF’s forecasts for real GDP growth and compared.

*Global GDP and trade are expected to rebound*

**Chart 65:** IMF, OECD and WTO growth forecasts

	2020	2021	2022	2023
<b>Global GDP (Real terms)</b>				
OECD	-3.2	5.9	3.1	2.2
IMF	-3.0	6.0	3.2	2.7
<b>Global GDP (Market Exchange Rates)</b>				
WTO	-3.4	5.8	2.8	2.3
IMF	-2.5	13.6	4.6	5.4
<b>Global Trade Volumes (Goods and Services)</b>				
OECD	-8.1	10.0	5.4	2.9
IMF	-8.2	10.3	4.7	2.4
<b>Global Trade Volumes (Goods only)</b>				
WTO	-5.2	9.7	3.5	1.0
IMF	-5.7	11.3	3.8	2.0

Sources: IMF World Economic Outlook October 2022, OECD Economic Outlook November 2022, WTO Trade Statistics & Outlook October 2022

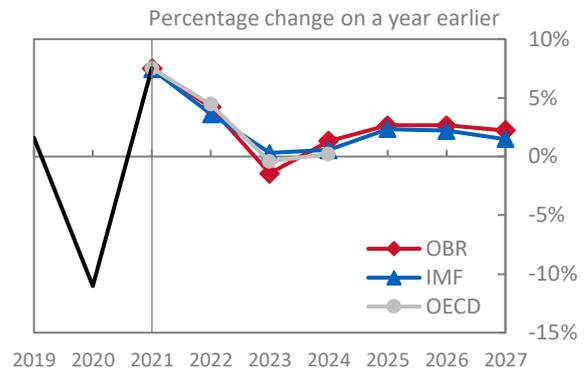
# Conditioning on the Office for Budget Responsibility's forecasts for the UK

- The UK projections in the *Outlook* are based on the Office for Budget Responsibility's (OBR) near-term forecasts and long-term projections out to 2050.** This is to avoid making independent judgements on the UK outlook, including the impact of UK policy. As with other forecasts, the OBR's forecasts are subject to a high degree of uncertainty.
- The OBR's near-term forecasts align closely with other forecasters for GDP, but they differ more on trade.** The OBR's near-term forecasts predict a slowdown in UK GDP growth in 2022 and 2023 followed by a return to its trend rate from 2024 onwards. This forecast is broadly in line with the IMF's and OECD's UK forecasts (Panel A, Chart 66). The OBR also expect a rebound in UK trade in 2022 but then a decline in import and export volumes in 2023 (Panels B and C, Chart 66). This forecast differs from the IMF who predict UK import and export growth to settle close to their historic average from 2023 onwards (as is the case for the IMF's forecasts for other similar countries). This difference means the UK's share of global exports falls slightly faster than its historic trend in the first five years of the *Outlook* (see Panel C, Chart 39, Section 2).
- The OBR does not produce long-term forecasts for UK trade, so imports and exports are assumed to grow in line with the OBR's long-term projections for UK GDP growth.** The OBR produce two sets of forecasts – detailed near-term forecasts out to 2027 and long-term projections for a more limited set of variables out to 2070. As the OBR's long-term projections do not include forecasts for imports and exports, both are assumed to grow in line with the OBR's long-term GDP projections (in real and nominal terms). That means the UK's export-to-GDP ratio and import-to-GDP ratio stay flat out to 2050. This is a neutral conditioning assumption, not a forecast of what is expected to happen.

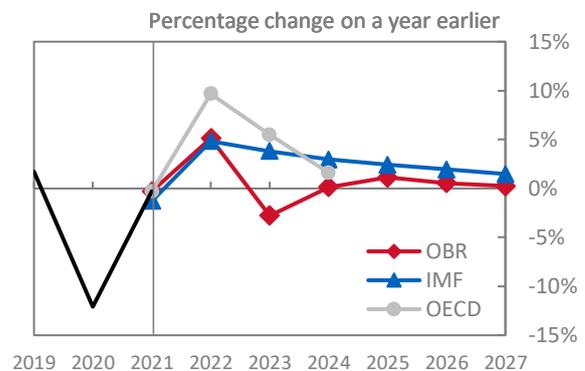
*The OBR, IMF and OECD broadly agree on the shape of UK GDP growth, but take different views on trade prospects*

**Chart 66:** Comparison of IMF, OECD and OBR forecasts for the UK

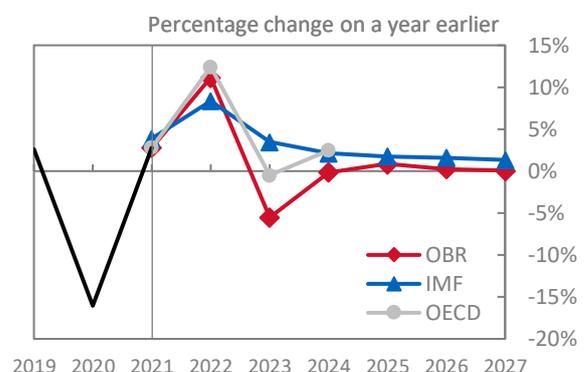
a) Real GDP Growth



b) Real export growth



c) Real import growth



Sources: IMF World Economic Outlook October 2022, OECD Economic Outlook November 2022, Office for Budget Responsibility Economic and Fiscal Outlook (November 2022) and Long-term economic determinants (July 2022), and DBT calculations

# Projecting global GDP in the long term

- The long-term GDP projections in the *Outlook* are based on a simple supply-side model of the real economy.** From 2022-2027, the *Outlook's* projections follow the IMF's forecasts, which account for fluctuations in demand and the business cycle<sup>5</sup>. Beyond 2027, the *Outlook* assumes that GDP is mainly determined by three supply-side factors – 1) labour; 2) capital; and 3) Total Factor Productivity (TFP) (Chart 67). The latter is a measure of technical progress or the efficiency with which labour and capital are combined to produce output. Land as a factor of production is assumed to remain stable, though this is a key uncertainty given climate change.
  - Labour supply projections are based on demographic and educational trends.** The *Outlook* assumes that the size of the workforce in each country will grow in line with the size of the population aged 15-64 (based on the UN's 2022 population projections). The proportion of this working-age population available for work (the participation rate) is assumed to remain broadly stable so that demographic trends are the key driver of labour inputs. The quality of labour – human capital – is assumed to improve over time – in line with historic trends in average educational attainment. For advanced economies like the US, which already have a high
- proportion of degree-educated young workers, human capital growth is expected to provide a dwindling contribution to potential growth as average educational attainment plateaus.
- Total factor productivity (TFP) growth is mainly determined by historic productivity trends and catch-up potential.** For advanced economies, TFP is mainly driven by assumptions about the pace of technical progress, which is influenced by recent trends in productivity growth as well as financial market development, the quality of institutions and trade openness. Emerging economies are also assumed to benefit from 'catch-up' potential – where they can adopt best-practice techniques from the technological frontier. The rate of convergence is assumed to depend on a country's state of development (the further from the frontier, the more catch-up potential) and historical trends in each country's ability to convert catch-up potential into actual growth.
  - Capital is assumed to grow in line with trends in investment, depreciation, and the capital intensity of production.** The combination of labour, capital and TFP provide a measure of real economic growth per worker, which is the basis of real GDP in the *Outlook*.

Chart 67: Components of potential growth and their drivers



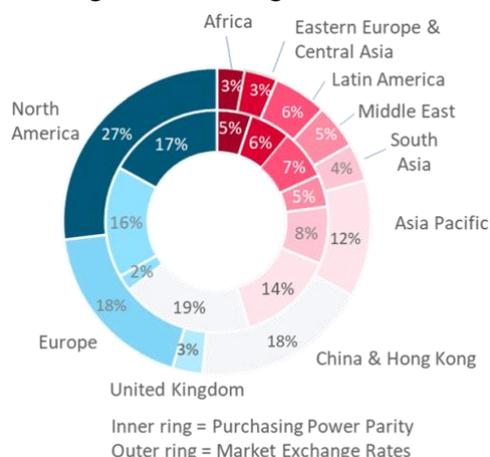
<sup>5</sup> Projections for Iran and Ukraine deviate from the IMF's World Economic Outlook. Iran's exchange rate and GDP deflator have been re-estimated using the World Bank's DEC conversion factor. The DEC is used in countries where there is significant divergence between the official rate and parallel activity. Projections for Ukraine are based on the IMF's October 2022 country report and Oxford Economics' Global Economic Model.

## Exchange rate assumptions

- All projections in the *Outlook* are converted into US dollars at Market Exchange Rates (MER), not Purchasing Power Parity (PPP).** This distinction is important and has an impact on the relative size of economies. Emerging markets account for a higher share of global GDP in PPP terms than MER (Chart 68).
- Purchasing Power Parity is the more common metric used for measuring global GDP, as it is more stable over time and accounts for differences in the cost of living.** PPP adjusts for the cost of living between countries by converting GDP into US dollars based on the relative cost of a comparable basket of goods in a country relative to the US. Since it is cheaper to buy the same basket of goods in low-income countries (where wage costs are lower) PPP gives a better sense of relative living standards between countries. PPP is also more stable over time because the price of the comparable basket of goods is only measured in a single year and all GDP figures for other years are converted at that same rate. By contrast, market rates fluctuate continuously.
- Market exchange rates are the more relevant metric for trade, investment and UK businesses.** Market exchange rates are the rates at which exporters sell overseas and the rates at which foreign investments are converted back into domestic currency. All nominal figures in the *Outlook* are expressed in time-varying market exchange rates.
- Exchange rate projections in the *Outlook* are conditioned on the IMF's forecasts in the near term and estimates of equilibrium exchange rates in the longer-term.** The IMF produce market exchange rate projections out to 2027 – these underpin our projections in the near-term. From 2027 onwards, exchange rates are assumed to converge gradually to a long-term equilibrium, derived from structural trends in relative prices and productivity between countries.
- Changes in relative prices – represented by the path of countries' GDP deflator – affects the purchasing power of currencies.** High rates of inflation in a given country will tend to be associated with a depreciating currency over the long run – in line with the so-called law of one price, which holds that the price of tradeable goods should be the same internationally (Taylor & Taylor, 2004).
- Over the long run, exchange rates are also held to adjust to changes in relative productivity.** That is consistent with the Balassa-Samuelson effect which posits that a relative increase in productivity will raise consumer purchasing power and, in turn, lead to exchange rate appreciation. Countries' relative productivity are benchmarked against the US, as a proxy of the technological frontier.
- The path of countries' equilibrium exchange rates weight together the projected path for relative prices and productivity.** In advanced economies, equilibrium is generally stable, as relative productivity is constant, while prices are assumed to rise in line with central bank inflation targets, concentrated at around 2%. In emerging markets, prices are generally assumed to rise faster than in advanced economies, partly due to rising living standards. To the extent that those increases in prices are not based on structural improvements in productivity, exchange rates depreciate to offset.

*Exchange rate assumptions have a significant impact on the relative size of economies*

**Chart 68:** Regions' share of global GDP, MER vs PPP



Source: IMF World Economic Outlook October 2022, DBT calculations

# How does the *Global Trade Outlook* compare with other long-term projections?

- The long-term projections for global GDP in the *Global Trade Outlook* are similar to other studies.** Annual real GDP growth (measured on a purchasing power parity basis for comparability) is projected to be 2.3% on average during 2030-2050 in the *Outlook* versus a 1.9%-2.9% range from other similar long-term studies (Panel A, Chart 69).
- External studies have shifted in line with the *Outlook's* projections for advanced economies.** That reflects an alignment in judgments around trend productivity. The *Outlook* uses average growth in GDP per capita over the past 25 years as a core anchor for its projections. This period includes major booms and busts as well as more recent experience of sluggish growth during the 2010s. The *Outlook* also assumes that productivity growth at the technological frontier (the United States) slows slightly over time as the contribution of human capital is expected to continue to plateau. The OECD now similarly take into account lower trend productivity since the Global Financial Crisis, having marked down their estimate of growth at technological frontier from 1.5% to 1.0%. (Panel B, Chart 69).
- The *Outlook's* projections for large emerging economies are broadly in line with other studies.** The *Outlook* and other external studies expect economic growth in emerging markets to slow relative to the recent past (Panel B, Chart 69). This reflects a broader maturing in those economies, less catch-up potential, and lessons from the development trajectories of other newly industrialised countries. Where differences between the *Outlook* and other studies do exist, these are typically driven by different assumptions about the pace of catch-up and – in the *Outlook's* case – additional data on economic and demographic trends in more recent years. That is most apparent in the outlook for Russia, where the *Outlook* factors in the impact of the war in Ukraine, lowering growth outlook relative other studies.

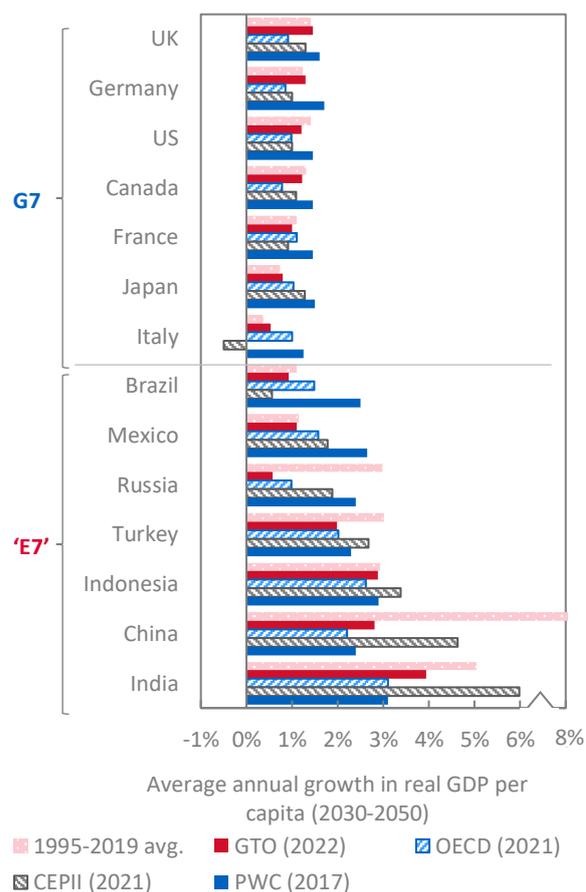
*Global GDP and trade are expected to rebound*

**Chart 69:** Comparison of long-term projections

**A):** Global GDP and GDP per capita growth

Average annual growth 2030-50: (real terms, PPP)	Global GDP	Global GDP per capita
Global Trade Outlook (2023)	2.3%	1.7%
OECD (2021)	1.9%	1.7%
CEPII (2021)	2.9%	1.8%
PWC (2017)	2.6%	
HSBC (2011)	~2.8%	
Memo: 1995-2019 average	3.7%	1.9%

**B):** GDP per capita growth - G7 and 'E7'



Sources: IMF World Economic Outlook October 2022, OECD Long-term baseline projections No. 109 (2021), CEPII Long-Term Macroeconomic Projections of the World Economy (2021), PWC The Long View: How will the global economic order change by 2050?, and DBT calculations.

Notes: Projections for global GDP are converted into US dollars at time-varying PPP exchange rates, except for CEPII projections which are converted at fixed exchange rates.

# Country coverage

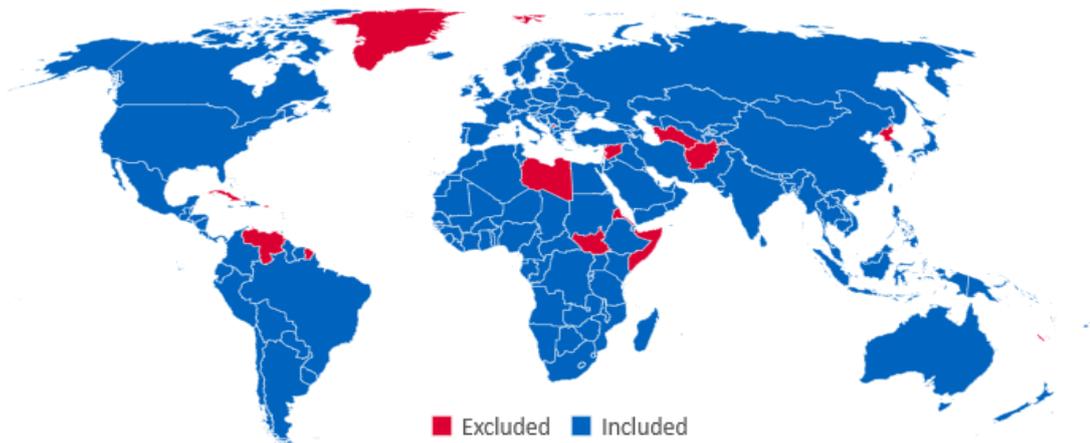
- The *Outlook* estimates GDP and trade for 182 countries, collectively accounting for approximately 99% of global GDP in 2021.** Exclusions arise from a lack of data or coverage in the IMF’s World Economic Outlook (WEO) or UNCTAD’s trade database. The IMF WEO typically covers all 190 member states plus an additional 5 who provide statistical information (e.g. Hong Kong SAR). However, data coverage for those countries can vary year to year. Forecasts are typically omitted where countries are experiencing conflict or significant economic and social turmoil that prevents access to, or estimates of, data (Charts 70 & 71). For example, Syria and Venezuela have not been forecast for some years. Likewise, UNCTAD trade data coverage can also vary year to year, with data for Eritrea and Turkmenistan no longer being published. The *Outlook* maintains a consistent coverage across its projections – including comparisons to past projections (Chapter 3), which are revised to ensure a constant sample.
- Given its size, projections for Ukraine have been estimated despite the ongoing conflict, but uncertainty bands around these are particularly large.** As Ukraine was omitted from the latest IMF WEO due to significant uncertainty, the *Outlook* uses macroeconomic forecasts from an October 2022 [IMF special country-report](#) and Oxford Economics’ Global Economic Model to condition the near-term path for GDP and trade.

**Chart 70: Countries not covered in the *Global Trade Outlook* due to lack of data**

Country	Share of global nominal GDP 2020
Cuba	0.13%
Puerto Rico	0.12%
Turkmenistan	0.06%
Libya	0.06%
Venezuela	0.05%
Lebanon	0.03%
Afghanistan	0.02%
Channel Islands	0.02%
Democratic People’s Republic of North Korea	0.02%
West Bank and Gaza	0.02%
Syria	0.01%
New Caledonia	0.01%
Kosovo	0.01%
Isle of Man	0.01%
Bermuda	0.01%
Somalia	0.01%
Monaco	0.01%
South Sudan	0.01%
Liechtenstein	0.01%
Guam	0.01%
French Polynesia	0.01%
Cayman Islands	0.01%
<i>Others: Virgin Islands, Faroe Islands, Greenland, Curacao, Eritrea, San Marino, Sint Maarten, Northern Mariana Islands, Turks and Caicos Islands, St. Martin, American Samoa</i>	0.03%
<b>Total</b>	<b>0.65%</b>

Sources: IMF World Economic Outlook October 2022, World Bank World Development Indicators

**Chart 71: Country coverage in the *Global Trade Outlook* by location**



## Projecting global trade in the long term

- **The trade projections in the *Global Trade Outlook* take UNCTAD’s import and export data as their starting point.** UNCTAD’s data cover all 182 countries in the *Outlook* and are reported in line with the IMF’s Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6). These data were downloaded in November 2022. Historic data are used up until 2021. All data are reported in US dollars.
- **UNCTAD’s historic data are then grown forward by the IMF’s trade forecasts out to 2027.** The IMF publish forecasts for import and export volumes in their October 2022 World Economic Outlook. These growth rates are applied to UNCTAD’s 2021 data to generate real trade forecasts for all countries out to 2027. The IMF do not publish nominal trade forecasts, so to generate nominal trade projections we calculate import and export deflators based on analysis of recent historic trends, the IMF’s forecasts for the GDP deflator and current account balance (both of which are published), and the path of exchange rate assumptions relative to equilibrium.
- **Beyond 2027, import projections are determined by trends in domestic demand and economic openness.** The faster domestic demand is rising, the more imports are typically required. However, trends in economic openness – specifically, the import-to-GDP ratio – also have a key bearing on import demand. Economic openness is partly determined by historic trends. For example, trade integration in the EU is assumed to continue, so the import-to-GDP ratio continues to rise in EU countries. Import intensity is also assumed to vary based on a country’s size and stage of development.
- **A key uncertainty around these trade projections is the extent to which economic openness evolves in line with recent trends and historical experience.** The openness of small economies is assumed to increase as incomes rise. But in large emerging markets, such as China, reliance on imports is expected to fall over time as the economy matures and domestic production expands.
- **Export projections are determined by price competitiveness, trend analysis and trade balance dynamics.** Domestic productivity, inflation and exchange rates influence how competitive a country’s exports are, in turn shaping export growth rates. Long-term trade balances are assumed to trend towards neutrality over the long run. The projections do not make any assumptions about the likelihood of new trade agreements being agreed, nor any unwinding of existing arrangements. As such these projections should be interpreted as a baseline against which potential changes in trading arrangements can be assessed.
- **Finally, export and import projections are constrained to align at the global level.** Global imports should match exports, but in practice measurement issues mean that there are discrepancies in the historic data. To ensure these statistical discrepancies do not get any larger, the *Outlook* constrains global exports to grow in line with global imports (in dollar terms) This constraint is applied by proportionately adjusting the size of exports in all countries and by interrogating trade balances for individual countries to ensure they evolve sensibly.

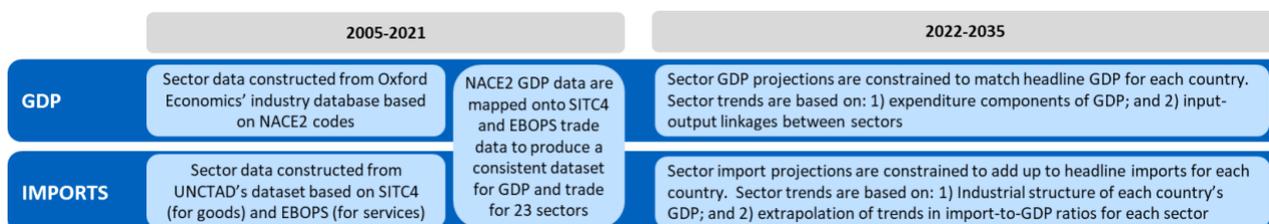
**Chart 72:** Overview of the *Global Trade Outlook*’s method of producing trade projections



## Projecting GDP and trade by sector

- The sectoral projections in the *Global Trade Outlook* are based on a mix of historic data from Oxford Economics (for GDP) and UNCTAD (for trade).** Constructing a consistent dataset of sector data for GDP and trade is a non-trivial task given stark differences in data availability. Data on sector GDP is obtained from Oxford Economics' industry database, which is classified on a NACE2 basis. Historic data on the sectoral structure of trade is obtained from UNCTAD, which is based on Standard Industrial Classification Codes (SITC revision 4) for goods and Extended Balance of Payments Services (EBOPS) classification for services.<sup>6</sup> Given the different classification systems, we have mapped the NACE2 and SITC4 and EBOPS datasets onto one another to create a consolidated dataset of 23 industrial sectors for GDP and trade (see following pages for sector definitions). Data constraints mean that this mapping is imperfect for some sectors.
- Sectoral projections for GDP are based on the expenditure components of GDP and input-output linkages between sectors.** We use Oxford Economics' Global Industry Model to decompose aggregate GDP projections into sector-specific GDP. Growth for individual sectors is largely driven by the importance of GDP expenditure components: consumer spending, investment, government spending and exports. The sensitivity of each sector to these components varies – for example, prospects for consumer-facing sectors (such as food & beverages) are closely tied to trends in consumer spending. Estimates of sector GDP also factor in demand between sectors – based on historic input-output relationships.
- Sectoral projections for imports are mainly driven by changes in the industrial structure of GDP.** First, historic import-to-GDP ratios are constructed at the sector level for each country. Second, these ratios are extrapolated forward based on a continuation of recent historic trends in nominal import intensity and sector shares of total imports. Finally, sector import projections are scaled so that they sum to the level of aggregate imports for each country. This produces a set of sector import projections that evolve based on how the industrial structure of GDP is shifting and based on recent changes in import intensity of production. Where appropriate, judgement is also applied. For example, the starting point of nominal imports in oil & gas and other highly traded commodities-based sectors was adjusted upwards to reflect the spike in commodities prices in 2022.
- Sector projections are only produced out to 2035.** While past trends are a helpful guide for the path of sectoral trade, they are likely to be less reliable in the long-term when the impact of new technologies and shifting consumer preferences is likely to alter the industrial composition of GDP.

**Chart 73:** Overview of the *Global Trade Outlook's* method of producing sector projections



<sup>6</sup> Service sector data are available from UNCTAD on a consistent BPM6 basis – the same basis used for aggregate import and export data. However, goods sector data are not widely available on a BPM6 basis, only based on International Merchandise Trade Statistics (IMTS). So we have constructed a proxy measure for goods sector data on a BPM6 equivalent basis, by applying the sector shares from the IMTS dataset to the aggregate import and export goods BPM6 series. This allows us to produce a breakdown of BPM6 trade across goods and services sectors. However, it is an imperfect proxy as BPM6 data are constructed on a residency basis, while IMTS data are based on a territorial basis.

## SECTOR DEFINITIONS: GOODS SECTORS

### Advanced Manufacturing

SITC sub-sector codes (for trade)

75	Office machines & automatic data processing machines
763	Sound recorders or reproducers
764	Telecommunication equipment, n.e.s.; & parts, n.e.s.
772	Apparatus for electrical circuits; board, panels
776	Cathode valves & tubes

NACE sub-sector codes (for GDP)

26.1	Electronic components & boards
26.2	Computers & office equipment
26.3	Telecommunications equipment

### Aerospace & Other Transport

SITC sub-sector codes (for trade)

714	Engines & motors, non-electric; parts, n.e.s.
79	Other transport equipment

NACE sub-sector codes (for GDP)

30.3	Aerospace
30-30.9	Ships, rail, motorcycle & military vehicles

### Agriculture

SITC sub-sector codes (for trade)

00	Live animals other than animals of division 03
041	Wheat (including spelt) and meslin, unmilled
042	Rice
043	Barley; unmilled
044	Maize (not incl. sweet corn), unmilled
045	Cereals, unmilled (excl. wheat, rice, barley, maize)
08	Feedstuff for animals (excl. unmilled cereals)
21	Hides, skins and furskins, raw
22	Oil seeds and oleaginous fruits
231	Natural rubber & similar gums, in primary forms
244	Cork, natural, raw & waste (incl. blocks, sheets)
245	Fuel wood (excl. wood waste) and wood charcoal
247	Wood in the rough or roughly squared
261	Silk
263	Cotton
264	Jute, other textile bast fibre, n.e.s., not spun; tow
265	Vegetable textile fibres, not spun; waste of them
268	Wool and other animal hair (incl. wool tops)
29	Crude animal and vegetable materials n.e.s.

NACE sub-sector codes (for GDP)

01+02+03	Agriculture, forestry & fisheries
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### Automotive

SITC sub-sector codes (for trade)

714	Internal combustion piston engines, parts, n.e.s.
78	Road vehicles

NACE sub-sector codes (for GDP)

29	Motor vehicles & parts
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### Chemicals

SITC sub-sector codes (for trade)

232	Synthetic rubber
51	Organic chemicals
52	Inorganic chemicals
53	Dyeing, tanning and colouring materials
56	Fertilizers other than those of group 272
57	Plastics in primary forms
59	Chemical materials and products, n.e.s.

NACE sub-sector codes (for GDP)

20.1	Basic chemicals & fertilisers
20.2	Pesticides & agrochemicals
20.3	Paints, varnishes, coatings & ink
20.5	Explosives, glues & photographic

## SECTOR DEFINITIONS: GOODS SECTORS

## Clothing and Footwear

## SITC sub-sector codes (for trade)

85	Footwear
84	Articles of apparel & clothing accessories
613	Furskins, tanned or dressed, excluding those of 8483

## NACE sub-sector codes (for GDP)

14	Wearing apparel & furs
15	Leather goods

## Consumer Goods (Not Included Elsewhere)

## SITC sub-sector codes (for trade)

12	Tobacco and tobacco manufactures
55	Essential oils for perfume materials and cleaning prep.
696	Cutlery
697	Household equipment of base metal, n.e.s.
761	Television receivers, whether or not combined
762	Radio-broadcast receivers, whether or not combined
775	Household type equipment, electrical or not, n.e.s.
82	Furniture and parts thereof
83	Travel goods, handbags, etc.
88	Photo apparatus, optical goods, watches and clocks
892	Printed Matter
893	Articles, n.e.s., of plastics
894	Baby carriages, toys, games & sporting goods
895	Office & stationery supplies, n.e.s.
896	Works of art, collectors' pieces & antiques
897	Jewellery & articles of precious materia., n.e.s.
898	Musical instruments, parts; records, tapes & similar
899	Miscellaneous manufactured articles, n.e.s

## NACE sub-sector codes (for GDP)

12	Tobacco
18	Printing & recorded media
20.4	Soaps, polish & detergents
26.4	Consumer electronics
27.5	Domestic appliances
31	Furniture manufacturing
32	Medical/dental, jewellery, music & games

## Food &amp; Beverages

## SITC sub-sector codes (for trade)

01	Meat and meat preparations
02	Dairy products and birds' eggs
03	Fish, crustaceans, molluscs and preparations thereof
046	Meal and flour of wheat and flour of meslin
047	Other cereal meals and flour
048	Cereal preparations, flour of fruits or vegetables
05	Vegetables and fruits
06	Sugar, sugar preparations and honey
07	Coffee, tea, cocoa, spices, and manufactures thereof
09	Miscellaneous edible products and preparations
11	Beverages
4	Animal and vegetable oils, fats and waxes

## NACE sub-sector codes (for GDP)

10	Food
11	Beverages

## Life Sciences

## SITC sub-sector codes (for trade)

541	Medicinal and pharmaceutical products
774	Electro-diagnostic appa. for medical sciences, etc.
87	Professional and scientific instruments, n.e.s.

## NACE sub-sector codes (for GDP)

21	Pharmaceuticals
26.6	Medical & surgical equipment
26.5+26.7+26.8	Measuring, testing navigation & optical

## SECTOR DEFINITIONS: GOODS SECTORS

**Machinery & Equipment***SITC sub-sector codes (for trade)*

72	Specialised machinery
73	Metal working machinery
741	Heating & cooling equipment & parts thereof, n.e.s.
742	Pumps for liquids
743	Pumps (exc. liquid), gas compressors & fans; centr.
744	Mechanical handling equipment, & parts, n.e.s.
745	Other non-electr. machinery, tools & mechan. appar.
749	Non-electric parts & accessor. of machinery, n.e.s.
773	Equipment for distributing electricity n.e.s.
778	Electrical machinery & apparatus, n.e.s.

*NACE sub-sector codes (for GDP)*

28.2	Ovens, lift/handling, HVAC, power tools
28.3	Agricultural machinery
28.4	Machine tools
28.9	Machines for mining & construction
27.2-4	Electric fittings & batteries
27.9	Other electrical equipment incl. capacitors & resistors

**Manufactured materials (Not Included Elsewhere)***SITC sub-sector codes (for trade)*

25	Pulp and waste paper
248	Wood simply worked, and railway sleepers of wood
266	Synthetic fibres suitable for spinning
267	Other man-made fibres suitable for spinning
269	Worn clothing & other worn textile articles
58	Plastics in non-primary form
611	Leather
612	Manufactures of leather, n.e.s.; saddlery & harness
62	Rubber manufactures, n.e.s.
63	Cork & wood manufactures (excl. furniture)
64	Paper and paper manufactures
65	Textile yarn and related products
661	Lime, cement, fabrica. constr. mat. (excl. glass, clay)
662	Clay construction, refracto. construction materials
663	Mineral manufactures, n.e.s.
664	Glass
665	Glassware
666	Pottery
691	Structures & parts, n.e.s., of iron, steel, aluminium
692	Metal containers for storage or transport
693	Wire products (excluding electrical) and fencing grills
694	Nails, screws, nuts, bolts, rivets & the like, of metal
699	Manufactures of base metal, n.e.s.
746	Ball or roller bearings
747	Appliances for pipes, boiler shells, tanks, vats, etc.
748	Transmis. shafts
811	Prefab. buildings, sanitary, heating & lighting fixtures
891	Arms & ammunition

*NACE sub-sector codes (for GDP)*

13	Textiles
16	Wood & wood products
17	Pulp & Paper
22	Rubber & plastics
20.6	Man-made fibres
23.1	Glass
25	Structural metal incl. tanks, boilers & weapons
23.2+23.3+23.4	Ceramic, clay & refractory products
23.5 – 23.9	Cement, plaster, abrasives & masonry

**Mining & Metals***SITC sub-sector codes (for trade)*

27	Crude fertilizers other than division 56 & crude minerals
28	Metalliferous ores and metal scrap
32	Coal, coke and briquettes
667	Pearls, precious & semi-precious stones
67	Iron and steel
68	Non-ferrous metals

*NACE sub-sector codes (for GDP)*

5	Coal & lignite mining (part of extraction)
24.4	Non-ferrous metals
24.5	Castings
07+08+09	Metals mining, quarry & related svcs.
24.1+24.2+24.3	Iron & steel

## SECTOR DEFINITIONS: GOODS SECTORS

### Oil & Gas

*SITC sub-sector codes (for trade)*

33	Petroleum, petroleum products and related materials
34	Gas, natural and manufactured

*NACE sub-sector codes (for GDP)*

6	Oil & natural gas extraction
19	Coke & refined petroleum products

### Power & Heat

*SITC sub-sector codes (for trade)*

35	Electric current
711	Vapour generating boilers, auxiliary plant; parts
712	Steam turbines & other vapour turbin., parts, n.e.s.
716	Rotating electric plant & parts thereof, n.e.s.
718	Other power generating machinery & parts, n.e.s.
771	Electric power machinery, and parts thereof

*NACE sub-sector codes (for GDP)*

27.1	Motors, generators & transformers
28.1	Turbines, engines, fluidics, pumps & gears
35.1	Electric power generation & distribution
35.2	Gas, steam, cooling, ice manufacture & 35.3 distribution

## SECTOR DEFINITIONS: SERVICE SECTORS

### Business Services

*EBOPS codes (for trade)*

10	Other business services
----	-------------------------

*NACE sub-sector codes (for GDP)*

68	Real estate activities
69	Legal and accounting activities
70	Activities of head offices; management consultancy
71	Architecture; engineering; technical testing & analysis
72	Scientific research and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
77	Rental and leasing activities
78	Employment activities
79	Travel agency, tour operator and related activities
80	Security and investigation activities
81	Services to building and landscape activities
82	Office administration & other business support activities

### Construction

*EBOPS codes (for trade)*

5	Construction
---	--------------

*NACE sub-sector codes (for GDP)*

41	Construction of buildings
42	Civil Engineering
43	Specialised construction activities

### Digital Services

*EBOPS codes (for trade)*

9	Telecommunications, computer & information services
---	-----------------------------------------------------

*NACE sub-sector codes (for GDP)*

61	Telecommunications
62	Computer programming, consultancy & related activities
63	Information service activities

## SECTOR DEFINITIONS: SERVICE SECTORS

**Financial Services***EBOPS codes (for trade)*

6 Insurance and pension services

*NACE sub-sector codes (for GDP)*

64 Financial Services, except insurance and pension funding

65 Insurance, reinsurance and pension funding

66 Activities auxiliary to financial services and insurance

**Intellectual Property, Recreation and Media***EBOPS codes (for trade)*

8 Charges for the use of intellectual property n.i.e.

11 Personal, cultural and recreational services

*NACE sub-sector codes (for GDP)*

58 Publishing activities

59 Motion pictures, video &amp; TV programme production, sound recording &amp; music publishing activities

60 Programming &amp; broadcasting activities

90 Creative, arts &amp; entertainment activities

91 Libraries, archives, museums &amp; other cultural activities

92 Gambling &amp; betting activities

93 Sports activities &amp; amusement &amp; recreation activities

94 Activities of membership organisations

95 Repair of computers and personal and household goods

96 Other personal service activities

97 Activities of households as employers of domestic personnel

98 Undifferentiated goods- &amp; services-producing activities of private households for own use

99 Activities of extraterritorial organisations and bodies

**Public Services***EBOPS codes (for trade)*

12 Government goods &amp; services n.i.e.

*NACE sub-sector codes (for GDP)*

36-39 Water, sewerage &amp; waste management

84 Public admin. and defence; compulsory social security

85 Education

86 Human health activities

87 Residential care activities

88 Social work activities without accommodation

**Private Services (Not Included Elsewhere)***EBOPS codes (for trade)*

1 Manufacturing services on physical inputs owned by others

*NACE sub-sector codes (for GDP)*

45 Wholesale and retail trade and repair of motor vehicles

46 Wholesale trade, except of motor vehicles

47 Retail trade, except of motor vehicles

68 Real estate activities

**Transport Services***EBOPS codes (for trade)*

3 Transport Services

*NACE sub-sector codes (for GDP)*

49 Land transport and transport via pipelines

50 Water transport

51 Air transport

52 Warehousing and support activities for transportation

53 Postal and courier activities

**Travel Services***EBOPS codes (for trade)*

3 Travel Services

*NACE sub-sector codes (for GDP)*

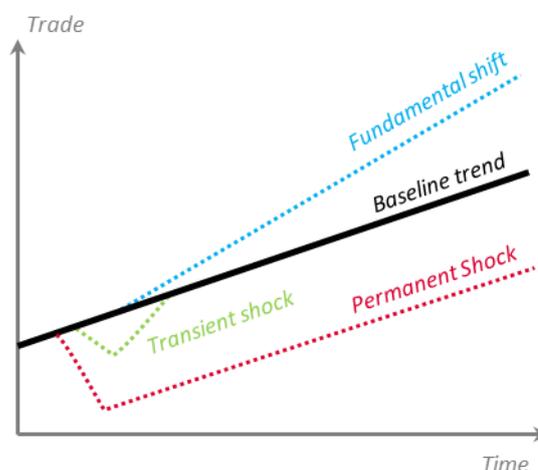
55 Accommodation

56 Food and beverage service activities

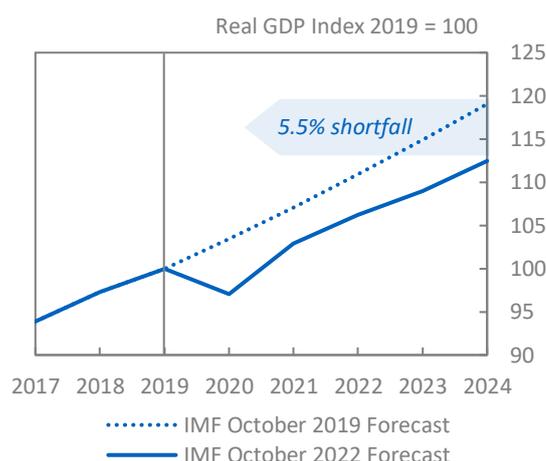
## Drivers of uncertainty: shocks and shifts

- The uncertainties surrounding the *Outlook* stem not just from methodological choices and modelling assumptions, but also from future shifts and shocks to the trading environment.** The projections in the *Outlook* are based on an informed extrapolation of historical trends, but a range of factors could disrupt these trends and put the world on a different path (Chart 74).
- Shifts – fundamental changes in geopolitical, environmental, technological and other trends – could lead to a very different outlook for trade** (blue line, Chart 74). The global trading system is assumed to remain broadly unchanged in the *Outlook's* projections, but other scenarios are possible. For example, a renewed wave of globalisation or rising protectionism could lead to very different paths for global trade – as discussed in the risks table overleaf.
- Shocks – unexpected events with positive or negative consequences – could also disrupt trade.** Physical (natural disasters, diseases), economic (financial crises) and political (revolutions, wars) shocks could all have an outsized and unpredictable impact on trade. The interconnectedness of the global economy means that even localised shocks can spread beyond national borders. For example, the 2011 Great East Japan Earthquake led to stark falls in output across East Asia as the disruption was transmitted through cross-border supply chains.
- The degree to which a shock matters for the long-term outlook for trade will depend on the size and persistence of its impact.** Some shocks to the global trading system can be large but transient (green line, Chart 74). For example, the eruption of Iceland's Eyjafjallajökull volcano in 2010, led to widespread disruption to air travel in Europe, but the effects were temporary. By contrast, other shocks – such as the Global Financial Crisis – led to permanent economic scarring and losses that were never recovered (red line, Chart 74). The extent to which the Covid-19 pandemic and the war in Ukraine have long term impacts is a key source of uncertainty. The IMF's October 2022 forecast assume only a partial recovery from both and some permanent economic scarring to GDP and trade projections (Charts 75 & 76).

**Chart 74:** Illustration of how different shifts and shocks can impact trends in trade

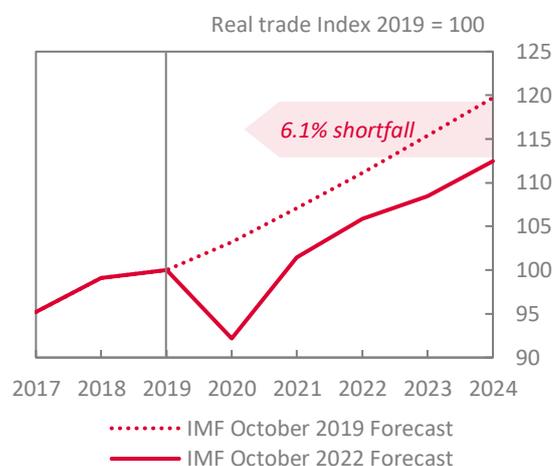


**Chart 75:** Global GDP forecast shift since 2019



Sources: IMF World Economic Outlook October 2019 & October 2022

**Chart 76:** Global trade forecast shift since 2019



Sources: IMF World Economic Outlook October 2019 & October 2022

Examples of potential shifts and shocks that could cause trade to diverge from the projections in the Outlook



## Geopolitical risks

### Potential shifts

- **Fragmentation** – Geopolitical tensions could threaten existing levels of trade integration and lead to a period of de-globalisation – lowering trade and GDP growth further than the projections in the *Outlook*. Domestic considerations in a country could drive protectionist policies, which could escalate further as other countries respond in kind – as in the 1930s, when rising barriers among major economies balkanised international trade. Tensions between economies could also escalate into a trade war – as happened between China and the US during 2018 – and weigh on openness more generally, as countries place greater emphasis on self-sufficiency. This could undermine the stability of the global trading system, increase the costs and risks of trade, and incentivise firms to reduce their reliance on global value chains. Geopolitical tensions will also reduce the likelihood of new trade agreements being successively concluded – particularly at the multilateral level – and reduce the effectiveness of key institutions that drive trade integration over time, such as the WTO.
- **A new wave of globalisation** – Renewed wave of globalisation would raise the pace of trade and GDP growth relative to the projections in the *Outlook*. In the post-war period, major liberalisation events included: the 1947 General Agreement on Tariffs and Trade (GATT); the creation of the European Economic Community in 1957; the creation of the World Trade Organization (WTO) in 1995. In the decades ahead, a further wave of globalisation could materialise in many forms: including a new multilateral trade agreement; the creation of new or expanded plurilateral trade agreements; or bilateral free trade agreements. All these routes could lower the cost of trade and encourage further integration of international global value chains.

### Potential shocks

- **Conflict** – Wars, terrorism, blockades and other sanctions can have large and persistent effects on global trade. These effects are particularly devastating for the countries directly impacted but can cause wider disruption to trade if the countries concerned are major importers or exporters and/or play a critical role in supply chains. For example, the war in Ukraine – and its effect on both countries' economic links with the rest of the world – has had an outsized impact on global trade in energy and other commodities, given the significant role of both countries in those markets.
- **Changes of government** – Election cycles can bring in different administrations that have very different policy stances on trade. This can lead to temporary or permanent shifts in prospects for trade, for example if a new government favours bilateral agreements over multilateral agreements, or actively supports re-shoring production.
- **Trade distortions and remedies** – Trade can also be distorted by unfair trade practices (such as industrial subsidies), which undermine market forces and warp trade flows. If such measures become prevalent, they can prompt other countries to impose trade remedies - such as countervailing duties - to level the playing field, which can further affect trade flows.



## Environmental risks

### Potential shifts

- **Climate change** - Climate change will contribute to structural shifts in the global economy and reshape trade patterns that could put the global trading system under strain. Under a scenario where global average temperatures rise by 2.6°C above pre-industrial levels, the world economy could be 10% smaller by 2050 than if the Paris temperature target is achieved.<sup>7</sup> These losses are unlikely to be evenly distributed – OECD economies could be 5% smaller on average by 2050 while economies in South East Asia could be up to 25% smaller. These unequal impacts could stoke tensions between countries.
- **Green revolution** – In a more optimistic scenario, the threat of climate change – and perhaps ambitions of some countries to become more energy self-sufficient – could provide more impetus to mitigate its effects and accelerate the shift towards a greener economy. To reach Net-Zero emissions by 2050 globally, renewables share of growth needs to increase approximately sevenfold more than recent years.<sup>8</sup> Green industries and energy require a different mix of imported inputs to existing industries; a rapid demand shift could reshape global trade towards new materials and minerals (like cobalt and lithium), creating new areas of strategic competition. In addition, a faster transition will bring forward the competitive challenge for countries and businesses that are reliant on carbon-intensive exports. As demand for fossil fuels eases, producers with the highest production costs will be the most exposed to transition risks.

### Potential shocks

- **Climate-related natural disasters** – The number of natural disasters in 2000-2019 almost doubled relative to the previous two decades, causing \$3 trillion of economic losses worldwide, up from \$1.6 trillion previously (adjusted for inflation).<sup>9</sup> More frequent and severe shocks pose serious risks to maritime shipping (which accounts for 80% of global trade volumes), international supply chains, and infrastructure.<sup>10</sup> A sustained increase in natural disasters may encourage businesses to move supply chains to less vulnerable regions to offset higher costs and uncertainty. That could slow or reverse the integration of those areas into the global economy, pushing down GDP and trade relative to our projections.

**Green policy trade shocks** – Countries keen to quickly push forward with their climate agendas may implement unilateral measures to lower their imported or exported carbon emissions. OECD analysis found poorly executed unilateral green policies could negatively impact non-green-focused investment and lower projected productivity, at least in the short term.<sup>11</sup> In addition, whilst bad green policies may increase global trade relative to projections, this could be driven by exports from countries with laxer green policies and large polluting sectors, therefore pushing up emissions overall (i.e. ‘carbon leakage’) and defeating the purpose of the original policy.

<sup>7</sup> Swiss Re (2021); ‘The economics of climate change’

<sup>8</sup> World Economic Forum: Reaching net zero by 2050 relies on these 7 things

<sup>9</sup> UNDRR (2020) ‘The Human Cost of Disasters 2000-2019’

<sup>10</sup> UNCTAD (2020) ‘Review of Maritime Transport’

<sup>11</sup> OECD (2021) ‘Assessing the Economic Impacts of Environmental Policies’



## Technological risks

### Potential shifts

- **Digital revolution** - Technological developments can reduce trade costs, improve production practices, and creates markets for new goods and services, all of which affect trade patterns. For example, a more rapid adoption of digital technologies could increase the tradability of services, relative to the *Outlook's* projection and reduce the role of distance. The OECD estimate that a 10% increase in digital connectivity between 2 countries raises services trade by over 3%.<sup>12</sup> At the same time, divergence in the rate of digitalisation between countries may also create different rates of trade growth, particularly in services
- **Tech-enabled reshoring** – Faster adoption of new technologies, such as additive manufacturing (3D printing), advanced robotics, and AI could reshape trade flows, by reducing the incentive to offshore production to countries with low labour costs. For example, McKinsey estimate that as the cost of advanced robotics fall, businesses may re-shore production close to centres of demand, which could reduce global goods trade by 5-10% by 2030. Artificial Intelligence, virtual agents and service bots could also substitute for cheap offshore labour in the service sector, which could reduce business services trade by 5-9%.<sup>13</sup> Moreover, if autonomous technologies substitute for labour, this could amplify income inequality within and between countries. Rising income inequality would reduce the growth of the global middle class and potentially undermine trade growth, particularly for discretionary consumer goods.

### Potential shocks

- **Tech disruption** – The creation of new technologies can transform global industries and entire economies. For example, the development of hydraulic fracturing and horizontal drilling technologies enabled the United States to tap into its vast reserves of shale gas and oil. This led to the US shale revolution, which has transformed the US into the largest producer of oil and gas in the world.<sup>14</sup> The US has switched from being a net importer to a net exporter, which has redrawn patterns of global energy trade and the US's energy security. In the future, frontier technologies have the potential to produce even more disruption. Indeed, Kurzweil argues that at some point in the decades ahead, computers – enabled by Artificial Intelligence – could overtake humans in their ability to innovate.<sup>15</sup> At that point – known as the singularity – productivity could rise exponentially (machines making machines) and disrupt economies across the world.

<sup>12</sup> OECD (2019) 'Trade in the digital era'

<sup>13</sup> McKinsey Global Institute (2019) 'Globalization in transition: The future of trade and value chains'

<sup>14</sup> IEA (2019) 'Energy Policies of IEA countries: United States 2019 review'

<sup>15</sup> Kurzweil R (2005) 'The singularity is near: when humans transcend biology', Published by the Penguin Group



**5**

# Projection Tables

## GDP Projections

	2021		2035		2050		Growth: 2021-35				Growth: 2021-50			
	Nominal GDP (\$bn)	Share of world GDP	Nominal GDP (\$bn)	Share of world GDP	Nominal GDP (\$bn)	Share of world GDP	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<b>World</b>	<b>95463</b>	<b>100.0%</b>	<b>195526</b>	<b>100.0%</b>	<b>370363</b>	<b>100.0%</b>	<b>2.6%</b>	<b>42%</b>	<b>5.3%</b>	<b>105%</b>	<b>2.2%</b>	<b>88%</b>	<b>4.8%</b>	<b>288%</b>
Advanced Economies	55981	58.6%	97451	49.8%	161679	43.7%	1.6%	24%	4.0%	74%	1.4%	49%	3.7%	189%
Emerging Market & Developing Economies	39482	41.4%	98075	50.2%	208685	56.3%	4.0%	74%	6.7%	148%	3.2%	148%	5.9%	429%
<b>Regions</b>														
Africa	2692	2.8%	7120	3.6%	16426	4.4%	4.0%	74%	7.2%	164%	3.7%	186%	6.4%	510%
Asia Pacific	12787	13.4%	24374	12.5%	45644	12.3%	2.3%	37%	4.7%	91%	1.9%	75%	4.5%	257%
China & Hong Kong	18144	19.0%	45896	23.5%	93540	25.3%	3.9%	72%	6.9%	153%	3.0%	133%	5.8%	416%
E. Europe & Central Asia	3250	3.4%	6621	3.4%	12898	3.5%	1.6%	25%	5.2%	104%	1.5%	56%	4.9%	297%
Europe	19100	20.0%	34134	17.5%	56412	15.2%	1.6%	24%	4.2%	79%	1.3%	46%	3.8%	195%
Latin America	4974	5.2%	10155	5.2%	17946	4.8%	2.3%	37%	5.2%	104%	1.9%	73%	4.5%	261%
Middle East	2675	2.8%	5633	2.9%	10220	2.8%	3.3%	57%	5.5%	111%	2.6%	109%	4.7%	282%
North America	24984	26.2%	44132	22.6%	74753	20.2%	1.6%	26%	4.1%	77%	1.6%	58%	3.9%	199%
South Asia	3725	3.9%	11791	6.0%	32663	8.8%	6.0%	126%	8.6%	217%	5.0%	317%	7.8%	777%
United Kingdom	3132	3.3%	5671	2.9%	9861	2.7%	1.8%	28%	4.3%	81%	1.6%	58%	4.0%	215%
<b>Individual Economies</b>														
Algeria	163	0.2%	306	0.2%	516	0.1%	2.3%	37%	4.6%	88%	2.0%	78%	4.1%	217%
Angola	75	0.1%	227	0.1%	362	0.1%	3.5%	63%	8.2%	202%	3.2%	149%	5.6%	381%
Argentina	487	0.5%	817	0.4%	1387	0.4%	2.0%	33%	3.8%	68%	1.6%	57%	3.7%	185%
Australia	1635	1.7%	3067	1.6%	5732	1.5%	2.3%	37%	4.6%	88%	2.0%	79%	4.4%	251%
Austria	477	0.5%	840	0.4%	1326	0.4%	1.6%	25%	4.1%	76%	1.2%	41%	3.6%	178%
Azerbaijan	55	0.1%	122	0.1%	197	0.1%	2.4%	39%	5.9%	123%	1.8%	67%	4.5%	261%
Bahrain	39	0.0%	77	0.0%	130	0.0%	2.9%	48%	5.0%	97%	2.2%	87%	4.3%	235%
Bangladesh	416	0.4%	1442	0.7%	3915	1.1%	6.4%	137%	9.3%	246%	5.6%	388%	8.0%	840%
Belarus	68	0.1%	123	0.1%	146	0.0%	0.3%	4%	4.3%	80%	0.3%	9%	2.6%	113%
Belgium	599	0.6%	1011	0.5%	1664	0.4%	1.2%	18%	3.8%	69%	1.1%	38%	3.6%	178%
Bolivia	41	0.0%	89	0.0%	181	0.0%	2.6%	43%	5.8%	120%	2.2%	89%	5.3%	346%
Brazil	1608	1.7%	3557	1.8%	5397	1.5%	1.8%	28%	5.8%	121%	1.3%	47%	4.3%	236%
Bulgaria	80	0.1%	179	0.1%	294	0.1%	2.6%	42%	5.9%	122%	1.8%	67%	4.6%	266%
Cameroon	45	0.0%	121	0.1%	313	0.1%	4.7%	91%	7.3%	167%	4.4%	252%	6.9%	589%
Canada	1988	2.1%	3764	1.9%	6713	1.8%	1.9%	30%	4.7%	89%	1.8%	70%	4.3%	238%
Chile	317	0.3%	618	0.3%	1259	0.3%	2.2%	35%	4.9%	95%	2.1%	85%	4.9%	297%
China	17745	18.6%	45143	23.1%	92403	24.9%	4.0%	72%	6.9%	154%	3.0%	135%	5.9%	421%
Colombia	314	0.3%	660	0.3%	1330	0.4%	3.2%	55%	5.4%	110%	2.7%	114%	5.1%	323%
Costa Rica	64	0.1%	143	0.1%	316	0.1%	3.1%	54%	5.8%	121%	2.7%	119%	5.6%	390%
Côte d'Ivoire	70	0.1%	210	0.1%	593	0.2%	5.8%	121%	8.1%	199%	5.3%	347%	7.6%	746%
Croatia	68	0.1%	148	0.1%	257	0.1%	2.7%	46%	5.8%	119%	2.0%	80%	4.7%	279%
Czechia	282	0.3%	588	0.3%	1020	0.3%	2.4%	40%	5.4%	109%	2.0%	79%	4.5%	262%
DR Congo	57	0.1%	188	0.1%	572	0.2%	6.2%	133%	9.0%	233%	5.9%	423%	8.3%	911%
Denmark	398	0.4%	723	0.4%	1312	0.4%	1.7%	26%	4.4%	82%	1.7%	64%	4.2%	229%
Dominican Republic	95	0.1%	273	0.1%	651	0.2%	4.9%	95%	7.9%	188%	4.5%	257%	6.9%	587%
Ecuador	106	0.1%	193	0.1%	331	0.1%	2.6%	42%	4.4%	82%	2.1%	82%	4.0%	212%
Egypt	423	0.4%	1214	0.6%	2868	0.8%	5.3%	107%	7.8%	187%	4.3%	237%	6.8%	578%
El Salvador	29	0.0%	50	0.0%	78	0.0%	1.8%	28%	4.1%	75%	1.4%	48%	3.5%	173%
Estonia	37	0.0%	93	0.0%	173	0.0%	3.0%	51%	6.8%	150%	2.4%	100%	5.4%	365%
Ethiopia	99	0.1%	350	0.2%	1194	0.3%	6.4%	139%	9.4%	252%	6.2%	477%	9.0%	1103%
Finland	298	0.3%	488	0.2%	807	0.2%	1.3%	19%	3.6%	64%	1.2%	41%	3.5%	171%
France	2957	3.1%	4850	2.5%	7893	2.1%	1.3%	20%	3.6%	64%	1.2%	40%	3.4%	167%
Germany	4263	4.5%	7116	3.6%	11772	3.2%	1.1%	16%	3.7%	67%	1.1%	38%	3.6%	176%
Ghana	79	0.1%	160	0.1%	574	0.2%	4.9%	95%	5.1%	102%	4.6%	270%	7.1%	625%
Greece	216	0.2%	382	0.2%	563	0.2%	1.5%	23%	4.1%	76%	0.9%	30%	3.4%	160%
Guatemala	86	0.1%	211	0.1%	481	0.1%	3.3%	58%	6.6%	146%	2.7%	119%	6.1%	459%
Hong Kong SAR	369	0.4%	655	0.3%	946	0.3%	2.3%	37%	4.2%	77%	1.3%	47%	3.3%	156%

Notes: For brevity, this table (and the one overleaf) includes individual economy projections for the 100 largest importers only (by Nominal US\$ imports in 2021). 'Advanced economies' includes all 39 countries categorised as 'advanced' by the IMF, while 'Emerging and Developing economies' includes all other economies.

	2021		2035		2050		Growth: 2021-35				Growth: 2021-50			
	Nominal GDP (\$bn)	Share of world GDP	Nominal GDP (\$bn)	Share of world GDP	Nominal GDP (\$bn)	Share of world GDP	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<i>Individual Economies</i>														
Hungary	182	0.2%	396	0.2%	650	0.2%	2.6%	44%	5.7%	117%	1.8%	70%	4.5%	256%
India	3176	3.3%	10081	5.2%	28051	7.6%	6.1%	128%	8.6%	217%	5.0%	316%	7.8%	783%
Indonesia	1187	1.2%	3312	1.7%	8018	2.2%	4.7%	89%	7.6%	179%	3.8%	199%	6.8%	575%
Iraq	207	0.2%	439	0.2%	774	0.2%	3.0%	51%	5.5%	112%	2.4%	98%	4.7%	274%
Ireland	505	0.5%	1138	0.6%	1906	0.5%	3.1%	53%	6.0%	126%	2.1%	83%	4.7%	278%
Iran	362	0.4%	746	0.4%	1032	0.3%	2.0%	33%	5.3%	106%	1.1%	38%	3.7%	185%
Israel	489	0.5%	1012	0.5%	2038	0.6%	3.4%	61%	5.3%	107%	3.0%	137%	5.0%	317%
Italy	2101	2.2%	3138	1.6%	4419	1.2%	0.6%	9%	2.9%	49%	0.3%	10%	2.6%	110%
Japan	4933	5.2%	7326	3.7%	10352	2.8%	0.7%	10%	2.9%	49%	0.4%	11%	2.6%	110%
Jordan	45	0.0%	100	0.1%	217	0.1%	3.1%	53%	5.8%	120%	2.9%	130%	5.5%	378%
Kazakhstan	197	0.2%	436	0.2%	1080	0.3%	3.6%	64%	5.8%	121%	3.4%	164%	6.0%	448%
Kenya	111	0.1%	267	0.1%	686	0.2%	5.2%	103%	6.5%	142%	4.4%	248%	6.5%	521%
Kuwait	136	0.1%	236	0.1%	292	0.1%	2.4%	40%	4.0%	74%	0.9%	29%	2.7%	115%
Latvia	39	0.0%	97	0.0%	183	0.0%	3.2%	56%	6.8%	151%	2.6%	109%	5.5%	369%
Lithuania	66	0.1%	152	0.1%	260	0.1%	2.3%	37%	6.2%	131%	1.8%	68%	4.9%	297%
Luxembourg	87	0.1%	164	0.1%	296	0.1%	2.1%	33%	4.7%	89%	1.9%	71%	4.3%	241%
Macao	30	0.0%	99	0.1%	191	0.1%	6.6%	145%	8.9%	230%	4.4%	251%	6.6%	537%
Malaysia	373	0.4%	1025	0.5%	2135	0.6%	4.2%	79%	7.5%	175%	3.3%	156%	6.2%	472%
Mexico	1298	1.4%	2433	1.2%	4329	1.2%	1.9%	30%	4.6%	88%	1.6%	58%	4.2%	234%
Morocco	143	0.1%	297	0.2%	582	0.2%	3.0%	51%	5.4%	108%	2.8%	121%	5.0%	307%
Myanmar (Burma)	65	0.1%	128	0.1%	377	0.1%	3.3%	58%	5.0%	97%	3.2%	148%	6.2%	479%
Nepal	36	0.0%	109	0.1%	303	0.1%	4.8%	92%	8.2%	203%	4.0%	214%	7.6%	746%
Netherlands	1014	1.1%	1827	0.9%	3177	0.9%	1.6%	25%	4.3%	80%	1.5%	55%	4.0%	213%
New Zealand	247	0.3%	445	0.2%	894	0.2%	2.2%	36%	4.3%	80%	2.1%	81%	4.5%	262%
Nigeria	442	0.5%	1599	0.8%	3319	0.9%	2.8%	48%	9.6%	262%	2.6%	108%	7.2%	652%
Norway	482	0.5%	741	0.4%	1303	0.4%	1.7%	27%	3.1%	54%	1.6%	59%	3.5%	170%
Oman	86	0.1%	165	0.1%	264	0.1%	2.8%	48%	4.8%	92%	2.0%	75%	3.9%	207%
Pakistan	348	0.4%	879	0.4%	2256	0.6%	4.7%	91%	6.8%	152%	4.3%	242%	6.7%	548%
Panama	64	0.1%	162	0.1%	380	0.1%	4.5%	86%	6.9%	154%	4.1%	224%	6.4%	497%
Paraguay	39	0.0%	87	0.0%	177	0.0%	3.2%	54%	6.0%	125%	2.7%	118%	5.4%	355%
Peru	226	0.2%	452	0.2%	914	0.2%	2.9%	48%	5.1%	100%	2.6%	110%	4.9%	304%
Philippines	394	0.4%	1098	0.6%	3553	1.0%	5.6%	116%	7.6%	179%	4.9%	303%	7.9%	802%
Poland	679	0.7%	1674	0.9%	3005	0.8%	2.4%	40%	6.7%	147%	1.7%	61%	5.3%	343%
Portugal	250	0.3%	475	0.2%	712	0.2%	1.8%	28%	4.7%	90%	1.1%	37%	3.7%	185%
Qatar	180	0.2%	363	0.2%	597	0.2%	2.7%	44%	5.1%	102%	2.0%	76%	4.2%	232%
Romania	284	0.3%	694	0.4%	1258	0.3%	3.0%	52%	6.6%	144%	2.1%	85%	5.3%	343%
Russia	1779	1.9%	2856	1.5%	4485	1.2%	0.4%	6%	3.4%	61%	0.2%	7%	3.2%	152%
Saudi Arabia	834	0.9%	1577	0.8%	2504	0.7%	3.1%	53%	4.7%	89%	2.0%	80%	3.9%	200%
Serbia	63	0.1%	176	0.1%	364	0.1%	3.7%	67%	7.6%	178%	3.3%	156%	6.2%	477%
Singapore	397	0.4%	786	0.4%	1323	0.4%	2.3%	38%	5.0%	98%	1.7%	61%	4.2%	233%
Slovakia	115	0.1%	248	0.1%	402	0.1%	2.3%	37%	5.7%	116%	1.6%	58%	4.4%	249%
Slovenia	62	0.1%	132	0.1%	219	0.1%	2.4%	40%	5.5%	113%	1.8%	67%	4.5%	255%
South Africa	419	0.4%	687	0.4%	1257	0.3%	1.6%	24%	3.6%	64%	1.5%	54%	3.9%	200%
South Korea	1811	1.9%	3121	1.6%	4950	1.3%	1.9%	30%	4.0%	72%	1.2%	41%	3.5%	173%
Spain	1426	1.5%	2529	1.3%	3628	1.0%	1.6%	25%	4.2%	77%	0.9%	28%	3.3%	154%
Sri Lanka	89	0.1%	136	0.1%	342	0.1%	1.5%	23%	3.1%	53%	2.0%	78%	4.7%	284%
Sudan	35	0.0%	102	0.1%	215	0.1%	4.9%	94%	7.9%	191%	4.3%	241%	6.4%	512%
Sweden	636	0.7%	1290	0.7%	2257	0.6%	1.8%	28%	5.2%	103%	1.7%	63%	4.5%	255%
Switzerland	800	0.8%	1511	0.8%	2621	0.7%	1.4%	21%	4.6%	89%	1.3%	45%	4.2%	228%
Taiwan	775	0.8%	1459	0.7%	2478	0.7%	2.1%	33%	4.6%	88%	1.7%	61%	4.1%	220%
Tanzania	70	0.1%	233	0.1%	614	0.2%	6.2%	131%	8.9%	231%	5.5%	369%	7.8%	773%
Thailand	506	0.5%	1065	0.5%	1831	0.5%	2.8%	47%	5.5%	111%	2.0%	80%	4.5%	262%
Tunisia	47	0.0%	82	0.0%	150	0.0%	2.4%	39%	4.1%	75%	2.0%	77%	4.1%	220%
Turkey	818	0.9%	2222	1.1%	4981	1.3%	3.1%	54%	7.4%	172%	2.6%	113%	6.4%	509%
Uganda	43	0.0%	135	0.1%	340	0.1%	5.9%	124%	8.5%	214%	5.2%	329%	7.4%	692%
Ukraine	200	0.2%	385	0.2%	845	0.2%	-0.2%	-2%	4.8%	93%	1.0%	32%	5.1%	323%
United Arab Emirates	420	0.4%	980	0.5%	2011	0.5%	4.1%	75%	6.2%	134%	3.4%	166%	5.6%	379%
United Kingdom	3132	3.3%	5671	2.9%	9861	2.7%	1.8%	28%	4.3%	81%	1.6%	58%	4.0%	215%
United States	22996	24.1%	40368	20.6%	68040	18.4%	1.6%	25%	4.1%	76%	1.6%	57%	3.8%	196%
Uruguay	59	0.1%	111	0.1%	207	0.1%	2.5%	41%	4.5%	86%	1.9%	73%	4.4%	249%
Uzbekistan	69	0.1%	275	0.1%	690	0.2%	5.1%	100%	10.4%	297%	4.6%	273%	8.3%	897%
Vietnam	366	0.4%	1310	0.7%	3438	0.9%	6.3%	136%	9.5%	258%	5.3%	341%	8.0%	839%
Zimbabwe	33	0.0%	57	0.0%	100	0.0%	2.8%	48%	4.0%	72%	2.4%	96%	3.9%	204%

# Import Projections

	2021		2035		2050		Growth: 2021-35				Growth: 2021-50			
	Nominal imports (\$bn)	Share of world imports	Nominal imports (\$bn)	Share of world imports	Nominal imports (\$bn)	Share of world imports	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<b>World</b>	<b>26827</b>	<b>100.0%</b>	<b>54048</b>	<b>100.0%</b>	<b>99388</b>	<b>100.0%</b>	<b>3.1%</b>	<b>54%</b>	<b>5.1%</b>	<b>101%</b>	<b>2.5%</b>	<b>104%</b>	<b>4.6%</b>	<b>270%</b>
Advanced Economies	16772	62.5%	30849	57.1%	50590	50.9%	2.4%	40%	4.4%	84%	1.9%	71%	3.9%	202%
Emerging Market & Developing Economies	10055	37.5%	23198	42.9%	48798	49.1%	4.2%	77%	6.2%	131%	3.3%	160%	5.6%	385%
<b>Regions</b>														
Africa	702	2.6%	1654	3.1%	3920	3.9%	6.7%	147%	6.3%	135%	5.0%	310%	6.1%	458%
Asia Pacific	4280	16.0%	9060	16.8%	16654	16.8%	3.7%	67%	5.5%	112%	2.9%	126%	4.8%	289%
China & Hong Kong	3851	14.4%	7878	14.6%	14751	14.8%	2.9%	50%	5.2%	105%	2.2%	87%	4.7%	283%
E. Europe & Central Asia	922	3.4%	1964	3.6%	4104	4.1%	3.1%	53%	5.5%	113%	2.5%	105%	5.3%	345%
Europe	8914	33.2%	17395	32.2%	28872	29.1%	2.8%	47%	4.9%	95%	2.1%	82%	4.1%	224%
Latin America	1395	5.2%	2664	4.9%	4980	5.0%	2.6%	43%	4.7%	91%	2.3%	95%	4.5%	257%
Middle East	946	3.5%	2229	4.1%	4321	4.3%	3.9%	71%	6.3%	136%	3.1%	146%	5.4%	357%
North America	4012	15.0%	6988	12.9%	11930	12.0%	2.0%	31%	4.0%	74%	1.8%	66%	3.8%	197%
South Asia	905	3.4%	2718	5.0%	7251	7.3%	6.4%	139%	8.2%	200%	5.1%	322%	7.4%	701%
United Kingdom	900	3.4%	1497	2.8%	2604	2.6%	1.4%	21%	3.7%	66%	1.4%	50%	3.7%	189%
<b>Individual Economies</b>														
Algeria	42	0.2%	67	0.1%	110	0.1%	0.8%	11%	3.5%	62%	0.9%	31%	3.4%	162%
Angola	19	0.1%	41	0.1%	64	0.1%	3.9%	70%	5.6%	115%	2.6%	113%	4.3%	238%
Argentina	72	0.3%	118	0.2%	207	0.2%	2.4%	40%	3.5%	63%	1.9%	72%	3.7%	186%
Australia	297	1.1%	614	1.1%	1057	1.1%	3.4%	59%	5.3%	107%	2.5%	107%	4.5%	256%
Austria	268	1.0%	474	0.9%	752	0.8%	2.3%	38%	4.2%	77%	1.6%	58%	3.6%	180%
Azerbaijan	16	0.1%	26	0.0%	40	0.0%	1.6%	25%	3.3%	57%	1.3%	47%	3.2%	147%
Bahrain	28	0.1%	52	0.1%	94	0.1%	3.1%	53%	4.6%	88%	2.5%	104%	4.3%	237%
Bangladesh	85	0.3%	284	0.5%	761	0.8%	6.3%	134%	9.0%	233%	5.5%	375%	7.8%	792%
Belarus	45	0.2%	78	0.1%	93	0.1%	1.2%	19%	4.0%	73%	0.7%	24%	2.5%	103%
Belgium	514	1.9%	904	1.7%	1479	1.5%	2.7%	46%	4.1%	76%	2.1%	81%	3.7%	188%
Bolivia	11	0.0%	25	0.0%	51	0.1%	3.5%	63%	6.1%	130%	2.7%	118%	5.5%	374%
Brazil	298	1.1%	529	1.0%	958	1.0%	1.7%	26%	4.2%	77%	1.9%	73%	4.1%	222%
Bulgaria	50	0.2%	106	0.2%	177	0.2%	3.2%	55%	5.5%	112%	2.5%	107%	4.4%	253%
Cameroon	10	0.0%	22	0.0%	56	0.1%	5.3%	107%	6.2%	131%	4.6%	268%	6.3%	487%
Canada	609	2.3%	1145	2.1%	2080	2.1%	2.5%	42%	4.6%	88%	2.3%	91%	4.3%	242%
Chile	100	0.4%	167	0.3%	315	0.3%	1.0%	15%	3.7%	67%	1.4%	51%	4.0%	215%
China	3094	11.5%	6643	12.3%	12938	13.0%	3.1%	54%	5.6%	115%	2.4%	98%	5.1%	318%
Colombia	70	0.3%	126	0.2%	249	0.3%	4.6%	88%	4.3%	80%	3.6%	180%	4.5%	256%
Costa Rica	22	0.1%	58	0.1%	129	0.1%	4.3%	80%	7.1%	161%	3.3%	156%	6.2%	479%
Côte d'Ivoire	16	0.1%	42	0.1%	115	0.1%	5.4%	109%	7.3%	168%	5.4%	361%	7.1%	633%
Croatia	36	0.1%	71	0.1%	129	0.1%	3.2%	55%	4.9%	96%	2.4%	98%	4.5%	258%
Czechia	196	0.7%	356	0.7%	633	0.6%	2.7%	45%	4.3%	81%	2.4%	97%	4.1%	222%
DR Congo	22	0.1%	76	0.1%	234	0.2%	7.1%	163%	9.2%	244%	6.3%	494%	8.5%	954%
Denmark	210	0.8%	370	0.7%	696	0.7%	2.1%	35%	4.1%	76%	2.1%	84%	4.2%	232%
Dominican Republic	29	0.1%	82	0.2%	197	0.2%	4.0%	74%	7.8%	187%	4.0%	208%	6.9%	592%
Ecuador	29	0.1%	49	0.1%	85	0.1%	2.5%	41%	3.9%	71%	2.1%	83%	3.8%	198%
Egypt	94	0.3%	230	0.4%	551	0.6%	5.4%	110%	6.6%	145%	4.5%	260%	6.3%	487%
El Salvador	16	0.1%	26	0.0%	41	0.0%	1.9%	30%	3.8%	68%	1.4%	51%	3.4%	162%
Estonia	29	0.1%	60	0.1%	117	0.1%	3.2%	55%	5.3%	106%	2.9%	129%	4.9%	302%
Ethiopia	21	0.1%	74	0.1%	253	0.3%	7.3%	166%	9.4%	253%	6.6%	546%	9.0%	1114%
Finland	116	0.4%	205	0.4%	311	0.3%	1.9%	31%	4.2%	77%	1.3%	48%	3.5%	168%
France	958	3.6%	1813	3.4%	2767	2.8%	2.5%	40%	4.7%	89%	1.8%	70%	3.7%	189%
Germany	1771	6.6%	3039	5.6%	5212	5.2%	2.7%	45%	3.9%	72%	2.0%	77%	3.8%	194%
Ghana	26	0.1%	52	0.1%	172	0.2%	6.0%	126%	5.2%	102%	4.0%	292%	6.7%	564%
Greece	103	0.4%	175	0.3%	288	0.3%	2.2%	35%	3.9%	71%	1.7%	62%	3.6%	181%
Guatemala	28	0.1%	64	0.1%	145	0.1%	3.9%	71%	6.2%	133%	3.0%	136%	5.9%	427%
Hong Kong SAR	734	2.7%	1176	2.2%	1700	1.7%	1.9%	29%	3.4%	60%	1.1%	39%	2.9%	132%

Notes: For brevity, this table (and the one overleaf) includes individual economy projections for the 100 largest importers only (by Nominal US\$ imports in 2021). 'Advanced economies' includes all 39 countries categorised as 'advanced' by the IMF, while 'Emerging and Developing economies' includes all other economies.

	2021		2035		2050		Growth: 2021-35				Growth: 2021-50			
	Nominal imports (\$bn)	Share of world imports	Nominal imports (\$bn)	Share of world imports	Nominal imports (\$bn)	Share of world imports	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<b>Individual Economies</b>														
Hungary	147	0.5%	309	0.6%	556	0.6%	3.6%	64%	5.5%	111%	2.6%	109%	4.7%	278%
India	776	2.9%	2335	4.3%	6254	6.3%	6.6%	144%	8.2%	201%	5.1%	327%	7.5%	706%
Indonesia	218	0.8%	543	1.0%	1440	1.4%	5.4%	108%	6.7%	149%	4.6%	272%	6.7%	561%
Iraq	48	0.2%	104	0.2%	166	0.2%	3.2%	55%	5.7%	118%	2.1%	83%	4.4%	246%
Ireland	471	1.8%	1277	2.4%	1846	1.9%	3.9%	70%	7.4%	171%	2.6%	110%	4.8%	292%
Iran	66	0.2%	105	0.2%	146	0.1%	-3.1%	-36%	3.4%	59%	-1.4%	-33%	2.8%	120%
Israel	121	0.4%	285	0.5%	624	0.6%	4.6%	89%	6.3%	136%	3.9%	202%	5.8%	417%
Italy	637	2.4%	1128	2.1%	1589	1.6%	2.2%	36%	4.2%	77%	1.1%	37%	3.2%	150%
Japan	942	3.5%	1663	3.1%	2473	2.5%	2.0%	32%	4.1%	77%	1.3%	44%	3.4%	163%
Jordan	23	0.1%	47	0.1%	104	0.1%	3.6%	64%	5.1%	102%	3.2%	151%	5.3%	346%
Kazakhstan	47	0.2%	92	0.2%	228	0.2%	3.3%	58%	4.9%	96%	3.3%	155%	5.6%	384%
Kenya	22	0.1%	60	0.1%	137	0.1%	5.2%	105%	7.4%	172%	4.1%	220%	6.5%	527%
Kuwait	51	0.2%	101	0.2%	122	0.1%	3.1%	53%	5.0%	98%	1.1%	38%	3.1%	140%
Latvia	26	0.1%	46	0.1%	92	0.1%	2.8%	46%	4.3%	80%	2.6%	113%	4.5%	257%
Lithuania	50	0.2%	104	0.2%	199	0.2%	3.3%	58%	5.4%	107%	2.9%	129%	4.9%	299%
Luxembourg	139	0.5%	242	0.4%	428	0.4%	2.0%	31%	4.0%	74%	1.7%	64%	4.0%	208%
Macao SAR	23	0.1%	59	0.1%	114	0.1%	4.5%	85%	7.0%	159%	3.4%	166%	5.7%	400%
Malaysia	226	0.8%	498	0.9%	985	1.0%	3.6%	64%	5.8%	120%	2.8%	120%	5.2%	336%
Mexico	545	2.0%	1069	2.0%	1886	1.9%	2.5%	42%	4.9%	96%	2.1%	84%	4.4%	246%
Morocco	60	0.2%	140	0.3%	305	0.3%	4.2%	78%	6.2%	133%	3.1%	197%	5.8%	408%
Myanmar (Burma)	9	0.0%	16	0.0%	46	0.0%	5.8%	120%	4.5%	86%	4.2%	229%	5.9%	421%
Nepal	17	0.1%	43	0.1%	113	0.1%	3.4%	60%	6.9%	153%	3.2%	148%	6.8%	568%
Netherlands	811	3.0%	1591	2.9%	2763	2.8%	2.9%	49%	4.9%	96%	2.3%	94%	4.3%	241%
New Zealand	63	0.2%	125	0.2%	249	0.3%	3.8%	69%	5.1%	100%	3.0%	133%	4.9%	297%
Nigeria	65	0.2%	101	0.2%	256	0.3%	1.0%	15%	3.2%	55%	2.3%	93%	4.8%	292%
Norway	140	0.5%	242	0.4%	436	0.4%	2.5%	41%	4.0%	72%	2.2%	88%	4.0%	210%
Oman	30	0.1%	64	0.1%	128	0.1%	4.1%	77%	5.6%	115%	3.4%	162%	5.2%	331%
Pakistan	76	0.3%	230	0.4%	656	0.7%	5.6%	114%	8.2%	201%	5.1%	327%	7.7%	759%
Panama	25	0.1%	67	0.1%	154	0.2%	4.8%	93%	7.4%	171%	4.2%	232%	6.5%	526%
Paraguay	13	0.1%	29	0.1%	59	0.1%	3.4%	60%	5.5%	113%	2.9%	132%	5.2%	340%
Peru	59	0.2%	111	0.2%	219	0.2%	3.1%	54%	4.6%	89%	2.9%	131%	4.7%	274%
Philippines	127	0.5%	456	0.8%	1410	1.4%	8.5%	212%	9.5%	258%	6.4%	507%	8.6%	1008%
Poland	382	1.4%	938	1.7%	1545	1.6%	3.5%	62%	6.6%	146%	2.2%	89%	4.9%	305%
Portugal	112	0.4%	204	0.4%	313	0.3%	2.0%	31%	4.4%	82%	1.3%	48%	3.6%	179%
Qatar	61	0.2%	144	0.3%	239	0.2%	2.6%	44%	6.3%	136%	2.0%	77%	4.8%	291%
Romania	132	0.5%	370	0.7%	654	0.7%	4.9%	95%	7.6%	180%	3.4%	162%	5.7%	395%
Russia	380	1.4%	583	1.1%	947	1.0%	0.7%	10%	3.1%	54%	0.5%	15%	3.2%	149%
Saudi Arabia	215	0.8%	513	0.9%	824	0.8%	4.7%	90%	6.4%	139%	3.0%	134%	4.7%	284%
Serbia	40	0.1%	105	0.2%	224	0.2%	4.5%	84%	7.1%	163%	3.9%	206%	6.1%	458%
Singapore	609	2.3%	1298	2.4%	1909	1.9%	3.6%	63%	5.6%	113%	2.0%	79%	4.0%	213%
Slovakia	107	0.4%	194	0.4%	341	0.3%	2.5%	41%	4.4%	82%	2.2%	87%	4.1%	219%
Slovenia	48	0.2%	108	0.2%	191	0.2%	3.8%	67%	6.0%	125%	2.8%	124%	4.9%	298%
South Africa	105	0.4%	266	0.5%	507	0.5%	3.6%	63%	6.9%	154%	2.6%	111%	5.6%	384%
South Korea	701	2.6%	1316	2.4%	1938	2.0%	2.7%	45%	4.6%	88%	1.9%	70%	3.6%	177%
Spain	476	1.8%	977	1.8%	1348	1.4%	2.7%	44%	5.3%	105%	1.7%	63%	3.7%	183%
Sri Lanka	22	0.1%	43	0.1%	95	0.1%	3.2%	56%	4.9%	97%	2.4%	97%	5.2%	330%
Sudan	11	0.0%	31	0.1%	65	0.1%	6.0%	127%	8.0%	192%	4.9%	300%	6.5%	516%
Sweden	265	1.0%	462	0.9%	902	0.9%	2.7%	45%	4.1%	74%	2.4%	97%	4.3%	241%
Switzerland	462	1.7%	1025	1.9%	1848	1.9%	2.5%	42%	5.8%	122%	2.0%	78%	4.9%	300%
Taiwan	409	1.5%	721	1.3%	1260	1.3%	2.7%	45%	4.1%	77%	2.0%	78%	4.0%	208%
Tanzania	12	0.0%	38	0.1%	94	0.1%	7.0%	156%	8.8%	227%	5.6%	383%	7.4%	702%
Thailand	289	1.1%	603	1.1%	1134	1.1%	3.9%	71%	5.4%	109%	2.9%	129%	4.8%	293%
Tunisia	24	0.1%	50	0.1%	116	0.1%	4.3%	80%	5.3%	107%	3.9%	201%	5.6%	384%
Turkey	286	1.1%	817	1.5%	1887	1.9%	5.1%	100%	7.8%	186%	3.7%	191%	6.7%	561%
Uganda	11	0.0%	24	0.0%	52	0.1%	4.0%	73%	6.0%	126%	3.6%	181%	5.6%	382%
Ukraine	84	0.3%	129	0.2%	348	0.3%	1.1%	17%	3.1%	53%	1.4%	49%	5.0%	313%
United Arab Emirates	342	1.3%	852	1.6%	1809	1.8%	4.3%	81%	6.7%	149%	3.7%	186%	5.9%	430%
United Kingdom	900	3.4%	1497	2.8%	2604	2.6%	1.4%	21%	3.7%	66%	1.4%	50%	3.7%	189%
United States	3403	12.7%	5844	10.8%	9849	9.9%	1.9%	29%	3.9%	72%	1.7%	62%	3.7%	189%
Uruguay	15	0.1%	26	0.0%	63	0.1%	3.8%	69%	4.0%	73%	3.2%	148%	5.0%	316%
Uzbekistan	28	0.1%	122	0.2%	287	0.3%	9.4%	251%	11.2%	339%	6.5%	515%	8.4%	934%
Vietnam	338	1.3%	1079	2.0%	2454	2.5%	7.3%	169%	8.6%	219%	5.6%	382%	7.1%	626%
Zimbabwe	8	0.0%	15	0.0%	30	0.0%	33.9%	5840%	4.6%	88%	16.8%	8999%	4.7%	283%

## Export Projections

	2021		2035		2050		Growth: 2021-35				Growth: 2021-50			
	Nominal exports (\$bn)	Share of world exports	Nominal exports (\$bn)	Share of world exports	Nominal exports (\$bn)	Share of world exports	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<b>World</b>	<b>27815</b>	<b>100.0%</b>	<b>54773</b>	<b>100.0%</b>	<b>100137</b>	<b>100.0%</b>	<b>2.8%</b>	<b>48%</b>	<b>5.0%</b>	<b>97%</b>	<b>2.3%</b>	<b>91%</b>	<b>4.5%</b>	<b>260%</b>
Advanced Economies	17105	61.5%	31826	58.1%	52455	52.4%	1.8%	28%	4.5%	86%	1.7%	65%	3.9%	207%
Emerging Market & Developing Economies	10710	38.5%	22948	41.9%	47682	47.6%	2.5%	42%	5.6%	114%	3.0%	134%	5.3%	345%
<b>Regions</b>														
Africa	615	2.2%	1471	2.7%	3504	3.5%	4.5%	85%	6.4%	139%	4.0%	211%	6.2%	470%
Asia Pacific	4664	16.8%	9552	17.4%	17292	17.3%	3.2%	55%	5.3%	105%	2.4%	98%	4.6%	271%
China & Hong Kong	4386	15.8%	8374	15.3%	15806	15.8%	2.9%	49%	4.7%	91%	2.2%	89%	4.5%	260%
E. Europe & Central Asia	1094	3.9%	2074	3.8%	4139	4.1%	2.5%	41%	4.7%	90%	2.1%	84%	4.7%	278%
Europe	9733	35.0%	18774	34.3%	30860	30.8%	2.4%	39%	4.8%	93%	1.8%	67%	4.1%	217%
Latin America	1352	4.9%	2619	4.8%	4852	4.8%	2.9%	49%	4.8%	94%	2.3%	95%	4.5%	259%
Middle East	1212	4.4%	2356	4.3%	4295	4.3%	3.6%	64%	4.9%	94%	2.7%	118%	4.5%	254%
North America	3168	11.4%	6063	11.1%	10911	10.9%	2.4%	39%	4.7%	91%	2.1%	85%	4.4%	244%
South Asia	715	2.6%	2071	3.8%	6012	6.0%	5.9%	125%	7.9%	190%	5.2%	331%	7.6%	741%
United Kingdom	875	3.1%	1418	2.6%	2466	2.5%	1.2%	19%	3.5%	62%	1.3%	47%	3.6%	182%
<b>Individual Economies</b>														
Algeria	41	0.1%	55	0.1%	98	0.1%	0.6%	8%	2.2%	36%	1.4%	48%	3.1%	140%
Angola	34	0.1%	45	0.1%	66	0.1%	2.2%	35%	2.1%	33%	2.2%	90%	2.3%	95%
Argentina	87	0.3%	144	0.3%	243	0.2%	2.7%	46%	3.6%	65%	1.9%	72%	3.6%	178%
Australia	391	1.4%	706	1.3%	1259	1.3%	2.6%	44%	4.3%	81%	2.0%	80%	4.1%	222%
Austria	270	1.0%	503	0.9%	781	0.8%	2.4%	40%	4.6%	87%	1.5%	55%	3.7%	190%
Azerbaijan	25	0.1%	36	0.1%	55	0.1%	1.5%	24%	2.4%	39%	1.2%	43%	2.7%	117%
Bahrain	36	0.1%	61	0.1%	105	0.1%	3.3%	58%	3.9%	72%	2.4%	100%	3.8%	194%
Bangladesh	49	0.2%	175	0.3%	508	0.5%	6.5%	141%	9.5%	255%	5.9%	430%	8.4%	929%
Belarus	49	0.2%	80	0.1%	94	0.1%	0.9%	14%	3.5%	62%	0.6%	20%	2.3%	92%
Belgium	514	1.8%	909	1.7%	1482	1.5%	2.1%	33%	4.2%	77%	1.8%	66%	3.7%	188%
Bolivia	9	0.0%	16	0.0%	37	0.0%	2.3%	37%	4.4%	84%	2.5%	106%	5.1%	322%
Brazil	317	1.1%	544	1.0%	991	1.0%	2.9%	50%	3.9%	71%	2.5%	107%	4.0%	213%
Bulgaria	52	0.2%	113	0.2%	181	0.2%	2.7%	45%	5.8%	120%	1.8%	69%	4.4%	251%
Cameroon	8	0.0%	20	0.0%	51	0.1%	6.3%	134%	6.6%	146%	5.1%	319%	6.5%	517%
Canada	611	2.2%	1087	2.0%	2013	2.0%	2.2%	35%	4.2%	78%	2.1%	83%	4.2%	229%
Chile	101	0.4%	183	0.3%	335	0.3%	2.6%	43%	4.3%	81%	2.0%	76%	4.2%	231%
China	3608	13.0%	7112	13.0%	13919	13.9%	3.1%	52%	5.0%	97%	2.4%	98%	4.8%	286%
Colombia	50	0.2%	104	0.2%	199	0.2%	3.6%	65%	5.5%	111%	2.7%	116%	4.9%	302%
Costa Rica	24	0.1%	61	0.1%	133	0.1%	4.5%	85%	7.0%	157%	3.3%	158%	6.1%	458%
Côte d'Ivoire	16	0.1%	46	0.1%	120	0.1%	6.3%	136%	7.7%	183%	5.2%	340%	7.1%	638%
Croatia	35	0.1%	83	0.2%	144	0.1%	3.7%	66%	6.3%	134%	2.5%	107%	5.0%	308%
Czechia	205	0.7%	388	0.7%	686	0.7%	2.8%	46%	4.7%	90%	2.3%	91%	4.3%	235%
DR Congo	20	0.1%	74	0.1%	230	0.2%	9.1%	238%	9.7%	264%	7.3%	672%	8.7%	1027%
Denmark	237	0.9%	411	0.8%	751	0.8%	1.9%	29%	4.0%	74%	1.8%	69%	4.1%	218%
Dominican Republic	19	0.1%	60	0.1%	157	0.2%	6.8%	150%	8.6%	216%	5.7%	403%	7.6%	730%
Ecuador	29	0.1%	49	0.1%	86	0.1%	2.4%	39%	3.8%	68%	2.1%	81%	3.8%	193%
Egypt	58	0.2%	212	0.4%	515	0.5%	6.3%	136%	9.6%	263%	4.9%	296%	7.8%	784%
El Salvador	8	0.0%	16	0.0%	28	0.0%	2.7%	45%	4.6%	89%	2.2%	86%	4.2%	226%
Estonia	29	0.1%	59	0.1%	117	0.1%	3.1%	53%	5.1%	101%	2.8%	125%	4.9%	300%
Ethiopia	10	0.0%	38	0.1%	135	0.1%	8.5%	212%	10.2%	289%	7.3%	680%	9.5%	1281%
Finland	116	0.4%	205	0.4%	313	0.3%	1.6%	24%	4.1%	76%	1.1%	36%	3.5%	169%
France	923	3.3%	1786	3.3%	2758	2.8%	2.4%	40%	4.8%	94%	1.7%	62%	3.8%	199%
Germany	1995	7.2%	3307	6.0%	5508	5.5%	1.9%	30%	3.7%	66%	1.5%	55%	3.6%	176%
Ghana	24	0.1%	50	0.1%	164	0.2%	5.2%	105%	5.3%	107%	4.5%	257%	6.9%	585%
Greece	88	0.3%	164	0.3%	278	0.3%	2.6%	44%	4.6%	87%	1.9%	73%	4.1%	217%
Guatemala	15	0.1%	38	0.1%	92	0.1%	4.4%	82%	6.7%	149%	3.5%	168%	6.4%	504%
Hong Kong SAR	751	2.7%	1162	2.1%	1703	1.7%	1.8%	29%	3.2%	55%	1.2%	40%	2.9%	127%

Notes: For brevity, this table (and the one overleaf) includes individual economy projections for the 100 largest importers only (by Nominal US\$ imports in 2021). 'Advanced economies' includes all 39 countries categorised as 'advanced' by the IMF, while 'Emerging and Developing economies' includes all other economies.

	2021		2035		2050		Growth: 2021-30				Growth: 2021-50			
	Nominal exports (\$bn)	Share of world exports	Nominal exports (\$bn)	Share of world exports	Nominal exports (\$bn)	Share of world exports	In real terms		In nominal terms		In real terms		In nominal terms	
							Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative	Per Year	Cumulative
<b>Individual Economies</b>														
Hungary	148	0.5%	329	0.6%	570	0.6%	3.9%	71%	5.9%	122%	2.6%	112%	4.8%	285%
India	643	2.3%	1831	3.3%	5349	5.3%	5.9%	123%	7.8%	185%	5.1%	328%	7.6%	731%
Indonesia	247	0.9%	534	1.0%	1399	1.4%	4.8%	94%	5.7%	116%	4.2%	231%	6.2%	467%
Iraq	77	0.3%	147	0.3%	217	0.2%	3.9%	71%	4.7%	90%	2.2%	88%	3.6%	181%
Ireland	672	2.4%	1692	3.1%	2559	2.6%	3.2%	55%	6.8%	152%	1.9%	75%	4.7%	281%
Iran	82	0.3%	107	0.2%	149	0.1%	0.8%	11%	1.9%	30%	0.5%	17%	2.1%	81%
Israel	141	0.5%	313	0.6%	658	0.7%	3.8%	68%	5.9%	122%	3.3%	159%	5.5%	367%
Italy	687	2.5%	1249	2.3%	1738	1.7%	1.9%	30%	4.4%	82%	0.9%	31%	3.3%	153%
Japan	917	3.3%	1650	3.0%	2496	2.5%	1.8%	29%	4.3%	80%	1.2%	42%	3.5%	172%
Jordan	14	0.0%	35	0.1%	83	0.1%	5.1%	101%	7.0%	157%	4.2%	227%	6.4%	506%
Kazakhstan	66	0.2%	122	0.2%	293	0.3%	3.2%	56%	4.4%	84%	3.1%	145%	5.3%	344%
Kenya	11	0.0%	38	0.1%	90	0.1%	6.3%	134%	9.0%	236%	4.6%	267%	7.4%	688%
Kuwait	76	0.3%	120	0.2%	140	0.1%	2.1%	34%	3.3%	59%	0.5%	16%	2.2%	86%
Latvia	25	0.1%	46	0.1%	92	0.1%	2.5%	42%	4.5%	84%	2.5%	103%	4.6%	269%
Lithuania	53	0.2%	107	0.2%	203	0.2%	2.5%	41%	5.2%	104%	2.4%	101%	4.8%	285%
Luxembourg	169	0.6%	290	0.5%	512	0.5%	1.9%	30%	3.9%	71%	1.7%	64%	3.9%	202%
Macao	27	0.1%	100	0.2%	184	0.2%	7.5%	174%	10.0%	279%	4.7%	274%	6.9%	595%
Malaysia	256	0.9%	550	1.0%	1071	1.1%	2.8%	47%	5.6%	115%	2.4%	97%	5.1%	318%
Mexico	522	1.9%	1045	1.9%	1838	1.8%	2.1%	34%	5.1%	100%	1.7%	61%	4.4%	252%
Morocco	47	0.2%	122	0.2%	279	0.3%	5.0%	98%	7.1%	160%	4.3%	237%	6.3%	493%
Myanmar (Burma)	10	0.0%	18	0.0%	50	0.0%	5.7%	116%	4.1%	76%	4.0%	212%	5.5%	375%
Nepal	2	0.0%	14	0.0%	38	0.0%	9.2%	245%	12.9%	445%	6.2%	467%	9.9%	1434%
Netherlands	905	3.3%	1714	3.1%	2937	2.9%	2.3%	38%	4.7%	89%	1.9%	72%	4.9%	224%
New Zealand	54	0.2%	121	0.2%	239	0.2%	3.6%	65%	5.9%	123%	2.7%	116%	5.2%	340%
Nigeria	51	0.2%	65	0.1%	170	0.2%	0.4%	6%	1.7%	27%	2.2%	89%	4.2%	234%
Norway	200	0.7%	272	0.5%	473	0.5%	1.7%	27%	2.2%	36%	1.6%	58%	3.0%	137%
Oman	42	0.2%	78	0.1%	125	0.1%	3.3%	57%	4.5%	84%	2.2%	88%	3.8%	196%
Pakistan	36	0.1%	115	0.2%	368	0.4%	6.9%	154%	8.7%	224%	6.2%	468%	8.4%	934%
Panama	26	0.1%	66	0.1%	154	0.2%	5.3%	105%	7.0%	158%	4.5%	255%	6.4%	501%
Paraguay	14	0.1%	29	0.1%	61	0.1%	2.3%	37%	5.3%	107%	2.4%	98%	5.1%	328%
Peru	66	0.2%	116	0.2%	220	0.2%	2.7%	45%	4.1%	75%	2.3%	92%	4.2%	233%
Philippines	87	0.3%	308	0.6%	1046	1.0%	7.2%	164%	9.5%	255%	5.8%	417%	9.0%	1104%
Poland	412	1.5%	951	1.7%	1558	1.6%	3.0%	51%	6.2%	131%	1.9%	71%	4.7%	278%
Portugal	105	0.4%	202	0.4%	313	0.3%	2.4%	40%	4.7%	91%	1.7%	62%	3.8%	197%
Qatar	106	0.4%	192	0.4%	293	0.3%	3.1%	53%	4.4%	82%	1.9%	74%	3.6%	177%
Romania	116	0.4%	332	0.6%	604	0.6%	4.1%	76%	7.8%	186%	2.9%	126%	5.9%	420%
Russia	550	2.0%	705	1.3%	1096	1.1%	0.1%	2%	1.8%	28%	0.0%	1%	2.4%	99%
Saudi Arabia	290	1.0%	541	1.0%	863	0.9%	4.6%	88%	4.5%	86%	2.8%	123%	3.8%	197%
Serbia	36	0.1%	99	0.2%	213	0.2%	4.2%	79%	7.5%	175%	3.7%	185%	6.3%	492%
Singapore	734	2.6%	1527	2.8%	2274	2.3%	3.3%	57%	5.4%	108%	1.9%	73%	4.0%	210%
Slovakia	108	0.4%	200	0.4%	346	0.3%	2.3%	37%	4.5%	86%	1.8%	69%	4.1%	222%
Slovenia	52	0.2%	111	0.2%	196	0.2%	3.2%	55%	5.6%	116%	2.5%	103%	4.7%	281%
South Africa	131	0.5%	274	0.5%	516	0.5%	3.1%	54%	5.4%	110%	2.4%	97%	4.9%	295%
South Korea	773	2.8%	1436	2.6%	2088	2.1%	2.5%	41%	4.5%	86%	1.5%	52%	3.5%	170%
Spain	498	1.8%	1047	1.9%	1465	1.5%	2.8%	47%	5.5%	110%	1.5%	55%	3.8%	194%
Sri Lanka	15	0.1%	38	0.1%	87	0.1%	5.3%	105%	6.9%	154%	3.5%	171%	6.3%	484%
Sudan	6	0.0%	20	0.0%	51	0.1%	8.3%	204%	8.8%	225%	6.7%	549%	7.6%	732%
Sweden	292	1.1%	499	0.9%	962	1.0%	2.5%	42%	3.9%	71%	2.4%	99%	4.2%	229%
Switzerland	567	2.0%	1199	2.2%	2088	2.1%	2.1%	34%	5.5%	111%	1.7%	64%	4.6%	268%
Taiwan	511	1.8%	855	1.6%	1431	1.4%	1.3%	20%	3.7%	67%	1.1%	39%	3.6%	180%
Tanzania	10	0.0%	35	0.1%	86	0.1%	7.4%	172%	9.4%	250%	5.8%	416%	7.7%	763%
Thailand	291	1.0%	652	1.2%	1183	1.2%	4.0%	73%	5.9%	124%	2.8%	123%	5.0%	306%
Tunisia	19	0.1%	43	0.1%	111	0.1%	3.8%	70%	5.8%	122%	3.9%	205%	6.2%	474%
Turkey	283	1.0%	773	1.4%	1829	1.8%	5.2%	103%	7.4%	173%	3.8%	196%	6.6%	546%
Uganda	6	0.0%	22	0.0%	49	0.0%	6.3%	135%	9.3%	246%	4.9%	300%	7.3%	675%
Ukraine	82	0.3%	218	0.4%	415	0.4%	2.6%	43%	7.3%	167%	2.6%	108%	5.8%	408%
United Arab Emirates	453	1.6%	947	1.7%	1918	1.9%	3.3%	57%	5.4%	109%	3.0%	136%	5.1%	323%
United Kingdom	875	3.1%	1418	2.6%	2466	2.5%	1.2%	19%	3.5%	62%	1.3%	47%	3.6%	182%
United States	2557	9.2%	4977	9.1%	8898	8.9%	2.4%	40%	4.9%	95%	2.2%	86%	4.4%	248%
Uruguay	16	0.1%	27	0.0%	64	0.1%	3.2%	55%	3.9%	72%	3.0%	139%	4.9%	304%
Uzbekistan	12	0.0%	55	0.1%	140	0.1%	9.7%	268%	11.3%	348%	6.9%	597%	8.8%	1043%
Vietnam	340	1.2%	1063	1.9%	2445	2.4%	6.3%	137%	8.5%	213%	4.8%	288%	7.0%	619%
Zimbabwe	6	0.0%	17	0.0%	65	0.1%	2.9%	50%	7.3%	167%	2.6%	113%	8.4%	949%





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