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The Economist Intelligence Unit

Geo-Economic & Industry Outlooks 2023:

Collection Of 17 EIU Briefs

March - December 2022

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Worldwide Cost of Living 2022

How soaring inflation has affected prices globally

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How soaring inflation has affected prices globally

Key findings

- EIU's latest Worldwide Cost of Living (WCOL) survey shows that **prices have risen** by an average of 8.1% in local-currency terms over the past year in the world's biggest cities. This is the **fastest rate for at least 20 years**, reflecting a global cost-of-living crisis sparked by the war in Ukraine and continuing covid-19 restrictions in China.
- **New York tops the rankings for the first time, tying with frequent leader Singapore,** which is back in pole position for the eighth time in ten years. Together the two have bumped Tel Aviv (Israel; top last year) down into third place. Damascus (Syria) and Tripoli (Libya) remain the cheapest of the 172 cities covered by our survey.
- **Istanbul (Turkey), Buenos Aires (Argentina) and Tehran (Iran)** have seen very high inflation. However, the **highest inflation rate is in Caracas** in Venezuela, where WCOL prices have risen by 132% since last year. Although Venezuela's hyperinflation has slowed sharply since 2019, we continue to exclude the city from our global averages to avoid skewing the calculations.
- The **Russian cities of Moscow and St Petersburg have shot up the rankings** by 88 and 70 places respectively as Western sanctions lead to higher prices, and buoyant energy markets and financial restrictions support the rouble.
- The most rapid increases in the WCOL index were for the **price of a litre of petrol, which has risen by 22% year on year on average** in local-currency terms amid higher global oil prices and a stronger US dollar.
- **Prices for gas and electricity have risen by 29%** on average in local-currency terms in western European cities as the region tries to wean itself off Russian energy. This compares with a global average increase of 11%.
- **Inflation for food and household goods has also been high** amid trade restrictions, caused partly by the war in Ukraine. By contrast, prices for recreational goods and services have been subdued in local-currency terms; this may reflect softer demand as consumers focus spending on essentials.

Top ten positions

City	Geography	Index (New York=100)	Rank
Singapore	Singapore	100	1
New York	US	100	1
Tel Aviv	Israel	99	3
Hong Kong	Hong Kong	98	4
Los Angeles	US	98	4
Zurich	Switzerland	94	6
Geneva	Switzerland	91	7
San Francisco	US	85	8
Paris	France	84	9
Copenhagen	Denmark	83	10
Sydney	Australia	83	10

Source: EIU.

Many countries across the world are struggling with a cost-of-living crisis, the impact of which is clear in the latest WCOL survey. The survey, which was conducted between August 16th and September 16th 2022, tracks the prices of over 200 goods and services in 172 cities worldwide (Kiev in Ukraine had to be excluded entirely from this year's survey owing to the country's war with Russia). On average, **WCOL prices have risen by 8.1% year on year** in local-currency terms in the latest survey. This is the **highest inflation rate recorded since digital WCOL surveys began almost 20 years ago**. Petrol prices have seen the most rapid increases, but utility and food prices have also increased sharply.

However, high inflation is not the only factor that drives the WCOL's annual ranking of the world's most expensive cities. A stronger currency will tend to see a city rise in the rankings, as prices are higher when expressed in international common currency. Structural factors such as competition or high demand play a key role in determining the cost of living as well. Because we convert local currency prices into US dollars to calculate each city's index, our rankings are also driven by exchange rates against the dollar. This year has seen the dollar strengthen against many currencies as the Federal Reserve (Fed, the US central bank) raises interest rates.

The combination of these two factors—high incomes and a stronger exchange rate—has propelled **Singapore and New York City to the top of our WCOL rankings** for 2022, making them the most expensive cities in the world. A stronger currency and a higher inflation rate have enabled these two cities to push Tel Aviv (Israel), which was top in the rankings last year, into third place.

New York is not the only US city that has risen in our rankings as a result of the strengthening dollar. Other US cities, including Atlanta and Boston, account for six of the top ten global movers up the rankings. Mexico City has also jumped upwards by 33 places, with the peso supported by Mexico's own interest-rate hikes, which are tracking ahead of the Fed's.

Biggest movers up the rankings in the past 12 months

City	Geography	Index (New York=100)	Rank	Index move	Rank move
Moscow	Russia	72	37	16	88
St Petersburg	Russia	66	73	16	70
Atlanta	US	70	46	3	42
Charlotte	US	69	53	3	39
Indianapolis	US	69	53	2	35
San Diego	US	79	17	2	33
Mexico City	Mexico	71	43	2	33
Saipan	Northern Mariana Islands	70	46	1	30
Portland	US	70	46	1	30
Boston	US	78	21	1	29

Source: EIU.

The biggest upward movers, however, are the Russian cities of Moscow and St Petersburg, which have shot up the rankings by 88 and 70 places respectively. Capital controls, import suppression and the conversion of European gas payments into roubles are supporting the value of the local currency. Meanwhile, local prices have been driven upwards by Western sanctions imposed after Russia invaded Ukraine in February 2022. According to our survey of prices, inflation in Moscow is now 17.1% year on year in local-currency terms, while in St Petersburg it has reached 19.4%.

Bottom ten positions

City	Geography	Index (New York=100)	Rank
Colombo	Sri Lanka	38	161
Bangalore	India	38	161
Algiers	Algeria	38	161
Chennai	India	37	164
Ahmedabad	India	35	165
Almaty	Kazakhstan	34	166
Karachi	Pakistan	32	167
Tashkent	Uzbekistan	31	168
Tunis	Tunisia	30	169
Tehran	Iran	23	170
Tripoli	Libya	22	171
Damascus	Syria	11	172

Source: EIU.

The cheapest cities in our rankings are Damascus, Tripoli and Tehran, reflecting these countries' weak economies and currencies. Damascus and Tripoli, which are often at the bottom of the WCOL rankings, have seen only moderate local-currency inflation over the past year. In calculating Tehran's index this year we decided to use the more widely used realistic parallel-market exchange rate, instead of the overvalued official exchange rate. As a result, Tehran is now the third-cheapest city in our comparative ranking, while it ranked much higher last year.

Biggest movers down the rankings in the past 12 months

City	Geography	Index (New York=100)	Rank	Index move	Rank move
Stockholm	Sweden	61	99	-12	-38
Luxembourg	Luxembourg	60	104	-11	-38
Lyon	France	63	90	-12	-34
Osaka	Japan	71	43	-23	-33
Manchester	UK	66	73	-12	-32
Nouméa	New Caledonia	68	64	-12	-31
Brussels	Belgium	68	64	-11	-28
Douala	Cameroon	52	128	-11	-27
Busan	South Korea	59	106	-9	-25
Tokyo	Japan	72	37	-19	-24

Note. Tehran is not included, as we switched to using the parallel-market exchange rate, which is more widely used than the official exchange rate.

Source: EIU.

Of the top ten biggest fallers in our rankings, European cities such as Luxembourg and Stockholm account for five. While inflation in Europe has risen, the energy crisis that has followed Russia's invasion of Ukraine is tipping the continent into recession and depreciating currencies against the US dollar and therefore reducing the indices for some European cities. In late August the euro fell below parity with the dollar for the first time in 20 years. Japan and South Korea have also seen currency depreciation, while local-currency inflation in these countries is fairly subdued; this has pushed down the indices for Tokyo and Seoul compared with New York.

Inflation is widely spread but variable

The cost-of-living crisis is affecting most of the world, with several cities in this year's WCOL survey suffering from very high inflation. In Istanbul, prices have risen by 86% in local-currency terms since last year, while they are up by 64% in Buenos Aires and 57% in Tehran. **The highest inflation rate is in Caracas, Venezuela,** where prices have risen by 132% in local-currency terms since last year. While this is a vast improvement on 2019's hyperinflation of 25,504%, we continue to exclude Venezuela from our global averages to avoid skewing the calculations.

The product most affected is petrol, prices of which have risen by 22% on average in local-currency terms. With oil priced in US dollars, part of this inflation has come from currency weakness: the average year-on-year price rise in dollars is a comparatively modest 11%. This dramatic rise in local petrol prices has caused public protests in several cities across the world this year, from Sri Lanka to Spain.

The variance in petrol price increases is huge in this year's survey, depending on the strength of each city's currency and the extent of government subsidies. In Istanbul and Colombo (Sri Lanka), where currency crashes have made imported oil very expensive, petrol prices have soared by an eye-watering

148% and 189% respectively in local-currency terms. In the cities of Brazil, which produces its own oil, petrol prices have actually fallen since last year. The former government used its control of the state oil company, Petrobras, to hold down prices as well as hiking fuel subsidies this year—yet it was still ousted by voters in October's presidential election.

Other prices in our survey have also risen sharply compared with last year. The high prices of energy commodities mean that utility bills for electricity and gas are up by an average of 11% in local-currency terms across the 172 cities in the WCOL survey. In western Europe, prices have soared by 29% on average amid an energy crisis sparked by efforts to wean the region off Russian oil and gas. Global car prices have risen by 9.5% on average in local-currency terms, as supply-chain blockages have curtailed production and led to waiting lists in some cities. Meanwhile, prices for food and household goods have increased more rapidly than prices for clothing and personal care products. By contrast, price rises for domestic help and recreational goods and services have been subdued.

Price increases are set to ease in 2023

The good news is that prices may be starting to ease in some countries as interest rates bite and the global economy slows. Supply-chain blockages should also start to ease as freight rates come down and demand softens. Unless the war in Ukraine escalates, we predict that commodity prices for energy, food and for supplies such as metals are likely to fall sharply in 2023 compared with 2022 levels, although they are likely to stay higher than previous levels. Overall, EIU forecasts that global consumer price inflation will fall from an average of 9.4% this year to a still-high 6.5% in 2023. We expect this partial drop to be reflected in next year's WCOL survey, bringing a little relief to hard-pressed households.

Methodology

The Worldwide Cost of Living is a twice-yearly survey conducted by EIU that compares more than 400 individual prices across more than 200 products and services in 172 cities (173 last year, when Kiev was included). Data for the survey, which has been carried out for more than 30 years, are collected each March and September by our global team of researchers. They are then compiled into an index by our team of economists for publication in June and December.

The survey has been designed to enable human resources and finance managers to calculate cost-of-living allowances and build compensation packages for expatriates and business travellers. It can also be used by consumer goods firms and other companies to map pricing trends, determine optimum prices for their products across cities and understand the relative expense of a city to formulate policy guidelines.

To collect the data, each researcher has a list of more than 200 specified products and services to research, with more than 50,000 individual prices collected every six months. These include prices for food, drink, clothing, household supplies and personal care items, home rents, transport, utility bills, private schools, domestic help and recreational costs. Items are updated or revised periodically to reflect shifts in purchasing habits. For example, in the latest survey we have revised indicators such as those for mobile-phone services, and for taxis and other ride-hire services.

To gather the price data, our researchers survey a range of stores, including supermarkets, mid-priced stores and higher-priced speciality outlets, as well as an array of service providers. The reported prices are not the recommended retail prices or manufacturers' costs, but the actual costs charged.

Our economists then convert the price data into a central currency (the US dollar), using the prevailing exchange rate and weighting to achieve comparative indices. The index uses an identical set of weights that is internationally based. Items are individually weighted across a range of categories, and a comparative index is produced using the relative difference by weighted item. For the purposes of this report, all cities are compared with a base city, New York City, which has an index score of 100.

The survey can be accessed via the data tool or our purpose-built website; these allow for city-to-city comparisons.

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Purchase the full Worldwide Cost of Living ranking from the EIU Store and access pricing information on more than 200 products and services in 173 cities worldwide. The ranking draws upon a comprehensive underlying data set including more than 400 individual prices per location.

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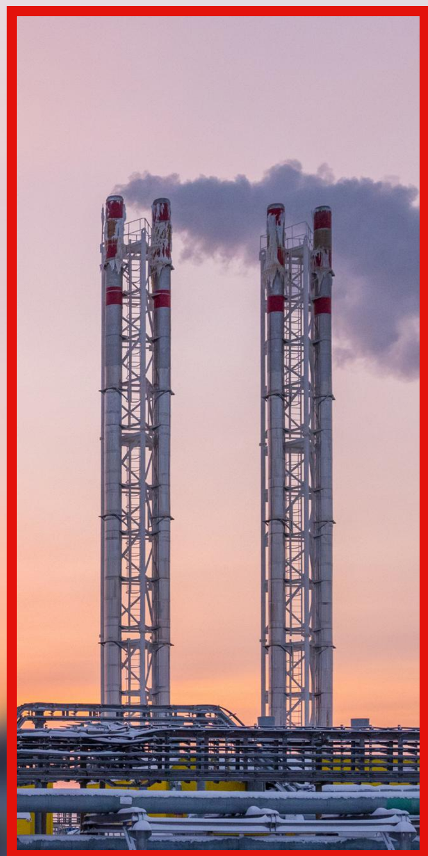
Risk outlook 2023

Ten risk scenarios that could reshape the global economy



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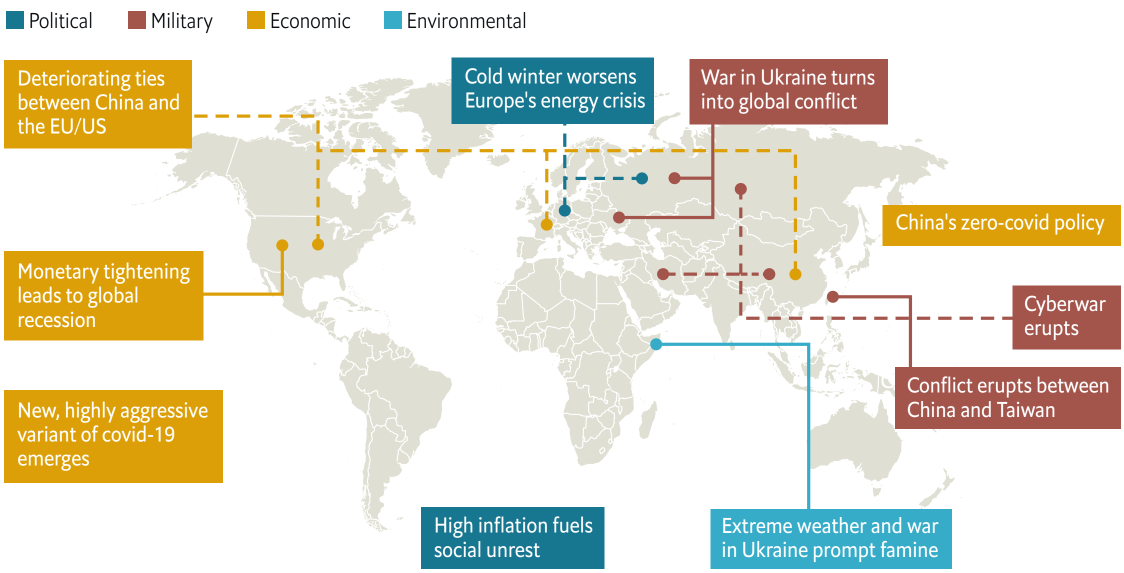
Risk Outlook 2023

Ten risk scenarios that could reshape the global economy

EIU produces a quantitative and qualitative assessment of economic, political and regulatory risks that help our clients evaluate potential shifts in a country's operating environment. In 2022 the global repercussions of Russia's invasion of Ukraine shifted global concerns away from coronavirus-related health issues and towards growing political, security and macroeconomic risks. We expect that ripple effects from the war in Ukraine, global monetary tightening and an economic slowdown in China will weigh on the economy in 2023, with global growth slowing to only 1.6%. This white paper explores some of the risks that could lead to even slower growth, or even, trigger a global recession.

Global risk scenarios



Source: EIU.

Scenario one: cold winter exacerbates Europe's energy crisis

High probability; Very high impact

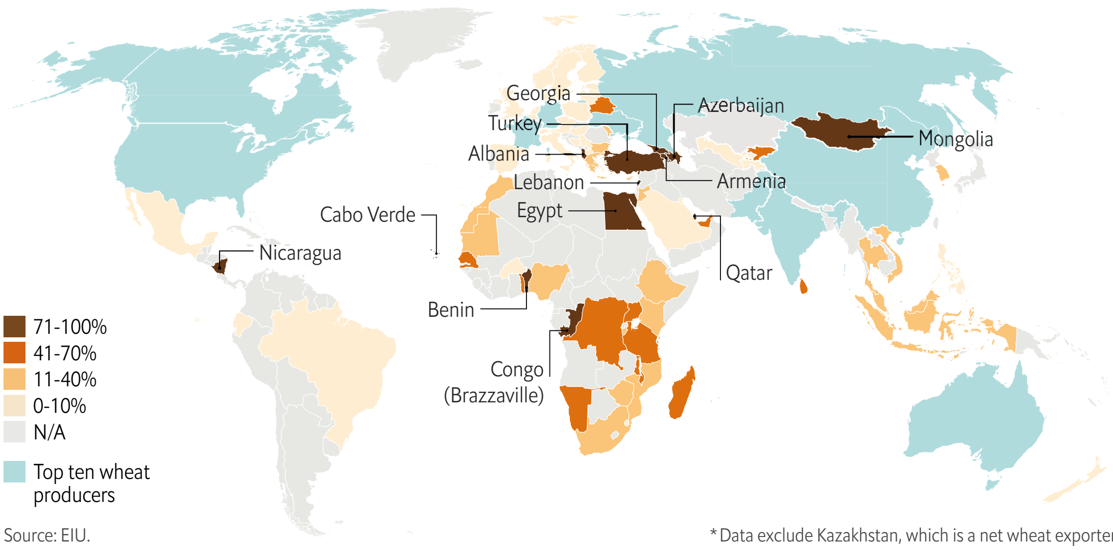
Russia has weaponised its energy supplies by completely or partially cutting off gas flows to 12 EU countries. If a cold winter in 2022/23 leads to above-average gas demand, Europe could exhaust its natural gas reserves early (and fail to replenish them), resulting in a recession that could drag into 2024 (our core forecast is for a mild recession, with the euro zone's GDP contracting by 0.4% next year). Major parts of the industrial sector would be forced to ration energy usage and reduce their workforces, ultimately bringing supply chains to a halt. High energy prices would lead to a surge in bankruptcies as firms become unprofitable. In an extreme scenario, governments could forcefully ration energy usage, leading to waves of blackouts. Governments could also halt price protections for households, increasing heating costs further and thus fuelling poverty and eroding consumers' purchasing power. A breakdown of EU solidarity is another risk, with member states possibly halting or reducing gas flows to their neighbours to prevent domestic shortages. Given their high level of dependency on Russian gas, central Europe, Germany and Austria would be the most exposed to a deep recession in such a scenario.

Scenario two: extreme weather adds to commodity price spikes, fuelling global food insecurity

High probability; High impact

Climate change models point to an increased frequency of extreme weather events. So far these have been sporadic and in different parts of the world, but they could start to happen more synchronously and for prolonged periods. Severe droughts and heatwaves in Europe, China, India and the US in 2022 are contributing to rising prices of some foodstuffs. In addition, the war between Russia and Ukraine (two of the world's largest agricultural exporters) has led to severe price spikes and risks creating global shortages of grains and fertilisers (which are crucial for harvests) in 2023. The world could face a prolonged period of crop shortages and skyrocketing prices, raising the risk of food insecurity (or even famine).

Over half a billion people live in countries that rely heavily on Russian and Ukrainian wheat
(% of total wheat imports from Russia and Ukraine, 2021)



Source: EIU.

* Data exclude Kazakhstan, which is a net wheat exporter.

Scenario three: direct conflict erupts between China and Taiwan, forcing US to intervene

Moderate probability; Very high impact

A direct conflict between China and Taiwan is unlikely, but tensions grew when China conducted "targeted military operations" following a visit to Taiwan by the speaker of the House of Representative (the lower house of the US Congress), Nancy Pelosi, in August. China's countermeasures have included live-fire military exercises in and around Taiwan's territorial waters. The US government has reiterated that its diplomatic approach towards Taiwan has not changed, but China is increasingly sceptical of US-Taiwan relations, particularly given the acute hostility towards China in the US Congress. The risk of a full military invasion is mitigated by China's reliance on Taiwan's semiconductors and concerns about the US's active response to Russia's invasion of Ukraine. However, recent military exercises by China and a more aggressive Taiwanese response raise the risk of a miscalculation, which could spiral into a wider conflict. Such a conflict would wipe out Taiwan's economy, including its semiconductor industry, on which global supply chains rely. It would also risk drawing in the US, Australia and Japan, starting a catastrophic global conflict.

Scenario four: high global inflation fuels social unrest

Very high probability; Moderate impact

Persistent inflationary pressures, caused by supply-chain disruptions and Russia's invasion of Ukraine, are pushing up global inflation, which is at its highest level since the 1990s. If inflation rises much higher than wage increases, making it hard for poorer households to purchase basic staples, it could spark social unrest. Such protest movements have arisen in India, Ecuador and Argentina. In an extreme scenario, protests could push workers in major economies and employed by large manufacturers to co-ordinate large-scale strikes demanding higher salaries that match inflation. Such movements, similar to those that have affected critical services in the UK (ports, postal services, barristers and railways), could paralyse entire industries and spill over to other sectors or countries, weighing on global growth.

Scenario five: new variant of coronavirus, or another infectious disease, sends global economy back into recession

Moderate probability; Very high impact

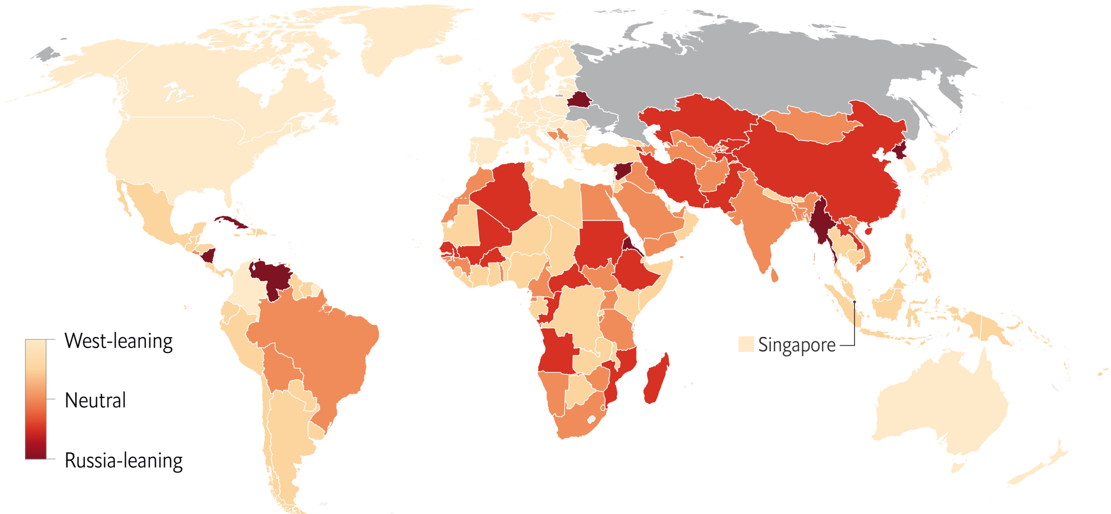
Amid global vaccine inequity, the relaxation of government policies and pandemic fatigue, we expect a new variant of covid-19 to emerge in late 2022 or early 2023. If it escapes immunity (despite a reformulation of vaccines), this could cause a repeat of 2020. Risks are not only related to the coronavirus—experts are warning that other infectious diseases will soon emerge (such as monkeypox). If another aggressive variant of the coronavirus materialises, developed countries may impose lockdowns. Consumer and investor sentiment would sink, leading to a downturn in financial markets, services and retail sales. Travel bans would return, dampening the tourism recovery. The vaccination drive would reset if vaccine producers have to start from scratch, and the global economy would go back into recession.

Scenario six: inter-state cyberwar cripples state infrastructure in major economies

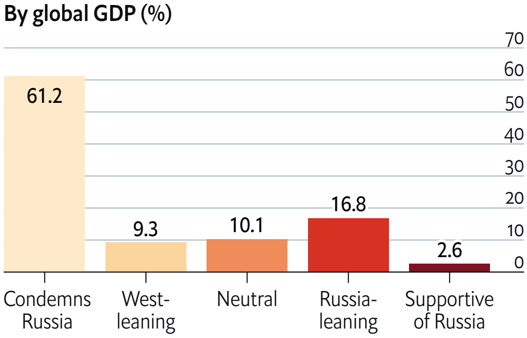
Moderate probability; Very high impact

Russia's invasion of Ukraine and tensions surrounding Taiwan have increased the likelihood of major state-on-state cyber-attacks. Given the much higher costs of direct military conflict and the difficulty in identifying perpetrators of cyber-attacks, any military escalation is most likely initially to take the form of cyber-warfare. This could be triggered by a complete diplomatic breakdown, leading to an escalating string of tit-for-tat cyber-attacks ultimately targeting software that controls state infrastructure. The shutdown of a national grid, for example, would severely disrupt business operations.

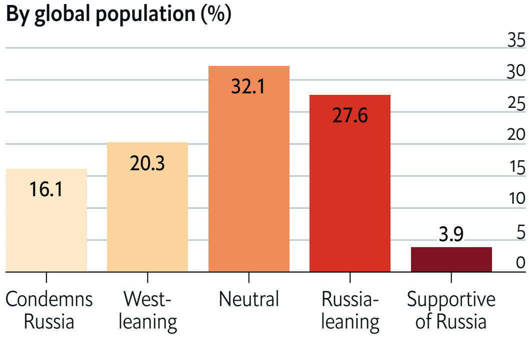
Two-thirds of the world's population live in countries that are neutral or Russia-leaning regarding the war in Ukraine



By global GDP (%)



By global population (%)



Source: EIU.

Scenario seven: further deterioration in West-China ties forces full decoupling of global economy

Moderate probability; High impact

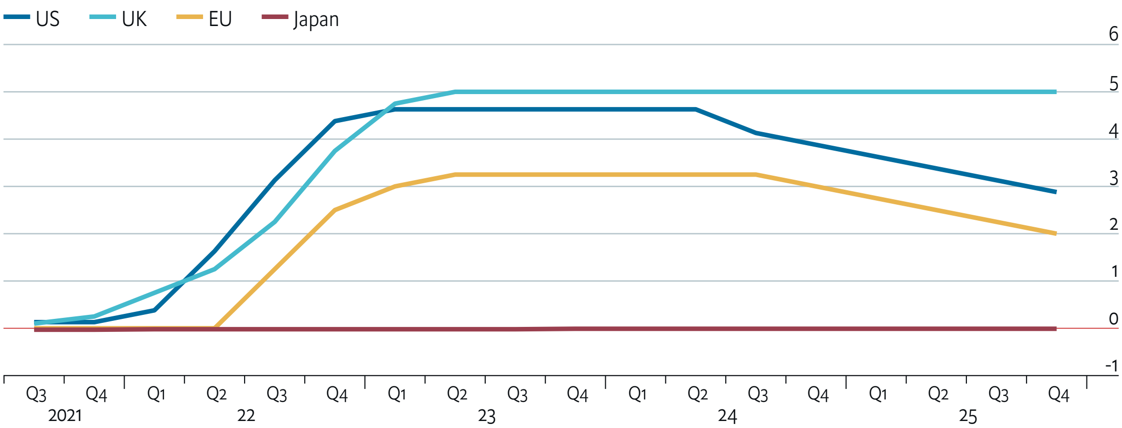
Western democracies, notably the US and the EU, are concerned about China's support to Russia following the invasion of Ukraine. In parallel, China is concerned about US-Taiwan relations and efforts by the US to convince other democracies to pressure it using restrictions on trade, technology and finance. The EU has also taken an increasingly confrontational stance towards China's human rights abuses in Xinjiang, unequal treatment of EU and Chinese firms, and its subsidy-led industrial model. In an extreme scenario, China could initiate military manoeuvres in the South China Sea (most likely in Taiwan), exacerbating tensions and pushing the West to unite in imposing sweeping trade and investment restrictions on China. This would force some markets (and companies) to choose sides. In retaliation, China could block exports of raw materials and goods that are crucial to Western economies, such as rare earths. This would have disastrous economic effects and force companies to operate two supply chains while fearing operational disruptions.

Scenario eight: aggressive monetary tightening leads to global recession

Moderate probability; Moderate impact

Major central banks are rapidly raising interest rates to try to tame rising inflation across most countries around the world (we assume that global inflation will stand at nearly 10% this year). These measures are fuelling a sharp increase in long-term interest rates, raising borrowing costs. A prolonged rise in inflation could prompt central banks to maintain aggressive policies that would undermine household purchasing power amid high energy and commodities prices. Amid other destabilising factors (for example the war in Ukraine, supply-chain disruptions, the strength of the US dollar and China's zero-covid policy), this situation could trigger a global recession. In developed countries, the economic slowdown could deepen, resulting in an asset market crash that would weigh on global growth. In emerging markets, interest-rate rises could prompt extreme currency depreciations and raise the risk of sovereign debt defaults (as happened in Sri Lanka in April).

Major central banks are rapidly raising interest rates
(main policy interest rate*; % end of period)



Source: EIU. *Data from Q4 2022 are EIU forecasts.

Scenario nine: China's zero-covid policy leads to severe recession

Low probability; High impact

China's government continues to believe covid-19 containment measures to be necessary. We therefore expect China's zero-covid policy to persist until mid-2023. With another coronavirus variant likely to emerge this winter, strict lockdown measures in China remain probable. These, combined with the persistent weakness in China's property sector, energy sector woes and a recent drought, could cause China's economy to contract severely. This would weigh on global economic activity, deteriorating already weak investor sentiment and dampening the performance of global financial markets. International companies could diversify their operations to non-China-based manufacturing and logistics hubs that have pivoted towards "living with the virus". However, this would be costly and would need to be carefully framed; Chinese authorities could retaliate, including via enhanced inspections of, or reputational attacks on, those firms that would be considered as "quitting the Chinese market".

Scenario ten: Russia-Ukraine conflict turns into global war

Very low probability; Very high impact

The war in Ukraine could become a global conflict, pitting Russia against NATO members. The war carries particular risks for NATO member states that border Ukraine and Russia, which could be drawn into the conflict inadvertently. Russia has readied its nuclear deterrence forces and could target critical infrastructure (such as gas pipelines or undersea telecommunications cables). In case of retaliation from NATO countries, the risk of a miscalculation cannot be discounted. Prospective and existing NATO member states such as Poland, Romania, the Baltic states, Finland and Sweden are the most likely trigger points. Moldova is another potential flashpoint. The consequences of a global conflict would be devastating. The global economy would fall into deep recession, with severe human consequences and large-scale fatalities. Such a confrontation could assume a nuclear form, with catastrophic consequences for major cities in Russia, the US and Europe.

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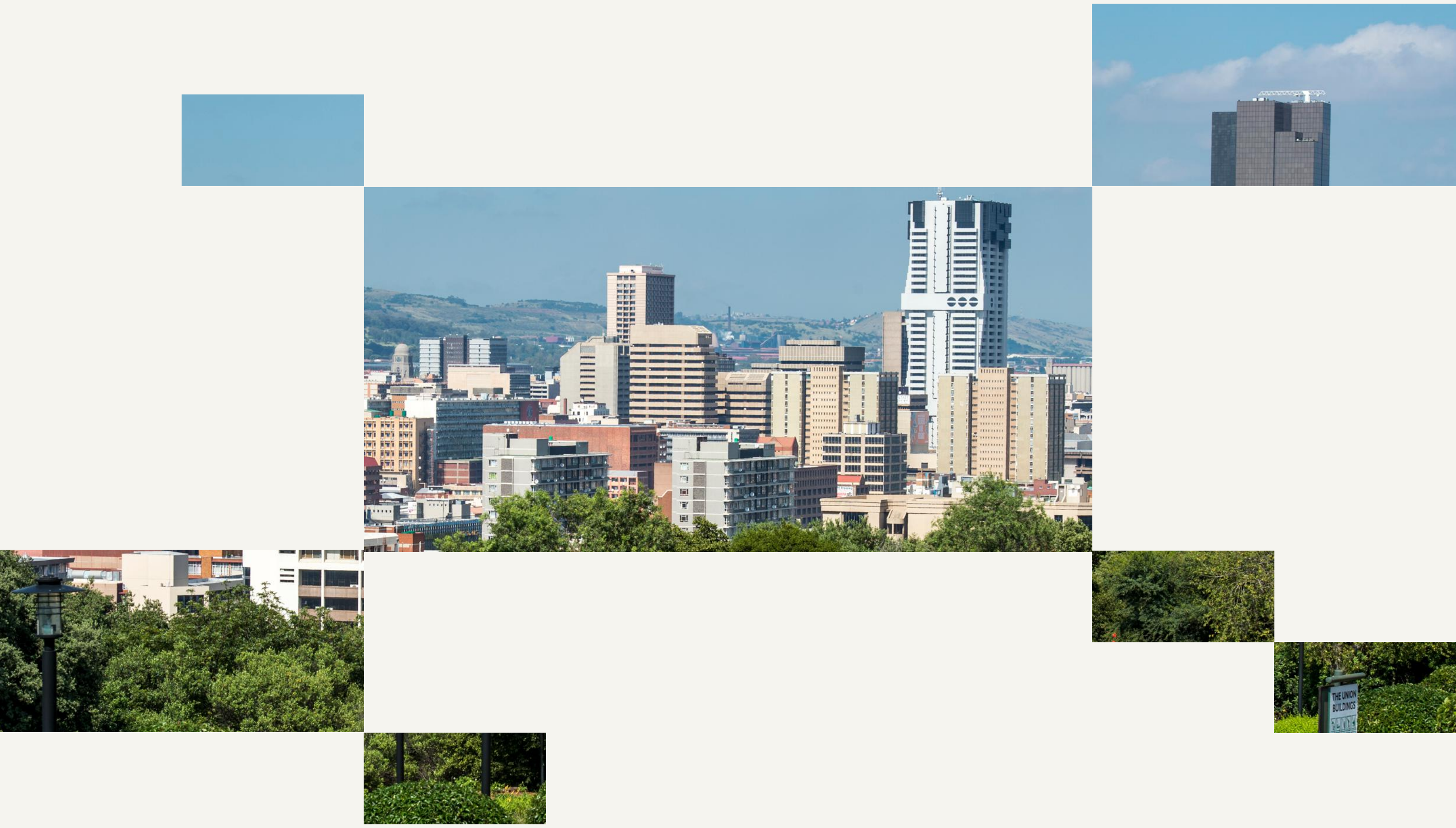
Africa outlook 2023: the challenges ahead

Resilience amid disruption



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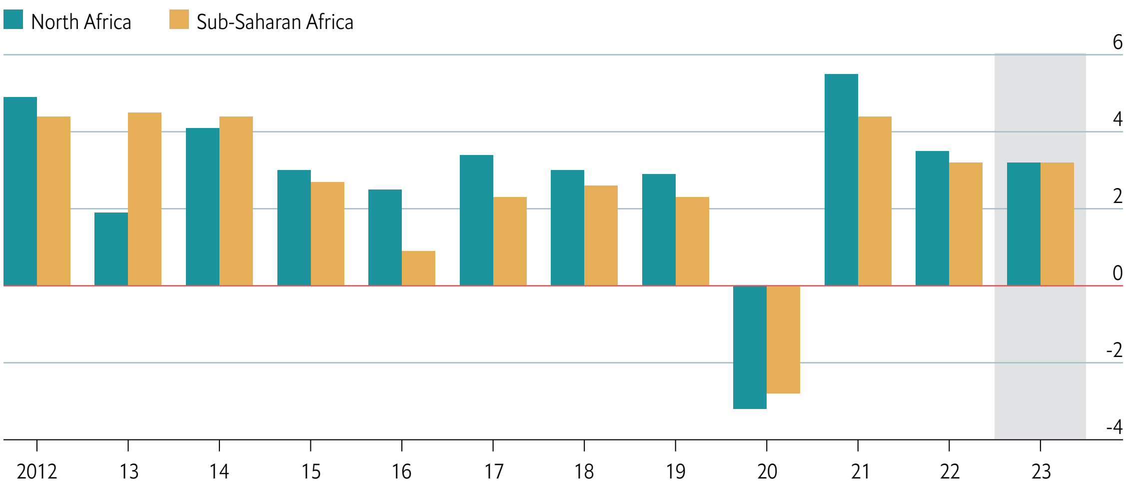
Africa outlook 2023: the challenges ahead

- **African economies will face turbulent times in 2023 as a range of internal and external shocks undermine the region's growth prospects and threaten stability, but most of the region will weather the storm and continue to grow.**
- **Resource-intensive economies and major commodity exporters will face challenging market conditions amid a global economic slowdown, but the outlook is far from gloomy as export prices remain reasonably high and competition remains intense for Africa's resources.**
- **Domestic price pressures will remain elevated—although inflation will ease back from the highs of 2022—and monetary policy will tighten across much of Africa, while the cost of international capital will rise substantially for some economies.**
- **Major concerns surround the heavy burden of debt servicing, instability created by election cycles, geopolitics and war, as well as the lingering threat of food insecurity caused by conflict and adverse weather conditions.**

Africa's economic recovery has been disrupted in 2022 by a range of internal and external shocks—including adverse weather conditions, rapidly rising rates of inflation, higher borrowing costs and softer demand in major export markets. Some of these factors will subdue growth prospects in the year ahead, but the region overall is expected to hold steady rather than suffer a major downturn in economic growth—both North Africa and Sub-Saharan Africa are forecast to grow by 3.2% in 2023. We expect almost all countries in Africa to continue to grow, although real GDP growth rates will vary considerably across the region and some states will stagnate and teeter on the brink of recession.

African economic growth
(real GDP; % change, year on year)

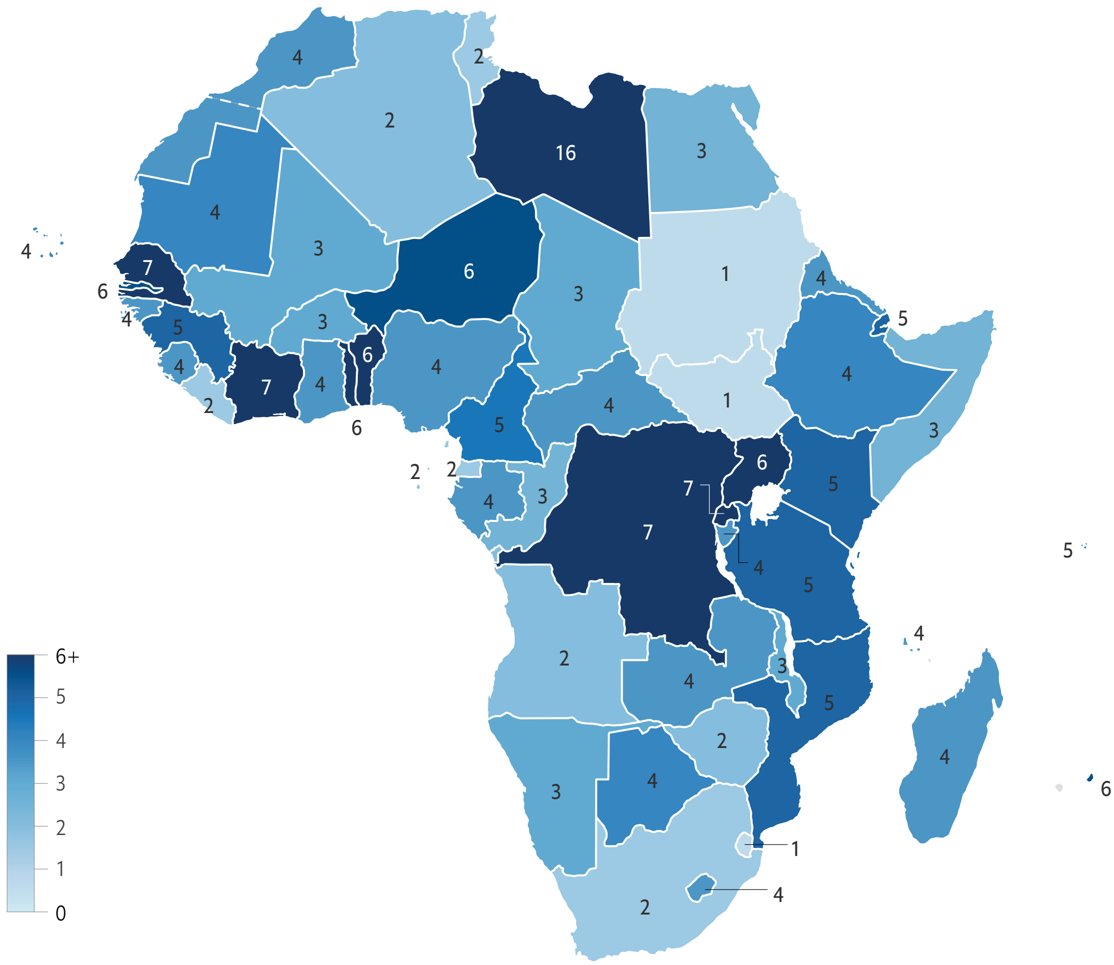


Source: EIU.

Heavyweights remain stuck in slow-growth mode

Crucially, regional heavyweights will remain stuck in slow-growth mode, amid more challenging domestic and external economic conditions. South Africa will grow by just 1.5% in 2023 as higher interest rates, power supply issues and weak demand weigh on domestic and export-oriented business activity. The country could easily enter a technical recession—two consecutive quarters of negative real GDP growth—in 2023. Similar conditions will hamper growth in Nigeria, although the economy will benefit from resilient commodities trade and dynamic consumer goods and services markets in major cities, pushing growth to 3.1% in 2023. Egypt will post growth of just under 3%, which will be less than half of that recorded in 2022, with the economy propped up as interest rates rise by a positive external contribution as real exports are supported by devaluation of the pound and liquefied natural gas (LNG) sales to energy-strapped Europe. Kenya is recovering from the uncertainties of national elections held in August 2022 and will be the fastest-growing major economy in Africa during 2023, posting real GDP growth in the region of 5%.

African economic growth, 2023
(real GDP; % change, year on year)



Source: EIU.

Be aware of major downside risk factors

Risks to the region's outlook are firmly weighed to the downside and the outcome for growth and stability across Africa could be much worse than what we currently expect in 2023. Heightened geopolitical tensions, the lingering effects of the covid-19 pandemic, ongoing supply-chain disruption, business and consumer price pressures, the rising cost of international and domestic finance, disruptive national elections, social grievances and adverse weather events are all present and will create an unsettled backdrop for the continent throughout 2023. Risk-mitigation strategies to deal with higher operating and investment costs, further supply-chain disruption and much softer demand among end-clients will probably feature prominently in the business plans for those investing in and dealing with African counterparts in 2023.

African countries are confronted with risks that could disrupt their economies

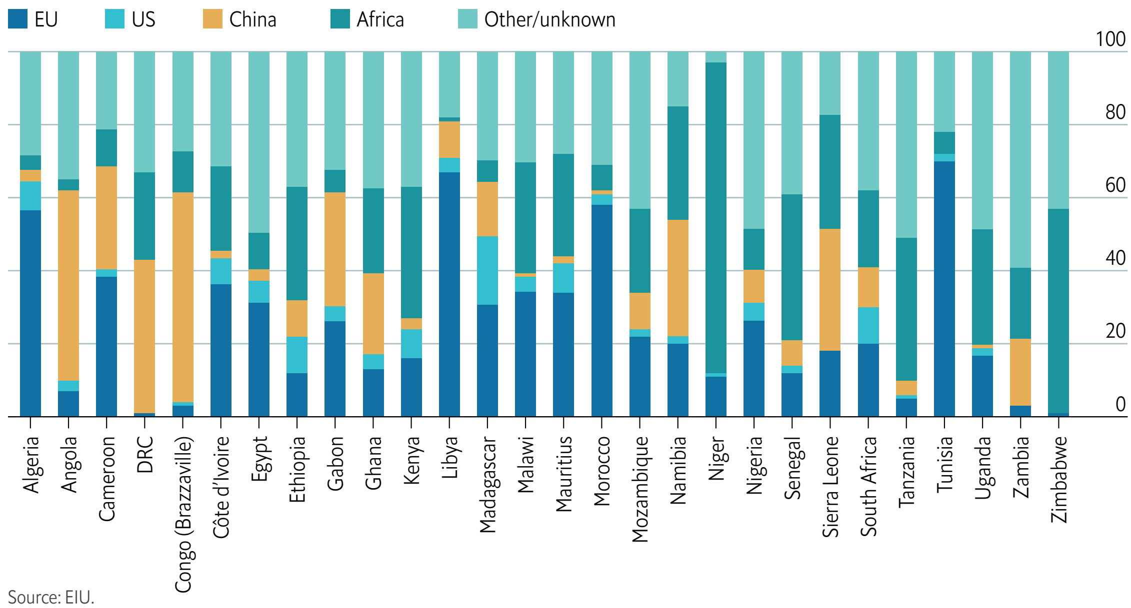
Scenario	Probability	Impact	Risk intensity (probability x impact)
Extreme weather events: Occurrence of extensive and prolonged droughts and flooding in fragile areas - especially across the Sahel and Horn of Africa - exacerbating issues of insecurity, people displacement and regional conflict.	High	Very high	20
Regional conflict zones: Regional conflict hotspots (including Mali, Burkina Faso, Ethiopia, eastern DRC and northern Mozambique) experience more intense fighting that disrupts local economies and draws in more players - African Union peacekeepers, Western allies, mercenaries (Russia).	High	Very high	20
Financial pressures create debt defaults: Global monetary tightening pushes larger African economies beyond the brink and into default, with most countries not yet engaged in a common framework for debt restructuring.	High	Very high	20
Disputed national elections: National elections - especially in DRC, Libya, Mali, Nigeria and Zimbabwe - prove highly volatile and disputed results prompt mass protests and social instability.	High	Very high	20
US-China tensions: Tension between the US and China ramps up, prompted by the war in Ukraine or security concerns in Taiwan, which creates pressure for African states to take sides.	Moderate	high	15
New coronavirus variants: New variants of the coronavirus spread across Africa and in key trade partners, which disrupt local economies and global supply chains.	Moderate	Moderate	9
Escalation of war in Europe: Conflict between Russia and Ukraine triggers open conflict between Russia and NATO members, further destabilising Europe, global supply chains and commodity markets.	Very low	Very high	5

Intensity colour key: 1 to 4 5 to 8 9 to 12 13 to 16 17 to 25
Note. Intensity is a product of the probability and impact ratings, where "very low" scores 1 and "very high" scores 5.
Source: EIU.

Exporters will face challenging market conditions

African exporters will face a more challenging external business environment in 2023, although the outlook is far from gloomy. Major export operations are highly exposed to the fortunes of the EU, the US and China and some businesses will face much softer demand in these markets in the year ahead. We expect the EU (and the UK) to slip into recession in 2023, and US economic growth will slow sharply as high inflation and monetary policy tightening take their toll on household spending and business investment. The performance of the Chinese economy will be subdued by its own internal pressures, which include lingering effects of the pandemic and trouble in the real estate sector.

Direction of trade for African countries' exports, 2021
(% of total recorded goods exports)



Source: EIU.

However, there are mitigating factors that should help Africa to avoid a major dip in export performance in 2023. Commodity prices—especially for energy products, metals and minerals—will remain volatile and most likely ease back in 2023. Nevertheless, they will remain relatively high by historical standards after having experienced two years of solid gains in 2021 and 2022 and major commodity exporters will continue to benefit from a terms of trade boost to their external balances in the short term. In addition, international competition will remain intense to secure long-term access to Africa's strategically important energy products and industrial inputs, which together with international sanctions on Russian entities—causing investors and buyers to look elsewhere—should help to prevent a contraction in demand for African commodity exports in 2023.

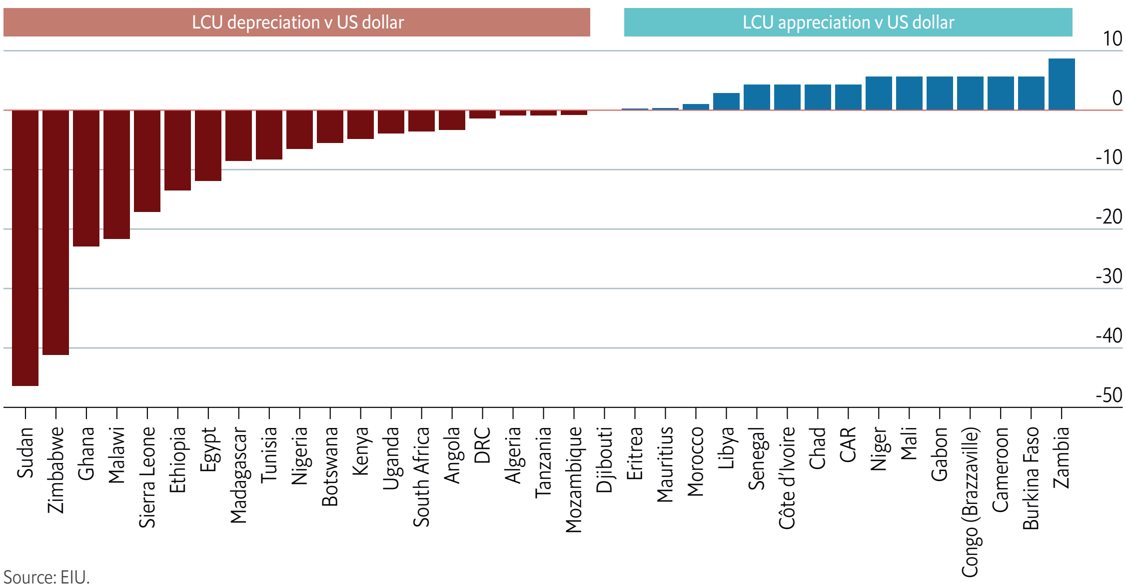
In the energy sector, the decision by European countries to replace Russian oil and gas with alternative supplies will provide a short- to medium-term boost to demand for African energy suppliers and a potential source of new investment for future projects in countries such as Nigeria, Angola, Gabon, Libya, Algeria, Egypt, Congo-Brazzaville, Ghana, Equatorial Guinea and Chad. Similarly, African mining ventures—especially those in Botswana, the Democratic Republic of Congo (DRC), Namibia, Nigeria, Sierra Leone, South Africa, Tanzania, Zambia and Zimbabwe—could receive more attention should Western-based mining companies and commodity traders increasingly shun Russian supplies of copper, cobalt, diamonds, gold, iron ore, manganese, nickel, platinum, palladium, tungsten, uranium, vanadium and zinc, among other products.

Less resource-intensive and more diversified trading economies will continue to be among the region's fastest-growing economies—including Kenya, Côte d'Ivoire and Mauritius. Export-oriented manufacturing operations will face more difficult and uncertain times in 2023—characterised by higher costs and weaker demand—but even here the erosion of business activity will be contained by the hard work over the past decade to improve global and regional value-chain integration, to build strong relations with international partners and to enhance international competitiveness.

Exchange rates will remain under pressure

Most African currencies have lost substantial value against the US dollar during 2022 and we expect exchange-rate weakness to continue into 2023, albeit to a lesser degree. The currencies of the troubled states of Sudan and Zimbabwe will be among the weakest in the world during 2023, while Ghana, Malawi, Sierra Leone, Ethiopia and Egypt—which will all suffer from elevated rates of inflation—will see their currencies depreciate by more than 10% against the US dollar. African majors of Nigeria, South Africa, Angola, Algeria and Kenya will not be exempt from currency weakness and will experience further depreciation of their currencies against the US dollar in 2023, largely due to tighter global financial markets, weaker external demand and price pressures at home.

African exchange-rate adjustment in 2023
(annual average % change; LCU:US$)

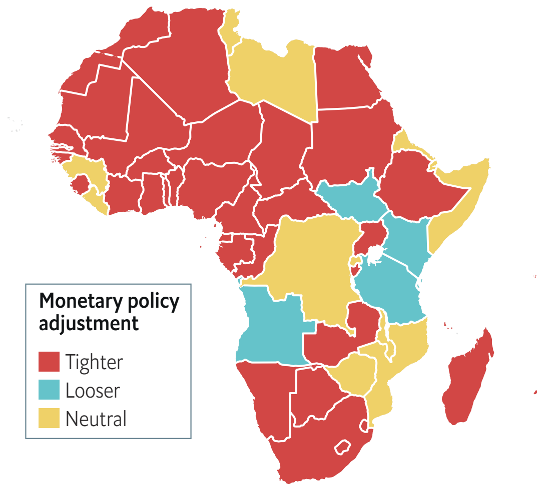


Source: EIU.

Tighter monetary policy and lower inflation rates

About two-thirds of African states have increased their domestic policy interest rates in 2022—to curb inflation and ease pressure on exchange rates—and the majority of Africa will raise domestic policy rates further in 2023. African governments will need to tread carefully to protect fragile confidence among households and businesses and to avoid disrupting short- to medium-term economic growth prospects. Policymakers faced by the most pressing need to tighten monetary policy are likely to be found in Ghana, Ethiopia, Egypt, South Africa and Zimbabwe. Annual average consumer price inflation will be in double digits for about 42% of African states in 2022 and elevated price pressures have become problematic for governments, businesses and households across the continent. Price pressures will remain high but ease back in 2023 in all African states except Zimbabwe, partly as a result of monetary policy adjustments and softer commodity prices.

African policy interest rate, 2023



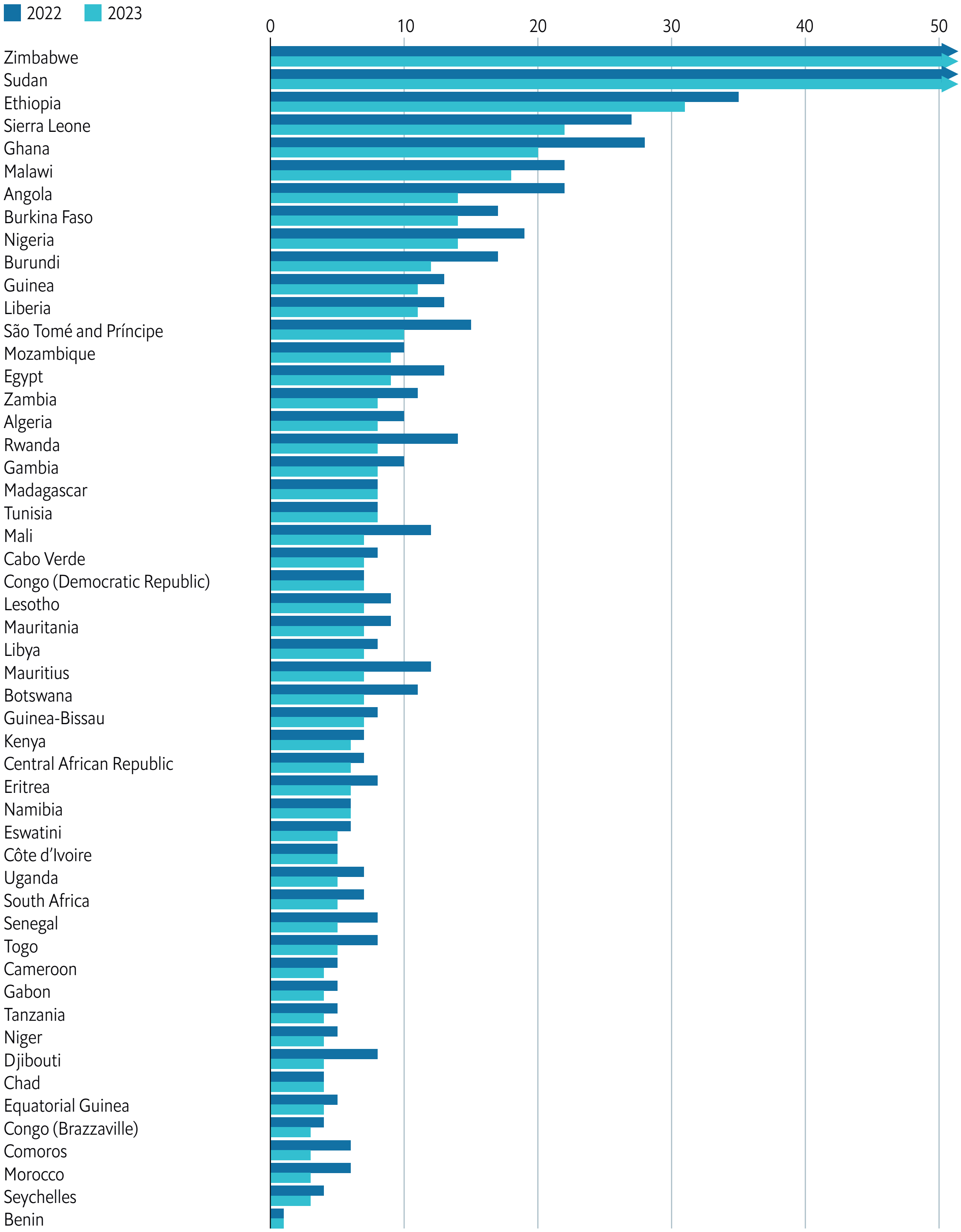
Source: EIU.

Debt servicing will become more problematic

African governments have ramped up their borrowing—domestically and internationally—and public-sector debt ratios (relative to GDP) have pushed back towards the highs last seen in the early 2000s just before the enormous debt restructuring of 2005, implemented under the umbrella of the heavily indebted poor countries (HIPC) initiative. On average, the public-sector debt/GDP ratio will remain above 60% for Africa in 2022 and 2023 and some African countries will far exceed this level. The need to service and roll over large amounts of debt at a time when domestic and international borrowing costs are on the rise will weigh heavily on some countries in 2023 and things could get even more painful in 2024 when more capital repayments fall due.

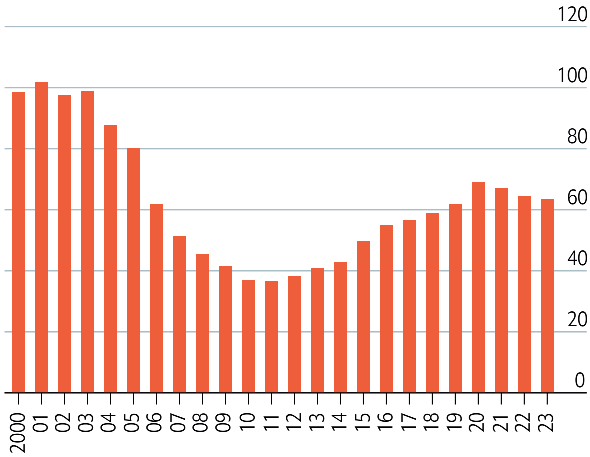
Ghana, Tunisia, Egypt, Congo-Brazzaville, Zambia, Zimbabwe and Mozambique have enormous amounts of debt (relative to GDP) and their governments will grapple with debt-servicing burdens that eat up a substantial share of their revenue in 2023. Elsewhere, major economies of Algeria, Angola, Ethiopia, Gabon, Kenya, Nigeria and South Africa have seemingly manageable levels of public debt but these countries will suffer from high and rising debt-servicing costs—especially Nigeria where the debt/GDP ratio is low but debt is hugely expensive to service. Consequently, pressure will mount to implement economic reforms—including changes to subsidy regimes and tax structures—and cut back on public-sector spending, although large-scale changes will most likely be put off until upcoming elections settle and the political path becomes clearer.

African inflation
(annual average; %)



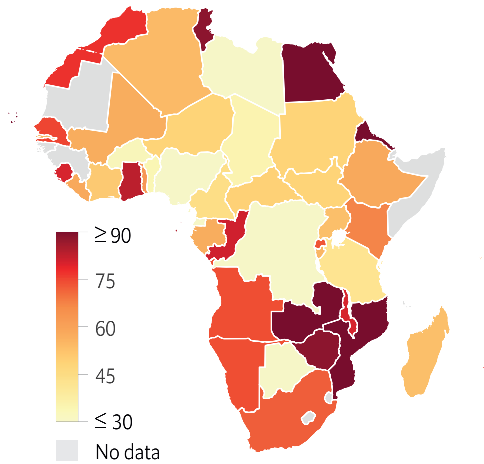
Source: EIU.

African public-sector debt
(% of GDP)



Source: EIU.

African public debt, 2023
(% of GDP)



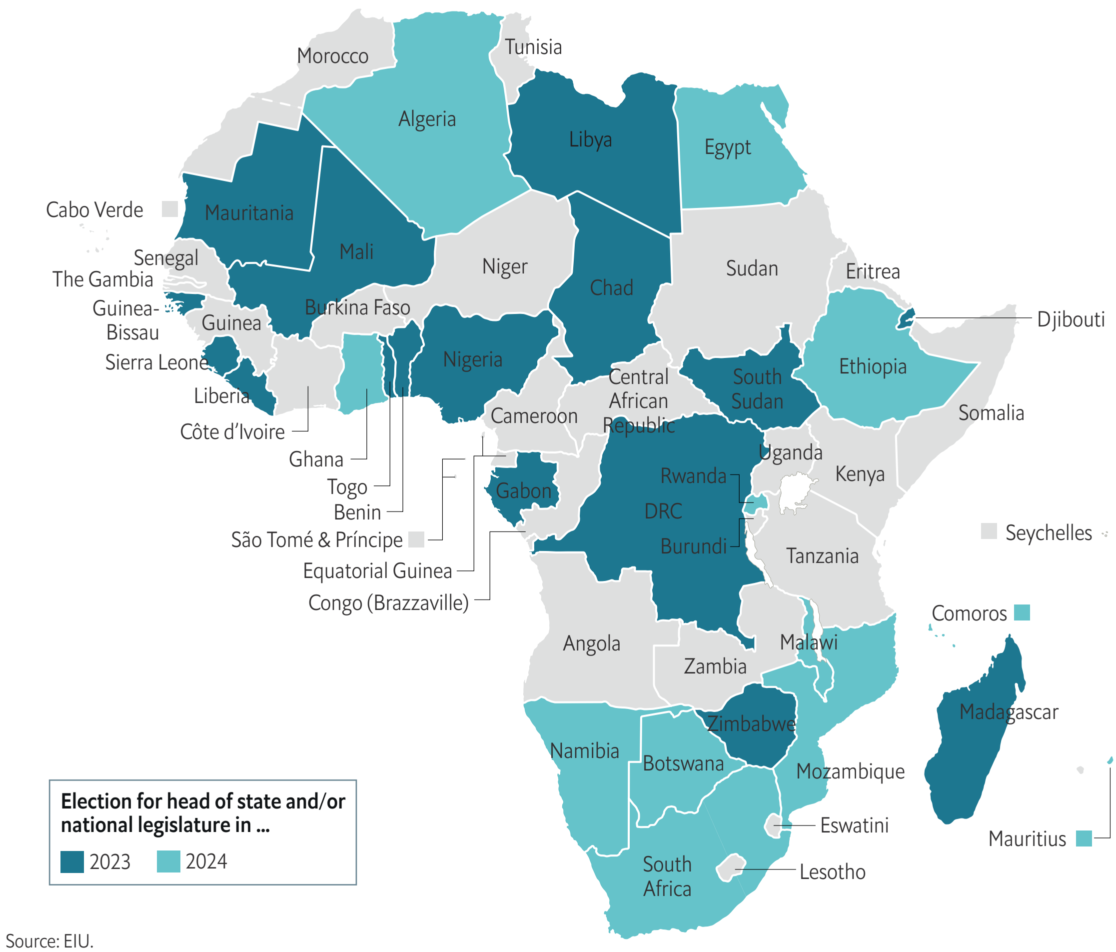
Source: EIU.

In the meantime, more African states will head towards external debt distress in 2023 and 2024—African states are required to repay about US$75bn of external borrowing (medium- and long-term capital repayments that fall due) in 2023 and a similar amount in 2024. Foreign creditors have offered pandemic-related debt relief and relatively low—by historical standards—interest rates in recent years, but these lines of international financial support have come to an end. The debt-servicing burden will become more painful because of higher interest rates, weaker currencies against the US dollar and softer capital inflows, while rolling over existing debt or accruing new debt will become much more of a challenge. Already, many African states have found it difficult to issue new Eurobonds in 2022 and yields in secondary markets—which indicate where future refinancing costs are headed—have risen sharply. A widespread external debt crisis across the continent seems unlikely, but some highly leveraged states will face acute financing difficulties and a very uncertain period.

Elections will pose a risk to stability

Africa will hold head of state (presidential or prime ministerial) or national legislature elections in 17 states during 2023 and preparations will ramp up for national elections in a further 13 states in 2024. Election time can be very unstable in Africa and the 2023-24 cycle will be no different with a high risk of political protests, mass demonstrations and strikes in a range of countries. Social unrest could easily be stoked by disinformation campaigns and disgruntled losers, as well as public discontent with political institutions, ruling elites and poor public services. Worsening socioeconomic conditions in some countries driven by subdued wage growth, the rising cost of living and food security concerns could prove problematic for incumbent or new government administrations. Upcoming elections in Algeria, Egypt, Ethiopia, the DRC, Libya, Madagascar, Nigeria, South Africa and Zimbabwe could prove to be flashpoints for disruptive civil unrest in 2023.

African election cycle



Source: EIU.

Intense geopolitics will roll into the new year

The EU, the US and China have doubled down on their efforts to build economic, political and security relations in Africa in recent years, and competition between these three major global powers will intensify in the year ahead. The EU retains pole position among international investors in Africa—as measured by the stock of foreign direct investment—and is the region's leading trade partner. Leaders from the EU and the African Union (AU) met at the sixth EU–AU Summit held in Brussels in February and agreed on the principles of a new partnership and joint vision for 2030. In addition, the Summit saw the EU agree to boost the supply of covid-19 vaccines and direct about €150bn of its Global Gateway investment funds to Africa. The US has a new Africa Strategy, which it hopes will revitalise ties with the continent following a nose-dive in relations during the presidency of Donald Trump, while the administration of Joe Biden is planning to hold a US-Africa Leaders' Summit in Washington in December 2022—the first since 2014 and the second such meeting ever.

Africa will play an important role in China's outreach through its ambitious Belt and Road Initiative and its Dual Circulation model of development, which seek to secure production bases and strategic supply chains in Africa, as well as open end-markets for Chinese goods and services on the continent. The era of Chinese state-backed big loans and mega-projects may be coming to an end, but a concerted effort to drive Chinese private-sector interests into Africa is under way. The projection of soft power will feature heavily in Chinese engagement with the continent, which includes continued covid-19 vaccine diplomacy, support for regional integration and branching into peace and security initiatives.

Russia has made a concerted push to secure political support across Africa in recent years, which has entailed intense diplomacy, financial aid and military support, but its ambitions on the continent are likely to be hampered by its war in Ukraine during 2023. The difficult economic situation in Russia and imposition of international sanctions will complicate African trade and investment deals with Moscow, while military support will wane as forces are redeployed to Europe (including personnel managed by the Wagner Group, a Russian paramilitary organisation) and losses are incurred there. A second Russia-Africa Summit is scheduled to take place in late 2022 in Ethiopia, but the uncertain nature of the war in Ukraine and its political implications could scale down or derail the gathering. Russia has strong alliances in Africa, which it will maintain—especially in the Central African Republic, Mali, Libya, Algeria, Egypt, Sudan and Mozambique—but it may find it hard to expand its geopolitical influence or footprint.

Benefits of digitalisation felt more widely

Africa has a track record of rapidly adopting technology and innovation to provide practical solutions for the challenges facing its governments and industries to improve efficiencies, remove barriers and explore new products or services. Over the past five years or so, digitalisation projects and broader digital transformation strategies have been encouraged by improving telecommunications networks, increased (mobile) internet access, advances in information and communications technology (ICT) products and services, and strong demand from rapidly growing urban populations. Since 2020 the pandemic has accelerated African digital innovation in a wide range of sectors and increased demand for more digital infrastructure and services across the continent. Many governments, and the African Union, have adopted digital transformation strategies through to 2030 and have already implemented regulatory changes with the aims— among others—of pursuing universal digital access, encouraging private-sector investment, opening new markets and driving socioeconomic development.

The push and pull for digital services will continue unabated in 2023 and beyond, which will drive opportunities in a wide range of sectors. Digitalisation initiatives and strategies are likely to benefit agricultural supply chains, manufacturing operations, transport and logistics services, formal and informal retailing, health and education provision, recreation and entertainment, financial services and government services. In turn, this should help to support thriving ICT sectors and technology hubs largely based in Nigeria, South Africa, Kenya and Egypt, as well as spur foreign investment into the African market. In addition, Africa retains a large communications gap—whether this is measured through mobile network coverage, smartphone use or internet access more broadly—and intense demand as well as competition to fill that gap, which will spur more infrastructure and service provision investment in the year ahead.

Drivers of and constraints on business in Africa

Sector	Positive drivers	Negative drivers
Energy, metals & materials	• High prices and strong global demand • Increased foreign investment interest • Long-term development plans	• High and rising input and operating costs • Risk to some projects from exposure to Russia
Light manufacturing & automotive	• Sustained domestic demand/regional trade • Foreign investment interest and global value chain integration • Major policy focus (supportive)	• Pressure from rapidly rising input and operating costs (fuel, power, etc) • Pressure on labour costs (wages/training)
Construction & building materials	• Pipeline of projects (energy and transport) • Real estate and utilities development • Investing in domestic/regional capacity	• Elevated costs for key inputs and fuel bills • Potential delay to some projects due to financing constraints
Agriculture & food processing	• Higher farm-gate prices and strong demand (domestic and foreign)	• Higher input costs (fuel/fertilisers) squeezing margins and elevated import bills
Retail & fast-moving consumer goods	• Thriving urban markets (pandemic recovery)	• Inflation squeeze on household incomes • Costs of adapting to new delivery models
Healthcare (pharma) & education	• Public- and private-sector investment plans • Major policy focus (national/multilateral)	• Major investment required (infrastructure/services) • Long-term funding issues and constraints
Digital & telecoms	• Increasing demand (positive pandemic effects) • Growing competition and infrastructure • Identified as critical success factor	• Supply chain disruption and delayed deliveries
Transport & logistics	• Trade facilitation (hard/soft) and cross-border demand	• Much higher operating costs (fuel)
Financial services	• Policy to boost financial inclusion (fintech etc) • Rising (aspirational) middle class	• Tighter credit conditions (interest rates/risk aversion)

Major power projects will gain traction

Some major energy projects will make positive steps towards bringing more power generation capacity on stream in 2023 and in the immediate years that follow, which will open up the prospect of increased supplies to feed domestic industry and households, as well as facilitate cross-border transfers. The enormous Grand Ethiopian Renaissance Dam (GERD) and South Africa's large Redstone concentrated solar power (CSP) plant—are nearing completion and are part of a large pipeline of hydroelectric, solar and wind projects that will see renewable installed capacity accelerate from 2023 onwards. In addition, various natural gas and LNG projects will be commissioned or ramp up production in 2023 to help to facilitate exports and supply gas-fired power stations.

Construction of the GERD is scheduled for completion in 2023 and power generation will be ramped up in subsequent years. Two turbines were commissioned in early 2022 with an installed capacity of 750 MW and a third filling of the dam took place in August and September. The GERD's total installed power generation capacity will rise to 5,000-5,500 MW once building works are complete and all 13

Grand Ethiopian Renaissance Dam

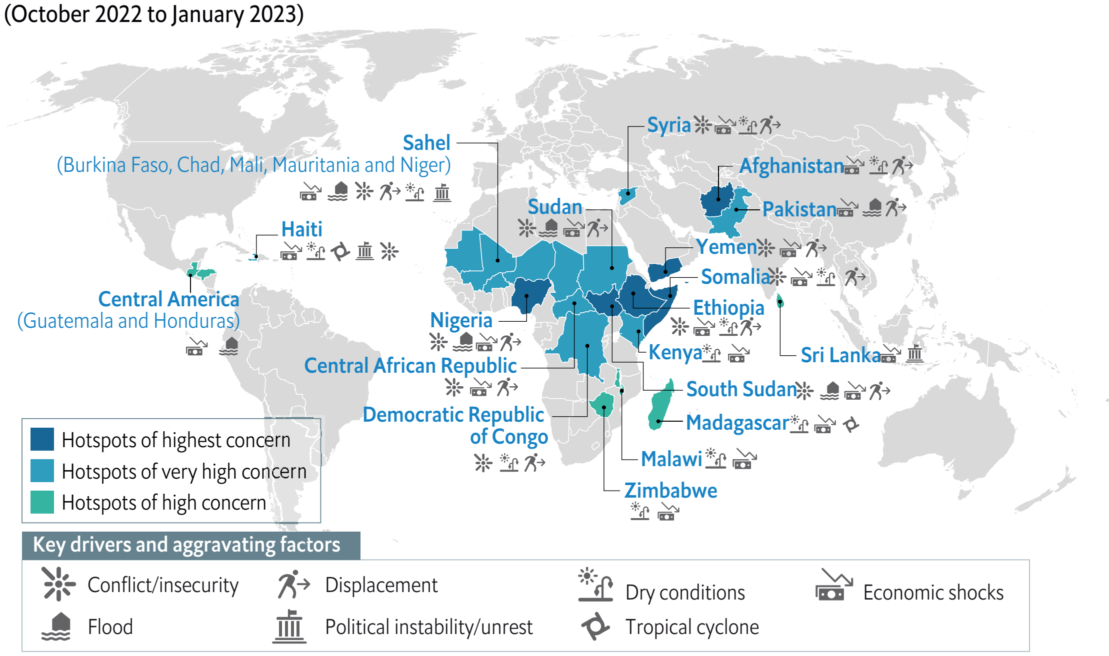
Source: EIU.

planned turbines are fully operational—making the facility the largest hydroelectric power plant in Africa. The project is a game changer for power provision in the Horn of Africa but is highly contentious given the potential impact on downstream water flows along the Blue Nile affecting Egypt and Sudan. Negotiations between Ethiopia, Egypt and Sudan over the filling of the GERD have stalled since April 2021, but talks are likely to resume in 2023 mediated by the AU as Ethiopia pushes ahead regardless.

Climate change and food security will trouble policymakers

Egypt will host the 2022 UN Climate Change Conference (COP27) in November—and the UAE will host COP28 in late 2023—where African leaders will continue to lobby hard for much more foreign investment and international financial support from the world's richest nations to pursue climate change adaptation projects and help build resilience across sectors, communities and ecosystems. African governments will push hard on a third front to secure equitable transfers for climate change-related loss and damage—long a hotly disputed and unresolved area of international climate change policy. Any immediate and substantive progress in these three areas—more finance for climate change

Early warning hunger hotspots
(October 2022 to January 2023)



Sources: UN Food and Agriculture Organisation; UN World Food Programme.

adaptation, resilience building and compensation—is unlikely to materialise in Cairo, or Dubai, while African states will remain at the vanguard of those countries suffering the effects of weather-related loss events.

Adverse weather conditions in 2022 and the potential for further disruption in 2023 will negatively affect domestic food supplies, while high prices for farm inputs (especially fuel and fertilisers) and imported food products will exacerbate the food security crisis playing out across much of East Africa, the Sahel and parts of Southern Africa. Water stress and food insecurity will remain a key driver of localised conflict, social unrest and cross-border migration—especially in Ethiopia, Somalia, and South Sudan where the risk of famine and hunger will loom large in 2023.

Unresolved conflicts affect regional stability

Conflict on the continent will remain an issue and difficult to resolve given underlying tensions and drivers, which often spill across borders. Hotspots of insecurity in 2023 will be found across the impoverished Sahel region—especially in Mali and Burkina Faso, in fragmented and disputed Libya, throughout the Horn of Africa, in northern Mozambique and in unsettled parts of Nigeria. Of particular concern is the conflict in northern Ethiopia (Tigray region), which will continue to undermine peace and stability in the Horn of Africa in 2023. The conflict, which started in November 2020, is stuck in a tense and tragic deadlock. An ongoing build-up of Ethiopian federal government forces and Eritrean allies along the Ethiopian border with Eritrea does not bode well for a peace settlement, and the fight with the Tigray People's Liberation Front, which controls most of the region, looks set to drag on and could draw more players into the arena in 2023. In addition, the conflict raging in Mali and Burkina Faso involve Isis and al-Qaida-linked jihadis, national armies, UN peacekeepers, European forces—especially the French—and mercenary groups, including the Russian private military group Wagner. Instability will reign and the death toll will remain high in 2023.

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Asia outlook 2023

Mixed prospects for regional heavyweights

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Mixed prospects for regional heavyweights

- **Higher interest rates will ensure a challenging economic environment in Asia in 2023. Growth in economies with high levels of household debt, such as Australia and South Korea, is set to slow sharply, even as a systemic crisis is avoided.**
- **Political uncertainty in South-east Asia, as elections take place in Thailand and loom in Indonesia, will encourage manufacturers to look to India as they seek to reduce reliance on China. Improvements in India's business environment and progress in bilateral trade deals make it an increasingly viable investment destination.**
- **China's domestic challenges, as it seeks an exit from zero-covid policies, will probably lead it to adopt a less confrontational approach in international affairs. A reduction in geopolitical risk would be welcomed by markets after the turbulence of 2022.**

Asia will face difficult economic conditions in 2023. Several years of strong export growth for the region will reverse, with the EU entering recession and the US economy forecast to slow sharply. The outlook for domestic demand in Asia is also challenging as interest-rate rises implemented in 2022 to curb inflation filter through local economies.

In addition, geopolitical risk will persist, with North Korea expected to resume nuclear testing and Taiwan preparing for elections. EIU forecasts regional growth of 3.5% in 2023, marginally slower than this year and short of the pre-pandemic trend of 4-5%. Still, even this outturn would remain the strongest among major global regions, and, as we note below, there remain bright spots.

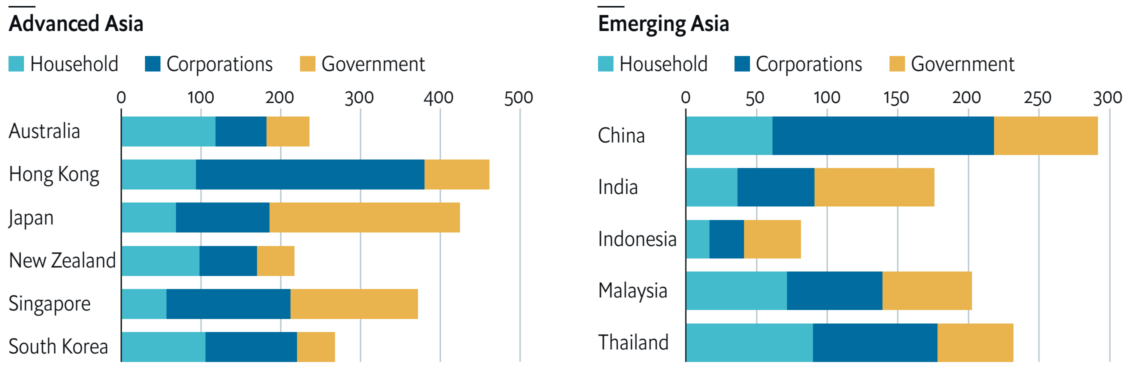
Households in Australia and South Korea among most vulnerable to higher rates

The impact of higher interest rates will be the major economic theme for Asia in 2023. With the exception of China and Japan, Asia's major central banks increased their policy rates in 2022 to combat inflation and support local currencies. The effects of these higher rates on governments, households and businesses will mainly be felt next year, owing to lagged monetary policy transmission. In "Sovereign debt in Asia: modest risks, high complexity", we wrote about the vulnerability of governments in several frontier Asian markets to higher rates.

At the macro level, however, the main concern will be the balance sheets of households and businesses in more advanced Asian markets that have become more leveraged over the past decade or are not profitable enough to meet higher debt-servicing costs. The additional costs will add to the squeeze caused by the higher consumer and producer prices generated by the war in Ukraine. Most banking sectors are in a strong position to withstand a rise in bad debts, meaning that the risk of systemic financial crisis is low. However, higher repayment costs will at least reduce the amount of finance available for consumer spending and business investment, acting to slow growth; at worst, they will cause widespread bankruptcy, leading to higher unemployment and prolonged downturns.

Our assumption is that household debt will prove the bigger concern, given that a sizable portion of corporate liabilities in many Asian markets have some sort of government backing. In this context, Australia and South Korea stand out, with household debt in both countries exceeding 100% of GDP (compared with an advanced economy aggregate of around 75%) and with much of that debt tied up in frothy local housing markets. Tightening by the countries' central banks means that rates on mortgages and business loans will be 4-5 percentage points higher in 2023 than 2022. We hold below-consensus GDP growth forecasts of 1.3% and 1.5% for Australia and South Korea respectively in 2023.

Markets with high household debt are vulnerable to rising interest rates
(credit to non-financial sectors as a % of GDP; end-March 2022)



Sources: Bank for International Settlements; EIU.

Household debt is also high in the middle-income economies of Malaysia and Thailand, where rates will also rise (albeit slowly). Better positioned to withstand a tighter liquidity environment will be countries with low levels of household debt, whether advanced economies, such as Singapore, or larger emerging markets. For example, consumer spending in India and Indonesia will continue to be affected by cost-of-living strains, but not by any forced household deleveraging.

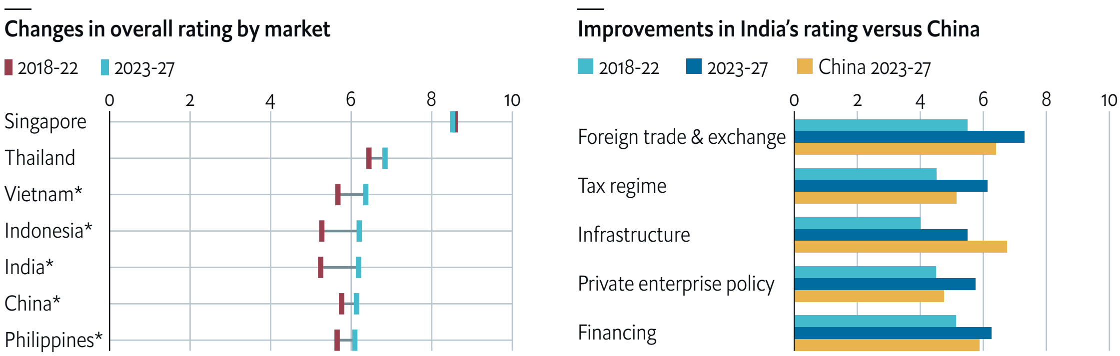
India has its moment, as political risk resurfaces in South-east Asia

South-east Asia has been the focus of investors' attention in Asia as they seek manufacturing alternatives to China. The free-trade area of the Association of South-East Asian Nations, as well as the bloc's centrality in various mega-regional free-trade agreements, has helped to smooth supply-chain linkages. Transport and digital infrastructure in the region is reasonable and improving.

The region will remain attractive, but we believe it will lose some of its appeal in 2023 as political risk resurfaces. Thailand is due to hold an unpredictable general election by May, with splits within the ruling military-aligned political bloc giving opposition forces loyal to an exiled former prime minister, Thaksin Shinawatra, an opportunity to return. The political instability that has come to characterise Malaysia is set to persist, following the indecisive outcome of its November 2022 election. Indonesia will enter a more volatile period as campaigning begins ahead of the 2024 elections and the influence of the capable departing president, Joko Widodo, weakens.

Higher political risk in South-east Asia will present India with an opportunity to capture more attention from global manufacturers. The dominance in India of the ruling Bharatiya Janata Party carries its own political risks, but from an investors' perspective it also offers policy continuity and means there is little chance of a change in administration. India has an obvious advantage in terms of a large and youthful labour market, while there has been incremental progress in addressing weaknesses in terms of transport infrastructure, taxes and trade regulation. The country has risen to 52nd in EIU's global business environment rankings, from 62nd five years earlier, and now ranks above China.

India's business environment now competitive with China and South-east Asia
(EIU business environment rating, historic and forecast period; 10=highest score)



Source: EIU.
*Indicates rating is below the global average.

Developments on the ground appear to support this view. Investment has accelerated in the electronics sector (an industry that India has previously struggled to cultivate), aided by government support provided under the so-called production-linked incentive scheme. The country's electronics exports rose by around 50% to US$14bn in 2021 and had already matched that value over the first nine months of 2022. Taiwan's Foxconn is among the suppliers to Apple (US) to be planning significant expansion in India, as it seeks to diversify its manufacturing capacity beyond China. In 2023 India's presidency of the G-20, as well as the probable conclusion of bilateral trade agreement negotiations with Australia and the UK, will further help to highlight investment opportunities in the country.

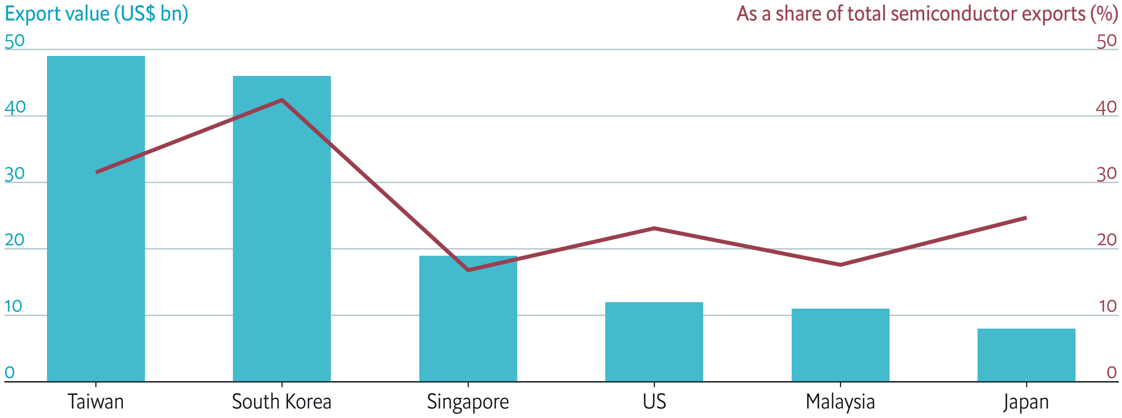
Distracted by domestic affairs, China tries a different geopolitical approach

China's economy is forecast to grow more quickly in 2023 than this year, as covid-19 management becomes more pragmatic. Still, a smooth shift away from "dynamic zero-covid" policies will be tricky to pull off, and the risk of a chaotic outcome—involving a stretched health system and a significant death toll—will be high. The issue will absorb the attention of the president, Xi Jinping, and the new leadership team that he recently assembled, among whom several (including the incoming premier, Li Qiang) problematically lack experience in running the organs of China's central government.

These challenging domestic circumstances could persuade China to adjust its international approach. An assertive, hardline diplomacy has taken hold under Mr Xi, involving combative responses to US political and economic pressure and a willingness to go further in pushing Chinese territorial claims in relation to the South and East China Seas, Taiwan and its border with India. Welcomed at home as a demonstration of China's rising strength, the trade tariffs, sanctions and heightened geopolitical risk that have come with this muscular foreign policy have nevertheless dragged on China's economy and made international firms cautious about expanding their footprint in the country.

While China is not about to conduct a foreign policy U-turn, especially with Mr Xi still in charge, we believe that it will seek more favourable international conditions in 2023 as it manages domestic challenges. There were signs of this approach at the G-20 summit in November 2022, when Mr Xi sought meetings with a range of counterparts (including from Western countries) and overall struck a conciliatory tone. This revealed some sensitivity to the pitfalls of a hardline approach, and possibly a recognition that a co-operative attitude will make it more challenging for the US to persuade countries in Asia (and elsewhere) to follow its approach towards China, such as with regard to tighter controls on technology exports.

Tighter US controls on tech exports to China will hurt Asian exporters
(exports to China of semiconductors and related parts by market, 2021)*



Areas to watch for meaningful change in Chinese policy will include trade purchasing commitments and concessions, with the lifting of punitive tariffs on Australian goods among realistic possibilities. Diplomatically, look for the country to play a more constructive role in mediating the crisis that would be caused by a North Korean nuclear test than it has done in the Russia-Ukraine conflict. Restraint ahead of Taiwan's elections in January 2024 would be a further indication of change. China's domestic preoccupations will mean a further sidelining of the Belt and Road Initiative, but probably also a willingness to work alongside other creditors in resolving sovereign debt crises.

Assuming that China adopts a less assertive foreign policy, it will probably prove selective and focus on countries it hopes can be dissuaded from aligning tightly with the US. Such a move could also be temporary, with an underlying trend towards assertiveness resurfacing in future years as China moves beyond its domestic problems. However, any reduction in geopolitical risk will be welcome for companies and investors after the turbulent events of 2022.

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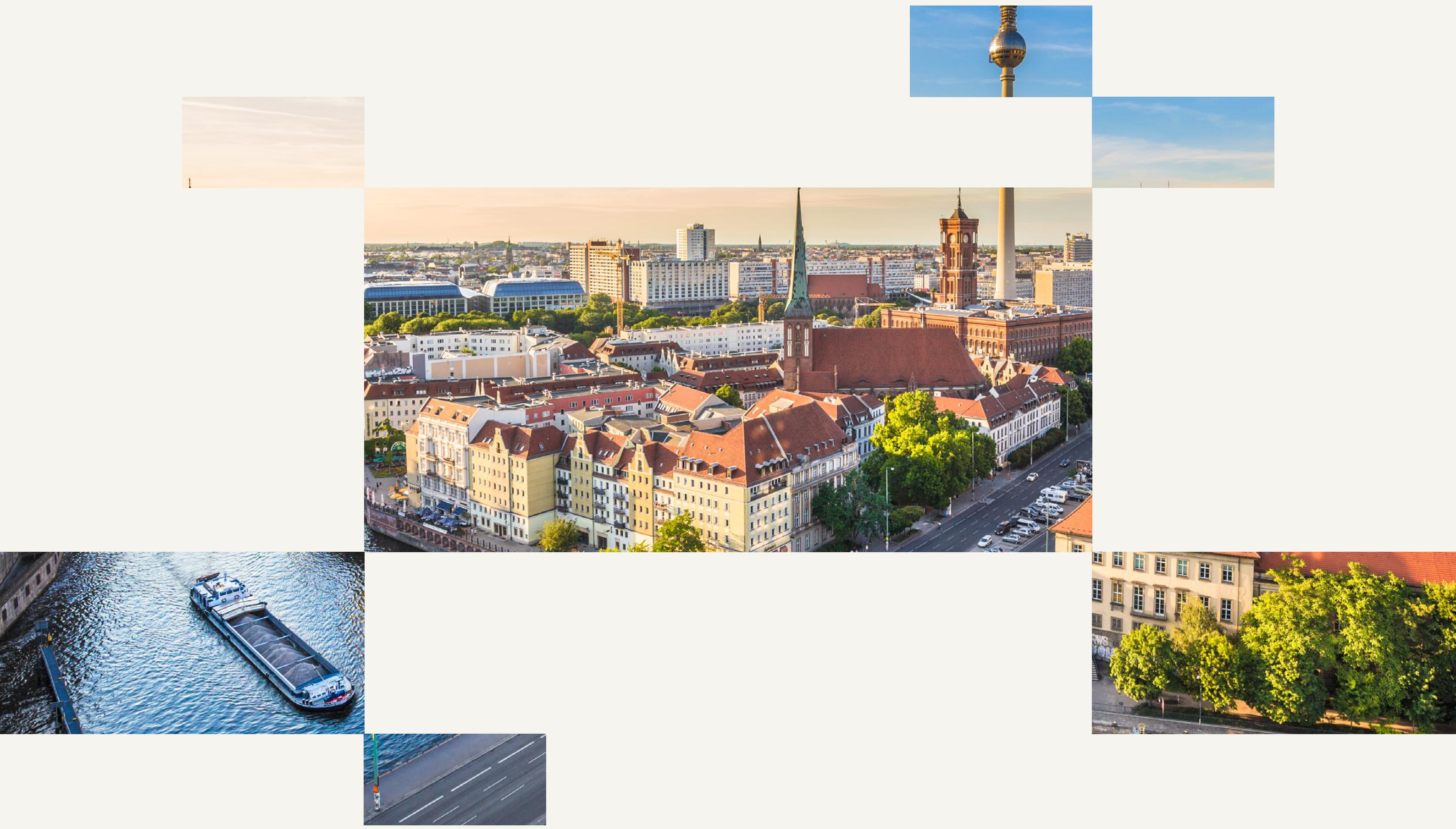
Europe outlook 2023

The threats to Europe's industrial competitiveness



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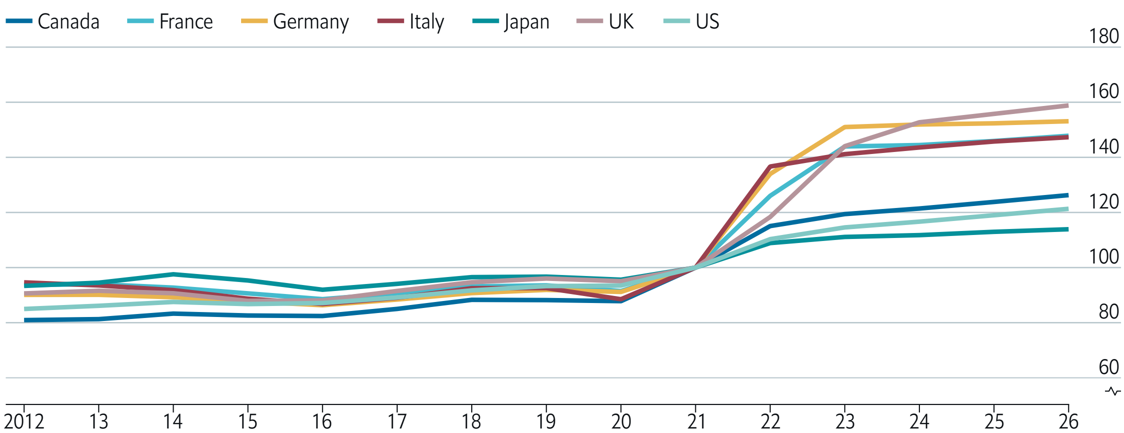
The threats to Europe's industrial competitiveness

- **Energy market dynamics for Europe in 2023 will be as challenging as in 2022. Natural gas storage in Europe is likely to be completely depleted by the spring, while little new import capacity will yet be available.**
- **High energy costs and falling demand are forcing industry across Europe to idle. Input costs will remain elevated for several years, making some European industrial sectors uncompetitive, and resulting in a loss of global market share.**
- **Chemicals and base metals will be the worst affected owing to their high reliance on natural gas as an input, but downstream industries such as the automotive sector will also suffer.**
- **China is set to benefit at the global level. Within the region, we expect a shift towards production in southern Europe from central Europe, with services holding up better than goods production.**

The stark increase in energy costs for the European industrial sector in 2023 and beyond will have a significant impact on the competitiveness of European industry. In addition, the coming recession will reduce domestic demand for industrial products; with global freight costs now declining as pandemic-related supply-chain disruption eases, import substitution is becoming more attractive. European industry already had a higher cost base than other advanced economies. A further increase will make producing in Europe an unprofitable business strategy for many energy-intensive firms.

Increases in European input costs outpace other advanced economies
(producer price index; 2021=100)



Source: EIU.

*EIU forecasts from 2023.

Given increasing geopolitical uncertainty and the size and expense of moving capital-intensive processes to Asia, we do not expect a trend of relocation. Instead, we expect firms to shut down some European production (possibly permanently) and replace it over time by increasing production elsewhere. However, these dynamics will be felt differently across industries. In this article, we examine four key sectors in which the impact will be particularly acute.

Energy: the transition accelerates

The push towards renewables will support European firms involved in the energy transition, with streamlined regulatory arrangements and greater subsidies. However, China will remain the global leader in overall production, with 76% of all photovoltaic cells produced there (compared with less than 14% in Germany). Even on new installations, 2020 data show the EU falling further behind China, and drawing level with the US. Wind energy faces similar dynamics.

Despite the gas crunch, hydrocarbon production in Europe will not significantly increase, with the exception of North Sea drilling in Norway and the UK. Increased nuclear power is planned in France, Sweden and the UK, as well as in central Europe, but all those initiatives will take several years to come online. On the corporate level, major energy firms—including Uniper, EDF and others—are facing significant strain as they scramble to replace Russian supplies, limiting their potential to be major investors in global projects.

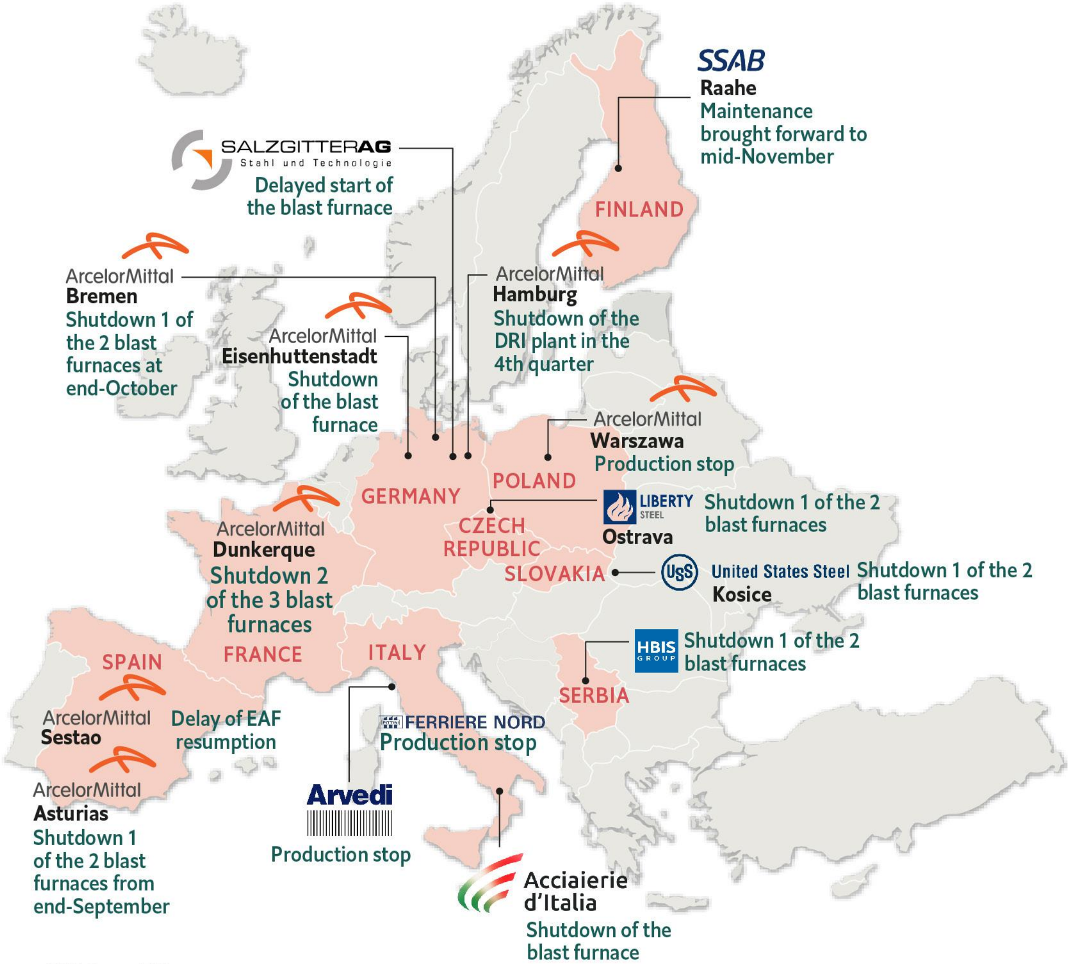
The construction of new gas infrastructure is designed to be dual-use with hydrogen to future-proof the infrastructure investment. **This will result in governments looking increasingly favourably on hydrogen projects, which can make use of the infrastructure.** However, the widespread take-up of hydrogen is still several years away and likely to be concentrated in sectors making the higher upfront initial investment.

Metals: eye-watering costs

Extremely high energy usage in the smelting process, as well as falling prices for metals such as aluminium and zinc, is eroding profitability in the metals sector. Average monthly wholesale electricity prices in key countries reached about €375/MWh in September, a tenfold annual increase. For aluminium, the most energy-intensive metal to smelt (at 14 MWh/tonne of primary production), this implies a power input costing US$5,200/tonne, more than double the spot price of aluminium (less than US$2,300/tonne). Other metals such as steel, although less energy intensive, are seeing similarly unviable cost dynamics. **Operating smelters under such conditions is not sustainable, even for short periods of time, and over half of productive capacity in Europe is now idle.**

Even plants with long-term power contracts will be at risk as these come up for renewal. The longer wholesale prices remain above €100/MWh—they were at about €200/MWh in early November—the more challenging it will be to renew at affordable rates. Even firms with access to power under preferential tariffs have had to cut production. Some smelters have maintained some production by avoiding peak usage times; but many cells can only remain without power for a few hours without risking a costly metal freeze. **Given these extreme operating conditions, the risk of further smelter closures remains high.**

Energy crisis is forcing the steel sector to idle
(EU steel plants; planned stoppages and closures as at Nov 2nd 2022)



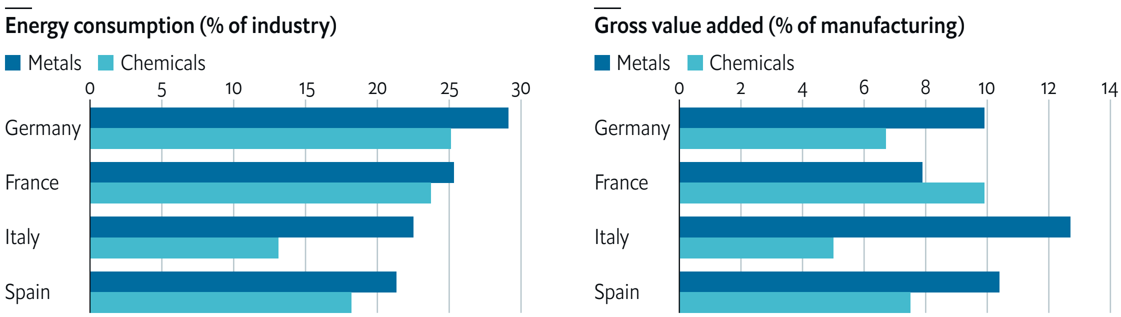
Sources: GMK Center; EIU.

Chemicals: no substitute for gas

The chemicals sector is second only to metals in terms of energy intensity, with natural gas being a feedstock for many chemicals as well as a source of heat generation, making substitution particularly difficult. Production of ammonia (of which natural gas is a feedstock) is particularly uncompetitive at present, and about 70% of Europe's fertiliser production capacity has been halted. Most will not be restarted, raising risks for crop yields in the short term and a loss of market share in the longer term.

BASF, Germany's largest chemical firm, uses as much energy annually as the energy usage of Denmark. With the European cost base already higher than in other developed markets even before the crisis, and set to remain at this elevated level throughout our forecast period (2023-27), this is no longer a profitable business model, and the company plans to permanently downsize its operations in the region. **Europe is therefore set to lose global market share for the chemical industry, with China (already the largest player) poised to benefit.**

European energy consumption for metals and chemicals is huge
(2019)



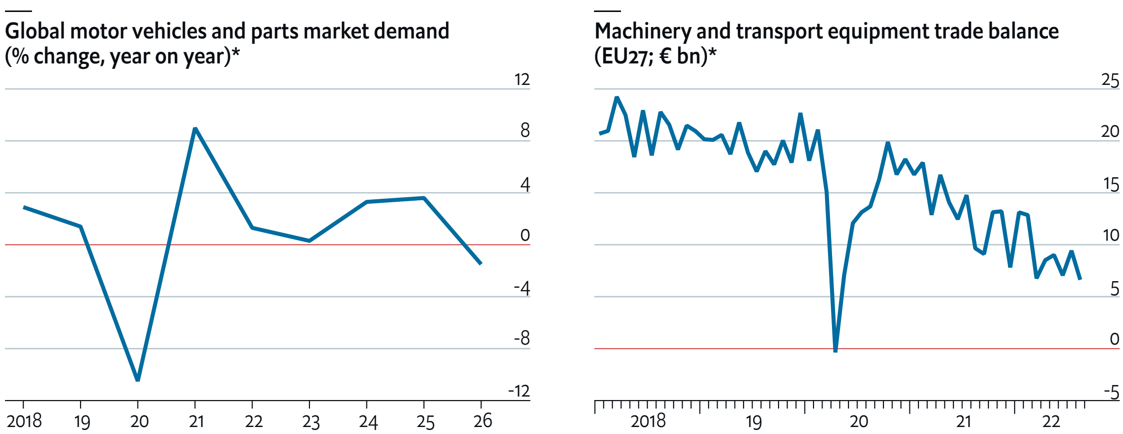
Sources: International Energy Agency; UNIDO; EIU.

The wider recession will reduce demand in Europe, further eroding the chemicals sector. Demand for industrial fibres, polymers and plastics used in construction and car manufacturing is falling, and inputs for (now idled) industrial processes, such as caustic soda, vital for aluminium smelting, are no longer in demand.

Automotive: less affected, but already in a slump

Although less directly energy intensive than other sectors, the automotive industry represents about 7% of EU economic output and supports vast upstream and downstream supply-chain networks throughout Europe. In addition to firms' direct energy use, which now costs more, input prices have risen for energy-intensive metals, glass, semi-manufactured input goods (especially electrical wiring from Ukraine and mineral goods from Russia) and critical inputs for electric vehicles.

A weak global automotive outlook is hurting European exports



Sources: Eurostat; EIU.
*EIU forecasts from 2023.

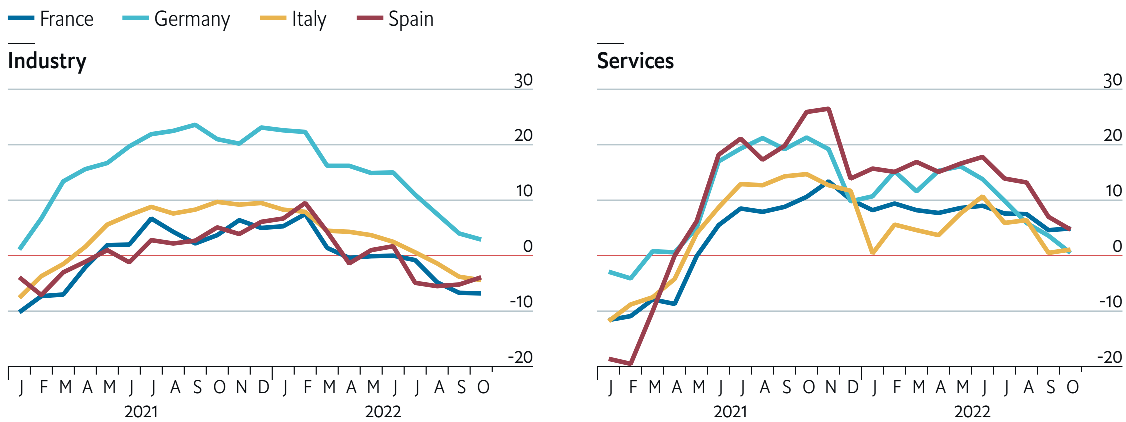
Automotive facilities in Europe were already grappling with over-capacity even before the pandemic; the recession will further reduce demand both within and outside Europe. **We expect that this will lead automakers to cut back investment and production in the region as it becomes unprofitable amid higher energy and labour costs.** However, weaker price inflation in southern

Europe presents an opportunity for automakers to nearshore some energy-intensive production processes southwards to Mediterranean countries, where liquefied natural gas (LNG) terminals are already functional and keeping energy costs contained.

Conclusion: what to watch out for

The increase in European industry's already high cost base will be a net loss for the continent. **Within the industrial sector, the impact will be most keenly felt in chemicals and fertilisers, sectors in which natural gas is a direct input to the final product**, whereas sectors such as automotive, which use gas for energy, but with possible alternative power sources, will see significant substitution and, as a consequence, less lasting scarring. The gas crunch also creates opportunities for firms that can provide effective substitutes for gas in industrial processes, which may also drive innovation in the energy and materials spaces. **Pressure on heavy industries is likely to see the less energy-intensive service sector hold up better through the recession and be more likely to drive future growth.**

Business confidence for industry has fallen further than for services
(seasonally adjusted; % balance of responses)



Sources: European Commission; EIU.

Globally, **China is well positioned to benefit,** with pre-existing cost base and scale advantages in metals, chemicals, and solar and wind installations. Regionally, **southern Europe will see its competitiveness within Europe increase,** as it has more installed LNG and pipeline capacity, **at the expense of central and eastern Europe**. Southern Europe also benefits from milder winter climates and greater reliance on services to begin with.

Firms active in the green transition stand to benefit, as subsidies and new forms of energy generation will raise profitability in the medium to long term. **One issue to watch out for is the introduction of the EU Carbon Border adjustment mechanism in 2026.** This may present a competitive advantage for chemicals producers in Europe, which already score well on green metrics, and will be an important consideration for European firms currently expanding production in non-EU markets but planning on importing to the EU.

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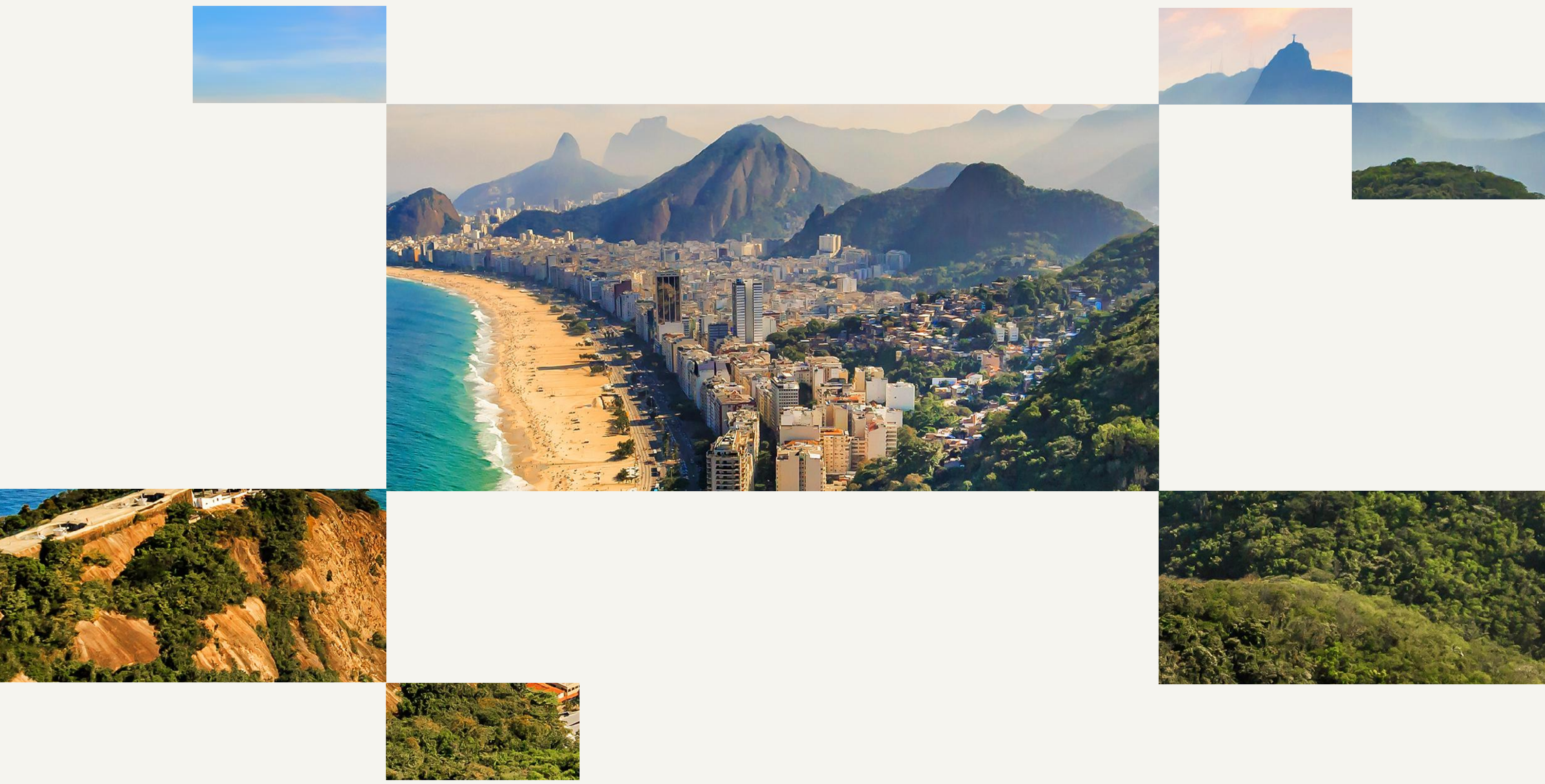
Latin America outlook 2023

Spotlight on new governments



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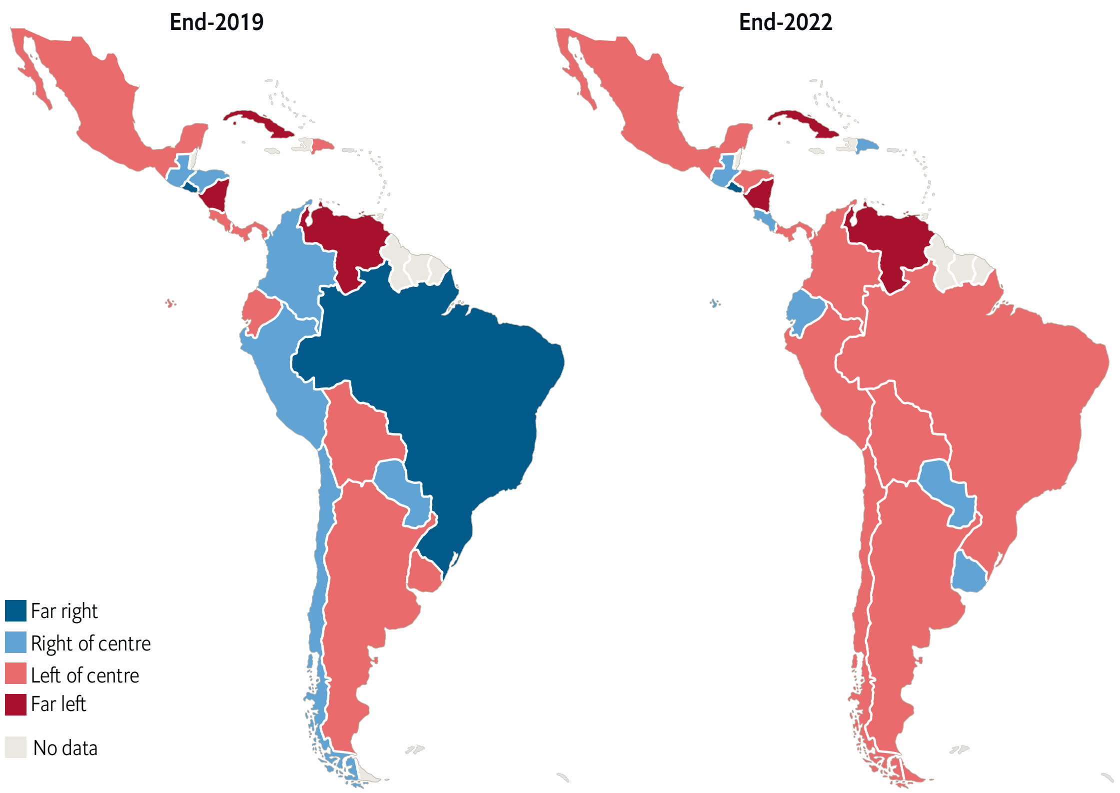
Spotlight on new governments

- **Latin America is facing significant global headwinds that will weigh on the economic outlook for 2023. Domestic policy will be holding growth back too, amid still-tight monetary policy and looming fiscal consolidation.**
- **However, perhaps the most significant development to watch in Latin America in 2023 is the success or failure of the many new governments in the region as they attempt to address the voter demands that swept them into office, all while grappling with serious macroeconomic dilemmas and divided legislatures.**
- **Despite this difficult political and economic environment, there will be opportunities for growth in 2023, particularly in agriculture, mining and nearshoring. However, to take advantage of these, the region's new governments will have to roll out policy reforms in 2023 that respond to public concerns without causing too much damage to the investment climate. In this white paper, EIU highlights some of these challenges.**

As the pandemic ebbs, a leftward tide rises

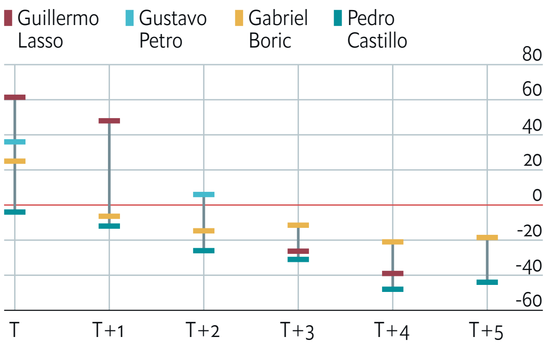


Note. Brazil's new left-of-centre government will take power in January 2023.
Source: EIU.

For Latin America's new presidents, now comes the hard part: governing

Latin America had another big election year in 2022, with important implications for policymaking in 2023 and beyond. **Policy shifts are on the cards as voters call for change**, not only on issues with a particular regional significance like crime and corruption, but also on the economy. One one—of consequence of the crises that have buffeted Latin America in the past three years is an increasing demand for a big state that spends more and regulates more. Accordingly, over the past year voters have elected candidates on the left of the political spectrum who are promising that kind of shift. It is no coincidence that tax reform—in order to ring-fence social spending—features among the top priorities of new leftwing governments in Chile and Colombia. Greater regulation (and taxation) of important commodity sectors, which are perceived to be the "winners" of the 2022 commodity shock, also looks likely.

Most recently elected presidents have had short honeymoons or none at all
(net approval rating, %)



Note. T represents the first month in office. Each subsequent month is numbered.
Sources: Cadem; Invamer; IPSOS Perú; Perfiles de Opinión; EIU.

However, Latin America's new left-wing presidents will not find governing easy. A collapse in electoral support for the moderate centre across the region has enabled populist right-wing political movements (in some cases, far-right ones) to gain ground too. Some of these movements have control of Congress and could easily block legislation; most countries have an extremely fragmented and divided legislature, making for, at best, a fractious process of mustering support on a bill-by-bill basis. This is not altogether a bad thing, as it represents something of a policy straitjacket and a moderating force, guarding against radical changes to the business environment.

Nevertheless, it will make policymaking a slow process, which may frustrate public demands for speedy—and substantial—results. **Expectations have been raised by the current election cycle, and Latin America's new presidents will find it hard to come up with the goods;** in this context, honeymoon periods will be extremely short and disillusionment will be quick to set in. All of this raises the risk that, having turned up to the ballot box to effect change this year, voters will resort in 2023 to the kind of large-scale protests that rocked the region in 2019.

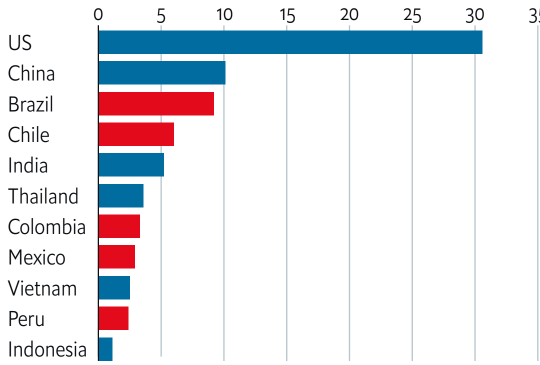
US-China rivalry will create problems and some (nearshoring) opportunities too

The decoupling of the US and China—forcing other countries to choose sides on strategic issues in an increasingly bifurcated global economy—will be a major trend underpinning geopolitics and geoeconomics for decades to come. The effects of this are already being felt in Latin America, and that will remain the case in 2023. A crucial question is, of course, which side of the divide Latin American countries will fall. In reality, the region's governments view both the US and China as important partners and will not want to choose between them. If and when they are forced to take sides on strategic issues like tech development, we think that the US will come out on top. For the most part, Latin America has strong diplomatic ties with the US, even in countries (particularly the big commodity producers in South America) where China has become the most important trade partner.

However, the decision is far from being clear-cut, bearing in mind that while China has been rolling out its Belt and Road Initiative (BRI) across Latin America, the US government has had little to put on the table. In our view, the lack of US engagement largely reflects the reluctance of US private-sector firms to invest in certain countries in the region for one reason or another (traditional obstacles have included weak infrastructure, low productivity, corruption concerns and macroeconomic instability). The promising Build Back Better World (B3W) initiative that was announced by the US administration (in conjunction with European governments), focusing on infrastructure in areas such as health, technology and climate, has failed to get off the ground.

In this environment, China is likely to make further inroads into Latin America in 2023, in strategic areas like lithium mining, and in countries like El Salvador, where increasing authoritarianism is putting the country at odds with the US, traditionally a close ally. A country to watch in 2023 will, of course, be Brazil, where Luiz Inácio Lula da Silva will take over as president in January. Although Lula enthusiastically increased engagement with China when serving as president back in the 2000s, we think that he will try to strike a balance between the two superpowers and keep both on side (as far as possible) this time around.

Latam labour cost competitiveness boosted by rapid Asian wage growth
(labour costs per hour, US$; 2026 forecast)



Source: EIU forecasts.

Meanwhile, the bifurcation of the world economy will present a huge opportunity for Latin American countries in the form of nearshoring. The year 2023 could well bring more investments to this end, particularly in Mexico. Our own analysis shows that Latin America is becoming increasingly competitive vis à vis the rest of Asia on labour costs, and it has other advantages such as proximity to the US. However, many countries in the region simply have too many disadvantages in too many areas, including weak infrastructure, low levels of skills and technological readiness, and political concerns about predictability, stability and security. Compared with major Asian economies, our business environment rankings suggest that Mexico, Costa Rica, Chile and Brazil are best placed to compete and benefit from nearshoring trends. Anecdotal evidence suggests that Mexico has indeed made some progress on this front; its share of US goods imports appears to be growing steadily. However, there are broader concerns about contract rights and the rules of the game in Mexico that will constrain the country's vast nearshoring potential in 2023.

Some Latam economies are better placed than others to compete for nearshoring investment
(score out of 10 in the business environment rankings)

	Political effectiveness	FDI policy	Foreign trade & exchange controls	Labour market	Infrastructure	Technological readiness	Average
Taiwan	7.8	8.2	9.1	6.9	7.8	9.2	8.2
Chile	7.1	8.2	8.7	6.5	7.0	7.8	7.5
Malaysia	6.4	7.8	8.2	6.9	7.0	7.8	7.4
Costa Rica	7.1	7.3	8.7	7.6	5.0	6.3	7.0
Mexico	5.3	6.9	9.6	6.4	6.0	6.9	6.8
Vietnam	5.7	6.0	8.7	6.6	6.0	6.9	6.6
Brazil	5.3	7.8	8.2	6.0	4.6	6.6	6.4
China	4.1	5.1	6.4	6.2	6.8	8.9	6.3
Colombia	5.2	6.9	6.9	5.9	6.0	6.3	6.2
Dominican Republic	5.8	7.3	8.7	5.2	5.5	4.4	6.1
Peru	3.9	6.4	8.7	5.7	5.5	5.2	5.9
Argentina	6.0	6.0	5.1	5.5	5.5	6.6	5.8
Ecuador	5.0	6.4	7.3	5.1	5.3	3.5	5.4

Source: EIU, business environment rankings.

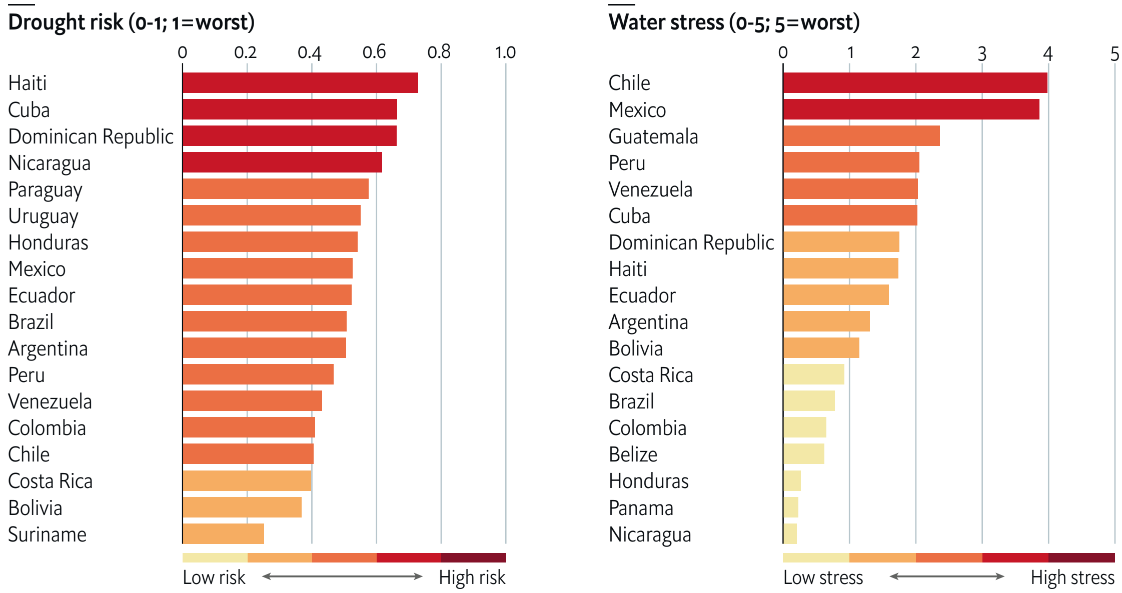
Water, water everywhere? Water supply will become a major political issue

Latin America has the most abundant water resources in the world. However, sources of water supply are not always well connected to sources of water demand, and droughts are becoming increasingly common, putting resources in many countries in the region under severe strain. The situation in 2023 is likely to be no different; according to the US climate prediction centre, there is a 76% chance of the La Niña weather pattern occurring in the approaching northern hemisphere winter (December-February). This would mark a rare "triple dip"—a third straight year of La Niña (and the drought conditions that it brings) for much of Latin America.

Whether drought conditions persist in 2023 or ease slightly, the issue of water stress (the gap between water demand and supply) will not go away, and is in fact likely to be high on policymakers' agendas for next year, considering the severe and widespread knock-on effects of drought and water stress. The region's traditionally vast water resources have led to a heavy reliance on hydropower for electricity generation, meaning that low water levels can result in power supply problems, as seen in Brazil in 2021. Latin America's big agricultural powerhouses are also extremely susceptible to drought conditions, as reflected in underwhelming production figures in some countries in the past couple of years, even in an environment of high prices. Goods exports can be affected by drought too; a crucial river transport route that conveys Paraguayan exports to Argentina (from where they travel on to other important export markets) has dried up, curbing transits. The risk of these problems recurring in 2023 is high.

Above and beyond this hit to activity, **the water issue will become a pressing political and policy question in 2023,** as all of the main water consumers (business users in industry, agriculture and mining) will attract criticism from the public and politicians alike for contributing to household

Latin America faces drought risk and water stress



Note. Water stress is the gap between water demand and water supply.
Sources: Aqueduct, World Resources Institute; EIU.

water shortages. Business supply has not been badly affected by drought conditions to date, owing to generous long-term water supply contracts that were signed before the problem of water stress arose. Now, however, these contracts are coming under fire in the likes of Mexico and Chile (both of which are among the top 25 water-stressed countries in the world). In Mexico, the president, Andrés Manuel López Obrador, has already threatened to end brewery operations in the drought-affected north of the country, and although this may simply be bluster, there is a risk that he will follow through on this threat in 2023. In Chile, meanwhile, the regulation of scarce water resources will undoubtedly be taken up in a renewed effort to rewrite the constitution that is getting under way. In both countries (as in the rest of the region), **there is a strong chance that new regulations end up crimping future mining and agriculture development.**

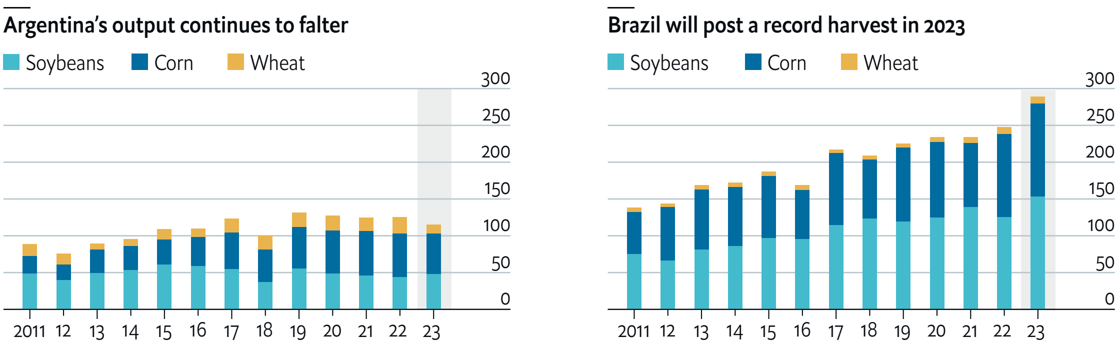
Agriculture: filling the grains gap?

The upending of global agricultural supply chains amid the Russia-Ukraine war raises the question of whether Latin America's agricultural powerhouses can step in and fill a supply gap left by the loss of Ukrainian production. **The answer is yes (in Brazil) and no (in Argentina)**. Brazil and Argentina are the region's two large global agricultural commodity producers; in fact, Brazil is the world's largest net agricultural commodity exporter. Both are top exporters of soybeans and corn, and Argentina is also an important wheat exporter. However, despite these apparent similarities, the nearterm fortunes of the agriculture sector in the two countries look very different.

This is partly down to luck. According to official projections, climate conditions will be fair in Brazil, whereas Argentina is set to record a third consecutive annual drop in overall grain production on the back of continued drought conditions. Argentina's soil is naturally highly fertile and requires less fertiliser per hectare than is the case in most other countries, but even so, a drop in fertiliser use in the face of spiking global prices will also constrain yields. Farmers have responded to the rising cost of inputs like fertiliser with crop switching, for example by shifting from corn to soybeans, which are more resilient to dry weather and less fertiliser-intensive.

Luck is not the only factor, however; Argentina is facing other headwinds that will prevent an expansion of investment and production in 2023 (and beyond). Years of macroeconomic instability have subdued investment, as have a heavy burden of export taxes (imposed to secure much-needed access to foreign exchange) and export quotas (introduced in a misguided attempt to contain domestic prices). These factors also reduce the incentive for farmers to try to take advantage of still-high global prices by ramping up production. The Argentinian government has tried to tempt them to boost output through a de facto subsidy in the form of a parallel exchange rate for the sector (the idea is to boost pesos earned for each dollar of exports and discourage stockpiling, which the country's farmers have a long tradition of doing as they await another of Argentina's frequent currency devaluations). Even so, the near-term outlook for Argentina's agriculture sector is discouraging.

Grains production lags in Argentina and booms in Brazil
(m tonnes)



Sources: Secretaría de Agricultura, Ganadería y Pesca; BCR; Conab; EIU.
Note. 2023 are latest projections.

Brazil, meanwhile, looks set for a record harvest in the 2022/23 crop year. The principal factors supporting this outlook include early efforts by Brazilian farmers to ramp up fertiliser imports, enabling them to secure crucial supplies and protect yields. Although the cost of fertilisers has rocketed, high soft-commodity prices will still provide Brazilian farmers with a solid profit margin. Another significant driver behind the increase in agriculture production in 2022/23, as in the past decade, is an expansion of arable land dedicated to crop production.

Looking ahead, however, this very expansion is a potential obstacle for the sector in Brazil. The US Department of Agriculture recently projected that land dedicated to agriculture, which currently stands at just over 40m ha, could expand by another 20m ha in the next decade. However, at least some of the recent expansion has been in areas surrounding the Amazon, giving rise to substantial environmental concerns and suggesting that when Lula takes office in January, he may impose restrictions on agriculture in order to meet global environmental commitments. **Finding a way to comply with these commitments without disrupting one of the fastest-growing—and important—sectors of Brazil's economy, will be a tough challenge for Lula in 2023 and beyond.**

Mining reform on the agenda as Latin America holds the key to the global energy transition

A number of factors—including post-pandemic "build back better" infrastructure initiatives and increasing public demands for clean energy in the battle against climate change—are raising demand for mining minerals that are crucial to the global energy transition. At the same time, the race to secure reliable sources of supply is heating up owing to global supply-chain issues and the intensifying US-China rivalry. **These trends have shone a spotlight on Latin America's abundant supply of strategic minerals such as lithium, copper, nickel, cobalt and rare earth elements.**

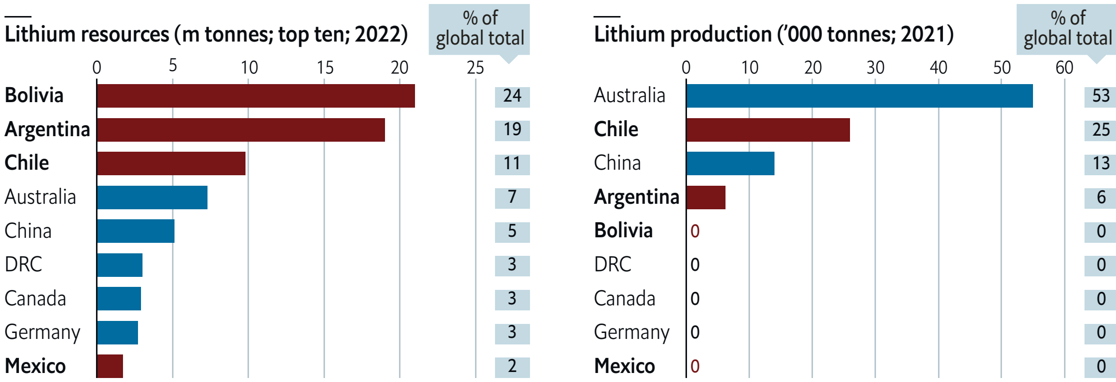
Latin America is home to some of the world's largest deposits of minerals crucial to the global energy transition
(global ranking of mining reserves)

Sources: US Geological Survey; EIU.

Latin America is home to a significant portion of all of these minerals: well over half of the world's lithium is in the region (mostly in the "lithium triangle" of Bolivia, Argentina and Chile); Chile has the world's biggest supply of copper; and Brazil holds the third-largest reserves of rare earth elements (about 10% of the global total). In a few cases, production levels reflect these large stocks. Chile and Peru, for example, are long-established global leaders in copper mining. However, although foreign investment in mining in Latin America is extensive, production of these materials does not, for the most part, come anywhere near potential, even though they are so critical for technology and clean energy. Bolivia's lithium resources have, for example, barely been commercialised at all.

There are several major obstacles to production. One, of course, is the weak overall business environment in some Latin American countries, which raises business concerns about contract rights and the rules of the game. Another is the complex nature of some of these mining operations, as they require large investments and technical expertise. For example, Bolivia's salt-pan lithium deposits are harder to access than Australia's hard-rock deposits. A third issue is an increase in protests and blockades by local communities, both on environmental grounds and in order to ensure that they get what they perceive to be a fair share of the rewards from local mining activity. Finally, and most importantly, the mining regulatory regime in much of Latin America is in flux. Among their other priorities, new governments across the region are seeking to address voter demands for stronger environmental regulation and fairer water usage. They will also want to fund spending by amending the tax and royalty rules that govern these windfall commodities.

Latam has huge lithium resources, but production is lagging



Sources: US Geological Survey; EIU.

In 2023 therefore, a major task in countries like Chile (where a process to rewrite the constitution will undoubtedly touch on the mining sector) is to clarify via pending reforms the new rules for the mining sector. To the extent that these address environmental concerns while still allowing for profitable private-sector operations, the stage will be set for a ramping-up of production. If, however, new regulations put Latin American mining operations at a substantial cost disadvantage relative to other global producers, or if governments push for their cash-strapped public sectors to lead the way on mining development, output will prove disappointing.

Given the region's ample resources, we expect next year to bring more investment announcements as companies accept the risk of a bumpy ride in order to secure resources, but output is likely be slow to approach its potential, in 2023 at least. Moreover, there is a significant risk that output of key minerals such as copper falls back in the long term, as local protests grow in strength and the mining framework becomes less attractive.

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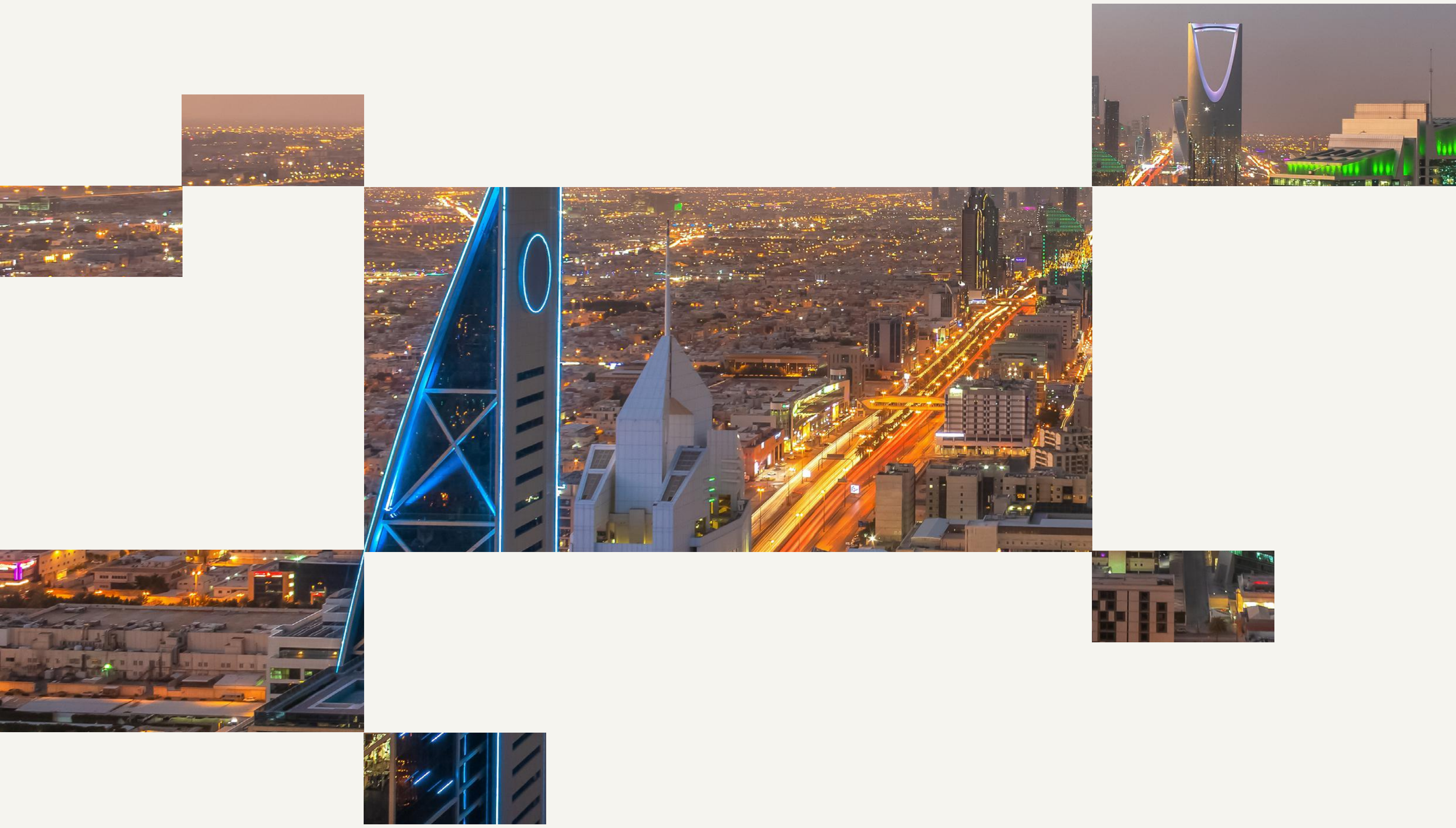
Middle East outlook 2023

Weathering political and economic headwinds



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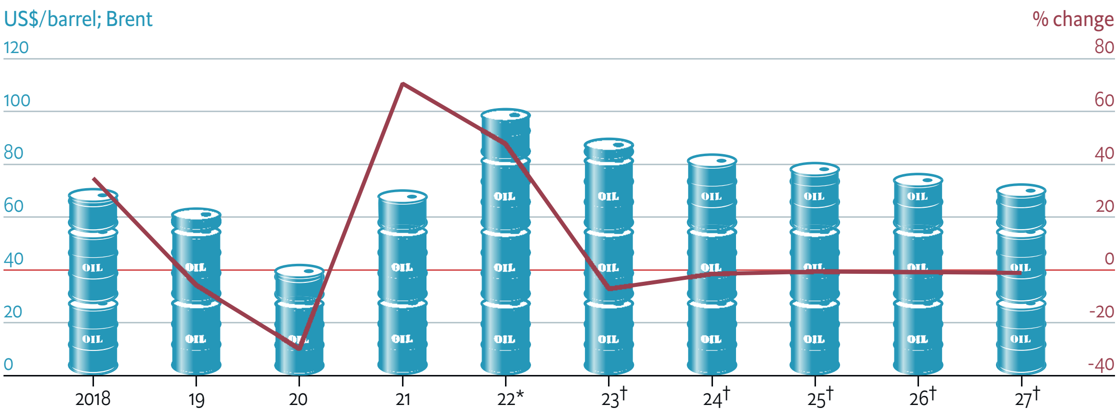
Weathering political and economic headwinds

- **Economies across the Middle East face mixed prospects in 2023, which will help to drive comparatively strong growth in the energy-rich Gulf Co-operation Council (GCC) states but hold most other economies in check.**
- **The region's travel and tourism industry is showing strong signs of recovery and international visitor arrivals could return to pre-covid levels by the end of 2023—largely owing to effective promotional campaigns, major investments and the release of pent-up demand.**
- **Troubled states face a very uncertain and insecure future—especially internationally sanctioned Iran and war-torn Syria and Yemen—where conditions are unlikely to improve and could easily deteriorate.**
- **Major players in the Middle East—including Saudi Arabia, the UAE and Iran—will continue to look eastwards towards Asia for trade, investment and political ties, which could further strain relations with Europe and the US. Another year of difficult balancing acts is in store.**

Major oil and gas producers in the Middle East have benefited substantially from strong global demand, rising output and high prices for their energy exports in 2022, and the region's net energy exporters—except internationally sanctioned and economically unstable Iran—can look forward to another year of decent returns from international markets in 2023. **The OPEC+ alliance will solely prioritise price levels, despite concerted diplomatic efforts by the US and European allies to persuade the cartel to increase production.** The recent move by OPEC+ to cut output by 2m barrels/day will be borne by Saudi Arabia and, to a lesser degree, the UAE. The actual cut to output will be about half the headline figure, as several major producers, most notably Nigeria and Russia, are producing well below their current quotas. **We expect OPEC+ to maintain its solidarity and forecast that oil prices will remain above US$90/barrel until at least mid-2023.**

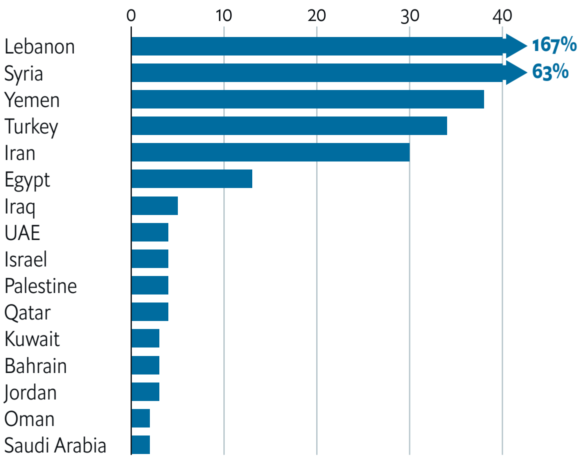
Oil prices



Sources: International Energy Agency; EIU.
*EIU estimates. †EIU forecasts.

The GCC states and Iraq will benefit the most from international energy market developments in 2023, with GCC states seeing high oil and gas revenue spill over and help to drive business activity in non-energy sectors—especially through state-backed investment in economic diversification projects. Inflation will be contained across the GCC in 2023 by exchange-rate pegs to the US dollar and fuel subsidy regimes. Elsewhere, elevated price pressures will weigh heavily on economic growth and stability in the region's more troubled states and some major energy importers—namely Lebanon, Syria, Yemen and Iran, as well as Egypt and Turkey. These countries face another year of double-digit annual consumer price inflation—hyperinflation in the case of Lebanon and Syria—which will cause economic hardship and in some cases fuel anti-government sentiment and protests.

Middle East: inflation, 2023
(av; %)



Source: EIU.

Middle East: economic growth, 2023
(real GDP; % change, year on year)

Downside risks prevail

The balance of risks to the region's outlook is heavily weighted to the downside, which reflects various global and regional shocks that could act to undermine economic growth and stability, social cohesion and security. Upside risks are limited to a low-probability scenario surrounding a quick resolution of the war in Europe leading to less volatility in commodity markets—food and fuel—and easing prices pressures, as well as the low risk of a stronger rebound of demand from China as covid-19 disruption dissipates and the authorities guide the economy to much faster growth.

Middle Eastern countries are confronted with risks that could disrupt their economies

Scenario	Probability	Impact	Risk intensity*
Regional conflict zones. Unresolved regional conflicts – especially in Syria and Yemen – escalate and spill beyond national borders to damage economic infrastructure in nearby states and stoke regional tensions.	High	High	16
Rapprochement efforts dissipate. Relations between Iran and the West deteriorate sharply and scupper plans to revive the Iran nuclear deal, while Iran escalates tensions with Saudi Arabia and Israel by pursuing its nuclear and missile programmes coupled with a regional "shadow war".	High	High	16
Chinese slowdown. China's economy decelerates rapidly and depresses energy and non-energy trade and investment flows to and from Asia.	High	High	16
US-China tensions. Rivalry and tension between the US and China intensify, which dampens bilateral trade, accelerates global decoupling and puts pressure on states to take sides.	Moderate	High	12
New coronavirus variants. New variants of the coronavirus spread across the Middle East and in key trade partners - especially China and Europe – disrupting domestic business, export markets and supply chains.	Moderate	Moderate	9
Escalation of war in Europe. The war in Ukraine triggers open conflict between Russia and NATO members, further destabilising Europe, disrupting global supply chains and adding volatility to commodity and financial markets.	Very low	Very high	5

Intensity colour key: 1 to 4 5 to 8 9 to 12 13 to 16 17 to 25

*Intensity is a product of the probability and impact scores, where "very low" scores 1 and "very high" scores 5.

Source: EIU.

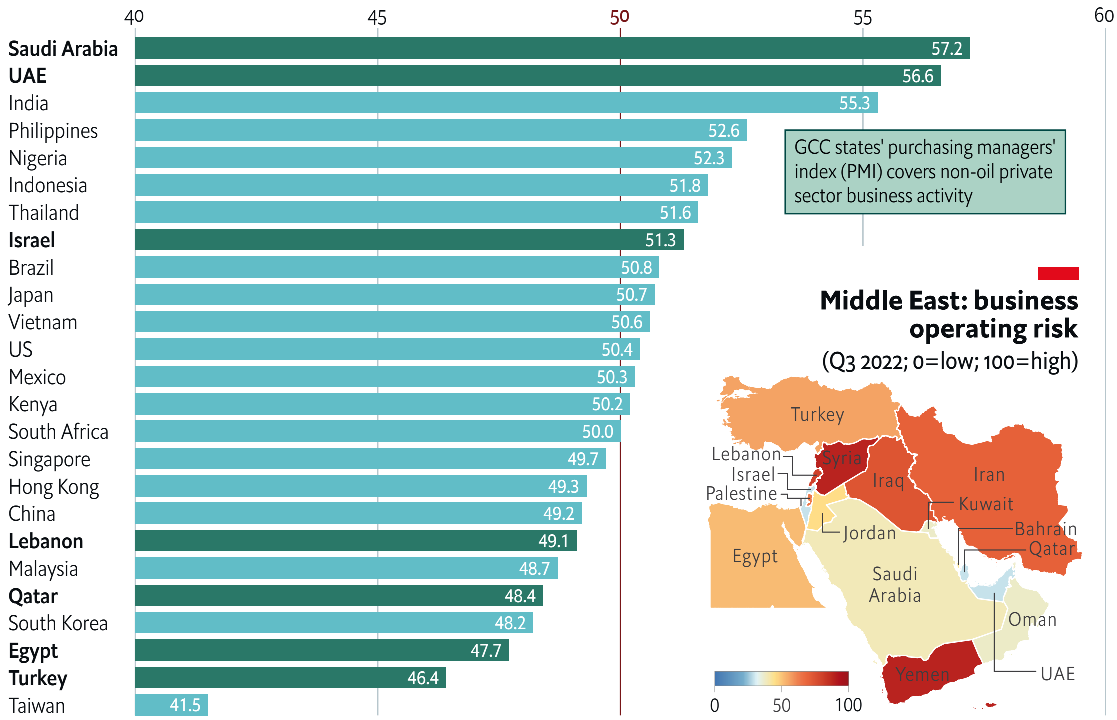
Focus on business sector reform

Business conditions across the Middle East will differ greatly by country in 2023. Business conditions in the GCC states will be the most favourable in the region, supported by buoyant energy sectors, the recycling of oil funds into the wider economy and ongoing business and economic reform programmes. Strong purchasing managers' indices (PMIs)—which record business activity in the non-oil private sector with a 50 threshold that separates expansion from contraction—for most GCC states are suggestive of relative health and momentum of non-energy private business sectors in the short term. Competition between Saudi Arabia and the UAE to establish leading business hubs will intensify, although this will also create space for co-operation and joint ventures given the scope for mutual benefit and the pragmatic nature of intra-GCC business investment. GCC states will continue to push for openings in new sectors and to attract foreign private investment, which will be supported by well-capitalised, profitable and strong financial sectors and already enacted pro-business reforms.

Business conditions will continue to be very challenging in Syria, Yemen, Iraq, Lebanon and Iran owing to a range of factors including sluggish growth prospects, high unemployment, social instability, international sanctions and conflict. In the case of Egypt and Turkey, volatile and unstable macroeconomies—including weak currencies, high rates of inflation, rising interest rates and uncertainty about the direction of economic policy—will represent a difficult backdrop for business operations in 2023.

Manufacturing purchasing managers' index, October 2022

(a reading above 50 indicates an expansion of the non-oil private sector compared with the previous month; below 50 represents a contraction; 50 indicates no change)



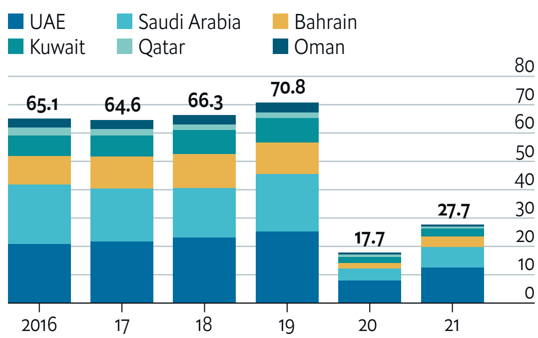
Source: EIU.

Recovery in travel and tourism

Business activity, revenue and profitability in the travel, tourism and hospitality industries in the Middle East have taken a major hit in recent years stemming from the covid-19 pandemic and then the Russian invasion of Ukraine. However, a corner appears to have been turned and momentum is building with international arrivals on the upswing in 2022 and a full recovery to a pre-covid levels of

Gulf Co-operation Council: international tourist arrivals

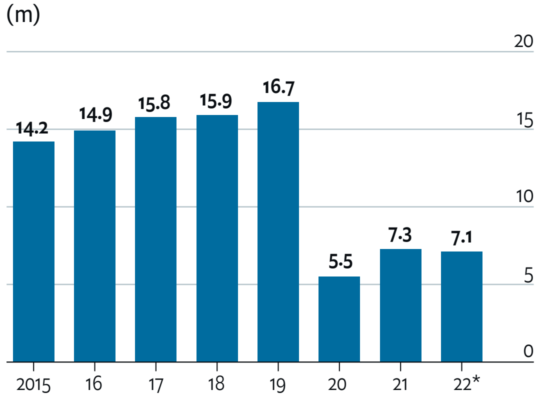
(m)



Sources: Local sources; EIU.

Dubai: international tourist visitors

(m)



*Jan-Jun.

arrivals expected in late 2023 (or early 2024). The recovery will be aided by major sports and cultural events—Qatar is hosting the FIFA World Cup in November and December 2022 and the AFC Asian Cup in 2023, while Saudi Arabia will increase the numbers of foreign visitors allowed to attend the annual haj pilgrimage. These and other locations, including major tourism hubs in the UAE and Oman, are redoubling their efforts to promote their tourism offer in major export markets in Europe and Asia, as well as reassuring visitors through high-level health and security measures.

Domestic tourism has supported a depressed market in recent years and this will continue to be an important outlet for the tourism sector, along with regional arrivals. International arrivals to the GCC were back on an upswing and accelerated quickly in late 2021 and in 2022, and looking ahead they will be aided by vaccine rollout and safety measures, lighter travel restrictions, a further promotional drive and the release of pent-up demand for travel and tourism. In the longer term, travel, tourism and hospitality are identified as key ingredients of strategic growth plans and consequently are subject to pro-business and pro-investment reforms as well as receiving substantial investment from the public and private sectors.

Another grim year for Iran

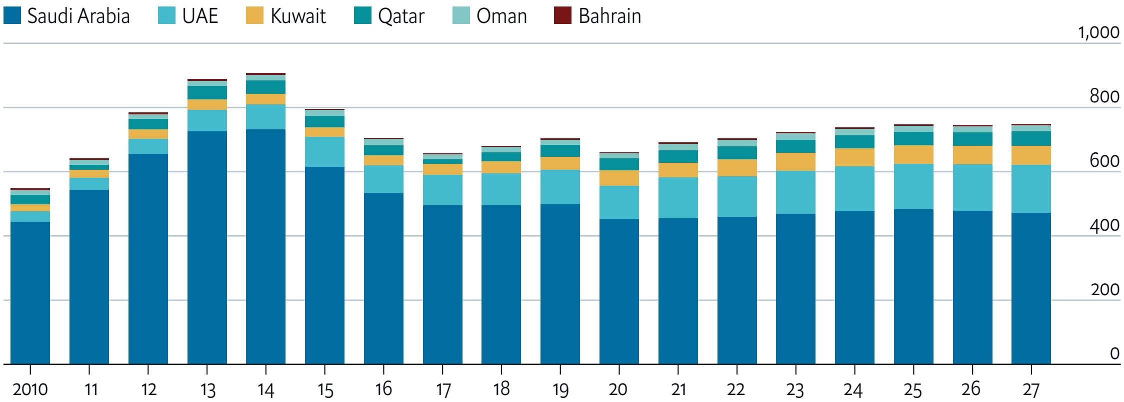
Iran will continue to suffer from an unstable economy, elevated unemployment, rampant inflation and simmering national grievances in 2023. The economy will remain hamstrung by US sanctions and stuck in slow growth mode, despite the persistence of reasonably high oil and gas prices on international markets. Disillusionment with the political system, years of repression and the deteriorating economic situation will drive further social unrest in 2023. The current regime led by the president, Ebrahim Raisi, will face a serious challenge from mass street protests and strike action, but protests will be met by a harsh response from the security forces, and hardliners are likely to retain the upper hand politically and control of the state. However, there is a high risk that further mass street protests will morph into a violent uprising that complicates matters for the ruling elite.

Hopes for a revival of the Joint Comprehensive Plan of Action (JCPOA, the Iran nuclear deal), and with it a lifting of US sanctions on Iran, are slim to non-existent given disagreement over the terms of the JCPOA and a deterioration of relations between Iran and administrations in the US and the EU, which have criticised Iran (and in the case of the EU imposed fresh sanctions) over arms sales to Russia and human rights abuses linked to the severe clampdown on public protests. Iran will continue to exploit its ostracism by the West to deepen military and economic ties with China and Russia, in the hope of easing the impact of existing sanctions and building external relations beyond the reach of the West.

More financial outreach from the GCC

An energy sector-induced economic bounce across the GCC that started in 2021 has helped member states to restore economic buffers and rebuild their financial war chests. The windfall from strong global energy demand and high oil and gas prices has enabled the rulers of Saudi Arabia and the UAE, in particular, to plough funds into national economic development plans and foreign ventures. During 2023 GCC states will continue to invest in the broader Middle East region, and elsewhere, to pursue their own economic goals and to strengthen regional alliances. The projection of soft power and the pursuit of hard-nosed financial investment will see billions of US dollars flow from the cash-rich GCC into strategic economic and geopolitical projects in 2023.

Gulf Co-operation Council: foreign-exchange reserves
(US$ bn)



Source: EIU.

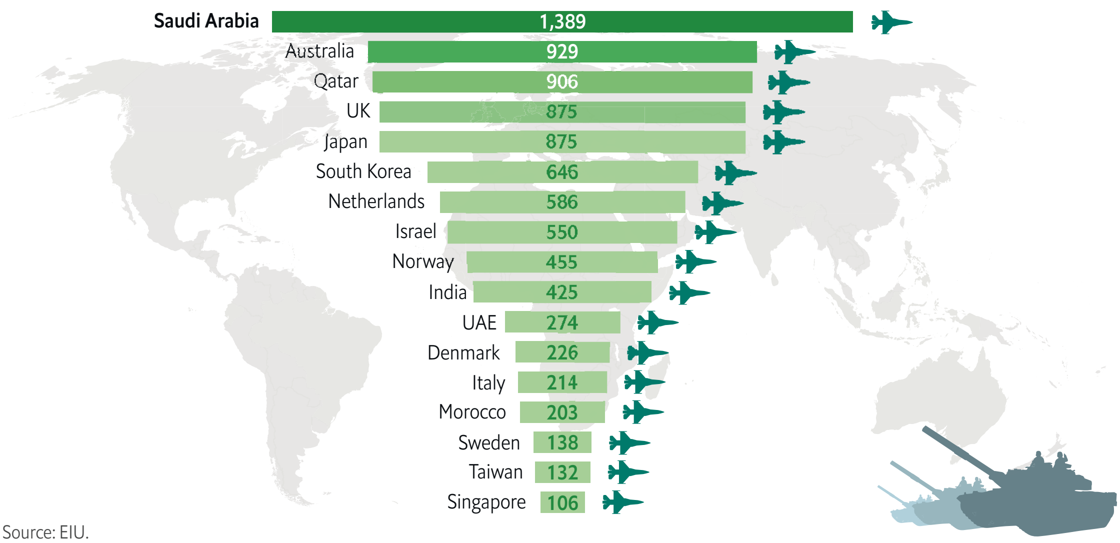
For instance, GCC states and related institutions will take a leading role in providing development finance through the Arab Co-ordination Group to help to tackle issues such as food security and climate adaptation—a food security action plan was agreed in mid-2022 with an initial US$10bn funding package to help lower-income countries foot the bill for food imports. Separately, GCC states have pledged about US$41bn in official support and investment to countries such as Egypt, Jordan, Yemen and Pakistan, where there is a need to provide emergency finance to shore up regional alliances, address economic instability or tackle humanitarian crisis. In addition, GCC states will continue to pursue strategic investments in foreign assets and ventures to support economic diversification and global partnerships, while robust non-oil GDP growth in the GCC in 2023 will continue to support remittance flows to other parts of the Middle East, as well as Africa and Asia.

Geopolitical pivot towards the East

Major players in the Middle have historical security relations and interaction with the US, strong trading links to Europe and China, and close ties to Russia. These relations will be tested in 2023 as the global economy slows, the war between Russia and Ukraine rolls on and China continues to rise as an influential economic and political player in the Middle East. A further pivot towards Asia—albeit in a measured fashion for those traditionally aligned to the West—is likely to be a key feature of Middle Eastern foreign policy in 2023.

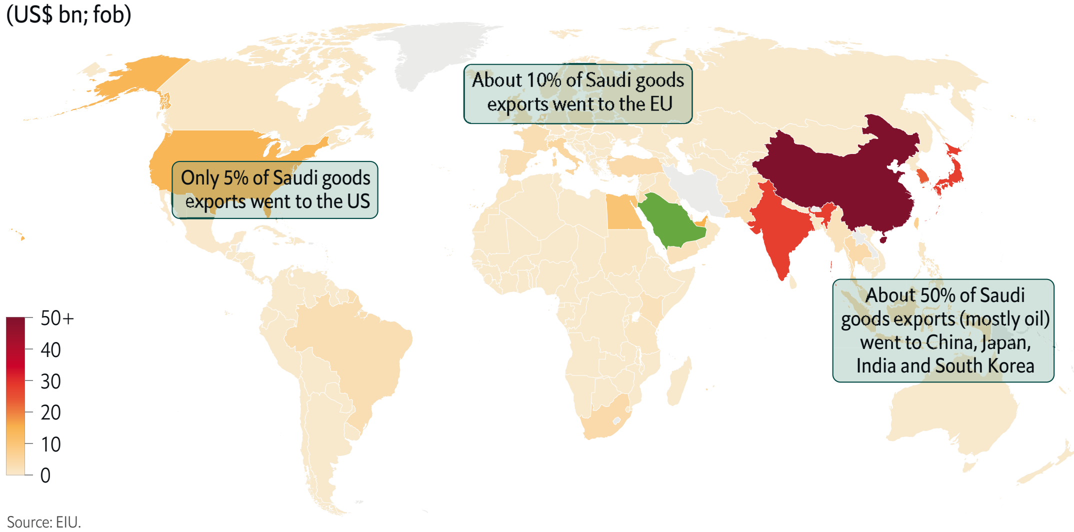
Saudi Arabia has a long-standing strategic partnership with the US built on the petrodollar system and US security guarantees, which will continue to play a critical role in underpinning the kingdom's foreign policy and defence capabilities in 2023. However, Saudi Arabia will increasingly adhere to a more independent foreign policy approach than in the past as it seeks to diversify its international relations—including closer ties with China and Russia. In part this reflects the ongoing shift in Saudi trade and investment ties towards Asia, especially China, and the success of the OPEC+ alliance—led by Saudi Arabia and Russia—in shaping global energy market conditions. China attempted to persuade Saudi Arabia to denominate oil sales between the two countries in renminbi (rather than US dollars as is the norm under the petrodollar arrangement with the US) and pressure will mount for this type

US arms exports by country, 2021
(US$ m; constant 1990 US$)



Source: EIU.

Destination of Saudi exports, 2021
(US$ bn; fob)



Source: EIU.

of transaction. Saudi Arabia will resist in the short term and maintain its exchange-rate peg to the US dollar, for fear of unsettling its own economy and relations with the US. The decline of the petrodollar (and the concomitant rise of the "petro yuan") is a longer-term risk, rather than a short- or medium-term one.

Iran already has poor relations with the West and these will deteriorate further 2023, which in turn will prompt the state to seek even stronger ties with other countries, including Russia, but especially China and India under its "look East" policy. Iran could obtain full Shanghai Co-operation Organisation (SCO) membership in 2023, which would facilitate its co-operation with SCO members—including

China and Russia—boost its influence and commercial ties in Central, East and South Asia, and provide Iran with more wriggle room to withstand sanctions and isolation from the West.

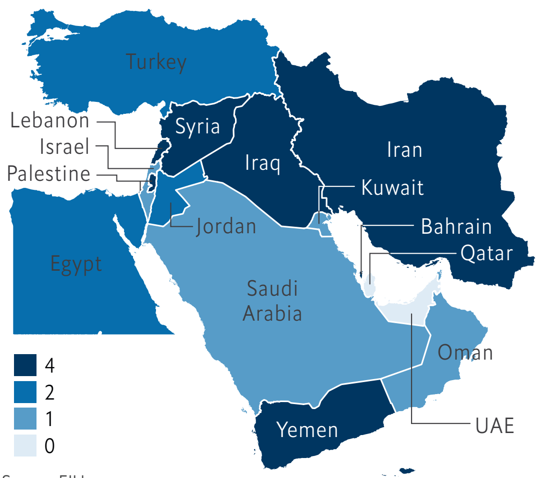
Unresolved conflicts destabilise the region

The decade-long conflict in Syria will remain a highly unstable, multifaceted affair with a myriad of domestic and international participants—more, rather than less, conflict appears on the horizon in 2023. The Syrian regime led by the president, Bashar al-Assad, and propped up by the Syrian army will retain control over most of the country. Outside regime-held territories, instability will be driven by Turkey's presence in the north and by opposition to the regime from rebel fighters in north-western Syria. Outbreaks of fighting in northern Syria between Kurdish-aligned groups and Turkish-backed rebels are likely to become more frequent in 2023. The Syrian regime will strengthen its influence in the resource-rich Kurdish territories in north-eastern Syria, leveraging the threat of Turkish invasion to establish a protectoral relationship with the Syrian Democratic Forces (SDF, the main Kurdish fighting force in north-eastern Syria)—we expect a rapprochement of some kind between the regime and the SDF by end-2023. Israel will increase the frequency of air and drone strikes on Iranian and Hizbullah positions inside Syria, especially as negotiations between Iran and the West over reviving the JCPOA are expected to falter. In addition, Russian preoccupation with its invasion of Ukraine could prove a destabilising factor, as opposition forces in the north-west, including groups backed by Turkey, sense that they have an opportunity to take advantage of Russian weakness, whether because of the impact of sanctions on supply lines to Russian bases or because of military setbacks in Ukraine itself.

The north-south civil war in Yemen will continue and intensify in 2023. Yemen's warring parties failed to renew the UN-brokered ceasefire (that began in April 2022) by an October 2nd deadline. Negotiations to revive the agreement remain ongoing, but major concessions from both sides appear unlikely, leading to an expected collapse of peace talks and the resumption of heavy fighting in early 2023. Divergent geopolitical ambitions in Yemen's multifaceted conflict will remain a major barrier to peace in 2023. Saudi Arabia and the UAE dominate a coalition of mainly Arab countries that oppose the Houthi rebels, a Shia group with strong positions in the north of the country. Houthi drone attacks targeting Saudi Arabia and the UAE are expected, which in turn are likely to mark the resumption of retaliatory Saudi air strikes on Houthi-held cities, such as Sanaa and Hodeida. Meanwhile, Iran will continue to provide some financial, logistical and military support to the Houthis as it seeks to undermine Saudi Arabia's backing of the Houthis' opponents by threatening domestic security in the GCC.

The long-running Israeli-Palestinian conflict has a new dynamic following the parliamentary election held in Israel in November, which was the fifth in four years and produced a narrow victory

Middle East: risk of social unrest in 2023
(0=low; 4=high)



Source: EIU.

in the 120-seat Knesset (parliament) for a right-wing government led by Benjamin Netanyahu, a former prime minister. The Netanyahu bloc comprises the major centre-right/right-wing Likud party, two ultra-Orthodox parties and an alliance of extreme right-wing parties. As prime minister Mr Netanyahu will attempt to restrict far-right policies to the domestic sphere and prevent them from influencing foreign policy initiatives, but this will be difficult to achieve given the pressures of governing in a coalition with personal and ideological differences and rivalries. The right-wing-dominated multiparty coalition will take a hard line on perceived threats to national security, continue Israeli settlement expansion and offer little to no concessions to the Palestinians, which will contribute to sporadic military confrontations on the Gazan-Israeli border and intermittent violent clashes elsewhere. This outcome will limit Israel's ability to further expand its regional ties, and especially those with Saudi Arabia and possibly the UAE.

Social tensions prompt protests and civil unrest

More generally, social tensions will remain high and spill over into highly disruptive mass demonstrations and protests in parts of the Middle East in 2023. Countries at a high risk of social unrest are Iran, Iraq, Lebanon, Syria and Yemen, where a difficult economic situation is exacerbated by conflict and years of oppression or economic mismanagement by ruling elites. Feeling threatened, rulers in some of these countries—especially Iran and Syria—will crack down hard on protesters. Countries at a moderate risk of social unrest include Egypt, Jordan and Turkey, which again will find social grievances driven by poor socioeconomic conditions—especially high rates of unemployment and inflation. In contrast, the risk of social unrest across the GCC and in Israel will remain low, largely as these countries are well equipped financially and institutionally to help mitigate socioeconomic pressures.

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North America outlook 2023

Economic headwinds approaching

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Economic headwinds approaching

- **EIU expects that a combination of stubbornly high inflation, a steep rise in interest rates and slowdowns elsewhere (most notably Europe and China) will curb US growth in 2023.**
- **We expect the US economy to experience a mild technical recession in early 2023. We expect real GDP to flatten year on year, rising by just 0.1%.**
- **In contrast, the Canadian economy will continue to benefit from high commodity prices, although aggressive monetary tightening will also take its toll on growth.**
- **In the US, Republicans' lacklustre performance in the 2022 mid-terms will kick off a battle for the 2024 presidential nomination. This competition will make it difficult for Republicans to present a united front in Congress and to mobilise voters.**
- **Both US and Canadian foreign policy will re-focus on China in 2023. We do not expect an easing of North America-China tensions any time soon.**

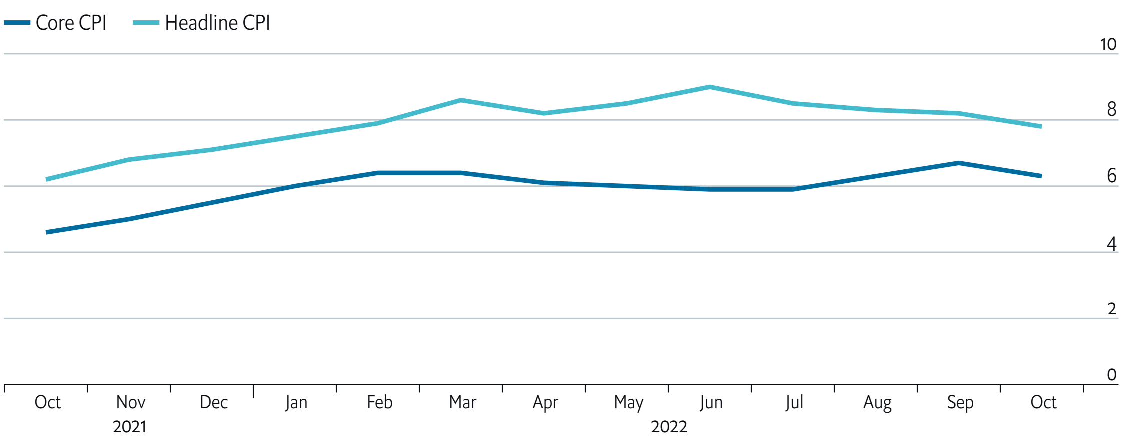
In 2022 the US and Canada faced similar economic challenges amid record high-inflation, Russia's invasion of Ukraine and heightened tensions with China. Both countries' focus shifted rapidly from coronavirus recovery, to managing economic headwinds stemming from the Ukraine war and navigating geopolitical uncertainty.

We expect that 2023 will be another year of managing slower growth, tightening monetary policy and trying to cool international tensions.

Interest rates: how far will the Fed go?

After US inflation spiked to an estimated 8.1% in 2022, a 40-year high, we expect that it will ease gradually over the course of 2023. In year-on-year terms, both headline and core inflation eased back from their recent peaks in October, to 7.7% and 6.3%, respectively.

Inflation measures are starting to ease, after core CPI hit a fresh high in September
(US consumer price index, % change year on year)



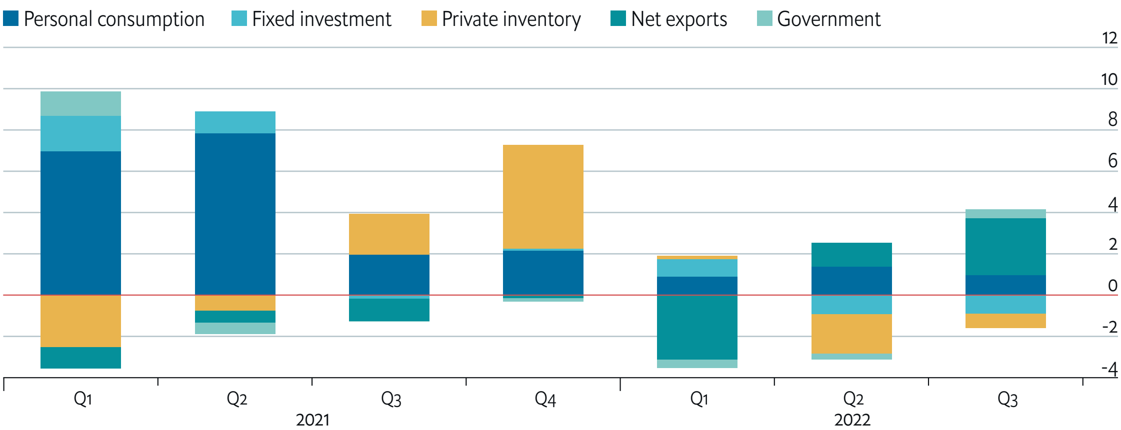
Sources: US Bureau of Labour Statistics; EIU.

Despite signs that inflation is easing, we expect price growth to remain above normal levels in 2023, as commodity prices remain higher than in recent years and as consumer spending slows only gradually. As a result, **we expect the Fed to raise interest rates to a peak target range of 4.5-4.75% at the start of February 2023**—twice as high as the peak range in the previous tightening cycle—and to leave them there until mid-2024. There is, however, an increasing risk that the Fed will raise interest rates above 5%, if inflation does not ease more noticeably in the coming months (as we expect it to) due to another oil-price spike or stubbornly resistant consumer demand.

US economic growth: is a recession on the cards?

We expect US consumer spending and fixed investment to slump in 2023, largely due to the steep rise in US interest rates, as well as stubbornly high inflation and slowing growth elsewhere in the world—including in Europe and China, two key markets for the US. We expect two quarters of GDP contraction in late 2022 and early 2023, as consumer spending and investment both drop from their high base. The housing sector—one of the fastest to respond to changes in monetary policy—has already declined noticeably in recent months, suggesting other sectors will follow. **We expect US consumer spending to be stickier, reflecting pent-up demand left over from the pandemic, strong nominal wage growth (albeit below inflation) and still-low unemployment.** The savings ratio has fallen to just over 3% in recent months, less than half its pre-pandemic level, as households have dipped into their savings in order to maintain spending (typically the savings ratio rises as households buckle up for difficult times).

Personal consumption and exports supported modest GDP rebound in Q3
(contribution to quarterly real GDP growth, percentage points)



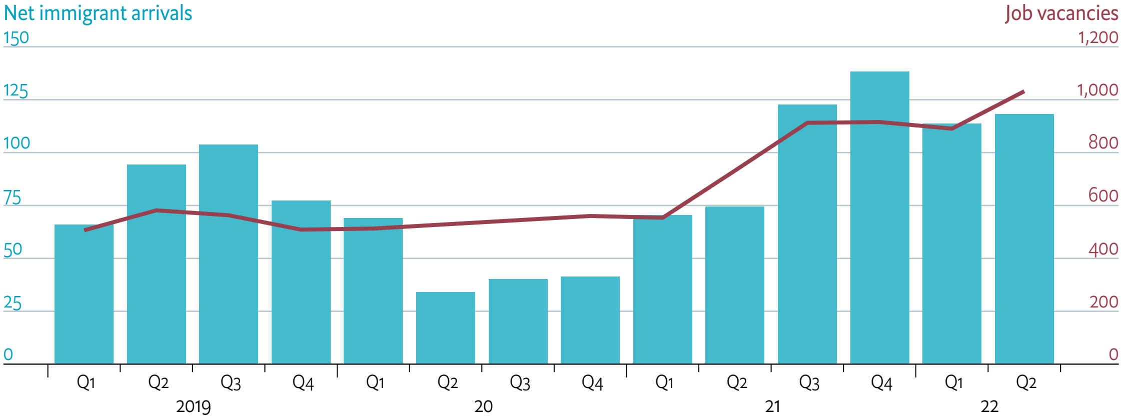
Sources: US Bureau of Economic Analysis; EIU.

Canadian economic outlook: slowdown ahead, but a recession is unlikely

In 2023 we believe that Canada's real GDP growth will be higher than that of its G7 peers, at a forecast 1.3% (compared with -0.1% on average for G7 countries; this average is an arithmetic one). Canada has benefitted from the spike in global commodity prices, notably for crude oil and wheat, following Russia's invasion of Ukraine. Higher commodity prices have fuelled inflation, but price growth has now started to come down from its high of 7.9% year on year in June. We believe that inflation will continue to fall in the coming months as global commodity prices decrease (albeit from a very high base), international transport costs fall and monetary tightening by the Bank of Canada (BoC, the central bank) starts to take effect.

Counterbalancing these positive trends, headwinds will weigh on the economy, including domestic and global monetary tightening, as well as the sharp economic slowdown in the US. There will also be other economic ripple effects from the war in Ukraine, such as an impending economic recession in Europe–which will also weigh on global growth. Labour shortages will also remain an issue. Despite government plans to bring in 1.5m immigrants by 2025, some sectors (like health care, manufacturing and construction) will face acute shortages.

Worker shortages in Canada remain despite proactive federal immigration policy
('000s)



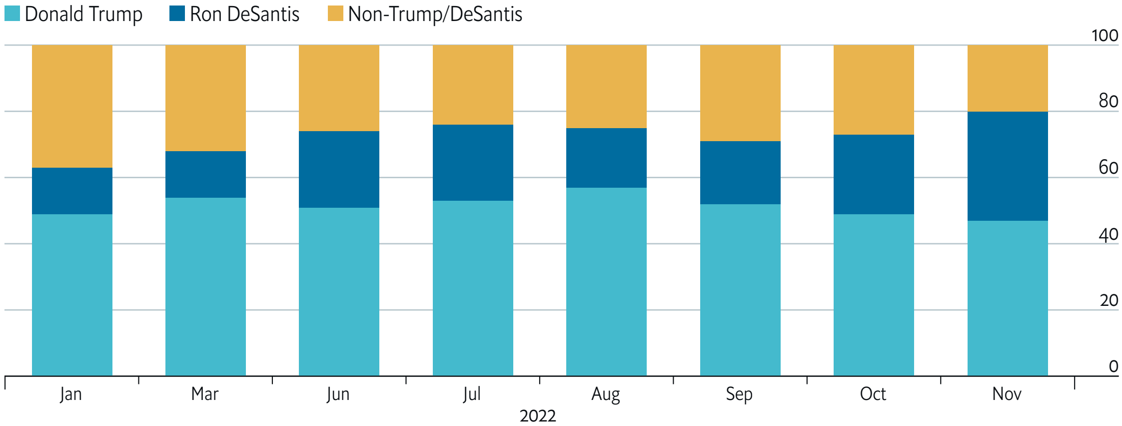
Sources: Statistics Canada; EIU.

US domestic politics: the 2024 US election season has begun

The November 8th US mid-term elections have resulted in a divided Congress, with a Democrat-controlled Senate (the upper house) and a Republican-controlled House of Representative (the lower house)–in line with our forecasts. This will set the country up for some bruising policy battles in 2023-24, particularly over the budget and the debt ceiling.

However, the biggest battle is now likely to take place within the Republican Party, as conservatives recover from their disappointing mid-terms performance and prepare for the 2024 presidential elections. The former president, Donald Trump, has already announced his candidacy for the 2024 election, as we expected, but will run with a greatly diminished profile. Mr Trump was very active in the mid-terms, endorsing more than 300 candidates, with mediocre results; not a single candidate from the far-right America First coalition—an unofficial slate of extreme-right candidates who deny the results of the 2020 election—won a race to serve as a key election official (governor, secretary of state or attorney general) in battleground states.

A weakened Donald Trump remains the Republican primary favourite
(% respondents who support the following if the Republican presidential primary were today)



Sources: Morning Consult; EIU.
*Latest survey conducted November 10th-14th 2022.

This creates an opening for potential challengers, particularly Ron DeSantis, who was re-elected as governor of Florida by a landslide (without seeking Mr Trump's endorsement). However, Mr Trump remains popular with much of the party's grassroots, and we do not expect him to step back from the political scene without a fight. The battle for the nomination is likely to divide congressional Republicans in the coming years; this will hinder their ability to put forward legislation, particularly as their extremely narrow majority in the House of Representatives (which drives the government's spending and taxation agenda) will make co-operation crucial. A long battle for the Republican presidential nomination also risks dividing the party ahead of the next election.

Foreign policy: all eyes (still) on Russia and China

We expect the US and Canada to remain focused on containing Russian aggression in Europe in 2023, as the war in Ukraine has revived tensions with Russia and strengthened North America's security ties with its traditional allies in Europe and NATO. We expect the US and Canada will maintain financial and military support for Ukraine in 2023, although the amount of this support by the US will depend on budget battles in a divided Congress.

Besides Russia, we do not expect Canada or the US's relations with China to improve in 2023. While the US aims to "contain" Russia in the near-term, the US national security strategy published in October highlights that the administration's longer-term focus is to "out-compete" China. Economic tensions, which had simmered for much of the term of the US president, Joe Biden, thus far, escalated significantly in October when the administration introduced sweeping export controls on US semiconductor manufacturing technology—a significant setback for China's technological and military plans.

Mr Biden has recently signalled his willingness to put a "floor" under the US-China relationship and to work with China on shared priorities, including the climate crisis. **However, the conflict will remain entrenched, and we expect the US administration to draw its red lines more**

clearly–particularly over its support for Taiwan and its efforts to out-compete China in the semiconductor industry–which will prevent any improvement in relations. Similarly, we expect Canada-China tensions to deepen in 2023, as Canada seeks to diversify its trade relationships and maintains claims that China attempted to interfere in its 2019 elections (which China denies).

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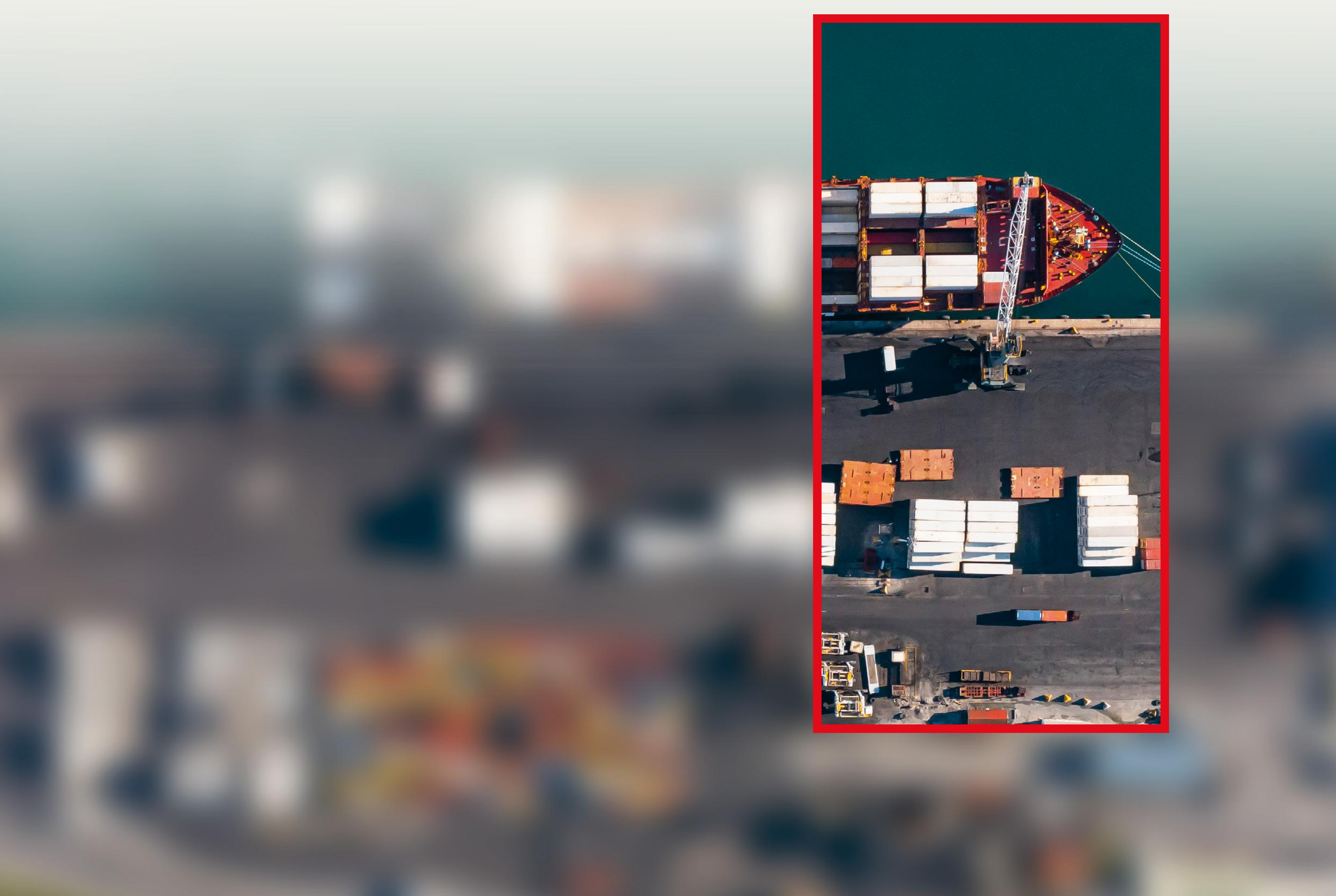
A new horizon for Africa-China relations

Why co-operation will be essential



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- **Africa-China relations are moving into a new phase. The latest policy initiatives, development strategies and financial pledges point to a deeper and broader engagement between Africa and China in the medium to long term.**
- **Major international powers—especially the EU and the US—are actively implementing foreign policy that seeks to reshape their own economic and political relations with Africa, which to an extent will help to counter, but not dislodge, Chinese influence across the continent.**
- **Substantially boosting and diversifying bilateral trade flows is a major policy objective—China is aiming to surpass the EU's total trade with Africa by 2030—but an expected slowdown in Chinese demand during 2022-26, especially in construction, a sector that is dependent on intensive use of natural resources, will make this difficult to achieve.**
- **We expect Chinese official investment to continue to target Africa's natural resources, together with trade-facilitating transport and power infrastructure. Private-sector trade and investment will also have a pivotal role in the decade ahead, targeting sectors such as information and communications technology (ICT) infrastructure and services, agricultural ventures, consumer goods and electronics, light manufacturing and finance.**

In November 2021 the Eighth Ministerial Conference of the Forum on China-Africa Co-operation (FOCAC 8) took place in Dakar, the capital of Senegal. Historically, the core messages emerging from the FOCAC have provided a clear indication of the future direction of travel of Chinese-African relations, and the latest edition was no exception. FOCAC 8 resulted in the adoption of the Dakar Action Plan (2022-24), the Chinese-African Declaration on Climate Change, the 2035 Vision for China-Africa Co-operation, and the Declaration of the Eighth Ministerial Conference of FOCAC. These documents suggest that China intends to expand its engagement with Africa over the coming decade through increasingly diversified trade; additional investment in target sectors and trade-facilitating infrastructure; projects that address Africa's environmental, social and governance issues; and a more hands-on and interventionist approach to regional diplomacy. Officials from China talk of building a more prosperous shared future for the country and Africa, although economic and geostrategic self-interest will continue to underpin China's public- and private-sector engagement with the continent.

The 2035 Vision for China-Africa Co-operation, the first mid- to long-term strategic plan to emerge from the FOCAC fora, sets out eight general areas for future engagement between China and its counterparts in Africa: mutually beneficial trade, investment and financing; industrial co-operation; green economy and climate change; healthcare provision; people-to-people exchanges; peace and security; co-operation on global governance; and partnerships in development agenda. These general themes suggest a more balanced approach to Chinese engagement in Africa during the decade ahead, as well as Chinese engagement that seeks to better address the sensitivities and future concerns of African partners. This may be the case to a certain extent, but only insofar as these areas of engagement align with China's own national development priorities and geopolitical aims, and the strategic outreach of its private sector.

Stimulators of African-Chinese commercial engagement

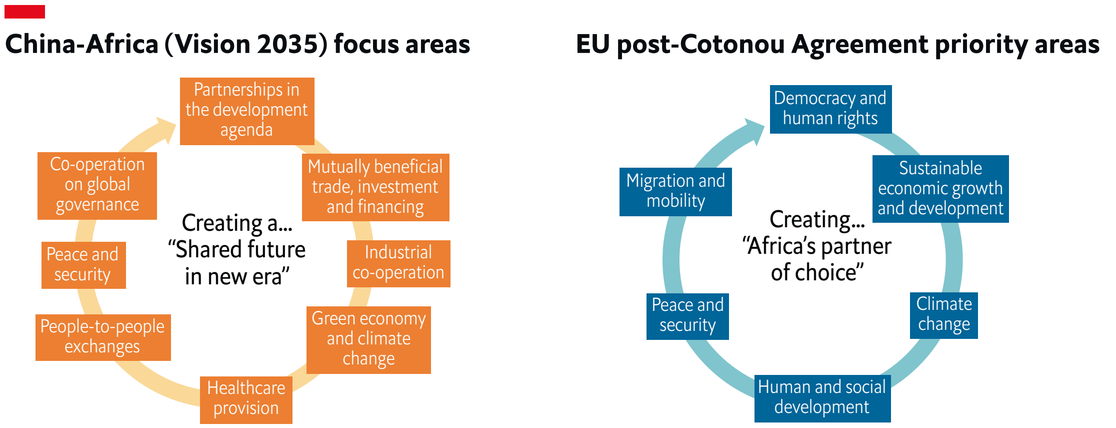
There are a range of broad drivers that are likely to push more Chinese trade and investment towards Africa in the decade ahead. These include intense international competition for Africa's extractive sector and agricultural resources. Chinese official investment—largely through loans and grants and channelled through state-owned enterprises and state-backed financial institutions—will continue to target Africa's natural resources, as well as trade-facilitating transport and power infrastructure. These are strategically important areas, given China's current and future demand for resources, and could result in further investment to scale up African supply chains of raw and processed energy, minerals, metals and agricultural products. Food security issues and enormous food import requirements in China could drive large trade and investment flows in African agricultural products and production, as well as environmental management systems and climate change mitigation strategies.

Africa has an enormous, young and low-cost pool of labour that presents a potential outlet for China's labour-intensive manufacturing sector—something that will become increasingly attractive as China's labour force grows older and becomes more costly. African-located manufacturing ventures will increasingly serve as an export base for industries that connect with Chinese value chains and target Chinese markets, as well as a launch pad for goods targeting markets in Europe and North America. In addition, Africa has potentially fast-growing markets for a wide range of consumer goods and services, which in the long term will be driven by an expanding urban middle class and further progress on regional integration.

The influence of these factors will be shaped by China's refocus on its overarching "dual circulation" model of development, which seeks to build domestic production capabilities and consumption (internal circulation), and at the same time stay engaged with the international market and global supply chains (international circulation). China aims to become self-reliant as much as possible in terms of essential inputs to production—especially high-end technology—and will attempt to minimise logistics bottlenecks by building more secure supply chains for essential materials from closely aligned trade partners. China is also actively seeking to build overseas markets as an outlet for its export industries and as a business opportunity for its foreign investment community. China's Belt and Road Initiative (which extends into Africa), though quietly deprioritised in the wake of the covid-19 pandemic and worsening regional sovereign credit risks, continues to provide crucial support to this dual strategy and could create commercial opportunities for business ventures based in Africa that link into China-centric value chains. Renewed interest could also come from the emerging Global Development Initiative, a new scheme proposed by China's president, Xi Jinping, at the UN General Assembly in September 2021.

Responding to the competition

China will attempt to keep ahead of other major powers, particularly the EU and US, both of which are taking a more active interest in Africa and seeking to reshape their own interaction with the continent. The EU and the African Union (AU) held a summit in February to help reset relations and set the foundation to make the EU "Africa's partner of choice" over the next two decades. The EU-AU Summit



Source: EIU.

set out plans for the Global Gateway Africa–Europe Investment Package worth €150bn, with the core aims of accelerating the green and digital transition in Africa, boosting sustainable growth and decent job creation across the continent, strengthening the African health system, and improving education and training on the continent. The EU is also hopeful of ratifying a new partnership agreement with Africa in 2022—a post-Cotonou Agreement— to set a framework for political, economic, sectoral and social co-operation between the EU and Africa over the next 20 years.

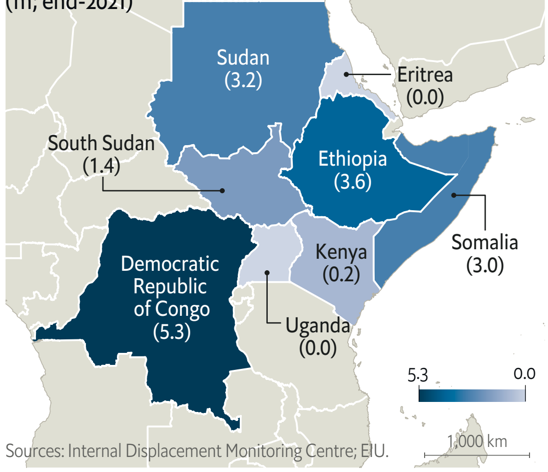
The US is re-engaging with Africa through initiatives such as the Build Back Better World (B3W) initiative that focuses more on "soft" projects in areas like climate, education, health and security, rather than "hard" infrastructure of airports, seaports, roads, railways and dams. Looking to forward their own foreign-policy agendas, other players such the UK, Brazil, Russia, India, South Korea, Japan, Turkey and the Gulf States (especially Saudi Arabia and the UAE) have intensified the scramble for access to African resources, future markets and production sites, and political support.

Competition between international powers for influence and access to Africa should help to strengthen the negotiating position of African states—on a unilateral basis or through collective bodies such as the African Union or regional economic blocs. For its part, China is pushing the line that it is well placed to fulfil the core requirements that African leaders have expressed individually and collectively for active support in developing pan-African and regional connectivity projects, a long-term partnership mindset rather than a donor-recipient arrangement, and, crucially, the ability and willingness to follow through on pledges and deliver on commitments. Question marks are also being raised in Africa over the motives behind the re-engagement of the EU and US, which for some African states raise memories of past failed commitments and are viewed merely as a desire to counter Chinese influence rather than work with African business partners.

Maintaining a non-interventionist stance

In January China's foreign minister, Wang Yi, visited Eritrea, Kenya and Comoros, continuing a three-decade-long tradition of Chinese foreign ministers opening the diplomatic year with a trip to Africa. During the trip he announced the creation of a new role of special envoy for the Horn of Africa—subsequently filled by an experienced foreign ambassador, Xue Bing—with a wide-ranging official remit to help secure lasting stability, peace and prosperity in the subregion. China followed up this appointment by co-hosting a Horn of Africa peace conference in Addis Ababa, the capital of Ethiopia, in June. These steps highlight China's interest in deepening its engagement with the subregion, albeit without a fundamental shift in Chinese foreign policy away from its long-standing principle of "non-interference" in the affairs of overseas countries. China's policymakers are cautious of being drawn diplomatically and militarily into far-flung conflict zones, especially given concerns around heightened geopolitical tensions closer to home. We do not foresee China's recently proposed Global Security Initiative (which emerged at about the same time as the aforementioned, similarly named Global Development Initiative), to substantially change the picture. The trajectory of China-Africa ties will remain more focused on deepening still relatively shallow trade and investment links, rather than more active diplomatic mediation or more formal security arrangements.

Internally displaced people in the Horn of Africa
(m; end-2021)

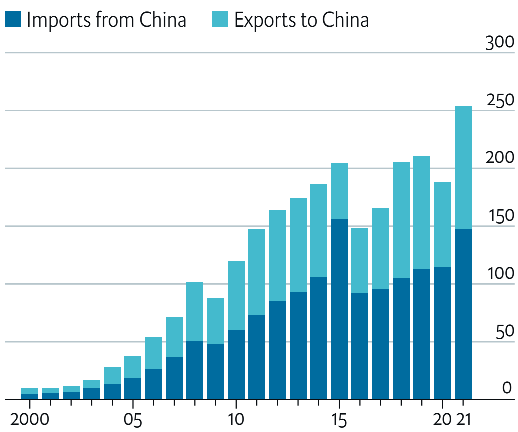


Sources: Internal Displacement Monitoring Centre; EIU.

Trade growth is a key priority

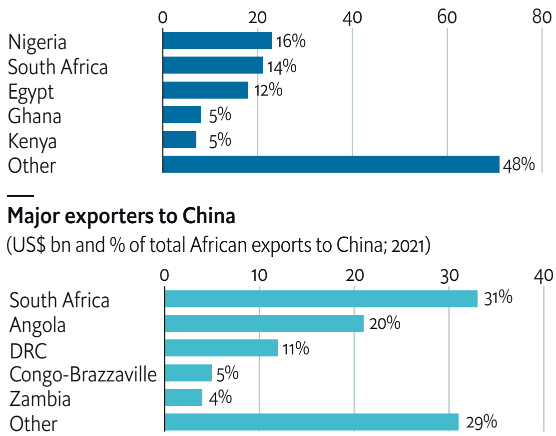
African states and the Chinese government have lofty ambitions to push the level of their bilateral trade much higher and diversify trade further in the years ahead. China is actively seeking ways to consolidate its position as the largest single country trader with the continent in the medium and long term. In the short-term China pledged at the FOCAC 8 meeting to buy a total of US$300bn worth of products from Africa in 2022-24. This would maintain the record level of African exports to China achieved in 2021, but in an environment of lower commodity prices—we expect energy and industrial raw material prices to ease during 2023-26 compared with their 2021 level—which entails a sizable

African trade with China
(merchandise goods; US$ bn)



Major importers from China
(US$ bn and % of total African imports from China; 2021)

Major exporters to China
(US$ bn and % of total African exports to China; 2021)



Sources: UN Comtrade (2000-15); China's General Administration of Customs (2016-21); EIU.

expansion of non-extractive sector trade. This will be a tall challenge made even more difficult by the expected slowdown in Chinese demand in 2022-26, especially in construction, a sector dependent on intensive use of natural resources.

Bilateral trade

Bilateral trade in goods between Africa and China rose to a record high of US$254bn in 2021—up by 35% compared with 2020—according to data released by China's General Administration of Customs. **African imports from China** reached US$148bn in 2021, the highest level recorded since 2015 and an increase of US$33bn, or 29%, compared with 2020. Africa bought vast quantities of essential pandemic goods—including pharmaceuticals, chemicals, personal protective equipment, face masks, hazmat suits and digital hardware—from China in 2021, but traders were also able to take advantage of resilient demand in Africa for consumer goods and the need for more intermediate or industrial products. **African exports to China** hit a record US$106bn in 2021, driven largely by strong demand and high prices for energy, mining and agricultural commodities.

Evolving nature of Chinese finance

China's lending to Africa over the past two decades has largely targeted transport, power and mining projects and largely involved policy banks—including the Export-Import Bank of China and China Development Bank. However, official lending at low rates has tailed off in recent years and commercial bank lending has taken on a more visible role in funding African projects. In addition, target sectors are widening as China provides less official funding for major transport projects and commercial enterprises increasingly target other sectors such as ICT infrastructure and services, agricultural ventures, manufacturing, and finance among others. This transition in project finance and project type is expected to continue as Chinese commercial interests explore new avenues of co-operation on the continent.

China made smaller short-term financial commitments at FOCAC 8 compared with FOCAC 6 and 7, held in 2015 and 2018 respectively, which reflects some belt tightening and greater risk aversion in China, owing to the adverse effects of the covid-19 pandemic. China made new financial pledges at FOCAC 8 amounting to US$40bn, a large drop from the US$60bn of finance pledged in 2018, and

FOCAC's financial pledges
(US$ bn)

	2018	2021
Credit lines	20	10
Grants & interest-free loans	15	-
Chinese foreign direct investment	10	10
Development financing	10	-
Financing African trade	5	10
IMF special drawing rights	-	10

Source: EIU.

there is a risk that this reduced figure may not actually materialise, owing to an expected economic slowdown in China, a shrinking current-account surplus and further financial belt tightening.

The FOCAC 8 financial pledges for the next three years include about US$10bn worth of credit lines available to African financial institutions (rather than African governments to fund Chinese projects, as has been the case previously), at least US$10bn of foreign direct investment (FDI), about US$10bn in trade finance for African partners and the reallocation to Africa of US$10bn of special drawing rights held with the IMF (25% of the Chinese total).

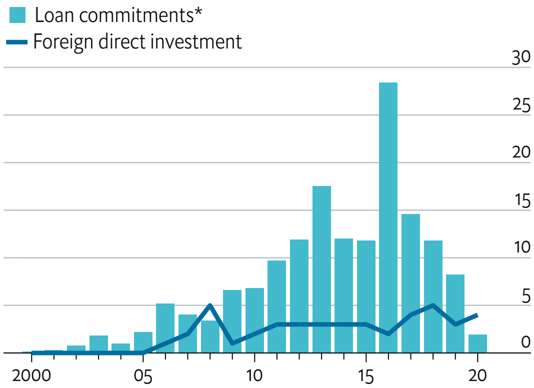
Separately, China has pledged to accumulate US$60bn of additional direct investment from Chinese firms in Africa by 2035, which appears challenging but achievable, given recent FDI trends and the expectation that the Chinese private sector will become even more invested in African ventures. Moreover, at FOCAC 8 China pledged at least US$10bn to be accumulated over three years, equalling a pledge that it made at FOCAC 7 (and subsequently realised).

Addressing the debt pile

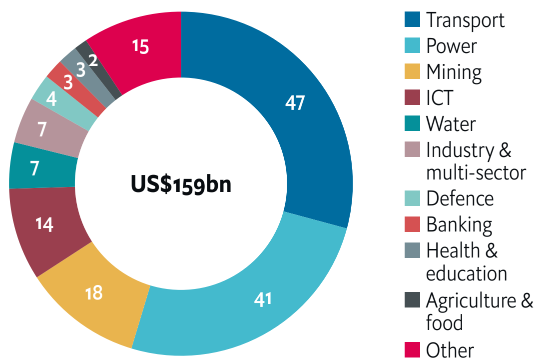
Africa has a higher debt burden than ever before, partly because of China's free and easy lending regime, which has been accompanied by little real effort to build accountability and transparency in the use of funds. China's enormous amounts of lending to Africa have promoted accusations among some countries—mainly from India and the West—of China employing "debt-trap" diplomacy, whereby poorer states are flooded with unsustainable debt, ultimately forcing them to surrender strategic assets or conceding significant political leverage. Chinese loan commitments in the region of US$160bn from 2000 through to 2020—according to the China Loans to Africa Database, managed by the Boston University Global Development Policy Centre—along with numerous Chinese backed infrastructure projects in Africa and the promise of more to come have helped China to secure access to Africa's natural resources and provided a foothold for Chinese firms operating in Africa.

Repayment issues have emerged in countries such as Ethiopia, Kenya, Uganda and Zambia, but there is little real evidence to date that active Chinese "debt-trap" diplomacy is in play across the region. However, Chinese loans have undoubtedly helped to build political influence on the continent, and

Chinese finance directed towards Africa
(US$ bn)



Chinese loans to Africa
(2000-20)



*Chinese policy and commercial banks, government entities, companies and other financiers.
Sources: China Africa Research Initiative, Johns Hopkins University's School of Advanced International Studies; EIU.

there is some pressure from China on its African partners to provide support for its foreign policy interests. This will continue to be the case as China seeks to build its international status and sphere of influence in Africa and shore up its access to the region's natural resources, although attempts by the EU and US to play catch-up could counter Chinese influence and rebalance international relations.

China is wary of its financial exposure in Africa and reputational or repayment issues surrounding some of its lending. The covid-19 pandemic has exacerbated Africa's external debt repayment issues and prompted a response from the international community and major bilateral lenders, including China. Wary of the need to address emerging external debt issues in Africa, China has reluctantly participated in the G20 Debt Service Suspension Initiative (DSSI) and pursued a case-by-case approach to debt restructuring and relief for African states. China is reported to have provided debt relief to 16 African states under the G20 DSSI, which includes Angola, Kenya, Mauritania and Zambia, while China also claims to have cancelled interest-free loans for around 15 African states, including Botswana, Burundi, Rwanda, Cameroon, Republic of Congo and Mozambique. Loan restructuring is nothing new for Chinese lenders, and new initiatives that protect Chinese commercial interests are likely in the years ahead.

China's slowdown impacts Africa

The Chinese economy is slowing, and this will directly impact Africa in the short to medium term. China's zero-covid policy will continue to disrupt economic activity well into 2023, especially household spending and private business activity. China will miss its annual growth target of 5.5% for 2022; instead, we expect real GDP growth to fall from 8.1% in 2021 to just 4% in 2022, followed by a modest uptick to 5.5% in 2023. From 2023 economic policy in China will return to the themes of "common prosperity", "carbon neutrality" and "dual circulation", many of which have been on pause, owing to the precarious economic fundamentals. We expect the Chinese economy to grow between 4% and 5% in 2024-26, a much slower pace of growth than the average of the past two decades.

China's economic slowdown and rebalancing in the short to medium term will lead to weaker import demand and most likely softer prices, while some Chinese foreign capital outflows could become harder to secure owing to financing constraints and greater risk aversion. The most exposed countries in Africa are commodity exporters, specifically those that provide supplies for the Chinese metal- and power-intensive construction sector, especially South Africa, the Democratic Republic of Congo, Zambia, Mauritania and Namibia. However, policy announcements suggest that China is in for the long-haul, and strong trade and investment ties will remain a key foreign policy priority. Equally, economic need and market forces will continue to drive Chinese commercial interests towards Africa.

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ECONOMIST INTELLIGENCE EIU

Industry outlook 2023

Challenges, opportunities and trends to watch in seven sectors

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Contents

Industry outlook 2023

Challenges, opportunities and trends to watch in seven sectors

The continuing pandemic, the war in Ukraine and high inflation have forced many companies to scale back their forecasts for this year. So will 2023 be any better?

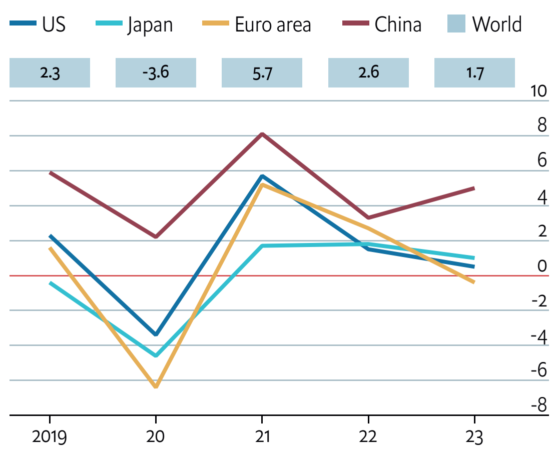
- The war in Ukraine, combined with lockdowns in China, has exacerbated supply-chain disruptions and pushed up global inflation, forcing EIU to downgrade its forecasts for economic growth in 2023.
- Many governments, particularly in Europe, will be forced to scale back investment in public services, including healthcare, in order to protect households and businesses from the effects of higher prices.
- While some businesses (particularly in commodities sectors) will benefit from high prices, many will be hit by weak demand and high input costs, particularly for energy.
- Profitability will be squeezed, while corporate investment will slow amid rising interest rates.
- However, some companies (notably in pharmaceuticals, technology and retailing) will take advantage of lower stock-market valuations, bankruptcies and government incentives to snap up strategic assets and position themselves for an eventual upturn.

Ever since the pandemic caused an unexpected slump in the global economy, companies have been waiting for the recovery. It has come, but it has been far from straightforward. In 2023, several industries—including automotive and tourism—will still not have recovered to 2019 levels. In others—including retailing and healthcare—spending growth will be robust in value terms, propelled by higher prices, but will be low or even negative in real terms. Meanwhile, industries such as energy and financial services face geopolitical risks that were barely conceivable a year ago.

The main reason for this disruption is Russia's invasion of Ukraine in February 2022, and the sanctions that the US, the EU and their allies have imposed in response. Combined with China's strict zero-covid policies, these have had a deleterious effect on global trade and energy flows, pushing up commodity prices and fuelling high inflation. As a result, EIU has downgraded its economic forecasts sharply for both 2022 and 2023 over the past few months (see box).

This report looks at the impact that slower economic growth and high inflation will have on seven global industries. We also offer some industry-specific predictions for 2023.

China will set the pace on growth
(% change in real GDP*)



Source: EIU.
*2022 and 2023 are forecasts.

- In the **automotive sector**, demand for electric vehicles (EVs) will continue to be the only bright spot in a gloomy year. We expect EV sales to rise by 25% to 10.7m units—more than five times their pre-pandemic level—while sales of fossil-fuel cars and commercial vehicles will fall. Even EV makers will encounter challenges from supply-chain disruption as well as a lack of charging infrastructure.
- For **consumer goods and retailing**, we expect inflation to push up global retail sales by nearly 5% in US-dollar terms, but the lower volume of sales and surging costs will weaken retailers' profits. Real-world retailers will turn to automation to try to reduce labour costs. Growth in online sales, although slower than in recent years, will remain in double digits. Global luxury brands, meanwhile, will suffer from China's slowdown.
- **Energy** consumption will see its second year of sluggish growth, rising by just 1.3% as the global economy slows. Lower gas supplies and more extreme weather events will force many countries to fall back on fossil fuels, including coal, delaying the energy transition. Even so, renewable energy consumption will surge by about 11%, with Asia leading the way.
- In the **financial services** sector, weakening economic output and rising interest rates will lead to more difficult conditions for banks, insurers and fund managers in 2023. However, new financial challengers, including fintech and cryptocurrency sellers, are likely to find the going even tougher, as their investors insist they start looking for profits.
- **Healthcare** spending will fall in real terms given high inflation and slow economic growth, forcing hard decisions on how to provide care. The use of health data will come under stricter regulation. The pharmaceutical sector will face challenges, as price cuts, higher supply costs and patent expiries lead to narrower margins.
- The **technology** sector will not be immune to economic headwinds, with profits falling. Companies will focus on investment in the metaverse, as well as the drive to standardisation and the battle with regulators. Asian telecoms companies will continue to look for consolidation in 2023; markets such as Sri Lanka, Japan and India are the most likely to see deals.
- Global **tourism** arrivals will rise by 30% in 2023, following 60% growth in 2022, but will still not return to pre-pandemic levels. The economic downturn, sanctions on Russia and, above all, China's zero-covid strategy will be among the factors weighing on the industry. Even so, we expect airlines to return to profitability.

Amid all this gloom, there will be areas of opportunity. The EV market, online retail sales and tourism will continue to deliver strong growth, particularly in Asia and the Middle East. Innovations—from the metaverse to automated vehicles and data analytics (notably in healthcare)—will attract investment, with some companies also seizing on chances offered by volatile financial markets. It will not be an easy year, but it could be a transformative one.

Macroeconomic conditions

The global economy is set to slow sharply in 2023 after two years of rebound from covid-19-related recessions. With the EU, Chinese and US economies all decelerating markedly, we forecast that global real GDP growth will rise by just 1.6% in 2023, down from 2.8% in 2022 and 5.7% in 2021. Despite the gloomy outlook, global consumer price inflation is likely to remain high, at a forecast 6.3% in 2023 (down from 9.4% in 2022), as a result of much higher prices for most energy and food commodities in the wake of Russia's war in Ukraine.

However, price pressures will be uneven, with the strongest upward impetus in Europe and North America, and less force in Asia, particularly in its largest economies. As a result, we foresee a continuation of monetary tightening in the west through hikes in policy interest rates and the unwinding of central bank balance sheets (known in the trade as quantitative tightening). By contrast, China and Japan will continue to pursue accommodative policies amid economic softening. Separately, several G20 economies—notably Argentina and Turkey—will continue to see very high inflation rates.

Automotive outlook 2023

Bright spots amid stalling growth

Key forecasts

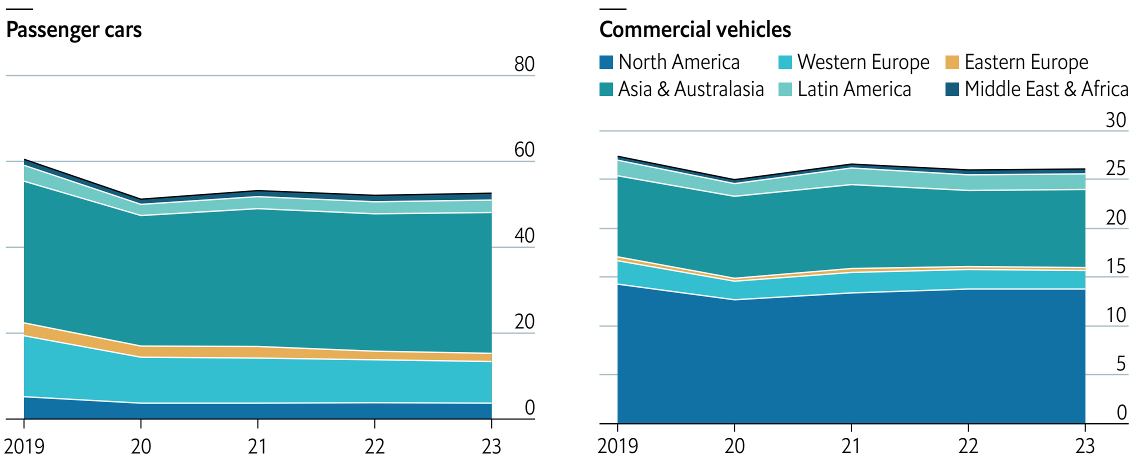
- The automotive industry will remain vulnerable to global headwinds in 2023 including the energy crisis, slower global demand and continued supply-chain problems.
- Global new-vehicles sales will remain flat in 2023: new-car sales will rise by 0.9% and new commercial vehicle (CV) sales will fall by 1.3%.
- Sales of electric vehicles (EVs) will be the only bright spot, growing by 25%, but governments will restructure their incentive schemes.
- Governments' focus will turn to charging networks, which are inadequate to meet the expanding EV fleet.
- Autonomous vehicles will take a leap forward, as UN regulators lift their speed limit.

Automotive sales will remain muted

New-vehicle sales will stall in 2023, especially in Europe and the US. We expect global new-car sales to rise by just 0.9% globally, held back by squeezed consumer spending, high commodity prices and production shutdowns caused by supply-chain disruptions. New-car sales in western Europe will decline by about 3%, while they will fall by 2.4% in North America. Meanwhile, new CV sales will fall by 1.3% globally, amid an expected recession in the Euro zone and slower GDP growth in the US and China.

Overall, this means that, following a decline in 2022, new-vehicle sales will rise only marginally in 2023, led by growth in Asia, the Middle East, Africa and Latin America. As a result, global new-vehicle

Automotive sales in the slow lane
(new-vehicle sales by region; m units)



Sources: national sources; EIU.
*2022 and 2023 are forecasts.

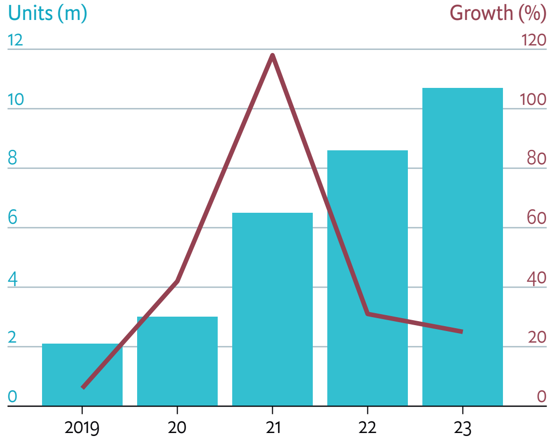
sales in 2023, at 79m, will still fall short of pre-pandemic levels of 88m units. Our forecast will remain vulnerable to considerable risks, including an escalation of the Russia-Ukraine war, possible energy shortages in Europe and a chance that the global economy may slip into recession.

Incentives for electric vehicles will be restructured

Sales of EVs will be the only bright spot in 2023, growing by 25% year on year to 10.8m units. Governments are getting innovative with their EV incentive policies, in order to encourage clean-vehicle sales without too much cost and without benefiting high-income households. The US will offer a US$7,500 EV tax credit at the point of sale on clean-vehicle purchases from January 1st 2023, but only if the cars meet stringent eligibility criteria, including final assembly within North America. The US will also remove a 200,000 vehicle cap per manufacturer, allowing Tesla, General Motors, and Toyota (which manufactures locally) to benefit from the subsidies. The plan aims to encourage investment in local production and limit government expenditure.

Meanwhile, China has extended tax breaks and purchase subsidies available for buyers of new energy vehicles (NEVs) until the end of 2023. These breaks include exemptions from purchase taxes, annual vehicle taxes and consumption taxes. The French government is working on a subsidised EV-leasing plan, in a bid to make EVs more affordable for low-income households. However, from 2023 Germany will reduce EV incentives available for battery EVs (depending on the price range) and will remove subsidies for plug-in hybrid EVs. Norway will also phase out tax breaks for expensive EVs from the start of January 2023.

Electric vehicle sales continue to soar
(sales of new plug-in EVs)



Source: EIU. *2022 and 2023 are forecasts.

Battery swapping and charging stations will expand, especially in China

The exponential growth in EV sales has led to problems with recharging networks, which governments will need to address in 2023. In China, for example, the number of EVs on the road is set to double to nearly 20m by 2024, but long queues at charging points are becoming common. As part of its 14th Five-Year Plan (covering 2021-25), the Chinese government aims to deploy charging stations on all highways connecting provinces by the end of 2023.

Automakers are also investing in recharging solutions, including battery swapping. Nio, an EV start-up, is planning to upgrade its proprietary battery swap stations in 2023, enabling them to store more batteries to suit different vehicle brands and voltages. It remains unclear if Nio's stations will swap batteries for non-Nio cars as well. India is also planning to implement a battery swapping policy in the 2022/23 fiscal year (April-March), as part of its aim to electrify all new vehicles by 2030. The Indian government will also offer financial incentives to companies setting up swapping stations, as well as encouraging battery leasing.

Despite these incentives, charging will be a challenge in 2023. One problem is that regulators have yet to put in place uniform battery standards, which would make it easier to find appropriate charging points and swapping stations. End-of-life battery recycling is lagging too.

Automotive supply chains will remain a weak link

Although a slowdown in demand has made supply-chain blockages less acute, they will continue to hold back production in 2023. Semiconductors will remain in short supply, with new capacity not due to come into operation until 2024. Escalating tensions between Taiwan and China will pose another risk. Automakers will also face challenges in acquiring metals such as nickel, cobalt, steel and aluminium. A shortage of these metals will make it harder to assemble EV batteries. Even the supply of lithium, a vital battery metal, could be affected by zero-covid policies in China, the world's largest lithium refiner.

In order to cope with this challenge, governments are increasing local sourcing. The US will use the CHIPS Act, passed in 2022, to spur domestic semiconductor production and research. The US has also published a critical mining strategy to increase its local supply of rare earths and other minerals,thus reducing its reliance on China. Rare earths are vital to battery production. Meanwhile, India is seeking to change laws to allow private miners to extract lithium domestically, as well as seeking to acquire lithium and cobalt mines overseas.

Europe's biggest supply challenge will be the energy crisis. Some vehicle and parts makers are having to cut production to reduce energy costs. They may also have to prepare for power cuts. Given close-knit supply chains, this will have knock-on effects throughout the automotive sector.

Level 3 self-driving cars will hit the roads

The autonomous vehicle segment will take a leap in 2023, as level 3 cars hit the roads and level 4 vehicles undergo tests. Mercedes-Benz (Germany) will start offering its level 3 driving system, Drive Pilot, in California and Nevada in the US in 2023. BMW's long-awaited level 3 technology should be on sale in its Series 7 sedan. Three US carmakers—Tesla, General Motors and Lucid—as well as South Korea's Hyundai and Kia, and Sweden's Polestar, are also expected to launch level 3 vehicles in 2023.

With level 5 representing full autonomy, the jump to level 3 is a significant step. It will take cars from what is effectively driver-assisted technology (such as Tesla's Autopilot) to autonomy that does not require full-time driver attention.These developments will come as UN regulations are amended to extend the speed limit for level 3 vehicles from 60km/h to 130km/h from the beginning of 2023.

As for level 4, Germany is planning to start an autonomous driving project in 2023 using vehicles manufactured by two EV makers: Mobileye (Israel) and Nio (China). The expansion of level 4 robotaxis will also pick up pace in 2023. Motional (US) will launch robotaxis in the US, while Cruise (US) will expand its offering in Dubai, UAE. Tesla is also expected to unveil its own robotaxi in 2023. Even so, these level 4 cars will only operate in carefully controlled zones, with operators on standby to cope with emergencies. Full autonomy remains some way off.

Vehicle autonomy reaches the tiping point
(levels of driving automation)

		Automation	The system	The driver	Existing examples
Level 0	Driver support features	None	Provides momentary driving assistance	Must steer, brake and accelerate	Automatic emergency braking; lane departure or forward collision warnings
Level 1	Driver support features	None	Provides continuous assistance with either acceleration/braking OR steering	Must be fully engaged in driving; steer or brake	Adaptive cruise control; lane departure assistance
Level 2	Driver support features	Partial	Provides continuous assistance with both acceleration/braking AND steering	Must be engaged with driving; continually monitor the vehicle	Highway pilot; several Level 2 models sold commercially
Level 3	Automated driving features	Conditional	Handles all aspects of driving when engaged	Must be ready to drive as needed	Honda Legend Sedan; Mercedes Drive Pilot
Level 4	Automated driving features	High	Drives under limited service areas	Is not needed in designated areas	Not yet available
Level 5	Automated driving features	Full	Drives universally	Is not needed	Not yet available

Sources: SAE International; National Highway Traffic Safety Administration; EIU.

To watch

Union blues: Amid high inflation and a possible recession, the Detroit Three automakers—General Motors, Ford and Stellantis North America (formerly Fiat Chrysler Automobiles)—will need to negotiate a four-year contract for 150,000 blue-collar workers represented by United Auto Workers (UAW), a trade union. This will not be easy at a time when US workers are restive about the cost of living. General Motors will be hoping to avoid a strike similar to the one in 2019 that cost it about US$3bn in lost earnings.

Agency models: Premium German carmaker Mercedes Benz plans to move away from franchise-operated dealerships and introduce an agency model in its home market and the UK. The move will turn its dealers into agents, who will offer a physical touchpoint for motorists. This will also allow the carmaker to become the retailer and to enter into sales contracts with customers, giving it direct access to data on consumer preferences and driving habits. The carmaker will also gain more control over the final retail price, as well as flexibility to bundle online sales and physical sales.

Battery tech: QuantumScape, a US-based EV battery maker and supplier of solid-state batteries to Volkswagen (Germany), will start testing 24-layer battery cells in 2023 - instead of the 16-layer cells currently in use. A solid-state battery has several advantages over a lithium-ion polymer battery, including higher energy density, which allows a battery EV to have a higher range. Rimac, a Croatian EV start-up, is also working towards improving the energy density of its vehicles through a new battery module that will use larger 46mm diameter cylindrical cells.

Key risk scenario: Geopolitical tensions, climate change and public protests will cause more supply-chain blockages

Persistent inflationary pressures, caused by supply-chain disruptions and Russia's invasion of Ukraine, are pushing up global inflation, which is at its highest level since the 1990s. This could fuel social unrest if inflation rises much higher than wage increases. In an extreme scenario, protests could push workers in major economies and employed by large manufacturers to co-ordinate large-scale strikes demanding higher salaries that match inflation. Such movements could paralyse ports, freight services and railways, exacerbating supply-chain problems.

Supply chains are also vulnerable to increased geopolitical tensions and climate threats. Further deterioration in China's ties with the West—especially over Taiwan—could threaten the flow of semiconductors out of Taiwan, or of key battery elements and metals from China. Meanwhile, a particularly cold winter could cause energy shortages in Europe, where some vehicle and parts makers are already facing a need to cut production.

Consumer goods and retail outlook 2023

Retailers respond to pricing pressures

- Inflation will push up global retail sales by a robust 5% in US-dollar terms in 2023, but the lower volume of sales and surging costs will weaken retailers' profits.
- The rollout of automation technologies will offer opportunities to limit wage growth, which means that retail employment is unlikely to return to 2019 levels.
- Online sales growth will slow, but the online share of retail will edge up to about 14% of global retail sales.
- Inflation-wary consumers will prefer to shop at discount stores, helping these retailers to increase their market shares.
- The economic slowdown in China, caused in part by its zero-covid strategy, will mean fresh challenges for global luxury brands already affected by the loss of Chinese tourists.

Inflation is hurting shoppers and shops alike. EIU forecasts for 2023 show widening disparities between retail sales in nominal and real terms. Persistently high inflation will lead to 4.8% growth in global retail sales in nominal US dollar terms, but this headline rate is inflated by high prices. It masks slowing growth in real terms, lower purchasing power and lower margins for retailers. However, there will be some pockets of real-terms growth, mainly in middle-income countries in Asia and the Middle East. Online retail sales will grow by 6.1%, slower than in 2020-22, but their share of the total retail market will continue to increase.

High inflation will squeeze profits…

With global inflation forecast at 6.4% in 2023 and demand flattening, retailers' profits will be squeezed in 2023. They will not only be challenged by higher costs for raw materials and logistics, but also by labour and energy costs. Retail wages have been rising faster than overall private-sector wages in many countries; wholesale electricity rates have also surged over the past year (especially in Europe).

Some retailers will close stores, and the risk of retail bankruptcies will increase after a couple of years of respite. At maximum risk will be debt-laden non-food retailers, as lower consumer purchasing power will translate into lower discretionary spending. High energy costs, particularly for refrigerators, will also put some food retailers in Europe at risk. Moody's, a rating agency, recently downgraded the credit rating for Iceland, a UK grocer.

….and retail jobs

One way retailers will try to protect their bottom lines in 2023 is by slashing labour costs. Retail wage growth, which has been outpacing that of other sectors, will slow. Although we do not currently expect massive layoffs in the sector, increased pressures on retailers' margins will slow down new hires. Hopes of the sector's employment levels returning to pre-pandemic levels in 2023 are fading.

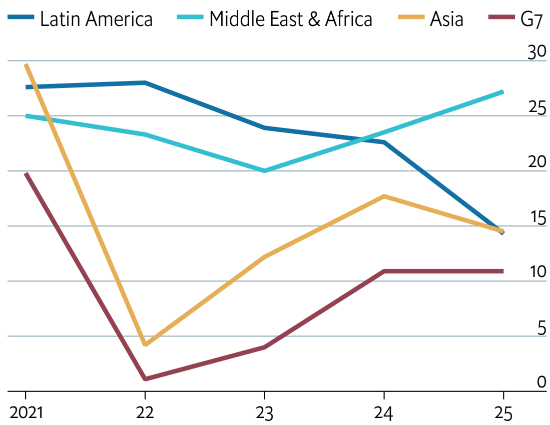
Many retail chains will also invest in automating their backend processes, reducing their need for workers. By March 2023 Australian department chain Myer will deploy 200 autonomous mobile robots with the capacity to process seven out of ten online orders. Japan's Aeon will collaborate with British retailer Ocado to build an automated warehouse in Japan by 2023 to manage stocks and basket goods for online deliveries.

Online retail growth will shift to developing markets

Online sales will continue to rise, with year-on-year growth of 6.1% taking their share of global retail sales to more than 14%, marginally exceeding the 13.9% share in 2022. However, sales growth will slow in China, the world's largest online retail market, as a result of its 'zero-covid' policies as well as high youth unemployment, a weakening economy and a government crackdown on technology companies. Meanwhile, the West will be wading through the cost-of-living crisis and a recession.

A growing middle class, increasing internet penetration and policy focus on digitalisation will make many emerging markets attractive for retail investment. The Middle East and Africa and Latin America will see the fastest pace of growth in online sales in 2023, at over 20%, while Asia will report a 12% increase. Amazon, a US online retailer, plans to enter five new countries in 2023, with South Africa, Nigeria and Colombia among the candidates. There will also be opportunities for marketplaces, logistics and payment service providers to enable Asia's micro, small and medium businesses, such as Indonesia's warungs, to go digital.

Online retail boom will move to developing markets
(online sales; % change, US dollars*)



Sources: Edge by Ascential; EIU. *2022-25 are forecasts.

Inflation will push consumers away from hypermarkets to discount retailers in 2023

In a reversal of the pandemic-era trend, big-box stores and hypermarkets will lose market share to discount and convenience stores in 2023, as reduced purchasing power forces many middle-income consumers to trade down. In inflation-ridden European markets, a shift in this direction is already visible in the food retail market. Aldi, a German discount retailer, overtook Morrisons, a supermarket, in September 2022 to become the fourth-largest grocery retailer in the UK. In France, the largest discount grocers—including Aldi and Lidl—have expanded their market shares over the past year.

Similar trends are visible in other markets. Data from Placer.ai, which tracks retail footfall, shows that in July 2022 (when US consumer price inflation was up by 8.5%) discounters and dollar stores were the only retail category in the US to register growth in footfall. Meanwhile, two of the country's biggest retailers, Walmart and Target, registered declines. In South Korea, a surge in food prices is forcing many restaurant-goers to pick up cheaper ready-to-eat meals from convenience stores.

Besides seeking lower price points, inflation-ridden consumers also tend to buy less but more often. This would make trips to out-of-town hypermarkets and big-box stores more expensive as fuel prices remain high. Some hypermarkets will react by moving closer to consumers, setting up smaller "express" stores that can better compete with convenience stores. This will offer some opportunities for commercial real-estate owners.

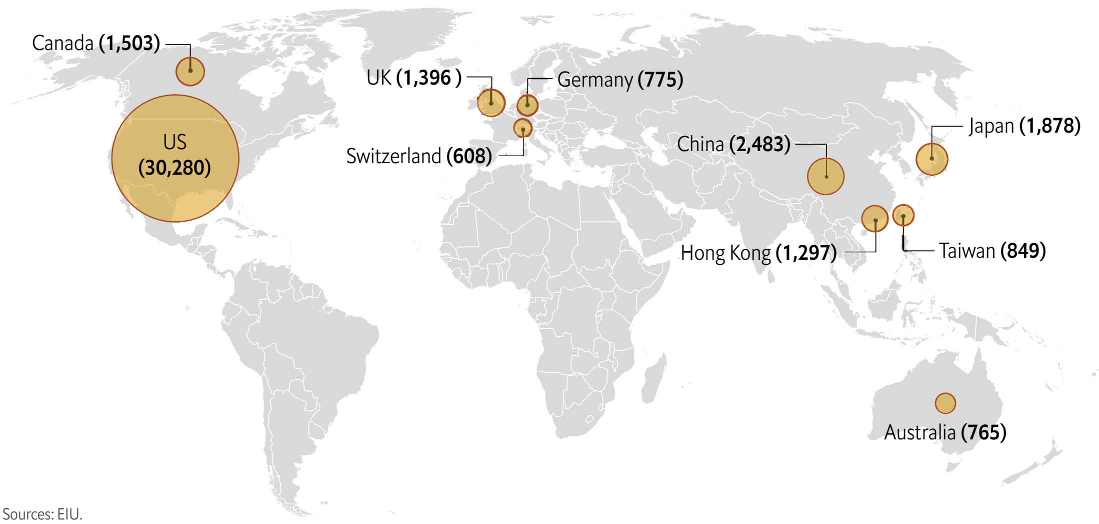
The economic slowdown in China will bring fresh challenges for luxury brands

The loss of Chinese tourists during the pandemic has been a blow for global luxury brands. However, their sales returned to pre-covid levels in 2021, helped by demand from domestic Chinese buyers. In 2022, China's zero-covid policies held back growth, although a rebound in Europe's tourism industry brought some compensation. However, 2023 will pose more challenges.

China's consumer spending will be lacklustre as the government maintains its zero-covid policy and a slowdown in important trade partners, such as the US and EU, weigh on the domestic economy. China's real-estate bubble, an important source of wealth for affluent Chinese, has been deflated by government crackdowns and covid-19. Youth unemployment remains high and will constrain demand from entry-level luxury buyers, an important customer base for luxury brands.

Other markets will struggle to offset Asia's sluggishness. The region will account for nearly 18% of the world's high-net-worth population in 2023, with China contributing a third of the region's total. Kering, a French luxury giant, earns 34% of its revenue from the Asia-Pacific market, excluding Japan. Tourist spending in Europe, which has been a silver lining this year, may not offer as much support next year. Whereas pent-up demand has driven a tourism revival in 2022, growth in global tourist arrivals will slow significantly in 2023.

Asia will account for nearly 18% of global high-net-worth households in 2023
(number of HNWHs >US$1m expected in 2022, '000)



Sources: EIU.

To watch

Plastic purge: Retailers will need to find other ways to package their goods in Spain, which will enforce a ban on plastic packaging for fruits and vegetables from January 2023 and (along with Italy) slap plastic taxes on non-reusable packaging. From July 2023 Dutch consumers will have to pay extra for single-use plastic cups and food packaging. Canada will expand its ban on making and importing single-use plastic products, due to come into effect by the end of 2022, by banning their sale from December 2023.

Green fashion: Spain's Inditex, the world's biggest fast-fashion company, aims to stop using single-use packaging by next year, as well opting for more sustainable fabrics. Zalando, a German online fashion retailer, aims to only sell brands that meet certain sustainability standards. Regulators will force the pace: Germany's supply-chain regulations, which demand that large companies vet for human rights and environmental violations, will pose a particular challenge for fashion retailers.

Better protection: Consumer brands and online sellers will face a stream of new privacy, competition and data regulations in 2023. In January, Finland's Consumer Protection Act will force online sellers to offer more transparency into their pricing and discounting strategies. In the US, five states will roll out data-privacy laws that will affect the way that businesses collect and process consumer data. India plans to launch a revised data protection bill in early 2023. Businesses will need to recalibrate their data collection and storage methods to comply with new laws.

Key risk scenario: Extreme weather fuels global food insecurity

The two regions most vulnerable to food insecurity in 2023 will be developing Asia and the Middle East and Africa. Countries in these regions are heavily dependent on food imports and quite exposed to climate vulnerabilities, and they also have limited scope for fiscal support. If weather conditions are even worse in 2023 than they were in 2022, an inability to afford or access food will lead to wider political and economic upheavals and increased poverty.

A colder than expected winter in Europe could also have an impact on food production, especially if it is followed by another hot summer of drought. An escalation in the energy crisis would worsen the ongoing fertiliser crisis, further pushing up food prices in Europe. Production of fresh produce, especially foods requiring temperature-controlled environments, will be affected in colder countries. Mounting costs will push several mom-and-pop retailers and foodservice outlets out of business.

Energy outlook 2023

Surviving the energy crisis

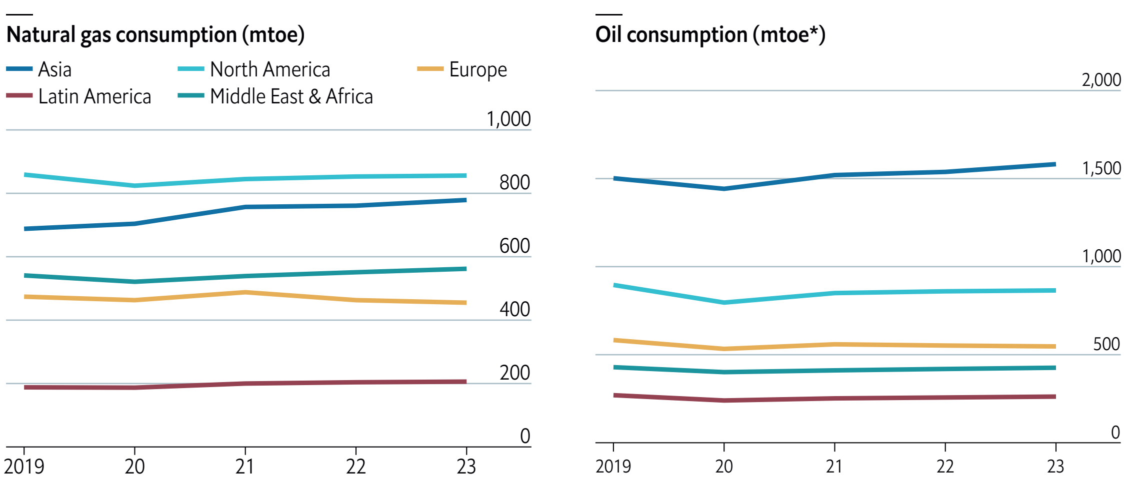
- Global energy consumption will grow by only 1.3% in 2023 amid a slowing economy.
- Despite decarbonisation targets, coal consumption will grow marginally to compensate for gaps in gas supplies.
- More extreme weather events will force many countries to fall back on fossil fuels, delaying the energy transition.
- Renewable energy consumption will surge by about 11%, with Asia leading the way, but investment will weaken.
- The energy crisis will prompt some governments to backtrack on efforts to phase out the use of nuclear power.

Energy consumption will see its second year of sluggish growth

With the global economy slowing and energy prices remaining high, total energy consumption across the 69 countries covered by EIU's Industry service will rise by just 1.3% in 2023. This will be the second consecutive year of sluggish consumption growth. In 2022 we estimate that demand grew by only 0.9%, amid record-high prices and a contraction in gas and oil supplies from Russia.

A reduction in energy supplies is also likely in 2023, as OPEC+ members are willing to cut production to prevent oil prices from dropping too far. Oil and gas output from Russia is also expected to fall further, with EU sanctions on oil entering full force by end-2022. Despite pricing pressures from supply-side issues, fears of a global recession are pulling oil prices down. We forecast an average price for Brent crude of US$89.6/barrel (b) in 2023, down from US$91.7/b previously.

Asia will lead energy demand growth



Sources: EIU; © OECD/IEA 2022 [www.iea.org/statistics].

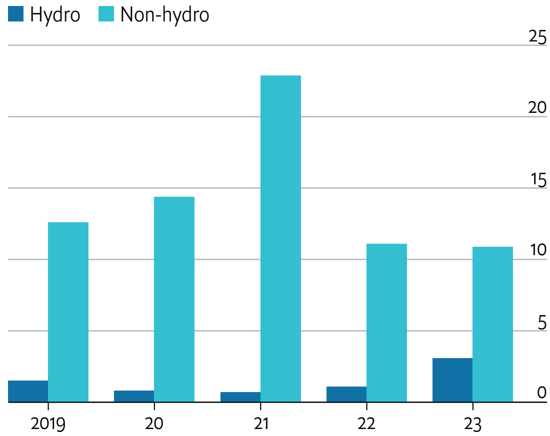
*million tonnes oil equivalent †Europe totals exclude Russia.

Natural gas usage will be flat, but coal and oil consumption will grow

Global natural gas consumption will remain flat in 2023 as it continues to decline in Europe (-1.7%) and remains flat in North America, offsetting gains in the rest of the world. We do not expect gas consumption in Europe (excluding Russia) to return to pre-war levels during our forecast period of 2022-31. However, gas demand in Asia will rise by 2.4% in 2023, with the region on track to become the largest global market for natural gas (surpassing North America) by 2027.

Coal consumption will benefit from increased policy focus on energy security, growing for the third consecutive year in 2023, although only marginally. Oil consumption will grow by 1.4%, mainly supported by Asia where usage will expand by 2.9%. On the contrary, oil demand in Europe will contract by 1% as economic activity slows down and the EU embargo on Russian oil imports becomes fully effective.

Renewables consumption will remain strong
(% change year on year)



Sources: EIU; © OECD/IEA 2022 [www.iea.org/statistics].

Growth in renewable energy will stay strong

Showing a much brighter outlook than fossil fuels, solar and wind energy consumption will surge by 11% during 2023 (although from a smaller base) as more projects come online. We forecast that solar and wind capacity addition will remain strong during our forecast period, prompting renewable energy consumption to grow at an annual average rate of 10% during the next ten years. Asia is and will continue to be the world's biggest market for renewable energy investment, with the lion's share going to China, India, Japan and South Korea.

However, the commodity price boom will divert some investment towards fossil-fuel projects. Higher interest rates will also increase the cost of financing renewable energy projects, slowing down the pace of the energy transition. Financial support for energy transition projects in developing countries could further diminish, disproportionately affecting poor and vulnerable geographies.

Energy crises caused by extreme weather events will encourage coal usage

Increasing frequency of extreme weather events, such as droughts, heatwaves and hurricanes, will have an adverse impact on countries' energy systems. Dry weather in much of the northern hemisphere in 2022 led to drought situations in major river systems such as the Yangtze (China), the Danube and the Rhine (Europe), and the Colorado River (US), severely impacting hydro power generation, which provides almost half of low-carbon electricity generation globally. Heatwaves could lead to blackouts as they push up peak power demand, while diminishing productivity of power plants; hurricanes could damage energy infrastructure.

With meteorologists forecasting more weather events—including a rare third consecutive year of La Niña—we expect more short-term power crises around the world in 2023. Countries will keep falling back on fossil fuels to cope with such scenarios. China and India, where hydro power accounts for more than 10% of total electricity generation, are most likely to do so. Another example is Brazil, which relies on hydro power for 60% of total power generation.

Developing countries will face an uphill road to climate finance

A volatile economic and geopolitical environment, plus recent extreme weather events in Europe and the US, are likely to shift public sentiment in those countries towards channelling climate adaptation funds for domestic needs before committing to assist other countries. This will affect availability of global climate finance. Developing countries, such as India and Indonesia, will struggle to secure meaningful commitments from the rich world to finance their energy transition. Consequently, these countries will be slower to wean themselves off dirty fuels such as coal, and the divergence in energy transition between the developed and the developing world will widen.

A comeback for nuclear energy

The energy crisis will prompt some governments to rethink their plans to phase out nuclear power, as sentiment shifts in favour of reliable energy supplies. Japan, which idled its nuclear plants in the wake of the Fukushima Daiichi disaster in 2011, plans to restart seven nuclear reactors by the summer of 2023. Including these seven, Japan currently has 23 commercially operable but offline nuclear reactors. In all, the country's reactors have a combined installed power-generation capacity of 21.7 GW. We do not rule out the Japanese government announcing the restart of more nuclear reactors during 2023.

A more striking example is Germany. After the Fukushima disaster, Germany started shutting down its nuclear power plants, with three remaining ones set to close by the end of 2022. However, energy security challenges have forced the country to make a u-turn on its nuclear policy. Recent comments by the government suggest that the country could extend the lifespan of the remaining plants. Other countries, such as India and China, are also likely to renew focus on nuclear energy in 2023.

To watch

LNG terminals: Germany, which is suffering from its earlier reliance on piped Russian gas, will see its first regasification unit come online in early 2023. The offshore LNG terminal at Wilhelmshaven will have the capacity to handle 7.5bn cu metres (bcm) of natural gas per year. Another under-construction terminal at Brunsbüttel is expected to add an additional 3-5 bcm per year of import capacity. The two facilities together could meet more than 10% of Germany's annual gas demand by 2023.

Iran negotiation: A tight crude oil market has revived talks over a nuclear deal with Iran, a major crude oil producer with spare export capacity. However, the negotiations, which will be closely watched, are likely to stretch into 2023, particularly if Iran's government cracks down hard on current civil protests. Despite a recent flurry of diplomatic activity, we do not expect Iran and the US to reach a deal that would allow some curbs on production and exports to be lifted. With no additional supply from Iran likely to be made available in 2023, the global oil market will remain tight.

Nigeria's new refinery: A 650,000-b/day mega-refinery and petrochemical complex is currently under construction in Nigeria. The Dangote refinery, which will cost an estimated US$19bn, is expected to reach full production in 2023. The facility will be the largest single-train refinery in the world and, once in operation, will make it possible for Nigeria to drastically cut its import bill for refined products.

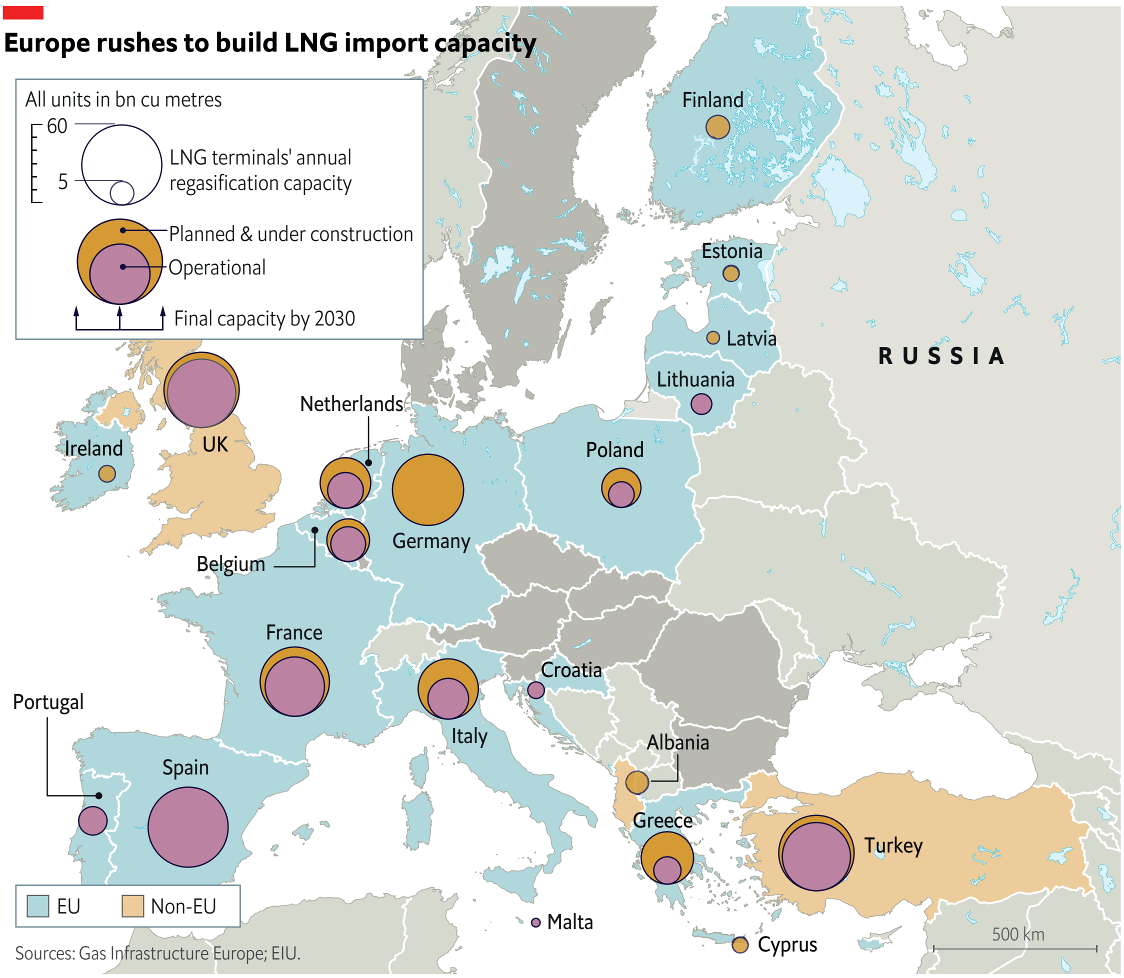
However, the refinery will sell locally only if prices are market led. A scaling-back of Nigeria's fuel subsidies in 2023 will therefore be necessary to allow the refinery to supply the domestic market at a profit.

Key risk scenario: A cold winter could exacerbate Europe's energy crisis

A colder-than-normal winter will push household gas consumption above expected levels, likely derailing Europe's plans to reduce gas consumption during the next months. In the absence of Russian supply, increased household demand will dry up storages, prompting the rationing of energy to the industrial sector. This will worsen the economic recession.

Energy-intensive industries such as chemicals, steel, glass and fertilisers would be worst hit, with knock-on effects further down the supply chain. Failure to conserve gas in the upcoming winter months will lead European governments to increase coal-fired power generation, hindering the region's efforts to combat climate change. Additionally, energy shortage in Europe will keep gas prices higher for longer than expected in 2023, further increasing the import bills of many commodity importers, especially in Asia and Africa.

Europe rushes to build LNG import capacity



Sources: Gas Infrastructure Europe; EIU.

Finance outlook 2023

A new test for financial stability

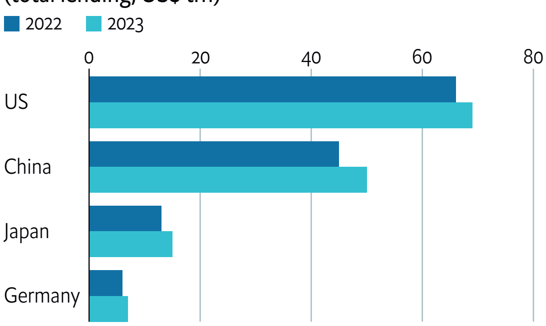
- Weakening economic output and rising interest rates will lead to more difficult conditions for banks, insurers and fund managers in 2023 than in the past two years.
- The impact will be particularly acute in North America and Europe, where governments will offer support. The environment will be tough in Asia as well, although policy rates will rise by less.
- Heavily indebted developing countries will find it harder to refinance foreign debt, driving some to default or require rescues to avoid it. However, the IMF will continue its lenient treatment of economies requiring its financing programmes.
- The current capital-market crunch will hobble a wide variety of loss-making fintech challengers that sought to outflank incumbents in banking, payments and other activities.

Global financial firms will face tougher conditions in 2023 in an environment marked by slowing economic growth, spiking prices, unevenly rising interest rates and sharpening international political tensions. Fortunately, firms in the industry have greatly improved their resilience over the past decade by bolstering their capital and liquidity positions, and leaving behind non-core activities and markets. As a result, most should prove capable of riding out the stresses arising from this latest economic downturn. In the longer term, the industry will benefit from enduring trends towards greater use of digital services, improved financial inclusion and expanding needs for savings to cover ageing populations and investment to confront challenges like the green transition.

Arrears and debt defaults will rise, but governments will offer support

Rising rates generally have positive impacts for financial firms, as they lead to wider interest-rate spreads for banks and better investment returns on the portfolios of insurance companies and fund managers. However, they also slow the overall economy and reduce the cash available to households and firms, while trimming demand for now-more-expensive credit. According to our forecasts, financial firms in the west have enjoyed some widening in interest margins recently, but these will soon narrow again as demand wanes for credit for consumption and investment. Meanwhile, margins will remain stable in China, Japan and most of the rest of Asia.

Lending will continue to rise in 2023
(total lending; US$ trn)



Source: EIU.

The toxic combination of weakening economies and rising interest rates may lead to a rise in arrears and defaults on debts. There are few signals so far indicating such distress, setting aside the special case of China's property developers who took advance payment for future apartments and borrowed heavily in US-dollar debt on overseas markets.

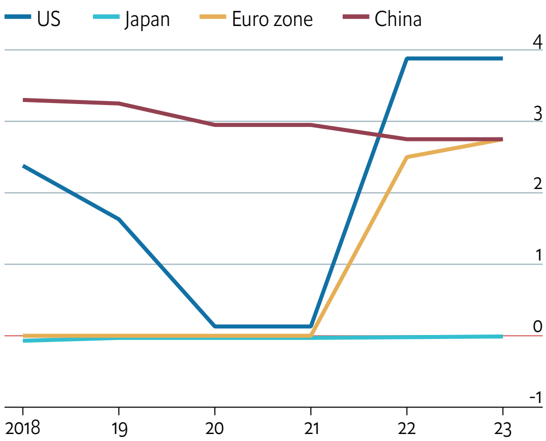
In any case, policymakers may step in, as they did during the pandemic, to support household and company borrowers who would otherwise struggle to repay debts. For example, lawmakers in Europe have outlined plans to cap or subsidise energy costs. This will leave borrowers in a better position to repay loans, while shifting rising costs to the public exchequer.

Sovereign debtors and asset markets will remain under pressure

One class of borrowers—heavily indebted developing countries—will have to proceed with only a limited safety net. Tightening financial conditions and rising costs on US-dollar and euro debt will make it more difficult and costly for them to roll over their debts. Small economies like Sri Lanka and Zambia have already defaulted (as did Russia in special circumstances), and larger economies could soon come into distress.

Moreover, China has emerged as an important creditor in the past decade but remains reluctant to participate in the types of debt-relief efforts used by OECD creditors. This could make it more difficult to reach compromises on debt reduction. On a positive note, the IMF under its current management has taken an accommodative approach to debt-burdened countries, provided they outline some path towards fiscal sustainability.

No more easy money
(policy interest rates*; end-period; %)



Source: EIU. *2022-23 are forecasts.

Markets for stock and bonds tend to anticipate economic recoveries, generating financial conditions and rising asset prices well in advance of official output figures. However, market participants first want to see a future turning point, such as a pause in interest-rate hikes by the US Federal Reserve (Fed, the central bank). This will not take place so long as price pressures remain very high in the US.

Financial challengers will stumble badly

The incumbents of the financial industry will suffer in 2023, but their upstart rivals - including fintech companies - are likely to fail in large numbers. Funders such as venture-capital and private-equity firms are insisting in the current market environment that financial challengers stop making losses and chart a path to profitability. This will prove impossible for some upstarts in consumer credit, payments and robo-advised fund management. Others will have to sharply curtail their expenses, including for marketing and customer acquisition. The culling of competition will ease pressures on established banks, insurers and fund managers.

Meanwhile, the recent sour turn in the markets has deflated a wide range of frothy financial activities that thrived in the bull run. The air has gone out of the cryptocurrencies and decentralised finance that aimed to displace banks and payments firms. Blank-cheque companies intended to outflank investment banks in bringing firms to the public markets, but instead they are being forced to return funds to investors. Non-bank consumer lenders are succumbing to rising levels of borrower defaults.

Taking a longer view, a number of enduring trends will sustain most financial firms. Most will enjoy a tailwind from citizens' rapidly rising use of formal financial services, increasing needs for savings for ageing populations and the huge financing needs for policy objectives such as decarbonisation and infrastructure improvements. A shift to digital strategies focused on mobile and online services will allow firms to close physical locations and trim staff expenses.

To watch

Exiting Mexico: Citigroup is likely to sell its Mexico retail banking franchise, which was once a crown jewel in its globe-spanning network. The US banking group has spun off many of its far-flung operations in recent years as international lenders trim their footprints.

Fresh Basel: The final implementation dates for Basel III (also known as Basel IV) arrive on January 1st 2023, after having been delayed by one year due to the pandemic. Customers will not notice the changes, which require new government regulations and will change the way that banks account for base capital, credit risk using standardised or internal models, as well as mandatory disclosures.

China's e-yuan: China is likely to expand its pilot use of its central bank digital currency (CBDC), dubbed the e-yuan, and may implement it countrywide. The country is the most advanced among major economies in pursuing CBDCs, but has yet to devise a way to use it in international trade.

Key risk scenario: Rising geopolitical tensions

Following the outbreak of Russia's war in Ukraine in early 2022, a coalition of democratic nations imposed sanctions on Russia, which in turn imposed exchange controls and other measures that locked capital inside its economy. As a result, many western banks and insurers moved to sell their local operations, often at fire-sale prices, or simply wind them down. Other firms continue to operate under local management and without access to any funds. Authorities in western Europe seized and closed Russian firms' operations across the continent.

This led to substantial losses, but the costs would be much larger if China seized Taiwan in 2023 (not our core scenario). US bank executives told a congressional committee in September 2022 that they would comply with any official demand to exit their China operations. Financial firms from Japan and elsewhere would also inevitably shutter their China units. Developed-country financiers have only a small footprint in China, but have coveted the country's large and growing financial markets. At the same time, China's banks, which have expanded overseas in recent years, would be frozen out of the economies of countries backing Taiwan in any conflict.

Healthcare outlook 2023

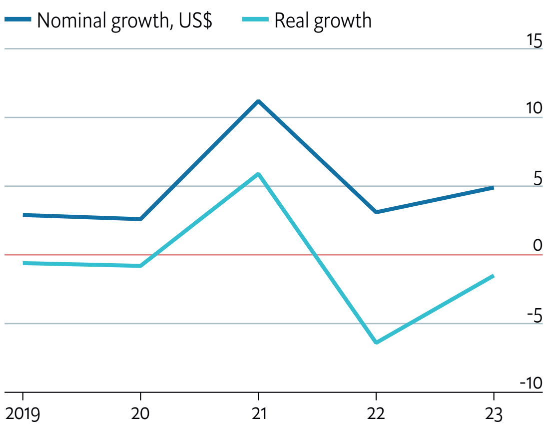
The aftermath of the pandemic

- Healthcare spending will fall in 2023 in real terms, given high inflation and slow economic growth, forcing difficult decisions on how to provide care.
- Digitalisation of the healthcare system will continue, but the use of health data will come under stricter regulation in the US, Europe and China.
- Patent cliffs for key drugs and measures to control pharmaceutical pricing in the US, India and elsewhere will force some major pharma companies to spur growth through deals.
- Supply-chain disruptions will continue to push up drugmakers' costs, despite investment in more localised pharmaceutical production.

Healthcare spending growth will fail to match inflation

The covid-19 pandemic forced governments to spend heavily on rolling out vaccination programmes and investing in healthcare infrastructure and staffing. However, government plans to maintain or increase spending in order to tackle a backlog of non-covid care and resolve staffing issues have been upended by the global economic slowdown. EIU expects total healthcare spending (public and private combined) to rise by 4.9% in nominal US-dollar terms in 2023, propelled by higher costs and wages. However, spending will fall in real terms as it fails to keep pace with inflation. We estimate that there will have been a similar pattern in 2022, meaning that 2023 will be the second successive year of real-terms funding declines.

Global healthcare spending will fall in real terms
(% change, year on year*)



Sources: World Bank; OECD; EIU. *2022 and 2023 are forecast.

The gap between spending and costs will be most acute in Europe, as well as in developed Asian countries such as Japan and South Korea. This will force healthcare providers to make some difficult decisions about how to provide care, cutting non-essential services and pushing up waiting lists. OECD data suggest that after the global financial crisis of 2008-09, spending on preventive care and pharmaceuticals was squeezed the most, and we expect this pattern to be repeated. Even so, we expect recruitment and retention of healthcare staff to be difficult as wages also fall in real terms. However, there will be pockets of strong growth in the healthcare sector, particularly in the Gulf countries, which are benefiting from high oil prices.

Regulators will monitor the use of health data in 2023

From maintaining electronic medical records to launching online health apps, the digitalisation of the healthcare sector will remain a key trend in 2023. However, concerns over protection of health data will increase. The EU aims to invest €220m (US$220m) between 2023 and 2027 in the development of the European Health Data Space, a cross-border digital platform through which people can control their own electronic health data.

The aim is to ensure data privacy, building on the EU's General Data Protection Regulation, while making the bloc's data more interoperable and accessible. The UK has a similar action plan that would centralise data storage and protection, while allowing clinicians and researchers to access it remotely. Such initiatives are likely to be copied elsewhere, after the World Health Organisation (WHO) pledged to partner with the EU in 2023 to carry out the plan.

Protecting health data is easier in countries dominated by well-regulated public healthcare systems, however. The US, with its system of competing private healthcare companies, will face a bigger challenge in 2023 as it tries to extend its data protection laws under the proposed American Data Privacy and Protection Act. China will also step up enforcement of its health data protection regulations following the surge in use of online health apps during the pandemic.

Life expectancy will recover fully in 2023

According to *The Economist's* excess death tracker, the covid-19 pandemic has so far killed around 22m people worldwide. Even official statistics, which put covid deaths at 6.5m, suggest that covid-19 is the fourth-largest cause of death on record. The UN calculates that by 2021 the disease had cut 1.7 years off global life expectancy, reducing it to 71.1 years. This was the first fall since 1959, at the height of the Great Chinese famine. While a recovery probably began in 2022, the UN calculates that 2023 will be the year when life expectancy first exceeds 2019 levels.

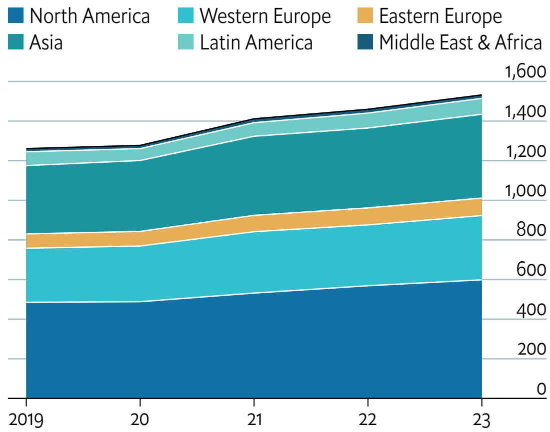
One of the biggest factors driving life expectancy is childhood immunisation, which was disrupted by the pandemic. There will be good news on this front in 2023, as healthcare systems and logistics return to normalcy. Malaria vaccines will be the next frontier. Mosquirix, developed by GlaxoSmithKline (UK), will be used more widely across Africa in 2023, but there are also hopes that R21/Matrix-M, a more effective malaria vaccine developed by Oxford University, will gain regulatory approval. But there is no room for complacency. The WHO had hoped to eradicate polio in 2023 under its 2030 agenda, but the disease is currently seeing a revival thanks to low vaccination uptake.

Pharmaceutical and biotech companies will see margins narrow

The combination of slower healthcare spending and high inflation is already forcing a reckoning for small biotech companies. As funding dries up after an unprecedented boom, many are cancelling research programmes or laying off staff. In 2023 the pressure will extend to pharmaceutical companies. Although we expect global pharmaceutical sales to rise by 5% in US-dollar terms, much of this growth will reflect higher input costs, while regulators will push down on pricing. The US, which accounts for one-third of global sales, will use the Inflation Reduction Act to allow its public health funds to buy cheaper medicines. China's steady centralisation of its drug purchasing system will make price negotiations tenser there.

2023 is also a key year for patent expiry, after several years of lull. In particular, AbbVie (US) will lose market exclusivity on its blockbuster anti-inflammatory, Humira, the world's best-selling drug. Januvia (sitagliptin), a diabetes drug produced by Merck (US) will also lose market exclusivity in the US. Although the value of global patent expiries will not peak until 2028, the prospect of a drop in revenue will prompt drugmakers to dip into the market with bolt-on acquisitions, especially given that market valuations for their targets will be low. Another key driver for mergers and acquisitions will be the pivot away from covid-19 vaccines, with drugmakers such as Pfizer and Moderna keen to diversify their drug portfolios.

Asia's share of pharma sales will rise
(pharma sales; US$ bn*)



Source: EIU. *2022 and 2023 are forecast.

The energy crisis

Supply-chain disruptions will continue for the pharmaceutical industry in 2023, but the energy crisis will lend a new twist. During the pandemic, lockdowns (particularly in China) contributed to logistics and production problems that particularly affected shipments of active pharmaceutical ingredients (APIs). Governments reacted by encouraging reshoring (the practice of bringing previously exported business operations back from overseas). India, which imports 70% of its APIs from China, is investing US$1.3bn into domestic API production. The EU and US also encouraged companies to reshore production for APIs and other supplies, despite higher domestic costs.

However, the Russia-Ukraine war has caused an energy crisis that threatens these reshoring plans, particularly in Europe. Generic drugmakers in the EU warn that ultra-high energy costs, combined with the possibility of power cuts, may make it impossible to produce APIs and medicines locally. Medicines for Europe, a lobbying group, warns that raw material costs have gone up by 50-160%, and is pushing for equivalent price rises. Rising labour and raw material costs elsewhere could also change the sums as drugmakers balance their need for secure supply chains against their desire for profits.

To watch

Genomic data: The UK's Genomics England aims to gather genomic data from up to 100,000 newborns in 2023 to help research into rare diseases. The government research body has already reached a goal of sequencing 100,000 adult genomes, and has now set a new target of 500,000 as it builds up its database for research.

Finland decentralisation: After multiple attempts, in July 2021 Finland passed a major healthcare reform that will shift healthcare provision from municipalities to 21 welfare regions. It will gradually come into force by January 2023 and seeks to make healthcare provision more uniform while boosting productivity.

African vaccines: BioNTech (Germany) units will open in Rwanda and possibly Senegal to produce vaccines for covid-19. South Africa will also see Biovac start producing Pfizer/BioNTech vaccines commercially, while Afrigen, backed by the WHO, hopes to start clinical trials of its own covid-19 vaccine next year.

Key risk scenario: New variant of coronavirus, or another infectious disease

Jeffrey Barrett, former head of the Covid-19 Genomics UK Consortium, recently voiced a careful hope that the Omicron variant may be the last for covid-19, given that it has proved so stable. However, he admitted that there is still room for surprises. Even Omicron itself is mutating, with the latest version—BA.5—able to overcome previous immunity. Moreover the potential for another (non-covid) virus or other pathogen to spread globally has increased as global travel restarts. The spread of the monkeypox virus is just one of several warnings that will keep researchers vigilant in 2023.

A new covid variant would pose a challenge for the world, but China faces its own hurdle even if Omicron is the last variant. We expect the government's zero-covid policy to persist well into 2023, partly because it will be difficult to come up with a good exit strategy. Whereas the zero-covid strategy has dampened economic growth, lifting restrictions entirely could quickly fill China's 50,000 intensive care unit beds. In May 2022 a Fudan University study published in a UK-based journal, Nature, found that without mobility controls the Omicron variant of the coronavirus could cause 1.6m deaths in China over six months. We expect China to undertake a renewed push for vaccination in 2023, probably with a domestically produced mRNA vaccine.

Technology and telecoms outlook 2023

The battle for digital supremacy

- The metaverse will not become mass-market in 2023, but this will not stop heavy investment in the technology. The drive to standardisation and the battle with web3 will be at the forefront.
- Artificial intelligence (AI) will continue to develop, after several breakthroughs in 2022, but will encounter challenges from new regulations in key jurisdictions.
- Semiconductors will continue to be a geopolitical tool between the US and China, involving many other countries. Some companies producing the most advanced products and equipment will benefit.
- Asian telecommunications companies will continue to look for consolidation in 2023. Mobile markets with four or more mobile network operators, such as Sri Lanka, Japan and India, are the most likely to secure deals.

Mobile and broadband subscriptions will continue to rise in 2023, while fixed-line connections will continue their decline. The technology and telecoms sectors have so far weathered the pandemic storm effectively, but new macro headwinds—from weaker economic growth and higher inflation—will have an impact next year. Amid such a backdrop, here are some of the key trends to watch for in 2023.

Metaverse will not become mainstream, but will receive heavy investment

The metaverse will not become mainstream in 2023, but it will still be at the forefront of tech innovation and investment. We continue to define the metaverse as immersive online platforms that use augmented and virtual reality technologies to enable users to socialise, work, play or shop virtually.

The metaverse and web3 are different

	Metaverse	Web3
Evolution	From PCs to smartphones to augmented glasses and headsets	From web 1.0 (reading) to web 2.0 (reading and writing) to web3 (reading, writing and owning)
Core principle	Immersive and virtual world	Decentralisation, trustless environment
Key technologies	Augmented, mixed and virtual reality	Blockchain, crypto assets (NFT, DAO...)
Competitive landscape	Big companies and siloed /different metaverses possible	Users in charge as opposed to corporate entities, with nobody having a dominant position

Source: EIU.

New devices, whether augmented glasses or virtual reality (VR) headsets, will be launched in 2023, driving development of the overall ecosystem. They will include an Apple headset that is likely to offer augmented reality rather than full VR.

The tech industry will focus on standards to ensure that there are rules in place to allow for interoperability and interconnectedness of different metaverse platforms. It will also focus on creating products for industry and enterprise clients, such as advertisements for virtual forefronts, digital twins, and new types of education and learning services.

The metaverse will also prove to be a battleground for web3—the two, while often interchanged, are not the same. Web3 is an entirely new framework based on blockchain and crypto assets whose core principles are decentralisation and diffuse ownership among individual users as opposed to corporate entities; as such it can operate outside of the metaverse). Centralisation has always occurred in the past with new technologies, so the metaverse is also likely to happen in a centralised manner, but web3 will continue to gain ground as a potential alternative in the coming year.

Developments in AI will come hand in hand with regulations

Artificial intelligence (AI) has seen some major developments in 2022—AlphaFold, an AI programme designed by DeepMind (Alphabet), has proven capable of breaking down the structure of a protein, underscoring the role of technology in scientific progress. AI models, which are trained on unlabelled data and capable of performing different tasks, and large language models, which learn from billions of words and phrases, will continue to evolve and provide solutions for multiple tasks across industries. But there is a debate as to whether these deep-learning models are too limited to attain human-like intelligence (if it is attainable), or whether there needs to be the development of other paradigms, such as ones where the context and the entire environment take the lead.

Although this debate will continue into 2023, that year will also be one of AI regulation. The EU is likely to push its own AI Act, which will seek to ban high-risk use cases before they enter the market, as opposed to taking a wait-and-see approach. This is in contrast to the US model, which focuses on innovation rather than regulation, although even the US Federal Trade Commission is pushing for companies to be held accountable for discriminatory algorithms. China will also continue to focus on algorithms, with greater scrutiny on how companies design and use them.

Chips face market and geopolitical challenges

There will be two main semiconductor-related challenges in 2023. From a market perspective, there will be a shortage of certain components and a glut of others, longer lead times for the most sophisticated machinery, and increasing demand for custom rather than mass demand chips, all of which will impact the competitive landscape. Some companies will be major winners, such as Arm, whose blueprints are used in many designs, and TSMC, which can build the most advanced chips. Others will lose out, such as Intel, which is still lagging behind the leaders in manufacturing and whose traditional designs will be under even greater pressure. In the longer term, demand for chips will remain strong, even if traditional products such as PCs and smartphones plateau, because of the demand for digital transformation and the rise of the metaverse.

Geopolitically, semiconductors will continue to be the key element in the US-China tech supremacy battle. The US will continue to restrict China's access to key technologies, while China will double down on its attempts to be self-reliant. This will increasingly involve other countries, as they will need to make a choice between the two nations. Russia, having been banned from buying advanced chips since its invasion of Ukraine, and facing unprecedented sanctions on a country-level, will look to procure some by any means necessary.

More telecoms operators in Asia will seek consolidation

Even as revenue growth slows, telecoms operators in Asia will need to invest in both 5G and fibre networks. This is why we expect that they will look for consolidation across their regional operations in 2023, especially in markets with four or more players. The trend started in 2022, where deals involving companies such as CK Hutchinson (Hong Kong) and Axiata (Malaysia) were announced in Indonesia, Thailand and Malaysia.

We forecast that companies in Japan and Sri Lanka (both four-player markets) will look for a similar way to grow inorganically in 2023.

- The ongoing economic distress in Sri Lanka has already led some companies to report losses since the first quarter of 2022. Rate rises implemented in 2022, increased telecoms levies and an ongoing SIM card registration drive will slow down cellular subscription in 2023, and companies may consider consolidation.
- Japan could also go back to being a three-player market as it was until 2020, when Rakuten, a low-cost player, entered the market. The new entrant's performance has worsened since May 2022 as its promotional free plans have ended. Other incumbents—SoftBank, NTT and KDDI—will look for ways to balance revenue decline and investment in 5G expansion and 6G trials in 2023.

Consolidation will not just involve private operators, but also public ones. For instance, the Indian government could renew its efforts to merge debt-ridden BSNL (mobile) and MTNL (fixed) in 2023.

To watch

EU clout: The EU's Digital Markets Act, which focuses on making the largest technology companies gatekeepers with specific obligations aimed at boosting competition, could be enforced as early as the spring of 2023. Other rules, focusing on data and AI, could also become laws this year, strengthening the EU's position as the global tech regulator.

Data deals: A March 2022 deal on US-EU data transfers will be ratified in 2023, granting a new legal framework for transatlantic data flows. As with its previous iterations, which were eventually invalidated because of the incompatibility between US surveillance rules and EU privacy rights, we expect a lawsuit to reach the European Court of Justice, which will rule on the legality of the deal in 2025.

Ad-supported tiers: Both Netflix and Disney will start rolling out their ad-supported plans in key markets from late 2022, but the bulk of the roll-out internationally will happen in 2023. Advertising will increasingly come to streaming as companies look to boost their revenue and consolidate their customer bases.

Mobile markets in Japan and Sri Lanka hold potential for consolidation
(number of mobile network operators)

Source: EIU.

Key risk scenario: Inter-state cyberwar cripples state infrastructure in major economies

Cyberwar can have a major impact on the global economy, especially if it involves major players. A major short-term issue is the increased risk of cyberattacks as more and more companies undertake digital transformation and become connected, increasing the attack surface for hackers. The Norwegian sovereign fund has recently highlighted that it suffers three major attacks a day. Regulators will have an increased role going forward, with the focus on mandatory reporting and critical infrastructure.

Indeed, infrastructure and healthcare systems will be extremely vulnerable to cyberattacks, as the 2020-21 attacks on Colonial Pipeline and Universal Health Services (both US) showed. Financial vulnerability will be an increasing concern, too, after Lloyd's of London, which underwrites reinsurance for many commercial insurance plans, said that it would require an exclusion for state-led cyberattacks from March 2023. This highlights the rising cyber risks from the Russia-Ukraine war.

Tourism outlook 2023

Turbulence in the travel industry

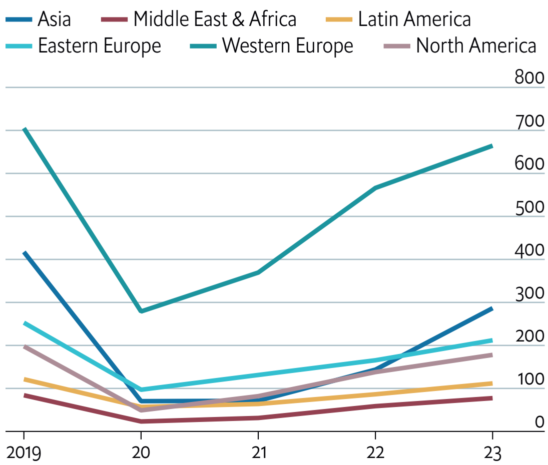
- Global tourism arrivals will rise by 30% in 2023, following 60% growth in 2022, but they will still not return to pre-pandemic levels.
- The economic downturn, sanctions on Russia and, above all, China's zero-covid strategy will be among the factors weighing on the industry.
- Hotels, restaurants and airports will struggle to cope with labour shortages, wage demands, and high food and energy prices.
- Even so, international airlines are expected to return to profitability, benefiting from continued pent-up demand.
- The impact of climate change on the industry will become more apparent, with high temperatures, water shortages and floods forcing tourism destinations to take action.

Tourism arrivals will rise by 30% globally

Last year, EIU expected global tourism arrivals to recover to near pre-pandemic levels by the end of 2023, as fear of covid-19 recedes and restrictions are lifted. However, Russia's invasion of Ukraine in February 2022 and the accompanying political instability, global inflation and economic slowdown—as well as China's strict zero-covid strategy—have dampened those expectations. We have now pushed our forecast for a tourism recovery firmly into 2024, with considerable turbulence likely in the interim.

Even so, the depth of the tourism slump in 2020-21 means that strong growth is near-inevitable in 2023 now that travel restrictions have been lifted in most countries. Globally, we expect pent-up demand for travel to drive growth of 30% in international tourism arrivals, taking them to 1.6bn. This follows growth of 60% in 2022, but will still not be enough to take total arrivals to their 2019 level of 1.8bn. However, the trajectory will differ by region. Much of the Middle East, buoyed by high oil prices, has already seen a full recovery, while Eastern Europe will have to wait until 2025 because of the impact of the war in Ukraine. Other regions will range in between, with most reaching a full recovery in 2024.

Tourism arrivals will fall short of 2019 levels
(International arrivals; m*)



Sources: World Tourism Organisation; EIU. *2022 and 2023 are forecasts

Chinese travellers will remain largely absent

While the war in Ukraine has delayed the tourism recovery, an even bigger factor has been China's zero-covid policy. China accounted for around one-tenth of the world's tourism departures before covid, but we now expect its borders to remain largely locked until at least mid-2023. There is even a risk that the zero-covid policy could be extended if the pandemic continues to be a threat. If all goes to plan, however, authorities will gradually take a less strict stance towards the virus, easing (but not lifting) mandatory quarantine measures and inbound travel controls. However, frequent mass testing of the population in big cities, and occasional lockdowns in smaller cities will continue to keep sporadic outbreaks from spiralling out of control.

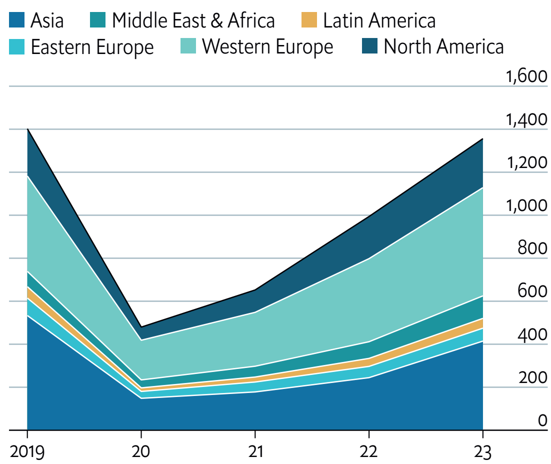
In this scenario, we expect the number of outbound travellers from China to more than double in 2023, to around 59m. Even so, that would be only a little more than a third of the 155m departures in 2019, when China was the world's biggest source of tourists. This reduced demand will primarily affect tourist destinations in Asia, including Thailand and Hong Kong, which used to be highly dependent on Chinese visitors. But the dampening effect will also be felt in Europe, the US and elsewhere. Even China's domestic tourism—which also fell in 2020-22—will be affected by the country's economic slowdown. We expect GDP growth of "just" 4.7% for China in 2023, which will feel like a recession in a country used to strong growth.

Labour shortages and high prices will add to woes

Inflation will not only affect travellers in 2023, but also the tourism sector. Hotels, bars and restaurants are grappling with high food and energy prices, while airlines are contending with high fuel bills. Airlines also face increasing wage pressures amid a chronic labour shortage. After laying off staff during the pandemic, many companies have struggled to rehire. This lack of staff has caused airport queues and caps on passenger numbers, as well as flight cancellations and lost luggage in the summer of 2022. The chief executive of Heathrow (UK) has warned that problems will last until the end of 2023.

The UK faces particular issues, because Brexit has stemmed the flow of seasonal workers from the EU. However, there are also labour shortages across Europe and in the US, where employment in the leisure and entertainment industries is still nearly 1m short of 2019 levels. The economic slowdown should make recruitment easier if job losses mount elsewhere. Several countries, including New Zealand and possibly the UK, will also ease visa requirements. Even so, it will take time to replace skills lost during the pandemic. Moreover, this labour-intensive industry is also likely to see more disruptive strikes in 2023 as workers themselves demand higher wages to cope with the higher cost of living.

Tourism expenditure will rebound faster
(Spending by international tourists; US$ bn*)



Sources: World Tourism Organisation; EIU. *2022 and 2023 are forecasts

Airlines will edge closer to profit

Major airlines in the US cut costs throughout the pandemic by laying off staff, restructuring fleets and borrowing heavily. They also received big government bailouts, particularly in Europe, North America and parts of Asia. Loans, wage subsidies and deferred taxes collectively totalled US$243bn in 2021. Nevertheless, the International Air Transport Association (IATA) expects airlines to suffer a combined net loss of US$9.7bn in 2022, after losing around US$180bn in 2020-21.

Despite the difficult economic conditions, the signs for 2023 are brighter, and IATA suggests that airlines may even head towards profitability if travel rebounds as expected. One big risk will be fuel costs: although oil prices are now softening, they are priced in US dollars, and the dollar is strengthening against nearly every currency. As a result, US-based airlines are the most likely to be profitable in 2023, while airlines in other regions will struggle.

The impact of climate change will increase

Climate change has already started to have an impact on key tourism destinations, with ski resorts lacking snow and summer resorts affected by droughts and wildfires. In 2023 these impacts will become clearer if weather-related events continue to get more extreme. Indeed, back in 2009, the Association of British Travel Agents pinpointed 2023 as the key date for its sustainable tourism drive, which aimed to protect the environment and develop sustainable transport. However, not enough progress has been made—tourism now accounts for between 5% and 8% of global greenhouse gas emissions. Nepal is one country that is setting 2023 as the start of a new sustainable tourism drive.

Travellers' awareness of the environmental consequences of tourism may also change their travel plans in 2023. According to the European Investment Bank, 37% of Chinese people, 22% of Europeans and 22% of Americans say that they will avoid flying because of climate-change concerns. Some of those who still want to travel will be prepared to pay higher prices for more eco-friendly options, or carbon-offsetting efforts. Regulators will pile on the pressure too. 2023 will see the conclusion of the voluntary pilot phase of the Carbon Offsetting and Reduction Scheme for International Aviation to reduce emissions from international flights. Eight more countries, including Cambodia, Cuba and Zimbabwe, will join, bringing the total number of participating states to 115.

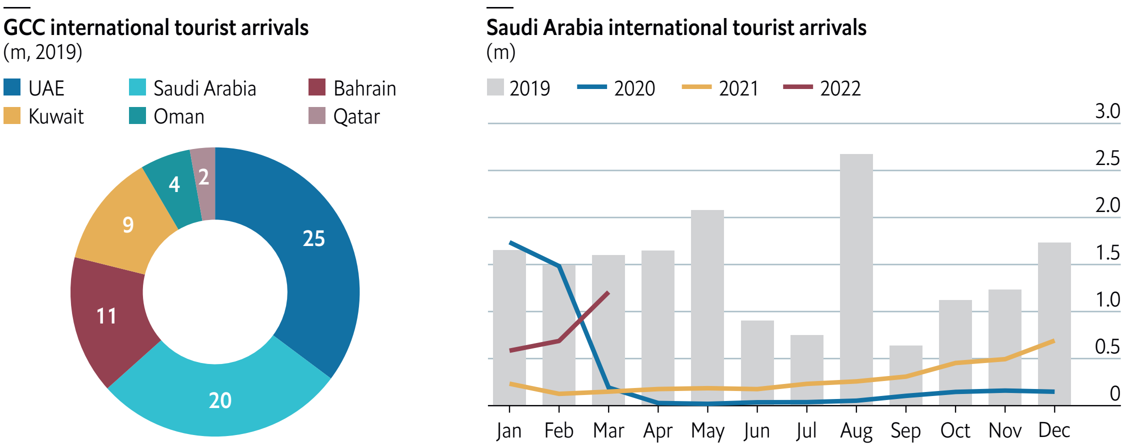
To watch

Saudi sojourns: The Middle East has seen an extremely strong revival in tourism in 2022. International arrivals rose by 287% year on year in January to July 2022, taking them close to 2019 levels. Saudi Arabia, which has seen the resumption of the Hajj pilgrimage, has particularly big plans for its tourism sector under its Vision 2030 economic development plan. These include the development of the Red Sea Project, with 50 hotels spread over 22 islands. Although not due for completion until the end of the decade, the project will take in its first visitors in early 2023.

Venetian fees: Some major tourist attractions are experimenting with tourism fees and taxes to help reduce crowds or fund infrastructure. From January 16th day-trippers to the ancient Italian city of Venice and some of its islands will have to make a reservation at a cost of between €3 and €10 (US$3-US$10), depending on demand. The long-threatened fee will not only cut crowds, it will also cut taxes for resident Venetians. Overnight tourists will be exempt because they will already be paying for their stay. Thailand and the Maldives introduced tourism fees in 2022, and London is also considering one.

Good sports: Sporting events will spur travel in 2023. China has pulled out of hosting June's Asian Cup football tournament, but it will ease its covid restrictions in order to host the postponed Asian Games in September. Meanwhile, France will hope to convert the Rugby World Cup into a boost for its tourism industry.

Gulf Cooperation Council and Saudi Arabian international tourist arrivals



Source: EIU.

Key risk scenario: A new pandemic or war could upend travel

The travel industry was the sector hardest hit by the covid-19 pandemic, with international arrivals and flights down by over 70% on 2019 levels in both 2020 and 2021. A new pandemic, or even a new deadly variant of covid, would therefore have the biggest impact on the sector's recovery. It would deter China from reopening its borders, and could prompt other countries to reimpose travel bans.

A widening of the Russia-Ukraine war could have an equally devastating effect. The war is already affecting the tourism industry in several ways: the loss of Russian and Ukrainian tourists, restrictions on airlines and the use of airspace, and higher food and fuel costs. However, a wider war would land a big hit to traveller confidence and disposable incomes, as well as new limitations on air routes.

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Automotive outlook 2023

Bright spots amid stalling growth

Key forecasts

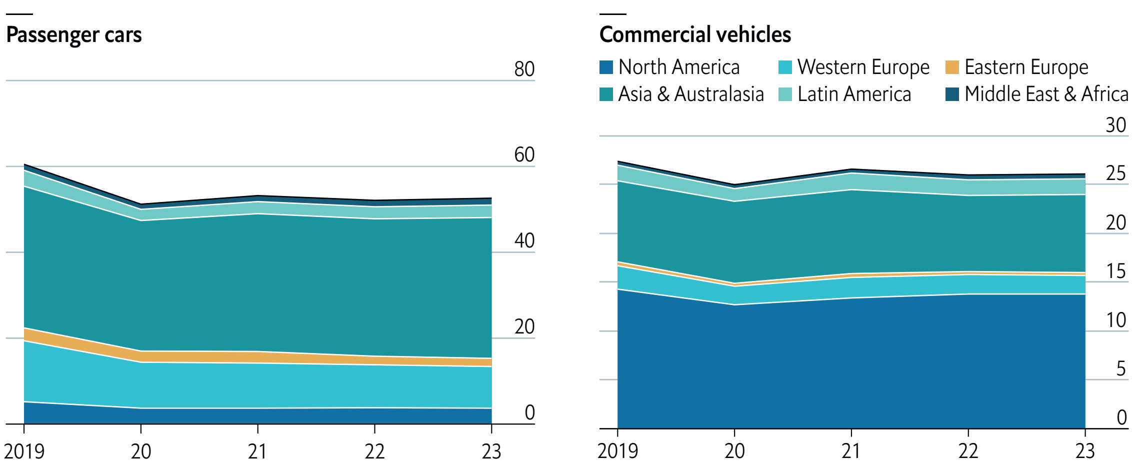
- The automotive industry will remain vulnerable to global headwinds in 2023 including the energy crisis, slower global demand and continued supply-chain problems.
- Global new-vehicles sales will remain flat in 2023: new-car sales will rise by 0.9% and new commercial vehicle (CV) sales will fall by 1.3%.
- Sales of electric vehicles (EVs) will be the only bright spot, growing by 25%, but governments will restructure their incentive schemes.
- Governments' focus will turn to charging networks, which are inadequate to meet the expanding EV fleet.
- Autonomous vehicles will take a leap forward, as UN regulators lift their speed limit.

Automotive sales will remain muted

New-vehicle sales will stall in 2023, especially in Europe and the US. We expect global new-car sales to rise by just 0.9% globally, held back by squeezed consumer spending, high commodity prices and production shutdowns caused by supply-chain disruptions. New-car sales in western Europe will decline by about 3%, while they will fall by 2.4% in North America. Meanwhile, new CV sales will fall by 1.3% globally, amid an expected recession in the Euro zone and slower GDP growth in the US and China.

Overall, this means that, following a decline in 2022, new-vehicle sales will rise only marginally in 2023, led by growth in Asia, the Middle East, Africa and Latin America. As a result, global new-vehicle

Automotive sales in the slow lane
(new-vehicle sales by region; m units)



Sources: national sources; EIU.

*2022 and 2023 are forecasts.

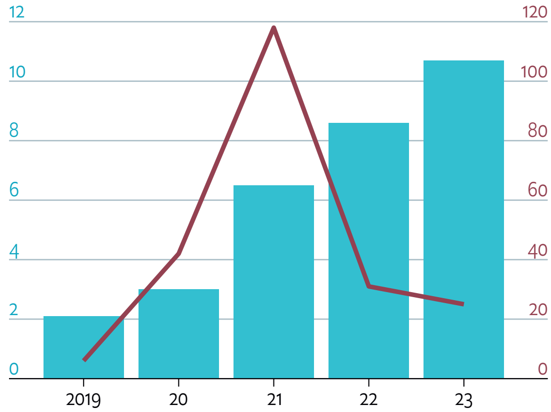
sales in 2023, at 79m, will still fall short of pre-pandemic levels of 88m units. Our forecast will remain vulnerable to considerable risks, including an escalation of the Russia-Ukraine war, possible energy shortages in Europe and a chance that the global economy may slip into recession.

Incentives for electric vehicles will be restructured

Sales of EVs will be the only bright spot in 2023, growing by 25% year on year to 10.8m units. Governments are getting innovative with their EV incentive policies, in order to encourage clean-vehicle sales without too much cost and without benefiting high-income households. The US will offer a US$7,500 EV tax credit at the point of sale on clean-vehicle purchases from January 1st 2023, but only if the cars meet stringent eligibility criteria, including final assembly within North America. The US will also remove a 200,000 vehicle cap per manufacturer, allowing Tesla, General Motors, and Toyota (which manufactures locally) to benefit from the subsidies. The plan aims to encourage investment in local production and limit government expenditure.

Meanwhile, China has extended tax breaks and purchase subsidies available for buyers of new energy vehicles (NEVs) until the end of 2023. These breaks include exemptions from purchase taxes, annual vehicle taxes and consumption taxes. The French government is working on a subsidised EV-leasing plan, in a bid to make EVs more affordable for low-income households. However, from 2023 Germany will reduce EV incentives available for battery EVs (depending on the price range) and will remove subsidies for plug-in hybrid EVs. Norway will also phase out tax breaks for expensive EVs from the start of January 2023.

Electric vehicle sales continue to soar
(sales of new plug-in EVs)



Source: EIU. *2022 and 2023 are forecasts.

Battery swapping and charging stations will expand, especially in China

The exponential growth in EV sales has led to problems with recharging networks, which governments will need to address in 2023. In China, for example, the number of EVs on the road is set to double to nearly 20m by 2024, but long queues at charging points are becoming common. As part of its 14th Five-Year Plan (covering 2021-25), the Chinese government aims to deploy charging stations on all highways connecting provinces by the end of 2023.

Automakers are also investing in recharging solutions, including battery swapping. Nio, an EV start-up, is planning to upgrade its proprietary battery swap stations in 2023, enabling them to store more batteries to suit different vehicle brands and voltages. It remains unclear if Nio's stations will swap batteries for non-Nio cars as well. India is also planning to implement a battery swapping policy in the 2022/23 fiscal year (April-March), as part of its aim to electrify all new vehicles by 2030. The Indian government will also offer financial incentives to companies setting up swapping stations, as well as encouraging battery leasing.

Despite these incentives, charging will be a challenge in 2023. One problem is that regulators have yet to put in place uniform battery standards, which would make it easier to find appropriate charging points and swapping stations. End-of-life battery recycling is lagging too.

Automotive supply chains will remain a weak link

Although a slowdown in demand has made supply-chain blockages less acute, they will continue to hold back production in 2023. Semiconductors will remain in short supply, with new capacity not due to come into operation until 2024. Escalating tensions between Taiwan and China will pose another risk. Automakers will also face challenges in acquiring metals such as nickel, cobalt, steel and aluminium. A shortage of these metals will make it harder to assemble EV batteries. Even the supply of lithium, a vital battery metal, could be affected by zero-covid policies in China, the world's largest lithium refiner.

In order to cope with this challenge, governments are increasing local sourcing. The US will use the CHIPS Act, passed in 2022, to spur domestic semiconductor production and research. The US has also published a critical mining strategy to increase its local supply of rare earths and other minerals,thus reducing its reliance on China. Rare earths are vital to battery production. Meanwhile, India is seeking to change laws to allow private miners to extract lithium domestically, as well as seeking to acquire lithium and cobalt mines overseas.

Europe's biggest supply challenge will be the energy crisis. Some vehicle and parts makers are having to cut production to reduce energy costs. They may also have to prepare for power cuts. Given close-knit supply chains, this will have knock-on effects throughout the automotive sector.

Level 3 self-driving cars will hit the roads

The autonomous vehicle segment will take a leap in 2023, as level 3 cars hit the roads and level 4 vehicles undergo tests. Mercedes-Benz (Germany) will start offering its level 3 driving system, Drive Pilot, in California and Nevada in the US in 2023. BMW's long-awaited level 3 technology should be on sale in its Series 7 sedan. Three US carmakers—Tesla, General Motors and Lucid—as well as South Korea's Hyundai and Kia, and Sweden's Polestar, are also expected to launch level 3 vehicles in 2023.

With level 5 representing full autonomy, the jump to level 3 is a significant step. It will take cars from what is effectively driver-assisted technology (such as Tesla's Autopilot) to autonomy that does not require full-time driver attention.These developments will come as UN regulations are amended to extend the speed limit for level 3 vehicles from 60km/h to 130km/h from the beginning of 2023.

As for level 4, Germany is planning to start an autonomous driving project in 2023 using vehicles manufactured by two EV makers: Mobileye (Israel) and Nio (China). The expansion of level 4 robotaxis will also pick up pace in 2023. Motional (US) will launch robotaxis in the US, while Cruise (US) will expand its offering in Dubai, UAE. Tesla is also expected to unveil its own robotaxi in 2023. Even so, these level 4 cars will only operate in carefully controlled zones, with operators on standby to cope with emergencies. Full autonomy remains some way off.

Vehicle autonomy reaches the tiping point
(levels of driving automation)

		Automation	The system	The driver	Existing examples
Level 0	Driver support features	None	Provides momentary driving assistance	Must steer, brake and accelerate	Automatic emergency braking; lane departure or forward collision warnings
Level 1	Driver support features	None	Provides continuous assistance with either acceleration/braking OR steering	Must be fully engaged in driving; steer or brake	Adaptive cruise control; lane departure assistance
Level 2	Driver support features	Partial	Provides continuous assistance with both acceleration/braking AND steering	Must be engaged with driving; continually monitor the vehicle	Highway pilot; several Level 2 models sold commercially
Level 3	Automated driving features	Conditional	Handles all aspects of driving when engaged	Must be ready to drive as needed	Honda Legend Sedan; Mercedes Drive Pilot
Level 4	Automated driving features	High	Drives under limited service areas	Is not needed in designated areas	Not yet available
Level 5	Automated driving features	Full	Drives universally	Is not needed	Not yet available

Sources: SAE International; National Highway Traffic Safety Administration; EIU.

To watch

Union blues: Amid high inflation and a possible recession, the Detroit Three automakers—General Motors, Ford and Stellantis North America (formerly Fiat Chrysler Automobiles)—will need to negotiate a four-year contract for 150,000 blue-collar workers represented by United Auto Workers (UAW), a trade union. This will not be easy at a time when US workers are restive about the cost of living. General Motors will be hoping to avoid a strike similar to the one in 2019 that cost it about US$3bn in lost earnings.

Agency models: Premium German carmaker Mercedes Benz plans to move away from franchise-operated dealerships and introduce an agency model in its home market and the UK. The move will turn its dealers into agents, who will offer a physical touchpoint for motorists. This will also allow the carmaker to become the retailer and to enter into sales contracts with customers, giving it direct access to data on consumer preferences and driving habits. The carmaker will also gain more control over the final retail price, as well as flexibility to bundle online sales and physical sales.

Battery tech: QuantumScape, a US-based EV battery maker and supplier of solid-state batteries to Volkswagen (Germany), will start testing 24-layer battery cells in 2023 - instead of the 16-layer cells currently in use. A solid-state battery has several advantages over a lithium-ion polymer battery, including higher energy density, which allows a battery EV to have a higher range. Rimac, a Croatian EV start-up, is also working towards improving the energy density of its vehicles through a new battery module that will use larger 46mm diameter cylindrical cells.

Key risk scenario: Geopolitical tensions, climate change and public protests will cause more supply-chain blockages

Persistent inflationary pressures, caused by supply-chain disruptions and Russia's invasion of Ukraine, are pushing up global inflation, which is at its highest level since the 1990s. This could fuel social unrest if inflation rises much higher than wage increases. In an extreme scenario, protests could push workers in major economies and employed by large manufacturers to co-ordinate large-scale strikes demanding higher salaries that match inflation. Such movements could paralyse ports, freight services and railways, exacerbating supply-chain problems.

Supply chains are also vulnerable to increased geopolitical tensions and climate threats. Further deterioration in China's ties with the West—especially over Taiwan—could threaten the flow of semiconductors out of Taiwan, or of key battery elements and metals from China. Meanwhile, a particularly cold winter could cause energy shortages in Europe, where some vehicle and parts makers are already facing a need to cut production.

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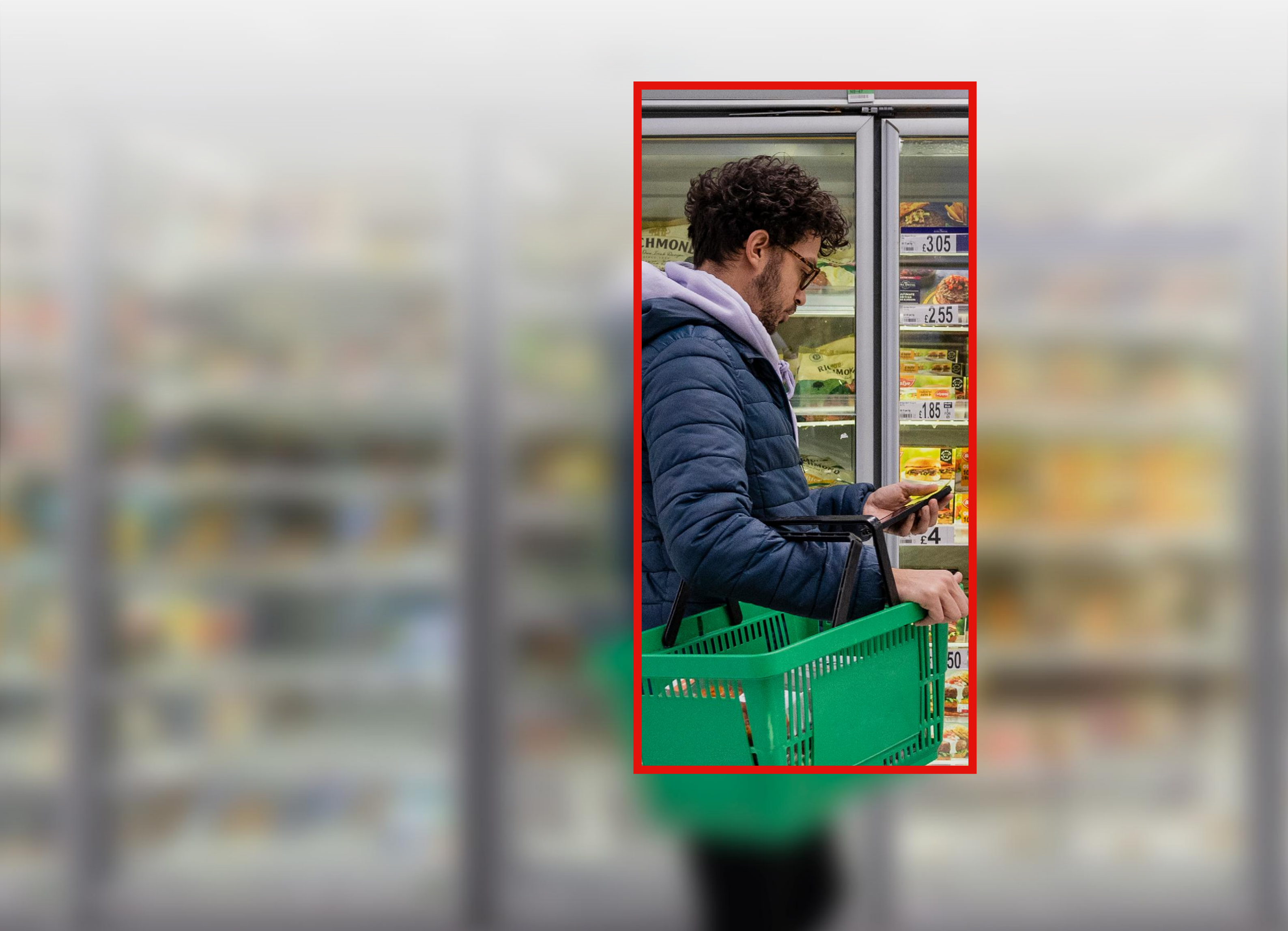
Consumer goods and retail outlook 2023

Retailers respond to pricing pressures



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Consumer goods and retail outlook 2023

Retailers respond to pricing pressures

- Inflation will push up global retail sales by a robust 5% in US-dollar terms in 2023, but the lower volume of sales and surging costs will weaken retailers' profits.
- The rollout of automation technologies will offer opportunities to limit wage growth, which means that retail employment is unlikely to return to 2019 levels.
- Online sales growth will slow, but the online share of retail will edge up to about 14% of global retail sales.
- Inflation-wary consumers will prefer to shop at discount stores, helping these retailers to increase their market shares.
- The economic slowdown in China, caused in part by its zero-covid strategy, will mean fresh challenges for global luxury brands already affected by the loss of Chinese tourists.

Inflation is hurting shoppers and shops alike. EIU forecasts for 2023 show widening disparities between retail sales in nominal and real terms. Persistently high inflation will lead to 4.8% growth in global retail sales in nominal US dollar terms, but this headline rate is inflated by high prices. It masks slowing growth in real terms, lower purchasing power and lower margins for retailers. However, there will be some pockets of real-terms growth, mainly in middle-income countries in Asia and the Middle East. Online retail sales will grow by 6.1%, slower than in 2020-22, but their share of the total retail market will continue to increase.

High inflation will squeeze profits…

With global inflation forecast at 6.4% in 2023 and demand flattening, retailers' profits will be squeezed in 2023. They will not only be challenged by higher costs for raw materials and logistics, but also by labour and energy costs. Retail wages have been rising faster than overall private-sector wages in many countries; wholesale electricity rates have also surged over the past year (especially in Europe).

Some retailers will close stores, and the risk of retail bankruptcies will increase after a couple of years of respite. At maximum risk will be debt-laden non-food retailers, as lower consumer purchasing power will translate into lower discretionary spending. High energy costs, particularly for refrigerators, will also put some food retailers in Europe at risk. Moody's, a rating agency, recently downgraded the credit rating for Iceland, a UK grocer.

….and retail jobs

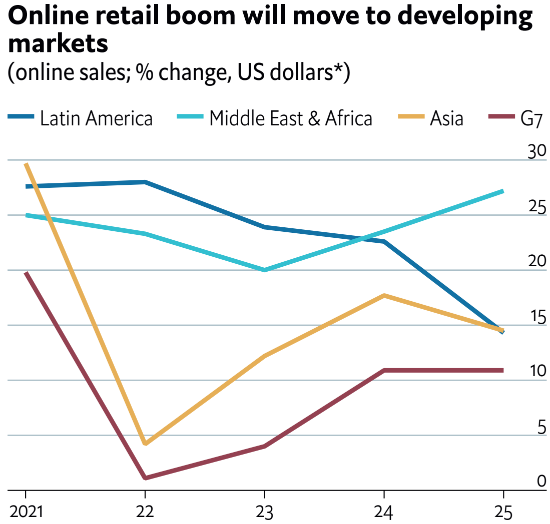
One way retailers will try to protect their bottom lines in 2023 is by slashing labour costs. Retail wage growth, which has been outpacing that of other sectors, will slow. Although we do not currently expect massive layoffs in the sector, increased pressures on retailers' margins will slow down new hires. Hopes of the sector's employment levels returning to pre-pandemic levels in 2023 are fading.

Many retail chains will also invest in automating their backend processes, reducing their need for workers. By March 2023 Australian department chain Myer will deploy 200 autonomous mobile robots with the capacity to process seven out of ten online orders. Japan's Aeon will collaborate with British retailer Ocado to build an automated warehouse in Japan by 2023 to manage stocks and basket goods for online deliveries.

Online retail growth will shift to developing markets

Online sales will continue to rise, with year-on-year growth of 6.1% taking their share of global retail sales to more than 14%, marginally exceeding the 13.9% share in 2022. However, sales growth will slow in China, the world's largest online retail market, as a result of its 'zero-covid' policies as well as high youth unemployment, a weakening economy and a government crackdown on technology companies. Meanwhile, the West will be wading through the cost-of-living crisis and a recession.

A growing middle class, increasing internet penetration and policy focus on digitalisation will make many emerging markets attractive for retail investment. The Middle East and Africa and Latin America will see the fastest pace of growth in online sales in 2023, at over 20%, while Asia will report a 12% increase. Amazon, a US online retailer, plans to enter five new countries in 2023, with South Africa, Nigeria and Colombia among the candidates. There will also be opportunities for marketplaces, logistics and payment service providers to enable Asia's micro, small and medium businesses, such as Indonesia's warungs, to go digital.



Sources: Edge by Ascential; EIU. *2022-25 are forecasts.

Inflation will push consumers away from hypermarkets to discount retailers in 2023

In a reversal of the pandemic-era trend, big-box stores and hypermarkets will lose market share to discount and convenience stores in 2023, as reduced purchasing power forces many middle-income consumers to trade down. In inflation-ridden European markets, a shift in this direction is already visible in the food retail market. Aldi, a German discount retailer, overtook Morrisons, a supermarket, in September 2022 to become the fourth-largest grocery retailer in the UK. In France, the largest discount grocers—including Aldi and Lidl—have expanded their market shares over the past year.

Similar trends are visible in other markets. Data from Placer.ai, which tracks retail footfall, shows that in July 2022 (when US consumer price inflation was up by 8.5%) discounters and dollar stores were the only retail category in the US to register growth in footfall. Meanwhile, two of the country's biggest retailers, Walmart and Target, registered declines. In South Korea, a surge in food prices is forcing many restaurant-goers to pick up cheaper ready-to-eat meals from convenience stores.

Besides seeking lower price points, inflation-ridden consumers also tend to buy less but more often. This would make trips to out-of-town hypermarkets and big-box stores more expensive as fuel prices remain high. Some hypermarkets will react by moving closer to consumers, setting up smaller "express" stores that can better compete with convenience stores. This will offer some opportunities for commercial real-estate owners.

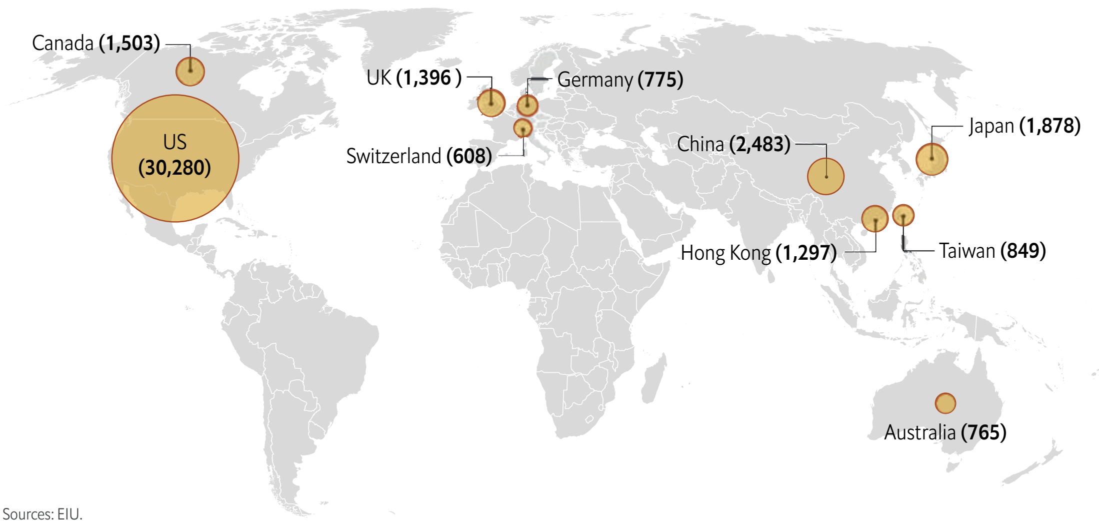
The economic slowdown in China will bring fresh challenges for luxury brands

The loss of Chinese tourists during the pandemic has been a blow for global luxury brands. However, their sales returned to pre-covid levels in 2021, helped by demand from domestic Chinese buyers. In 2022, China's zero-covid policies held back growth, although a rebound in Europe's tourism industry brought some compensation. However, 2023 will pose more challenges.

China's consumer spending will be lacklustre as the government maintains its zero-covid policy and a slowdown in important trade partners, such as the US and EU, weigh on the domestic economy. China's real-estate bubble, an important source of wealth for affluent Chinese, has been deflated by government crackdowns and covid-19. Youth unemployment remains high and will constrain demand from entry-level luxury buyers, an important customer base for luxury brands.

Other markets will struggle to offset Asia's sluggishness. The region will account for nearly 18% of the world's high-net-worth population in 2023, with China contributing a third of the region's total. Kering, a French luxury giant, earns 34% of its revenue from the Asia-Pacific market, excluding Japan. Tourist spending in Europe, which has been a silver lining this year, may not offer as much support next year. Whereas pent-up demand has driven a tourism revival in 2022, growth in global tourist arrivals will slow significantly in 2023.

Asia will account for nearly 18% of global high-net-worth households in 2023
(number of HNWHs >US$1m expected in 2022, '000)



Sources: EIU.

To watch

Plastic purge: Retailers will need to find other ways to package their goods in Spain, which will enforce a ban on plastic packaging for fruits and vegetables from January 2023 and (along with Italy) slap plastic taxes on non-reusable packaging. From July 2023 Dutch consumers will have to pay extra for single-use plastic cups and food packaging. Canada will expand its ban on making and importing single-use plastic products, due to come into effect by the end of 2022, by banning their sale from December 2023.

Green fashion: Spain's Inditex, the world's biggest fast-fashion company, aims to stop using single-use packaging by next year, as well opting for more sustainable fabrics. Zalando, a German online fashion retailer, aims to only sell brands that meet certain sustainability standards. Regulators will force the pace: Germany's supply-chain regulations, which demand that large companies vet for human rights and environmental violations, will pose a particular challenge for fashion retailers.

Better protection: Consumer brands and online sellers will face a stream of new privacy, competition and data regulations in 2023. In January, Finland's Consumer Protection Act will force online sellers to offer more transparency into their pricing and discounting strategies. In the US, five states will roll out data-privacy laws that will affect the way that businesses collect and process consumer data. India plans to launch a revised data protection bill in early 2023. Businesses will need to recalibrate their data collection and storage methods to comply with new laws.

Key risk scenario: Extreme weather fuels global food insecurity

The two regions most vulnerable to food insecurity in 2023 will be developing Asia and the Middle East and Africa. Countries in these regions are heavily dependent on food imports and quite exposed to climate vulnerabilities, and they also have limited scope for fiscal support. If weather conditions are even worse in 2023 than they were in 2022, an inability to afford or access food will lead to wider political and economic upheavals and increased poverty.

A colder than expected winter in Europe could also have an impact on food production, especially if it is followed by another hot summer of drought. An escalation in the energy crisis would worsen the ongoing fertiliser crisis, further pushing up food prices in Europe. Production of fresh produce, especially foods requiring temperature-controlled environments, will be affected in colder countries. Mounting costs will push several mom-and-pop retailers and foodservice outlets out of business.

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Energy outlook 2023

Surviving the energy crisis

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Energy outlook 2023

Surviving the energy crisis

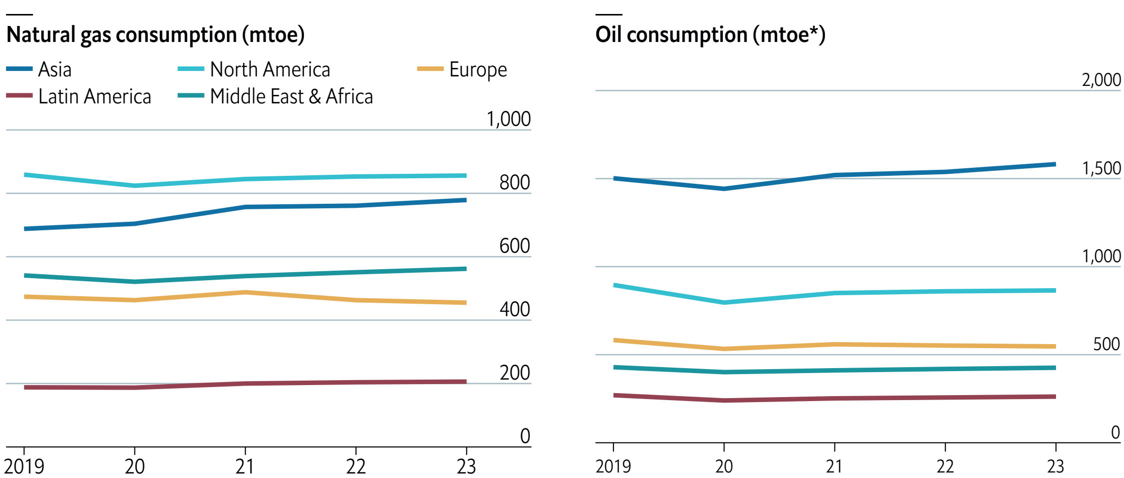
- Global energy consumption will grow by only 1.3% in 2023 amid a slowing economy.
- Despite decarbonisation targets, coal consumption will grow marginally to compensate for gaps in gas supplies.
- More extreme weather events will force many countries to fall back on fossil fuels, delaying the energy transition.
- Renewable energy consumption will surge by about 11%, with Asia leading the way, but investment will weaken.
- The energy crisis will prompt some governments to backtrack on efforts to phase out the use of nuclear power.

Energy consumption will see its second year of sluggish growth

With the global economy slowing and energy prices remaining high, total energy consumption across the 69 countries covered by EIU's Industry service will rise by just 1.3% in 2023. This will be the second consecutive year of sluggish consumption growth. In 2022 we estimate that demand grew by only 0.9%, amid record-high prices and a contraction in gas and oil supplies from Russia.

A reduction in energy supplies is also likely in 2023, as OPEC+ members are willing to cut production to prevent oil prices from dropping too far. Oil and gas output from Russia is also expected to fall further, with EU sanctions on oil entering full force by end-2022. Despite pricing pressures from supply-side issues, fears of a global recession are pulling oil prices down. We forecast an average price for Brent crude of US$89.6/barrel (b) in 2023, down from US$91.7/b previously.

Asia will lead energy demand growth



Sources: EIU; © OECD/IEA 2022 [www.iea.org/statistics].

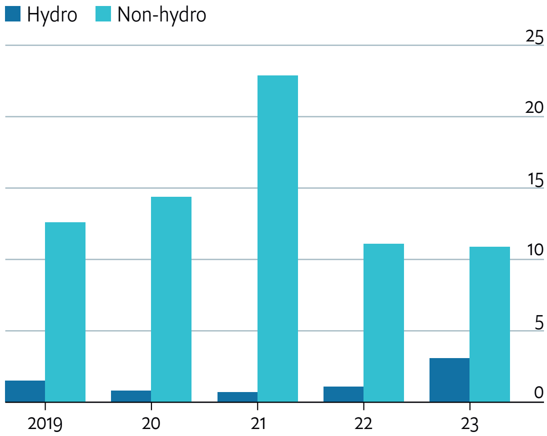
*million tonnes oil equivalent †Europe totals exclude Russia.

Natural gas usage will be flat, but coal and oil consumption will grow

Global natural gas consumption will remain flat in 2023 as it continues to decline in Europe (-1.7%) and remains flat in North America, offsetting gains in the rest of the world. We do not expect gas consumption in Europe (excluding Russia) to return to pre-war levels during our forecast period of 2022-31. However, gas demand in Asia will rise by 2.4% in 2023, with the region on track to become the largest global market for natural gas (surpassing North America) by 2027.

Coal consumption will benefit from increased policy focus on energy security, growing for the third consecutive year in 2023, although only marginally. Oil consumption will grow by 1.4%, mainly supported by Asia where usage will expand by 2.9%. On the contrary, oil demand in Europe will contract by 1% as economic activity slows down and the EU embargo on Russian oil imports becomes fully effective.

Renewables consumption will remain strong
(% change year on year)



Sources: EIU; © OECD/IEA 2022 [www.iea.org/statistics].

Growth in renewable energy will stay strong

Showing a much brighter outlook than fossil fuels, solar and wind energy consumption will surge by 11% during 2023 (although from a smaller base) as more projects come online. We forecast that solar and wind capacity addition will remain strong during our forecast period, prompting renewable energy consumption to grow at an annual average rate of 10% during the next ten years. Asia is and will continue to be the world's biggest market for renewable energy investment, with the lion's share going to China, India, Japan and South Korea.

However, the commodity price boom will divert some investment towards fossil-fuel projects. Higher interest rates will also increase the cost of financing renewable energy projects, slowing down the pace of the energy transition. Financial support for energy transition projects in developing countries could further diminish, disproportionately affecting poor and vulnerable geographies.

Energy crises caused by extreme weather events will encourage coal usage

Increasing frequency of extreme weather events, such as droughts, heatwaves and hurricanes, will have an adverse impact on countries' energy systems. Dry weather in much of the northern hemisphere in 2022 led to drought situations in major river systems such as the Yangtze (China), the Danube and the Rhine (Europe), and the Colorado River (US), severely impacting hydro power generation, which provides almost half of low-carbon electricity generation globally. Heatwaves could lead to blackouts as they push up peak power demand, while diminishing productivity of power plants; hurricanes could damage energy infrastructure.

With meteorologists forecasting more weather events—including a rare third consecutive year of La Niña—we expect more short-term power crises around the world in 2023. Countries will keep falling back on fossil fuels to cope with such scenarios. China and India, where hydro power accounts for more than 10% of total electricity generation, are most likely to do so. Another example is Brazil, which relies on hydro power for 60% of total power generation.

Developing countries will face an uphill road to climate finance

A volatile economic and geopolitical environment, plus recent extreme weather events in Europe and the US, are likely to shift public sentiment in those countries towards channelling climate adaptation funds for domestic needs before committing to assist other countries. This will affect availability of global climate finance. Developing countries, such as India and Indonesia, will struggle to secure meaningful commitments from the rich world to finance their energy transition. Consequently, these countries will be slower to wean themselves off dirty fuels such as coal, and the divergence in energy transition between the developed and the developing world will widen.

A comeback for nuclear energy

The energy crisis will prompt some governments to rethink their plans to phase out nuclear power, as sentiment shifts in favour of reliable energy supplies. Japan, which idled its nuclear plants in the wake of the Fukushima Daiichi disaster in 2011, plans to restart seven nuclear reactors by the summer of 2023. Including these seven, Japan currently has 23 commercially operable but offline nuclear reactors. In all, the country's reactors have a combined installed power-generation capacity of 21.7 GW. We do not rule out the Japanese government announcing the restart of more nuclear reactors during 2023.

A more striking example is Germany. After the Fukushima disaster, Germany started shutting down its nuclear power plants, with three remaining ones set to close by the end of 2022. However, energy security challenges have forced the country to make a u-turn on its nuclear policy. Recent comments by the government suggest that the country could extend the lifespan of the remaining plants. Other countries, such as India and China, are also likely to renew focus on nuclear energy in 2023.

To watch

LNG terminals: Germany, which is suffering from its earlier reliance on piped Russian gas, will see its first regasification unit come online in early 2023. The offshore LNG terminal at Wilhelmshaven will have the capacity to handle 7.5bn cu metres (bcm) of natural gas per year. Another under-construction terminal at Brunsbüttel is expected to add an additional 3-5 bcm per year of import capacity. The two facilities together could meet more than 10% of Germany's annual gas demand by 2023.

Iran negotiation: A tight crude oil market has revived talks over a nuclear deal with Iran, a major crude oil producer with spare export capacity. However, the negotiations, which will be closely watched, are likely to stretch into 2023, particularly if Iran's government cracks down hard on current civil protests. Despite a recent flurry of diplomatic activity, we do not expect Iran and the US to reach a deal that would allow some curbs on production and exports to be lifted. With no additional supply from Iran likely to be made available in 2023, the global oil market will remain tight.

Nigeria's new refinery: A 650,000-b/day mega-refinery and petrochemical complex is currently under construction in Nigeria. The Dangote refinery, which will cost an estimated US$19bn, is expected to reach full production in 2023. The facility will be the largest single-train refinery in the world and, once in operation, will make it possible for Nigeria to drastically cut its import bill for refined products.

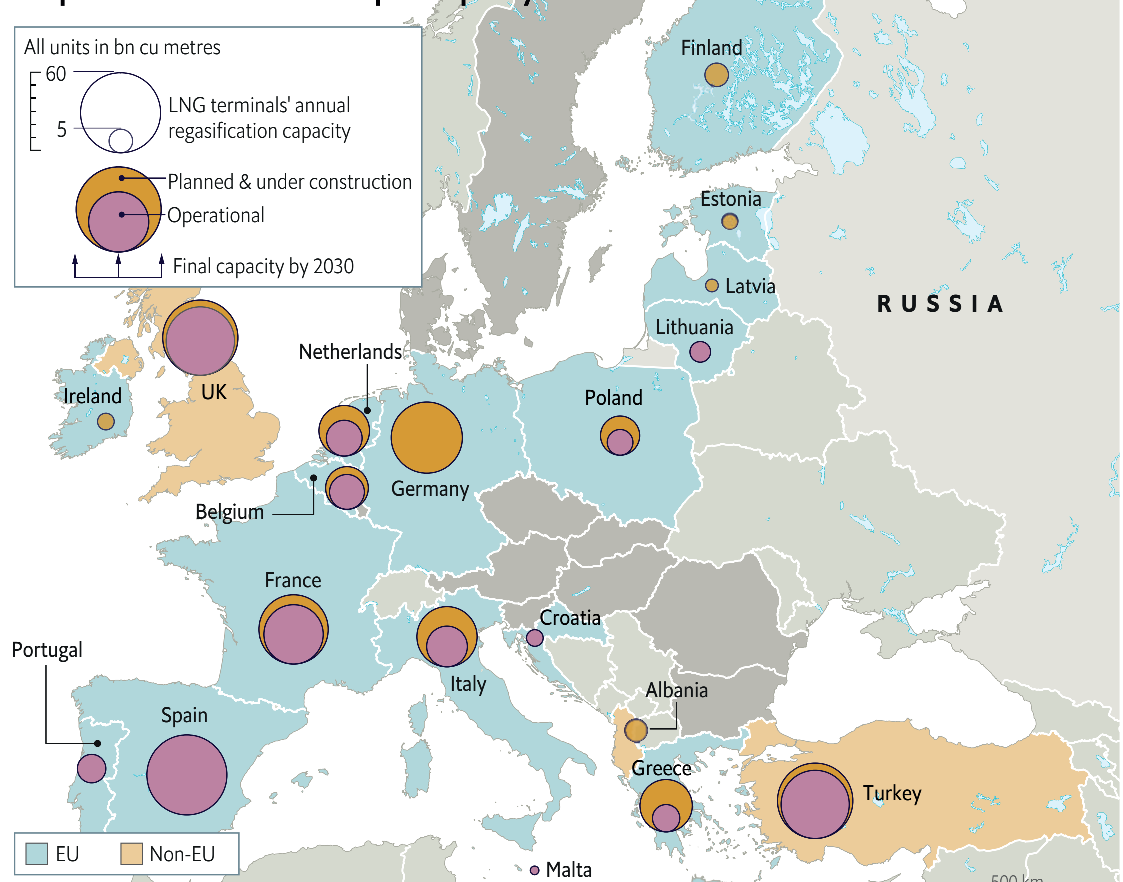
However, the refinery will sell locally only if prices are market led. A scaling-back of Nigeria's fuel subsidies in 2023 will therefore be necessary to allow the refinery to supply the domestic market at a profit.

Key risk scenario: A cold winter could exacerbate Europe's energy crisis

A colder-than-normal winter will push household gas consumption above expected levels, likely derailing Europe's plans to reduce gas consumption during the next months. In the absence of Russian supply, increased household demand will dry up storages, prompting the rationing of energy to the industrial sector. This will worsen the economic recession.

Energy-intensive industries such as chemicals, steel, glass and fertilisers would be worst hit, with knock-on effects further down the supply chain. Failure to conserve gas in the upcoming winter months will lead European governments to increase coal-fired power generation, hindering the region's efforts to combat climate change. Additionally, energy shortage in Europe will keep gas prices higher for longer than expected in 2023, further increasing the import bills of many commodity importers, especially in Asia and Africa.

Europe rushes to build LNG import capacity



Sources: Gas Infrastructure Europe; EIU.

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Finance outlook 2023

A new test for financial stability

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Finance outlook 2023

A new test for financial stability

- Weakening economic output and rising interest rates will lead to more difficult conditions for banks, insurers and fund managers in 2023 than in the past two years.
- The impact will be particularly acute in North America and Europe, where governments will offer support. The environment will be tough in Asia as well, although policy rates will rise by less.
- Heavily indebted developing countries will find it harder to refinance foreign debt, driving some to default or require rescues to avoid it. However, the IMF will continue its lenient treatment of economies requiring its financing programmes.
- The current capital-market crunch will hobble a wide variety of loss-making fintech challengers that sought to outflank incumbents in banking, payments and other activities.

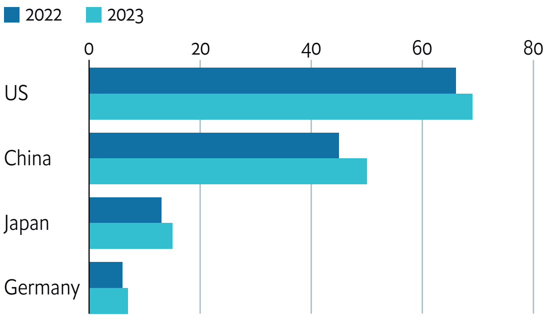
Global financial firms will face tougher conditions in 2023 in an environment marked by slowing economic growth, spiking prices, unevenly rising interest rates and sharpening international political tensions. Fortunately, firms in the industry have greatly improved their resilience over the past decade by bolstering their capital and liquidity positions, and leaving behind non-core activities and markets. As a result, most should prove capable of riding out the stresses arising from this latest economic downturn. In the longer term, the industry will benefit from enduring trends towards greater use of digital services, improved financial inclusion and expanding needs for savings to cover ageing populations and investment to confront challenges like the green transition.

Arrears and debt defaults will rise, but governments will offer support

Rising rates generally have positive impacts for financial firms, as they lead to wider interest-rate spreads for banks and better investment returns on the portfolios of insurance companies and fund managers. However, they also slow the overall economy and reduce the cash available to households and firms, while trimming demand for now-more-expensive credit. According to our forecasts, financial firms in the west have enjoyed some widening in interest margins recently, but these will soon narrow again as demand wanes for credit for consumption and investment. Meanwhile, margins will remain stable in China, Japan and most of the rest of Asia.

The toxic combination of weakening economies and rising interest rates may lead to a rise in arrears and defaults on debts. There are few signals so far indicating such distress, setting aside the special case of China's property developers who took advance payment for future apartments and borrowed heavily in US-dollar debt on overseas markets.

Lending will continue to rise in 2023
(total lending; US$ trn)



Source: EIU.

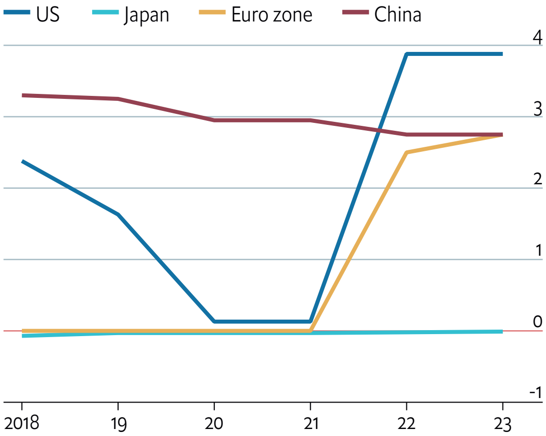
In any case, policymakers may step in, as they did during the pandemic, to support household and company borrowers who would otherwise struggle to repay debts. For example, lawmakers in Europe have outlined plans to cap or subsidise energy costs. This will leave borrowers in a better position to repay loans, while shifting rising costs to the public exchequer.

Sovereign debtors and asset markets will remain under pressure

One class of borrowers—heavily indebted developing countries—will have to proceed with only a limited safety net. Tightening financial conditions and rising costs on US-dollar and euro debt will make it more difficult and costly for them to roll over their debts. Small economies like Sri Lanka and Zambia have already defaulted (as did Russia in special circumstances), and larger economies could soon come into distress.

Moreover, China has emerged as an important creditor in the past decade but remains reluctant to participate in the types of debt-relief efforts used by OECD creditors. This could make it more difficult to reach compromises on debt reduction. On a positive note, the IMF under its current management has taken an accommodative approach to debt-burdened countries, provided they outline some path towards fiscal sustainability.

No more easy money
(policy interest rates*; end-period; %)



Source: EIU. *2022-23 are forecasts.

Markets for stock and bonds tend to anticipate economic recoveries, generating financial conditions and rising asset prices well in advance of official output figures. However, market participants first want to see a future turning point, such as a pause in interest-rate hikes by the US Federal Reserve (Fed, the central bank). This will not take place so long as price pressures remain very high in the US.

Financial challengers will stumble badly

The incumbents of the financial industry will suffer in 2023, but their upstart rivals - including fintech companies - are likely to fail in large numbers. Funders such as venture-capital and private-equity firms are insisting in the current market environment that financial challengers stop making losses and chart a path to profitability. This will prove impossible for some upstarts in consumer credit, payments and robo-advised fund management. Others will have to sharply curtail their expenses, including for marketing and customer acquisition. The culling of competition will ease pressures on established banks, insurers and fund managers.

Meanwhile, the recent sour turn in the markets has deflated a wide range of frothy financial activities that thrived in the bull run. The air has gone out of the cryptocurrencies and decentralised finance that aimed to displace banks and payments firms. Blank-cheque companies intended to outflank investment banks in bringing firms to the public markets, but instead they are being forced to return funds to investors. Non-bank consumer lenders are succumbing to rising levels of borrower defaults.

Taking a longer view, a number of enduring trends will sustain most financial firms. Most will enjoy a tailwind from citizens' rapidly rising use of formal financial services, increasing needs for savings for ageing populations and the huge financing needs for policy objectives such as decarbonisation and infrastructure improvements. A shift to digital strategies focused on mobile and online services will allow firms to close physical locations and trim staff expenses.

To watch

Exiting Mexico: Citigroup is likely to sell its Mexico retail banking franchise, which was once a crown jewel in its globe-spanning network. The US banking group has spun off many of its far-flung operations in recent years as international lenders trim their footprints.

Fresh Basel: The final implementation dates for Basel III (also known as Basel IV) arrive on January 1st 2023, after having been delayed by one year due to the pandemic. Customers will not notice the changes, which require new government regulations and will change the way that banks account for base capital, credit risk using standardised or internal models, as well as mandatory disclosures.

China's e-yuan: China is likely to expand its pilot use of its central bank digital currency (CBDC), dubbed the e-yuan, and may implement it countrywide. The country is the most advanced among major economies in pursuing CBDCs, but has yet to devise a way to use it in international trade.

Key risk scenario: Rising geopolitical tensions

Following the outbreak of Russia's war in Ukraine in early 2022, a coalition of democratic nations imposed sanctions on Russia, which in turn imposed exchange controls and other measures that locked capital inside its economy. As a result, many western banks and insurers moved to sell their local operations, often at fire-sale prices, or simply wind them down. Other firms continue to operate under local management and without access to any funds. Authorities in western Europe seized and closed Russian firms' operations across the continent.

This led to substantial losses, but the costs would be much larger if China seized Taiwan in 2023 (not our core scenario). US bank executives told a congressional committee in September 2022 that they would comply with any official demand to exit their China operations. Financial firms from Japan and elsewhere would also inevitably shutter their China units. Developed-country financiers have only a small footprint in China, but have coveted the country's large and growing financial markets. At the same time, China's banks, which have expanded overseas in recent years, would be frozen out of the economies of countries backing Taiwan in any conflict.

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Healthcare outlook 2023

The aftermath of the pandemic

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Healthcare outlook 2023

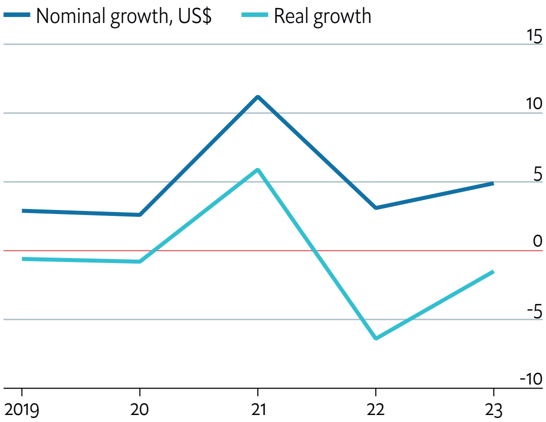
The aftermath of the pandemic

- Healthcare spending will fall in 2023 in real terms, given high inflation and slow economic growth, forcing difficult decisions on how to provide care.
- Digitalisation of the healthcare system will continue, but the use of health data will come under stricter regulation in the US, Europe and China.
- Patent cliffs for key drugs and measures to control pharmaceutical pricing in the US, India and elsewhere will force some major pharma companies to spur growth through deals.
- Supply-chain disruptions will continue to push up drugmakers' costs, despite investment in more localised pharmaceutical production.

Healthcare spending growth will fail to match inflation

The covid-19 pandemic forced governments to spend heavily on rolling out vaccination programmes and investing in healthcare infrastructure and staffing. However, government plans to maintain or increase spending in order to tackle a backlog of non-covid care and resolve staffing issues have been upended by the global economic slowdown. EIU expects total healthcare spending (public and private combined) to rise by 4.9% in nominal US-dollar terms in 2023, propelled by higher costs and wages. However, spending will fall in real terms as it fails to keep pace with inflation. We estimate that there will have been a similar pattern in 2022, meaning that 2023 will be the second successive year of real-terms funding declines.

Global healthcare spending will fall in real terms
(% change, year on year*)



Sources: World Bank; OECD; EIU. *2022 and 2023 are forecast.

The gap between spending and costs will be most acute in Europe, as well as in developed Asian countries such as Japan and South Korea. This will force healthcare providers to make some difficult decisions about how to provide care, cutting non-essential services and pushing up waiting lists. OECD data suggest that after the global financial crisis of 2008-09, spending on preventive care and pharmaceuticals was squeezed the most, and we expect this pattern to be repeated. Even so, we expect recruitment and retention of healthcare staff to be difficult as wages also fall in real terms. However, there will be pockets of strong growth in the healthcare sector, particularly in the Gulf countries, which are benefiting from high oil prices.

Regulators will monitor the use of health data in 2023

From maintaining electronic medical records to launching online health apps, the digitalisation of the healthcare sector will remain a key trend in 2023. However, concerns over protection of health data will increase. The EU aims to invest €220m (US$220m) between 2023 and 2027 in the development of the European Health Data Space, a cross-border digital platform through which people can control their own electronic health data.

The aim is to ensure data privacy, building on the EU's General Data Protection Regulation, while making the bloc's data more interoperable and accessible. The UK has a similar action plan that would centralise data storage and protection, while allowing clinicians and researchers to access it remotely. Such initiatives are likely to be copied elsewhere, after the World Health Organisation (WHO) pledged to partner with the EU in 2023 to carry out the plan.

Protecting health data is easier in countries dominated by well-regulated public healthcare systems, however. The US, with its system of competing private healthcare companies, will face a bigger challenge in 2023 as it tries to extend its data protection laws under the proposed American Data Privacy and Protection Act. China will also step up enforcement of its health data protection regulations following the surge in use of online health apps during the pandemic.

Life expectancy will recover fully in 2023

According to *The Economist*'s excess death tracker, the covid-19 pandemic has so far killed around 22m people worldwide. Even official statistics, which put covid deaths at 6.5m, suggest that covid-19 is the fourth-largest cause of death on record. The UN calculates that by 2021 the disease had cut 1.7 years off global life expectancy, reducing it to 71.1 years. This was the first fall since 1959, at the height of the Great Chinese famine. While a recovery probably began in 2022, the UN calculates that 2023 will be the year when life expectancy first exceeds 2019 levels.

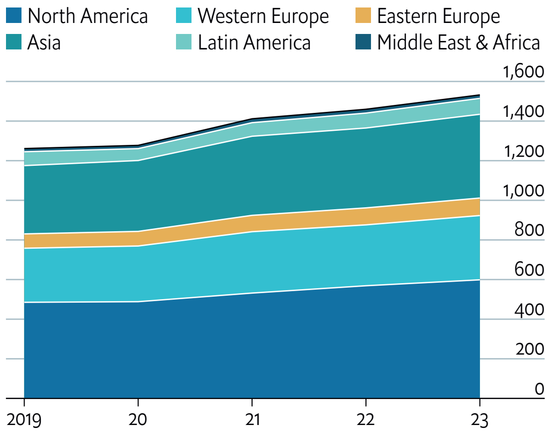
One of the biggest factors driving life expectancy is childhood immunisation, which was disrupted by the pandemic. There will be good news on this front in 2023, as healthcare systems and logistics return to normalcy. Malaria vaccines will be the next frontier. Mosquirix, developed by GlaxoSmithKline (UK), will be used more widely across Africa in 2023, but there are also hopes that R21/Matrix-M, a more effective malaria vaccine developed by Oxford University, will gain regulatory approval. But there is no room for complacency. The WHO had hoped to eradicate polio in 2023 under its 2030 agenda, but the disease is currently seeing a revival thanks to low vaccination uptake.

Pharmaceutical and biotech companies will see margins narrow

The combination of slower healthcare spending and high inflation is already forcing a reckoning for small biotech companies. As funding dries up after an unprecedented boom, many are cancelling research programmes or laying off staff. In 2023 the pressure will extend to pharmaceutical companies. Although we expect global pharmaceutical sales to rise by 5% in US-dollar terms, much of this growth will reflect higher input costs, while regulators will push down on pricing. The US, which accounts for one-third of global sales, will use the Inflation Reduction Act to allow its public health funds to buy cheaper medicines. China's steady centralisation of its drug purchasing system will make price negotiations tenser there.

2023 is also a key year for patent expiry, after several years of lull. In particular, AbbVie (US) will lose market exclusivity on its blockbuster anti-inflammatory, Humira, the world's best-selling drug. Januvia (sitagliptin), a diabetes drug produced by Merck (US) will also lose market exclusivity in the US. Although the value of global patent expiries will not peak until 2028, the prospect of a drop in revenue will prompt drugmakers to dip into the market with bolt-on acquisitions, especially given that market valuations for their targets will be low. Another key driver for mergers and acquisitions will be the pivot away from covid-19 vaccines, with drugmakers such as Pfizer and Moderna keen to diversify their drug portfolios.

Asia's share of pharma sales will rise
(pharma sales; US$ bn*)



Source: EIU. *2022 and 2023 are forecast.

The energy crisis

Supply-chain disruptions will continue for the pharmaceutical industry in 2023, but the energy crisis will lend a new twist. During the pandemic, lockdowns (particularly in China) contributed to logistics and production problems that particularly affected shipments of active pharmaceutical ingredients (APIs). Governments reacted by encouraging reshoring (the practice of bringing previously exported business operations back from overseas). India, which imports 70% of its APIs from China, is investing US$1.3bn into domestic API production. The EU and US also encouraged companies to reshore production for APIs and other supplies, despite higher domestic costs.

However, the Russia-Ukraine war has caused an energy crisis that threatens these reshoring plans, particularly in Europe. Generic drugmakers in the EU warn that ultra-high energy costs, combined with the possibility of power cuts, may make it impossible to produce APIs and medicines locally. Medicines for Europe, a lobbying group, warns that raw material costs have gone up by 50-160%, and is pushing for equivalent price rises. Rising labour and raw material costs elsewhere could also change the sums as drugmakers balance their need for secure supply chains against their desire for profits.

To watch

Genomic data: The UK's Genomics England aims to gather genomic data from up to 100,000 newborns in 2023 to help research into rare diseases. The government research body has already reached a goal of sequencing 100,000 adult genomes, and has now set a new target of 500,000 as it builds up its database for research.

Finland decentralisation: After multiple attempts, in July 2021 Finland passed a major healthcare reform that will shift healthcare provision from municipalities to 21 welfare regions. It will gradually come into force by January 2023 and seeks to make healthcare provision more uniform while boosting productivity.

African vaccines: BioNTech (Germany) units will open in Rwanda and possibly Senegal to produce vaccines for covid-19. South Africa will also see Biovac start producing Pfizer/BioNTech vaccines commercially, while Afrigen, backed by the WHO, hopes to start clinical trials of its own covid-19 vaccine next year.

Key risk scenario: New variant of coronavirus, or another infectious disease

Jeffrey Barrett, former head of the Covid-19 Genomics UK Consortium, recently voiced a careful hope that the Omicron variant may be the last for covid-19, given that it has proved so stable. However, he admitted that there is still room for surprises. Even Omicron itself is mutating, with the latest version—BA.5—able to overcome previous immunity. Moreover the potential for another (non-covid) virus or other pathogen to spread globally has increased as global travel restarts. The spread of the monkeypox virus is just one of several warnings that will keep researchers vigilant in 2023.

A new covid variant would pose a challenge for the world, but China faces its own hurdle even if Omicron is the last variant. We expect the government's zero-covid policy to persist well into 2023, partly because it will be difficult to come up with a good exit strategy. Whereas the zero-covid strategy has dampened economic growth, lifting restrictions entirely could quickly fill China's 50,000 intensive care unit beds. In May 2022 a Fudan University study published in a UK-based journal, Nature, found that without mobility controls the Omicron variant of the coronavirus could cause 1.6m deaths in China over six months. We expect China to undertake a renewed push for vaccination in 2023, probably with a domestically produced mRNA vaccine.

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Technology and telecoms outlook 2023

The battle for digital supremacy

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Technology and telecoms outlook 2023

The battle for digital supremacy

- The metaverse will not become mass-market in 2023, but this will not stop heavy investment in the technology. The drive to standardisation and the battle with web3 will be at the forefront.
- Artificial intelligence (AI) will continue to develop, after several breakthroughs in 2022, but will encounter challenges from new regulations in key jurisdictions.
- Semiconductors will continue to be a geopolitical tool between the US and China, involving many other countries. Some companies producing the most advanced products and equipment will benefit.
- Asian telecommunications companies will continue to look for consolidation in 2023. Mobile markets with four or more mobile network operators, such as Sri Lanka, Japan and India, are the most likely to secure deals.

Mobile and broadband subscriptions will continue to rise in 2023, while fixed-line connections will continue their decline. The technology and telecoms sectors have so far weathered the pandemic storm effectively, but new macro headwinds—from weaker economic growth and higher inflation—will have an impact next year. Amid such a backdrop, here are some of the key trends to watch for in 2023.

Metaverse will not become mainstream, but will receive heavy investment

The metaverse will not become mainstream in 2023, but it will still be at the forefront of tech innovation and investment. We continue to define the metaverse as immersive online platforms that use augmented and virtual reality technologies to enable users to socialise, work, play or shop virtually.

The metaverse and web3 are different

	Metaverse	Web3
Evolution	From PCs to smartphones to augmented glasses and headsets	From web 1.0 (reading) to web 2.0 (reading and writing) to web3 (reading, writing and owning)
Core principle	Immersive and virtual world	Decentralisation, trustless environment
Key technologies	Augmented, mixed and virtual reality	Blockchain, crypto assets (NFT, DAO...)
Competitive landscape	Big companies and siloed /different metaverses possible	Users in charge as opposed to corporate entities, with nobody having a dominant position

Source: EIU.

New devices, whether augmented glasses or virtual reality (VR) headsets, will be launched in 2023, driving development of the overall ecosystem. They will include an Apple headset that is likely to offer augmented reality rather than full VR.

The tech industry will focus on standards to ensure that there are rules in place to allow for interoperability and interconnectedness of different metaverse platforms. It will also focus on creating products for industry and enterprise clients, such as advertisements for virtual forefronts, digital twins, and new types of education and learning services.

The metaverse will also prove to be a battleground for web3—the two, while often interchanged, are not the same. Web3 is an entirely new framework based on blockchain and crypto assets whose core principles are decentralisation and diffuse ownership among individual users as opposed to corporate entities; as such it can operate outside of the metaverse). Centralisation has always occurred in the past with new technologies, so the metaverse is also likely to happen in a centralised manner, but web3 will continue to gain ground as a potential alternative in the coming year.

Developments in AI will come hand in hand with regulations

Artificial intelligence (AI) has seen some major developments in 2022—AlphaFold, an AI programme designed by DeepMind (Alphabet), has proven capable of breaking down the structure of a protein, underscoring the role of technology in scientific progress. AI models, which are trained on unlabelled data and capable of performing different tasks, and large language models, which learn from billions of words and phrases, will continue to evolve and provide solutions for multiple tasks across industries. But there is a debate as to whether these deep-learning models are too limited to attain human-like intelligence (if it is attainable), or whether there needs to be the development of other paradigms, such as ones where the context and the entire environment take the lead.

Although this debate will continue into 2023, that year will also be one of AI regulation. The EU is likely to push its own AI Act, which will seek to ban high-risk use cases before they enter the market, as opposed to taking a wait-and-see approach. This is in contrast to the US model, which focuses on innovation rather than regulation, although even the US Federal Trade Commission is pushing for companies to be held accountable for discriminatory algorithms. China will also continue to focus on algorithms, with greater scrutiny on how companies design and use them.

Chips face market and geopolitical challenges

There will be two main semiconductor-related challenges in 2023. From a market perspective, there will be a shortage of certain components and a glut of others, longer lead times for the most sophisticated machinery, and increasing demand for custom rather than mass demand chips, all of which will impact the competitive landscape. Some companies will be major winners, such as Arm, whose blueprints are used in many designs, and TSMC, which can build the most advanced chips. Others will lose out, such as Intel, which is still lagging behind the leaders in manufacturing and whose traditional designs will be under even greater pressure. In the longer term, demand for chips will remain strong, even if traditional products such as PCs and smartphones plateau, because of the demand for digital transformation and the rise of the metaverse.

Geopolitically, semiconductors will continue to be the key element in the US-China tech supremacy battle. The US will continue to restrict China's access to key technologies, while China will double down on its attempts to be self-reliant. This will increasingly involve other countries, as they will need to make a choice between the two nations. Russia, having been banned from buying advanced chips since its invasion of Ukraine, and facing unprecedented sanctions on a country-level, will look to procure some by any means necessary.

More telecoms operators in Asia will seek consolidation

Even as revenue growth slows, telecoms operators in Asia will need to invest in both 5G and fibre networks. This is why we expect that they will look for consolidation across their regional operations in 2023, especially in markets with four or more players. The trend started in 2022, where deals involving companies such as CK Hutchinson (Hong Kong) and Axiata (Malaysia) were announced in Indonesia, Thailand and Malaysia.

We forecast that companies in Japan and Sri Lanka (both four-player markets) will look for a similar way to grow inorganically in 2023.

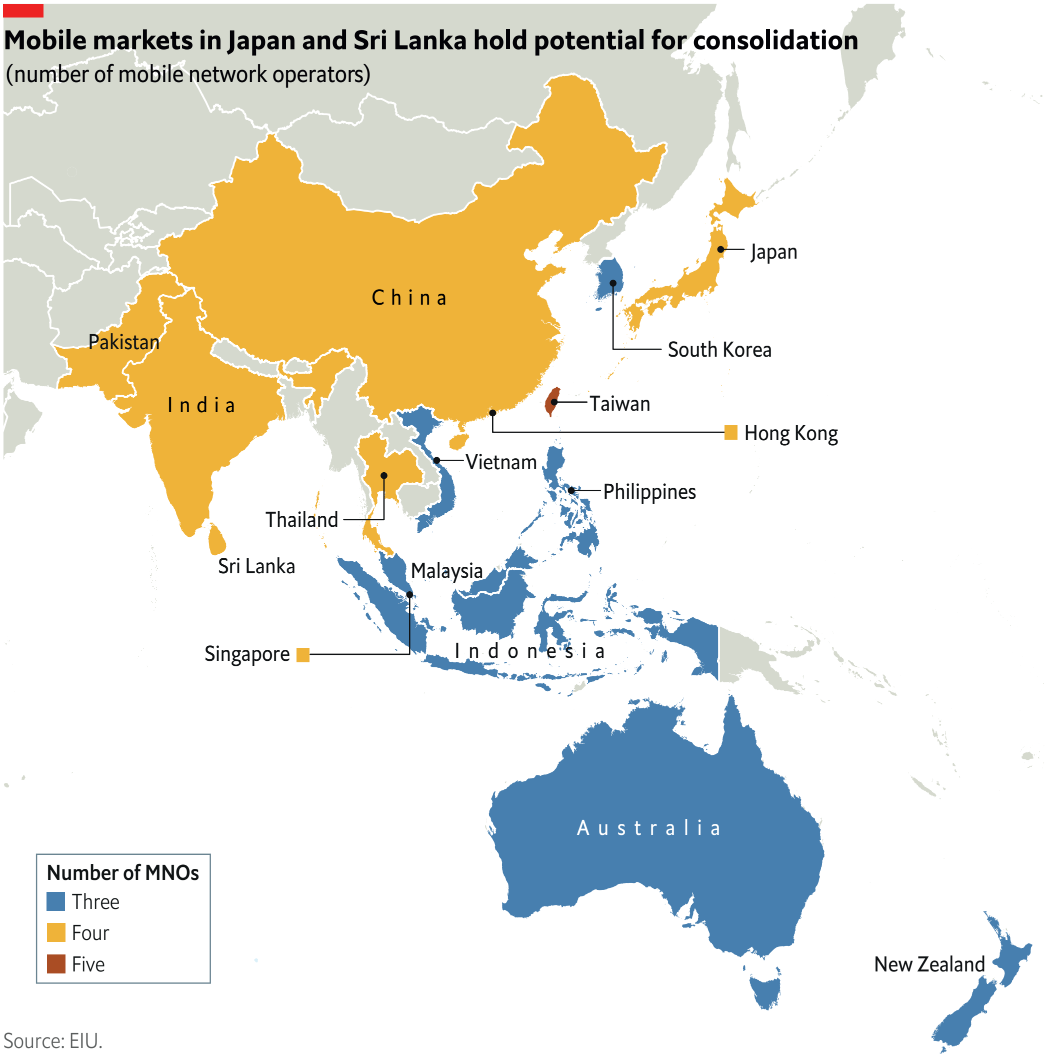
- The ongoing economic distress in Sri Lanka has already led some companies to report losses since the first quarter of 2022. Rate rises implemented in 2022, increased telecoms levies and an ongoing SIM card registration drive will slow down cellular subscription in 2023, and companies may consider consolidation.
- Japan could also go back to being a three-player market as it was until 2020, when Rakuten, a low-cost player, entered the market. The new entrant's performance has worsened since May 2022 as its promotional free plans have ended. Other incumbents—SoftBank, NTT and KDDI—will look for ways to balance revenue decline and investment in 5G expansion and 6G trials in 2023.

Consolidation will not just involve private operators, but also public ones. For instance, the Indian government could renew its efforts to merge debt-ridden BSNL (mobile) and MTNL (fixed) in 2023.

To watch

EU clout: The EU's Digital Markets Act, which focuses on making the largest technology companies gatekeepers with specific obligations aimed at boosting competition, could be enforced as early as the spring of 2023. Other rules, focusing on data and AI, could also become laws this year, strengthening the EU's position as the global tech regulator.
Data deals: A March 2022 deal on US-EU data transfers will be ratified in 2023, granting a new legal framework for transatlantic data flows. As with its previous iterations, which were eventually invalidated because of the incompatibility between US surveillance rules and EU privacy rights, we expect a lawsuit to reach the European Court of Justice, which will rule on the legality of the deal in 2025.
Ad-supported tiers: Both Netflix and Disney will start rolling out their ad-supported plans in key markets from late 2022, but the bulk of the roll-out internationally will happen in 2023. Advertising will increasingly come to streaming as companies look to boost their revenue and consolidate their customer bases.

Mobile markets in Japan and Sri Lanka hold potential for consolidation
(number of mobile network operators)



Source: EIU.

Key risk scenario: Inter-state cyberwar cripples state infrastructure in major economies

Cyberwar can have a major impact on the global economy, especially if it involves major players. A major short-term issue is the increased risk of cyberattacks as more and more companies undertake digital transformation and become connected, increasing the attack surface for hackers. The Norwegian sovereign fund has recently highlighted that it suffers three major attacks a day. Regulators will have an increased role going forward, with the focus on mandatory reporting and critical infrastructure.

Indeed, infrastructure and healthcare systems will be extremely vulnerable to cyberattacks, as the 2020-21 attacks on Colonial Pipeline and Universal Health Services (both US) showed. Financial vulnerability will be an increasing concern, too, after Lloyd's of London, which underwrites reinsurance for many commercial insurance plans, said that it would require an exclusion for state-led cyberattacks from March 2023. This highlights the rising cyber risks from the Russia-Ukraine war.

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Tourism outlook 2023

Turbulence in the travel industry

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Tourism outlook 2023

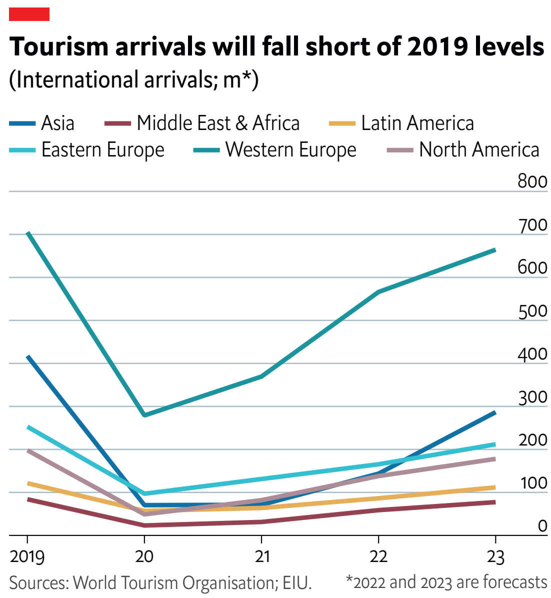
Turbulence in the travel industry

- Global tourism arrivals will rise by 30% in 2023, following 60% growth in 2022, but they will still not return to pre-pandemic levels.
- The economic downturn, sanctions on Russia and, above all, China's zero-covid strategy will be among the factors weighing on the industry.
- Hotels, restaurants and airports will struggle to cope with labour shortages, wage demands, and high food and energy prices.
- Even so, international airlines are expected to return to profitability, benefiting from continued pent-up demand.
- The impact of climate change on the industry will become more apparent, with high temperatures, water shortages and floods forcing tourism destinations to take action.

Tourism arrivals will rise by 30% globally

Last year, EIU expected global tourism arrivals to recover to near pre-pandemic levels by the end of 2023, as fear of covid-19 recedes and restrictions are lifted. However, Russia's invasion of Ukraine in February 2022 and the accompanying political instability, global inflation and economic slowdown—as well as China's strict zero-covid strategy—have dampened those expectations. We have now pushed our forecast for a tourism recovery firmly into 2024, with considerable turbulence likely in the interim.

Even so, the depth of the tourism slump in 2020-21 means that strong growth is near-inevitable in 2023 now that travel restrictions have been lifted in most countries. Globally, we expect pent-up demand for travel to drive growth of 30% in international tourism arrivals, taking them to 1.6bn. This follows growth of 60% in 2022, but will still not be enough to take total arrivals to their 2019 level of 1.8bn. However, the trajectory will differ by region. Much of the Middle East, buoyed by high oil prices, has already seen a full recovery, while Eastern Europe will have to wait until 2025 because of the impact of the war in Ukraine. Other regions will range in between, with most reaching a full recovery in 2024.



Sources: World Tourism Organisation; EIU. *2022 and 2023 are forecasts

Chinese travellers will remain largely absent

While the war in Ukraine has delayed the tourism recovery, an even bigger factor has been China's zero-covid policy. China accounted for around one-tenth of the world's tourism departures before covid, but we now expect its borders to remain largely locked until at least mid-2023. There is even a risk that the zero-covid policy could be extended if the pandemic continues to be a threat. If all goes to plan, however, authorities will gradually take a less strict stance towards the virus, easing (but not lifting) mandatory quarantine measures and inbound travel controls. However, frequent mass testing of the population in big cities, and occasional lockdowns in smaller cities will continue to keep sporadic outbreaks from spiralling out of control.

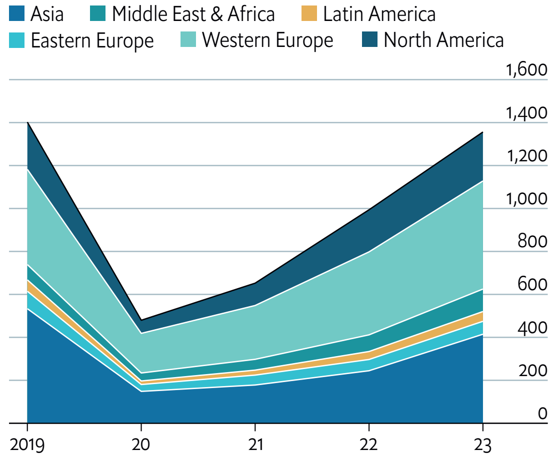
In this scenario, we expect the number of outbound travellers from China to more than double in 2023, to around 59m. Even so, that would be only a little more than a third of the 155m departures in 2019, when China was the world's biggest source of tourists. This reduced demand will primarily affect tourist destinations in Asia, including Thailand and Hong Kong, which used to be highly dependent on Chinese visitors. But the dampening effect will also be felt in Europe, the US and elsewhere. Even China's domestic tourism—which also fell in 2020-22—will be affected by the country's economic slowdown. We expect GDP growth of "just" 4.7% for China in 2023, which will feel like a recession in a country used to strong growth.

Labour shortages and high prices will add to woes

Inflation will not only affect travellers in 2023, but also the tourism sector. Hotels, bars and restaurants are grappling with high food and energy prices, while airlines are contending with high fuel bills. Airlines also face increasing wage pressures amid a chronic labour shortage. After laying off staff during the pandemic, many companies have struggled to rehire. This lack of staff has caused airport queues and caps on passenger numbers, as well as flight cancellations and lost luggage in the summer of 2022. The chief executive of Heathrow (UK) has warned that problems will last until the end of 2023.

The UK faces particular issues, because Brexit has stemmed the flow of seasonal workers from the EU. However, there are also labour shortages across Europe and in the US, where employment in the leisure and entertainment industries is still nearly 1m short of 2019 levels. The economic slowdown should make recruitment easier if job losses mount elsewhere. Several countries, including New Zealand and possibly the UK, will also ease visa requirements. Even so, it will take time to replace skills lost during the pandemic. Moreover, this labour-intensive industry is also likely to see more disruptive strikes in 2023 as workers themselves demand higher wages to cope with the higher cost of living.

Tourism expenditure will rebound faster
(Spending by international tourists; US$ bn*)



Sources: World Tourism Organisation; EIU. *2022 and 2023 are forecasts

Airlines will edge closer to profit

Major airlines in the US cut costs throughout the pandemic by laying off staff, restructuring fleets and borrowing heavily. They also received big government bailouts, particularly in Europe, North America and parts of Asia. Loans, wage subsidies and deferred taxes collectively totalled US$243bn in 2021. Nevertheless, the International Air Transport Association (IATA) expects airlines to suffer a combined net loss of US$9.7bn in 2022, after losing around US$180bn in 2020-21.

Despite the difficult economic conditions, the signs for 2023 are brighter, and IATA suggests that airlines may even head towards profitability if travel rebounds as expected. One big risk will be fuel costs: although oil prices are now softening, they are priced in US dollars, and the dollar is strengthening against nearly every currency. As a result, US-based airlines are the most likely to be profitable in 2023, while airlines in other regions will struggle.

The impact of climate change will increase

Climate change has already started to have an impact on key tourism destinations, with ski resorts lacking snow and summer resorts affected by droughts and wildfires. In 2023 these impacts will become clearer if weather-related events continue to get more extreme. Indeed, back in 2009, the Association of British Travel Agents pinpointed 2023 as the key date for its sustainable tourism drive, which aimed to protect the environment and develop sustainable transport. However, not enough progress has been made—tourism now accounts for between 5% and 8% of global greenhouse gas emissions. Nepal is one country that is setting 2023 as the start of a new sustainable tourism drive.

Travellers' awareness of the environmental consequences of tourism may also change their travel plans in 2023. According to the European Investment Bank, 37% of Chinese people, 22% of Europeans and 22% of Americans say that they will avoid flying because of climate-change concerns. Some of those who still want to travel will be prepared to pay higher prices for more eco-friendly options, or carbon-offsetting efforts. Regulators will pile on the pressure too. 2023 will see the conclusion of the voluntary pilot phase of the Carbon Offsetting and Reduction Scheme for International Aviation to reduce emissions from international flights. Eight more countries, including Cambodia, Cuba and Zimbabwe, will join, bringing the total number of participating states to 115.

To watch

Saudi sojourns: The Middle East has seen an extremely strong revival in tourism in 2022. International arrivals rose by 287% year on year in January to July 2022, taking them close to 2019 levels. Saudi Arabia, which has seen the resumption of the Hajj pilgrimage, has particularly big plans for its tourism sector under its Vision 2030 economic development plan. These include the development of the Red Sea Project, with 50 hotels spread over 22 islands. Although not due for completion until the end of the decade, the project will take in its first visitors in early 2023.

Venetian fees: Some major tourist attractions are experimenting with tourism fees and taxes to help reduce crowds or fund infrastructure. From January 16th day-trippers to the ancient Italian city of Venice and some of its islands will have to make a reservation at a cost of between €3 and €10 (US$3-US$10), depending on demand. The long-threatened fee will not only cut crowds, it will also cut taxes for resident Venetians. Overnight tourists will be exempt because they will already be paying for their stay. Thailand and the Maldives introduced tourism fees in 2022, and London is also considering one.

Good sports: Sporting events will spur travel in 2023. China has pulled out of hosting June's Asian Cup football tournament, but it will ease its covid restrictions in order to host the postponed Asian Games in September. Meanwhile, France will hope to convert the Rugby World Cup into a boost for its tourism industry.

Gulf Cooperation Council and Saudi Arabian international tourist arrivals

Source: EIU.

Key risk scenario: A new pandemic or war could upend travel

The travel industry was the sector hardest hit by the covid-19 pandemic, with international arrivals and flights down by over 70% on 2019 levels in both 2020 and 2021. A new pandemic, or even a new deadly variant of covid, would therefore have the biggest impact on the sector's recovery. It would deter China from reopening its borders, and could prompt other countries to reimpose travel bans.

A widening of the Russia-Ukraine war could have an equally devastating effect. The war is already affecting the tourism industry in several ways: the loss of Russian and Ukrainian tourists, restrictions on airlines and the use of airspace, and higher food and fuel costs. However, a wider war would land a big hit to traveller confidence and disposable incomes, as well as new limitations on air routes.

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Paket Pempek Frozen Untuk Satu Porsi Yang Terdiri dari 3 pcs Mini Kapal Selam, 2 pcs Mini Lenjer, 3 pcs Adaan dan 80ml Kuah Cuko.

Berat Pempek per Kemasan 485gr

Mini Adaan **Rp 45.000**

Paket Pempek Frozen Untuk Penikmat Adaan. Terdapat 10 pcs Adaan Dalam Satu Kemasan dan 60ml Kuah Cuko.

Berat Pempek per Kemasan 250gr

Value Package

Kapal Selam Klasik **Rp 125.000**

Paket Pempek Frozen Kapal Selam Besar Isi Telur, Isi Per Kemasan 5 pcs dan 225ml Kuah Cuko.

Berat Pempek @200gr x 5pcs (1000gr)

Adaan Klasik **Rp 125.000**

Paket Pempek Frozen Adaan Isi Per Kemasan 40 pcs dan 225ml Kuah Cuko.

Berat Pempek @25gr x 40 pcs (1000gr)

Lenjer Klasik **Rp 125.000**

Paket Pempek Frozen Lenjer Potongan Besar, Isi Per Kemasan 6 pcs dan 225ml Kuah Cuko.

Berat Pempek 1000gr

Dengan Ikan & Bahan Alami

Value Package

Mini Kapal Selam Klasik Rp 90.000

Paket Pempek Frozen Kapal Selam Ukuran Kecil Isi Telur, Isi Per Kemasan 10 pcs dan 225ml Kuah Cuko.

Berat Pempek @100gr x 10pcs (1000gr)

Mix Klasik Rp 125.000

(Adaan dan Lenjer)

Paket Pempek Frozen Adaan dan Lenjer Ukuran Sedang, Isi Per Kemasan Adaan dan Lenjer. Kuah Cuko 225ml.

Berat Pempek @500gr x 2 (1000gr)

Keju Klasik Rp 90.000

Paket Pempek Frozen Kapal Selam Ukuran Kecil Isi Keju, Isi Per Kemasan 10 pcs dan 225ml Kuah Cuko.

Berat Pempek @100gr x 10pcs (1000gr)

HOME MADE

NON MSG

Pesan Melalui Whatsapp 0818 186 464 | Tokopedia @pempekJB | Instagram @Pempek.jb

Hampers Package

Solusi Praktis sebagai Bingkisan bagi Relasi Anda. Cukup Anda pesan kemudian kirimkan, dan biarkan mereka menikmatinya dengan caranya sendiri.

Complete Package Rp 260.000

Paket pempek yang berisikan empat paket campuran, Ice Bag Cantik dan Ice Gel. Bingkisan ini terdiri dari:

Paket 1 (1 Kapal Selam Jumbo Telur, 2 Mini Lenjer, 3 Adaan,1 Kuah Cuko 80ml)

Paket 2 (3 Mini Kapal Selam Telur, 2 Mini Lenjer, 3 Adaan, 1 Kuah Cuko 80ml)

Paket 3 (5 Mini Lenjer & 1 Kuah Cuko 60ml)

Paket 4 (10 Adaan & 1 Kuah Cuko 60ml)

Berat Pempek 1390gr dan Kuah Cuko 280ml

Mix Package Rp 160.000

Paket pempek yang berisikan dua paket campuran, Ice Bag Cantik dan Ice Gel. Bingkisan ini terdiri dari:

Paket 1 (1 Kapal Selam Jumbo Telur, 2 Mini Lenjer, 3 Adaan,1 Kuah Cuko 80ml)

Paket 2 (3 Mini Kapal Selam Telur, 2 Mini Lenjer, 3 Adaan, 1 Kuah Cuko 80ml

Berat Pempek 870gr dan Kuah Cuko 160ml

Mini Package Rp 120.000

Paket pempek yang berisikan dua paket campuran, Ice Bag Cantik dan Ice Gel. Bingkisan ini terdiri dari:

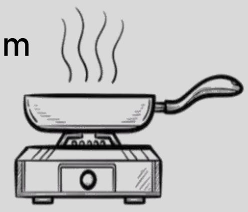
Paket 1 (5 Mini Lenjer & 1 Kuah Cuko 60ml)

Paket 2 (10 Adaan & 1 Kuah Cuko 60ml)

Berat Pempek 525gr dan Kuah Cuko 120ml

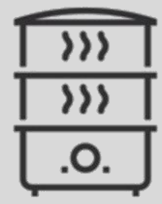
Cara Memasak Pempek JB

<u>Goreng</u>



- Letakan pempek dalam wadah, diamkan beberapa saat pada suhu ruang setelah dikeluarkan dari freezer,sehingga pempek tidak kaku.
- Panaskan minyak goreng (150°C - 180°C).
- Goreng pempek dalam api sedang hingga berubah warna menjadi kuning keemasan.
- Angkat, tiriskan dan potong sesuai selera

<u>Kukus;</u>



- Letakan pempek dalam wadah, diamkan beberapa saat pada suhu ruang setelah dikeluarkan dari freezer, sehingga pempek tidak kaku.
- Masukan air dalam pengukus, kemudian panaskan air hingga mendidih.
- Kukus pempek selama kurang lebih 15 menit.
- Angkat, tiriskan dan potong sesuai selera.

<u>Air Fryer;</u>

- Letakan pempek dalam wadah, diamkan beberapa saat pada suhu ruang setelah dikeluarkan dari freezer, sehingga pempek tidak kaku.
- Panaskan Air Fryer selama 2 menit (180°C) sebelum digunakan.
- Olesi pempek dengan minyak goreng.
- Angkat kemudian potong pempek sesuai selera.

*Khusus Pempek Lenjer, buka plastic pelindung sebelum dimasak

*Pempek beku dapat di defrost di microwave sebelum di goreng

*Bila terlalu pedas, kuah cuko bisa ditambahkan AIR PANAS & GULA PASIR sesuai selera

Simpan pada suhu

-18 ℃ atau -20 ℃

**Simpan dalam wadah tertutup*

Komposisi Produk:

Pempek; Tepung Tapioka, Ikan Tenggiri, Ikan Belida, Bawang Merah, Bawang Putih, Daun Bawang, Garam, Lada, Gula Pasir, Penyedap Rasa Non-MSG, Air, Telur, Keju, Minyak Nabati **Kuah Cuko;** Air, Garam, Gula Merah, Gula Pasir, Lada, Cabai, Bawang, Cuka Makan

ASPRINET INDO TRAINING

ASPRI SEMINAR
get smart

PITCH DECK
2022

CLICK TO DISCOVERY

—ABOUT

INTRODUCTION

WHO WE ARE?

Established in 2000, as a training agent for over 300 seminar or training providers in Indonesia we have experience with, and access to, only the best instructors and topics available. We have started our own training consultancy with a strong base of knowledge and experience for the past 10 years. We are ready to provide our clients with only the best experience of knowledge with fully added services compared to the others.

WHAT WE DO?

We provide Assessment, Consultancy, Public Training and In-House Training for potential clients that seek the best knowledge and quality.

—ABOUT

STRATEGY

- **VISION STATEMENT**

To become one of the leading providers by maintaining our uncompromising principles and create value for all our stakeholders

- **MISSION STATEMENT**

To become the training provider of choice, providing excellent service and value added solutions, to all customers.

- **VALUE**

Quality and satisfaction.

- **BUSINESS GOALS & OBJECTIVES**

To be THE preferred training provider partner for wide a range of diversified clients from start-ups to industry giants. And To become the leading innovative company in the training and educational services industry.

— ABOUT

BUSINESS CONCEPT

- **BUSINESS CONCEPT**

We provide assessment, consultancy, public training and in-house training for potential clients that seek the best knowledge and quality.

- **SERVICES**

Public and In-House Training, Assessment, Consultancy and Seminar and Event Management

- **BUSINESS COMPETITIVENESS**

With more than 20 certified instructors that specialize in their own areas of discipline, now we offer only the best public training and in-house training according to your needs. Topics vary from HRD, Finance, General Management, Production, Logistics, etc. This has made Aspriseminar as one of the leading training providers, fully reliable and professional.

ABOUT

MANAGEMENT & OWNERSHIP

C

COMMISIONERS

RADEN M SOEDJONO

M

MANAGEMENT

ARI WINARNO

A

PROFESSIONAL ADVISORS

HASAN M SOEDJONO
ONGKY P SUMARNO
KAREN MILLS

D

DIRECTOR

MALIK M SOEDJONO

O

OFFICE & ADMINISTRATIVES PERSONNEL

ARIES KUNTADI
RANDI PRASETIO
BUDI LINGGA

OUR SERVICE

INTERNATIONAL CERTIFICATION

1. American Academy is an official professional certification body recognized by the United States government.
2. American Academy has also been widely recognized in almost all countries in the world including Indonesians Human Resources.
3. American Academy is also recognized by various international standard institutions such as ANSI, NFPA, NOAA, etc.
4. American Academy has competency-based training modules in accordance with the development of the industrial world globally.
5. Your competence is recognized globally according to international standards.
6. The American Academy certificate you obtain is sent directly from the United States to your home or office address as a guarantee of the authenticity of your certification.

OUR SERVICE

INTERNATIONAL CERTIFICATIONS

1. MPM ® Master Project Manager
2. CIPM ® Certified International Project Manager
3. PME © Project Manager E-Business
4. CPE Certified Planning Engineer
5. MQM Master Quality Manager
6. MCP © Management Consultant Professional Master Management Consultant
7. CPRM Certified Project Risk Manager
8. CHRA Certified Human Resources Analyst
9. CLC Certified Leadership Consultant
10. CMA Certified Marketing Analyst

14. AFA Accredited Financial Analyst
15. AMA Accredited Management Accountant
16. AMC Accredited Management Consultant
17. CRA Certified Risk Analyst ®
18. MFP Master Financial Planner
19. CRA Certified Risk Analyst ®
20. CWM Chartered Wealth Manager ®
21. RBA Registered Business Analyst
22. CPC Certified Project Consultant ©
23. And Many More inside :
    - www.certifiedprojectmanager.us
    - www.aafm.us

OUR SERVICE

INTERNATIONAL CERTIFICATIONS

1. Sertifikasi Reviewer Penelitian Nasional (CIRR)
2. Sertifikasi Asesor Metodologi (CIPA)
3. Sertifikasi Training of Trainer (CIT)
4. Sertifikasi Audit Mutu Internal (CIIQA)
5. Sertifikasi Peneliti Kualitatif (CIQaR)
6. Sertifikasi Peneliti Kuantitatif (CIQnR)
7. Sertifikasi Cyber Security (CICS)
8. Sertifikasi Human Capital Management (CIHCM)
9. Sertifikasi Asset & Business Valuation (CIABV)
10. Sertifikasi Biosafety Officer (CIBsO)
11. Sertifikasi Budgeting (CIBG)
12. Sertifikasi Enterprise Risk Management (CIERM)
13. Sertifikasi Financial Management (CIFM)
14. Sertifikasi Pemandu Bakat Talenta Olahraga (CISTI)
15. Sertifikasi Leadership Capability (CILC)
16. Sertifikasi Merger & Akuisisi (CIMA)
17. Sertifikasi Peneliti Terapan (CIAR)
18. Sertifikasi Mixed Methods (CIMMR)
19. Sertifikasi Operator for XRF (CIO-XRF)
20. Sertifikasi Estate Management (CIEM)
21. Sertifikasi Perhotelan
22. Sertifikasi Geo Strategic (CIGS)

— OUR SERVICES

OUR SERVICE

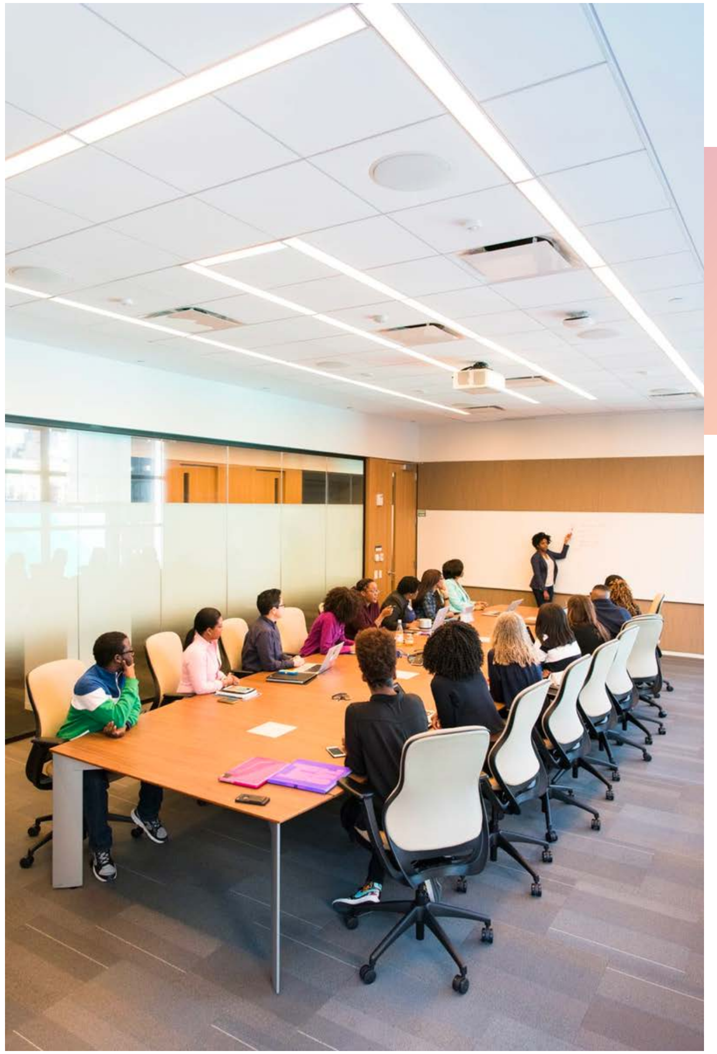
INCLUDE TRAININGS

1. Soft Skill
2. ISO Series
3. Sales & Marketing
4. Human Resources
5. Procurement & Purchasing
6. Finance & Accounting
7. Export Import
8. Operation Series
9. Management Series
10. IT
11. HSE / PJK3

— OUR SERVICES

Soft skill

1. Self Empowerment Training
2. Fundamental Supervisory Training
3. Creative Problem Solving & Decision Making
4. How to Influence People
5. Winning Negotiation Skill
6. High Impact Presentation Skill
7. Effective Time & Activity Management
8. Business Communication and Personal Development
9. Leadership
10. Analytical Thinking
11. Transformational Leadership
12. Millennial Leadership
13. Change Management
14. And many more….



— OUR SERVICES

ISO Series

1. Understanding and Implementing ISO 9001:2015
2. Understanding & Implementing ISO 14001:2015
3. Document Control & Filing System
4. Training CSR (Corporate Social Responsibility) Based on ISO 26000
5. Understanding & Implementing ISO 9001: 2015 Training
6. Risk Management Based on ISO 31000:2008
7. Internal Quality audit ISO 9001-2015
8. Housekeeping Excellence
9. ISO 27000
10. Awareness Occupational Health and Safety Management System ISO 45001:2018
11. Internal Audit ISO 19011:2018
12. And Many More…

ASPRINET INDO TRAINING

— OUR SERVICES

Sales & Marketing

1. Customer Service Excellence Strategy
2. Customer Satisfaction Measurement
3. Managing Service Experience
4. Handling Customer Complaint
5. Shop Floor Leadership & Management
6. Sales Management
7. Key Account Management
8. And Many More…

CORPORATE PROFILE

— OUR SERVICES

Human Resources

1. HR Audit
2. Training Need Analysis
3. Performance Appraisal
4. PSHRP (People Skill for HR Personnel)
5. HR Management Development Program
6. How To Deal With Difficult People
7. Training for Trainer
8. Recruitment and Selection
9. Wage Management
10. Workload Analysis
11. Recruitment and selection
12. Managing HR for Beginner
13. Talent Management System: Step By Step
14. HR Management for Non HR Executives
15. Job Analysis, Workload Analysis & Manpower Planning
16. Human Capital Management

— OUR SERVICES

Procurement & Purchasing

1. Practical Procurement Management
2. Strategic Sourcing & Vendor Management
3. Owner Estimate in Goods and Services
4. Negotiation Skill for Effective Purchasing
5. Strategic Sourcing in Procurement
6. Smart Negotiation for Purchasing
7. Procurement and Purchasing Management
8. Procurement cost saving strategy
9. Spend Management and Cost Saving Strategy in Procurement
10. Supplier relationship management
11. The Power of Procurement and Its Impact within Organization
12. E- Procurement
13. Contract Management and Supplier Relationship Management
14. Vendor Assessment & Performance Measurement
15. Tender Evaluation & Contract Management
16. Goods and Services Audit

— OUR SERVICES

Finance & Accounting

1. Capital Budgeting & Fixed Assets Management
2. Financial Management for Non Financial Executives
3. Collection and Control Management
4. Effective Budgeting: Planning and Controlling
5. Business Development and Investment Analysis
6. Building and Assets Management
7. Training Cost Accounting
8. Collection - Receivables and Credit Risk Management
9. Business Financing Analysis
10. Fixed Asset Management
11. Financial Statement Analysis (FSA)
12. Managing and Organizing Account Payable
13. Cash Flow and Treasury Management
14. Training Accounting Control Best Practices
15. Financial Control Management

— OUR SERVICES

Export Import

1. Sistem Perpajakan Kepabeanan Pelabuhan dan Sistem IT Inventory Kawasan Berikat
2. Management Ekspor Impor Kepabeanan dan Pelabuhan
3. Pedoman Praktis Customs Exim dan Letter of Credit
4. Ekspor Impor, Shipping and Customs Procedure
5. Many more….

— OUR SERVICES

Operations Series

1. Production Planning and Inventory Management
2. Inventory Warehouse
3. Legal Aspect of Employment
4. Best Practice Logistics and Supply Chain
5. Lean Manufacturing
6. Practical Warehouse Management
7. Quality Management System
8. Effective Stock Control & Warehouse Operation
9. Managing Low Cost Operation of Warehouse & Distribution Center
10. Training GMP - Good Manufacturing Practice
11. Objective Training Best Practice Supply Chain Management
12. Effective Warehouse Management
13. Best Practice Logistics and Transportation Management

— OUR SERVICES

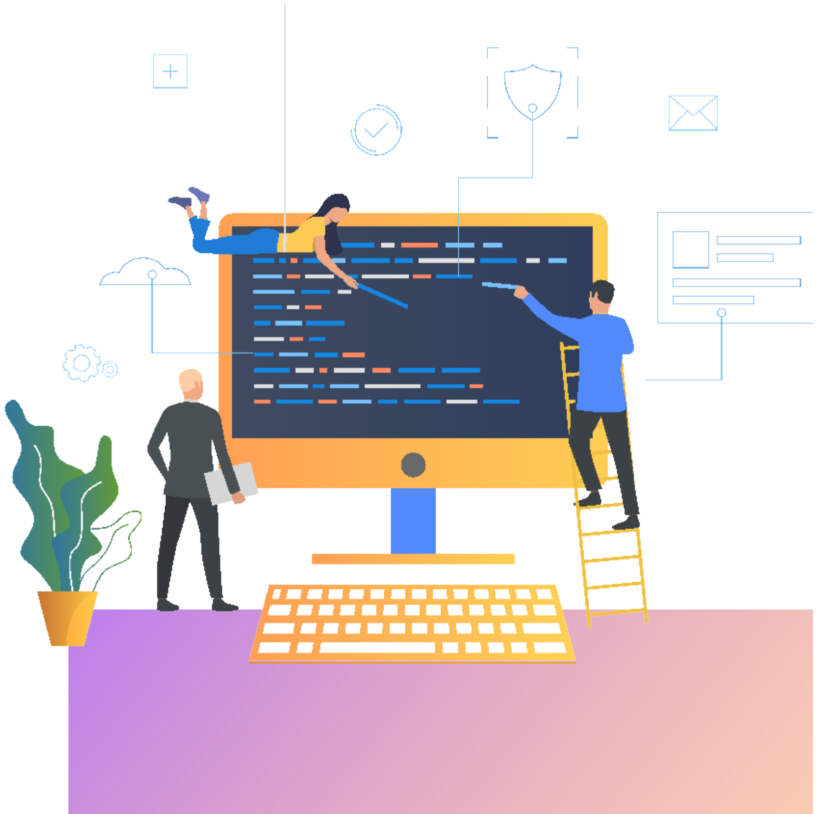
Management Series

1. Advance Secretary
2. General Affairs Development Program
3. Root cause Analysis
4. Industrial Relation
5. Project Planning and Controlling
6. Project Management
7. Managing office and filling system
8. Key Performance Indicator with Balanced Scorecard
9. SWOT Analysis
10. Legal Drafting of Contract
11. Outsourcing Management and Evaluation
12. Standard Operating Procedures (SOP)
13. Balanced Scorecard
14. Service Level Agreement
15. Conflict Management for Managers
16. Strategic Business Analyst

— OUR SERVICES

IT (Information & Technology)

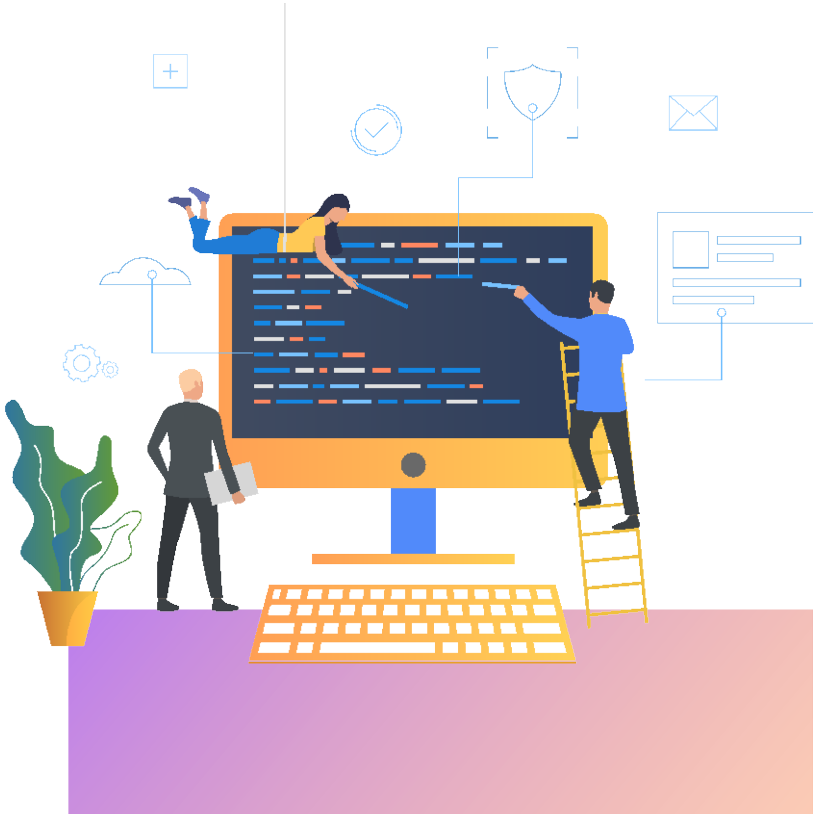
1. IT Audit
2. Modelling your Business Process with BPMN 2.0: Step by Step
3. Business Analysis (IT)-CBAP
4. Data Center
5. Information System Security Audit
6. Business Continuity Plan (BCP)
7. IT Service Management (ITIL)
8. ISO 27000
9. And many more…



— OUR SERVICES

HSE / PJK3

1. Safety Riding and Safety Driving (Defensive Riding and Driving)
2. Ahli K3 Umum
3. Petugas P3K
4. Hiperkes Paramedis
5. Supervisor Scaffolding
6. Ahli Muda K3 Konstruksi
7. TKPK 1
8. Pelatihan Kebakaran ABCD
9. Teknisi K3 Listrik
10. Auditor SMK3
11. Operator Forklift
12. Operator Crane
13. Pelatihan K3 Kimia
14. And many more….



INTERACTIVE ONLINE LEARNING

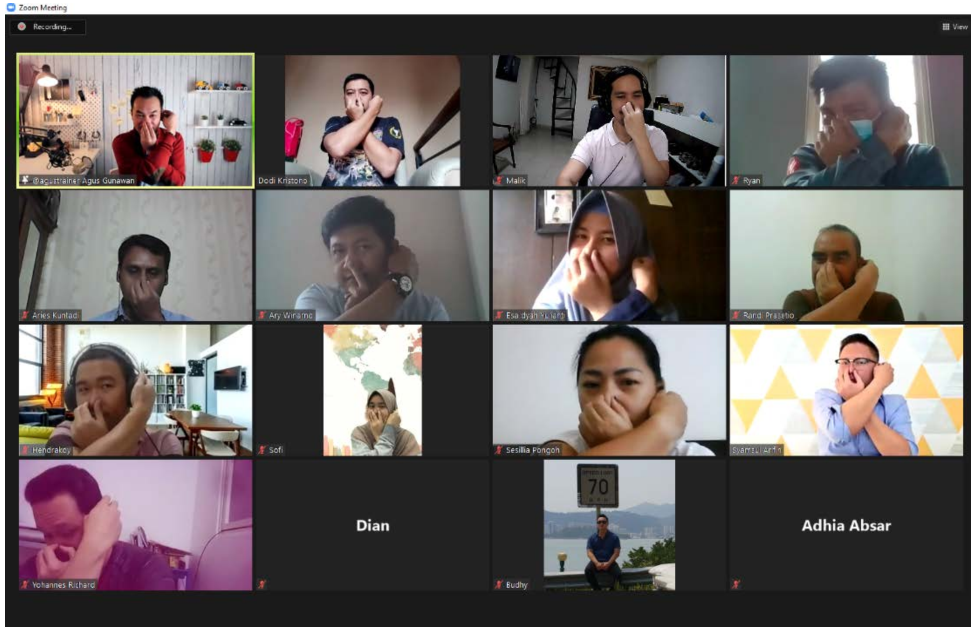
ZOOM Training

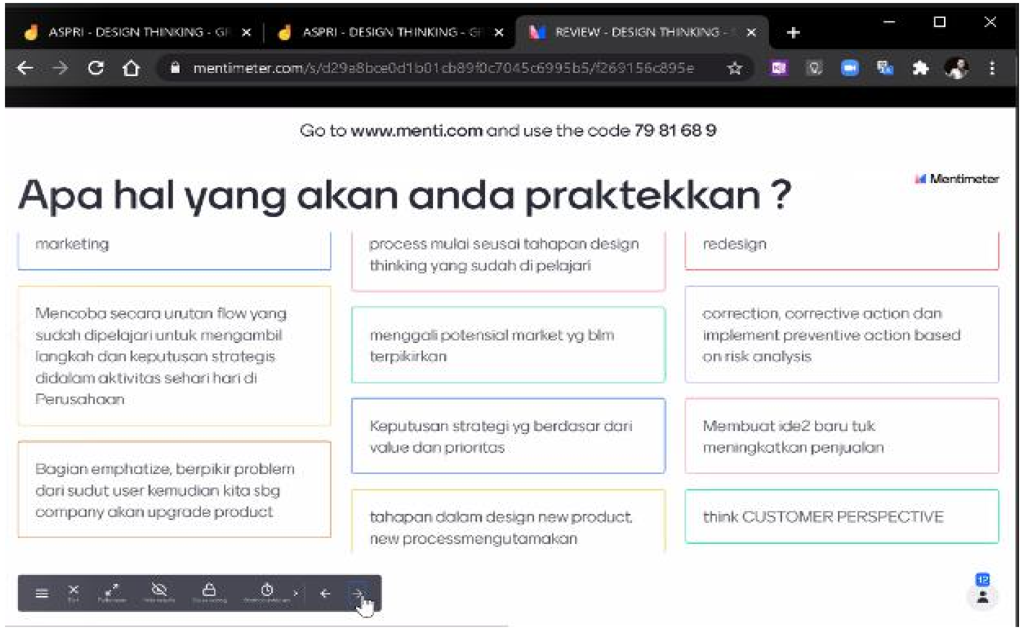
- Our training is interactive training where participants will be asked to actively participate in discussions and group work.
- Our training duration is 4 hours/day
- Each of our interactive online learning includes certificates and it's own module

OUR SERVICES

INTERACTIVE ONLINE LEARNING

ZOOM Training

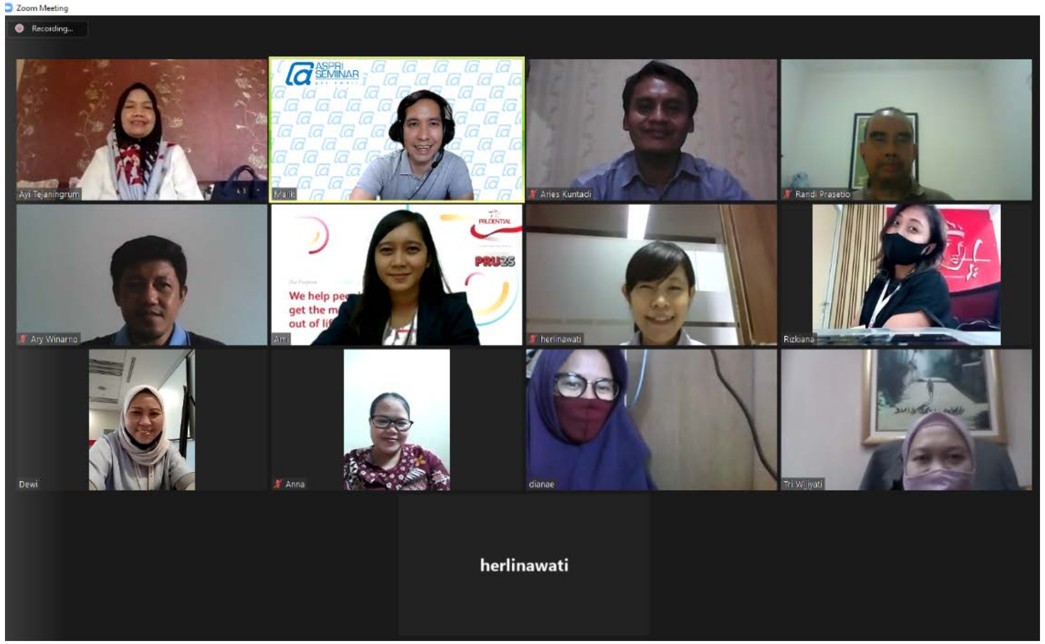


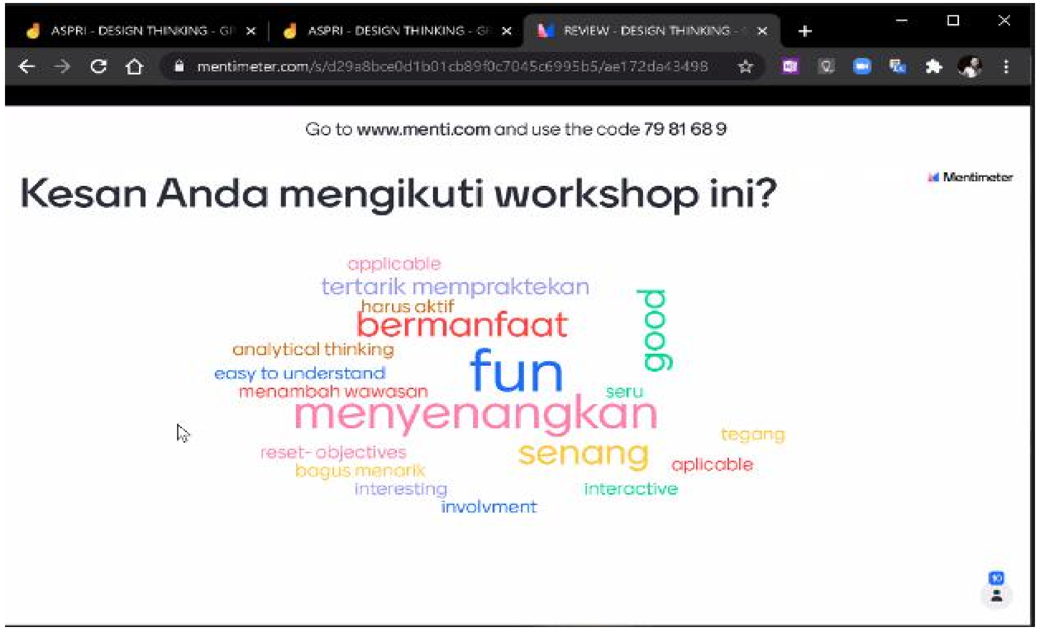


— OUR SERVICES

INTERACTIVE ONLINE LEARNING

ZOOM Training





Assessment

One of the causes of failure in Human Resource Management (HR) in many organizations is that management often places people in positions that are not in accordance with their potential and capacity. This placement error stems from an improper assessment of the person who will be placed in a certain position.

Because there has been no practical tool nor method for measuring individual potential and capacity capable of showing representative, and reliable assessment results to be used as a basis for making the necessary strategic decisions.

Our assessment method is a numerical test model for individual potential and competence. Combining aspects of psychology and Human Resources, which is more accurate than the conventional model.

— OUR SERVICES

Assessment

WHY US?

Develop company standards for individual performance appraisal through focus group discussions.

Conduct individual potential tests of prospective employees and company employees.

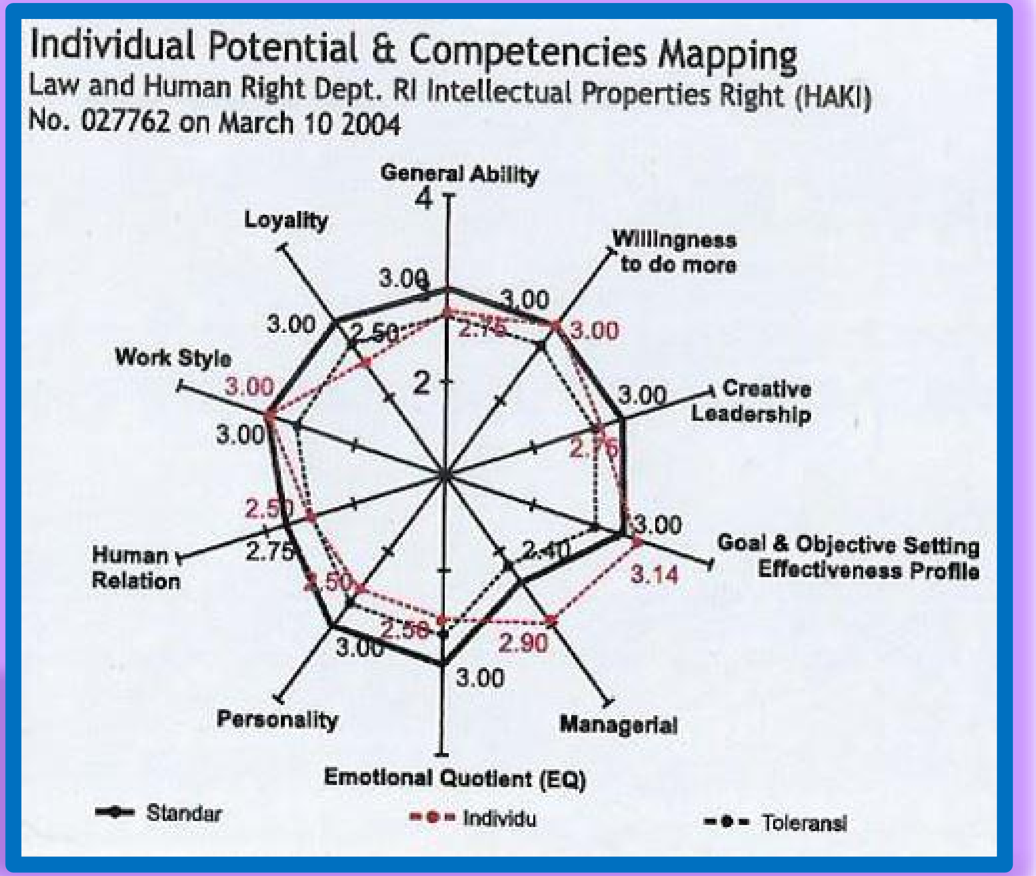
Mapping individual potential and Report the results of individual potential mapping.

Assess and interpret individual potency test results.

— OUR SERVICES

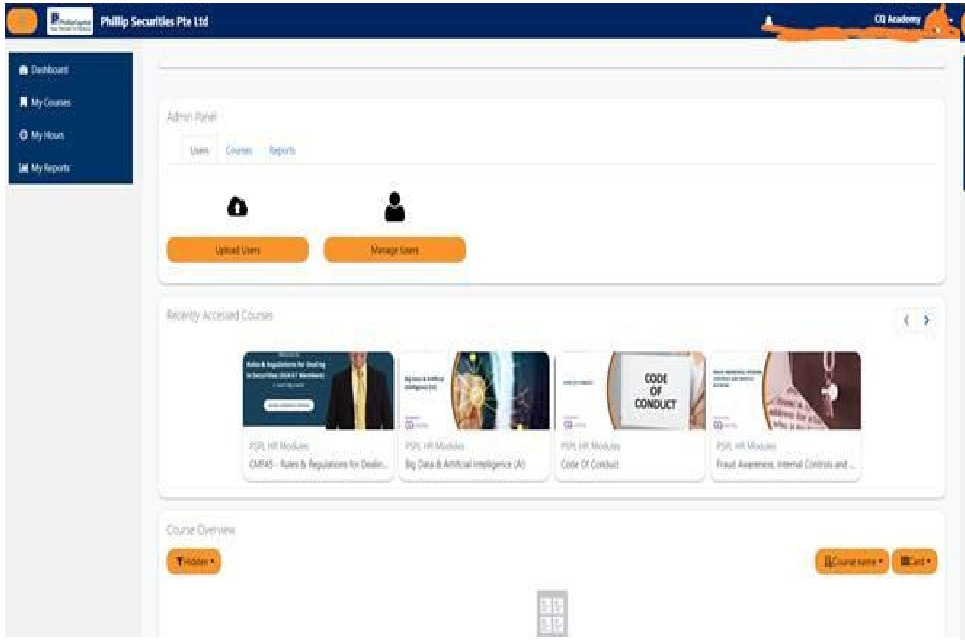
Assessment

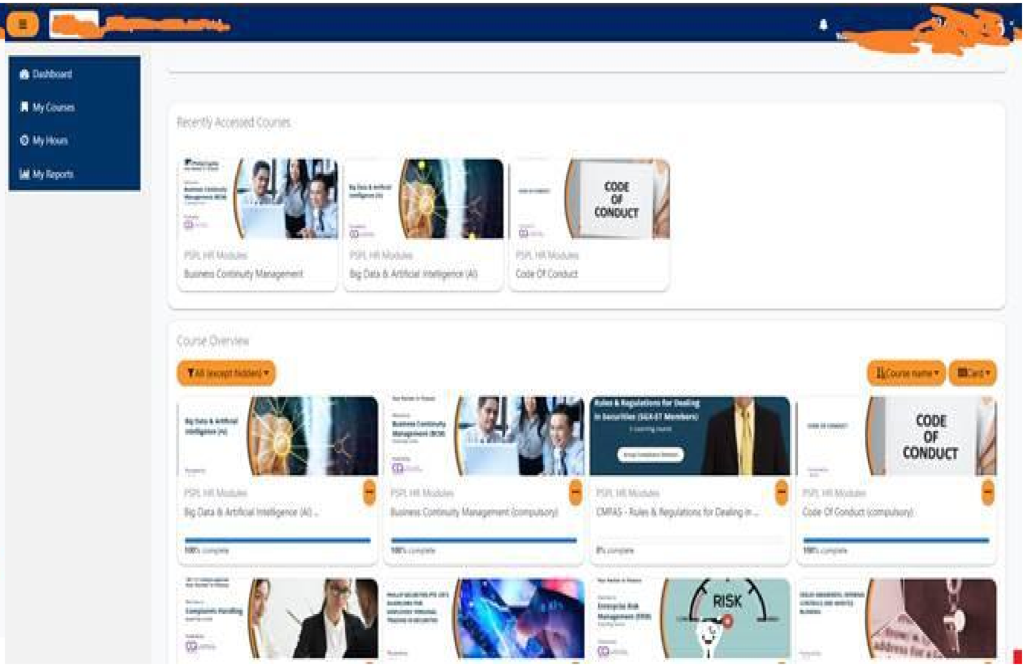
With the "Dynamic Personal Spider Plot" (DPSP) method. This will be able to be assessed dynamically. Because the assessment is carried out by superiors, colleagues and subordinates in a 360 degree manner. The end result can be the number of competencies that one individual has.



— OUR SERVICES

Learning Management System



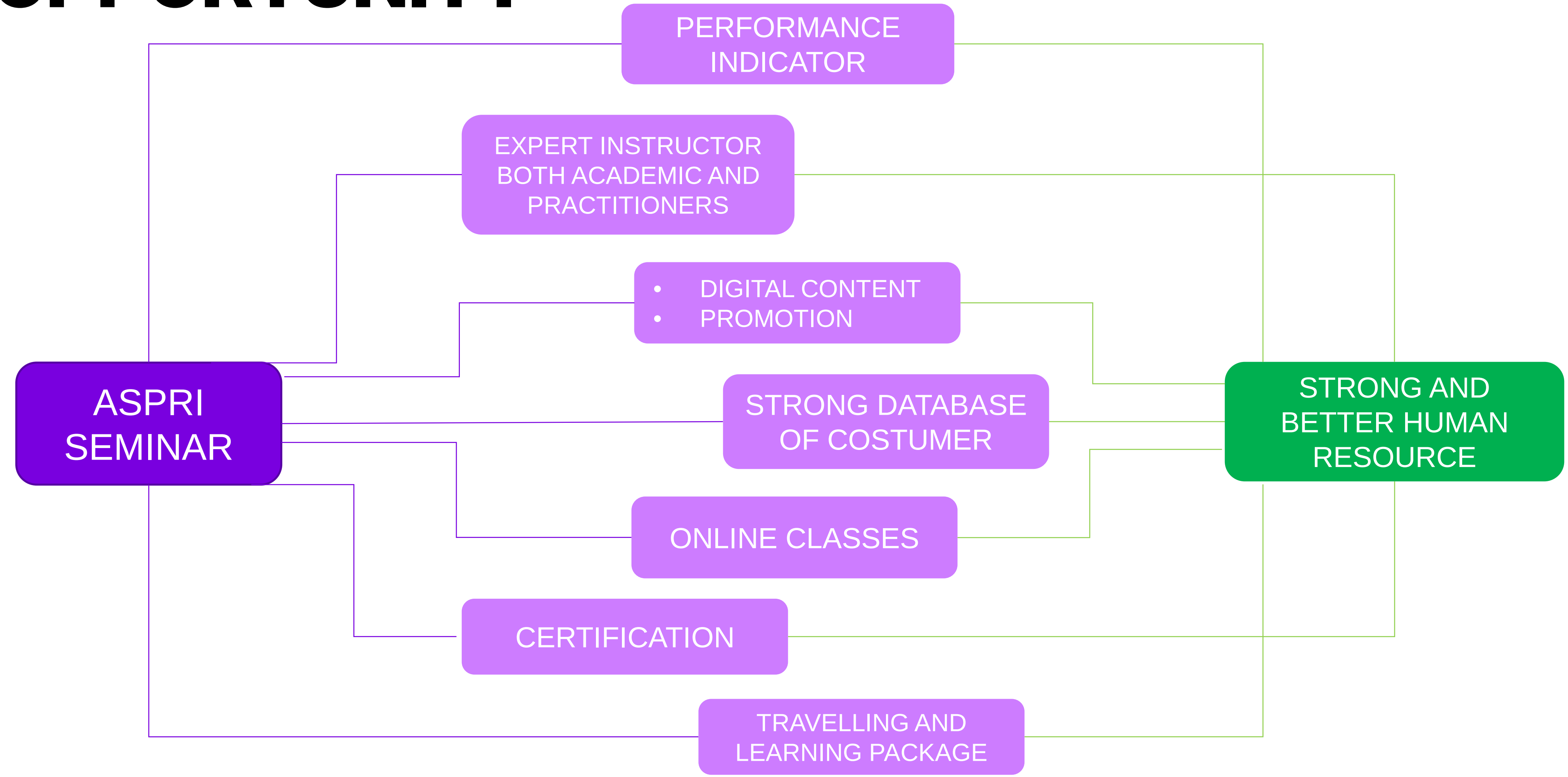


PAST EVENTS

- Bahagia Produktif Purna Bakti, September 2019 diikuti oleh 50 peserta dari Sekolah JIS Jakarta
- Financial Statement Analysis, Agustus 2019 diikuti oleh 25 peserta dari PT Traveloka
- Distribution center, Juni 2019 diikuti oleh 25 peserta dari PT TAP Agri
- Collection and Receivable Management, Feb 2019 diikuti oleh 25 peserta dari PT Sinta Prima
- Business Communication Skill, Jan 2019 diikuti oleh 35 peserta dari Yayasan Alhamidiyah
- Modelling your Business Process with BPNM, Des 2018 diikuti oleh 30 Peserta dari kementrian Pariwisata
- Pelatihan Teknik Menulis, Nov 2018 di ikuti oleh 30 peserta dari Kementrian Pertahanan
- Pelatihan Key Performance Indicator, Okt 2018 diikuti oleh 30 peserta dari Kementrian Pertahanan
- Pelatihan Talent Management, Sep 2018 diikuti oleh 30 peserta dari Mabes Polri
- Pelatihan Certified Business Analyst , Aug 2020 diikuti oleh 15 peserta dari Mitra Mandiri Informatika
- Pelatihan Document Control Filling System, Sep 2020 diikuti oleh 25 peserta dari Widatra

— OUR SERVICES

OPPORTUNITY



— OUR SERVICES

Services

- Public Training Online and Offline
- In-house Training
- Assessment
- Talent Management
- Event Management

ASPRINET INDO TRAINING

CONTACT

BUSINESS

Business, Administrative & Contact Information

Business name: PT Asprinet Indo Training

Business type: Training Provider, Event Organizer

Tel: 021-7191612

HP: 0811-992866

E-mail:

malikms@cbn.net.id

information@aspriseminar.com

Website: www.aspriseminar.com

Physical address: Jl. Bank 4 No: 3 Pela Mampang, Mampang Prapatan Jaksel 12720

Banking details:

Bank:

Bank Permata

Branch:

Bank Permata Cabang Wisma Surya, Kemang

Account number:

701866568

Account name:

PT Asprinet Indo Training

CORPORATE PROFILE

—THE END

THANK YOU