

Industries in 2021: a slow, painful recovery

A report by The Economist Intelligence Unit



The world leader in global business intelligence

The Economist Intelligence Unit (The EIU) is the research and analysis division of The Economist Group, the sister company to The Economist newspaper. Created in 1946, we have over 70 years' experience in helping businesses, financial firms and governments to understand how the world is changing and how that creates opportunities to be seized and risks to be managed.

Given that many of the issues facing the world have an international (if not global) dimension, The EIU is ideally positioned to be commentator, interpreter and forecaster on the phenomenon of globalisation as it gathers pace and impact.

EIU subscription services

The world's leading organisations rely on our subscription services for data, analysis and forecasts to keep them informed about what is happening around the world. We specialise in:

- **Country Analysis:** Access to regular, detailed country-specific economic and political forecasts, as well as assessments of the business and regulatory environments in different markets.
- **Risk Analysis:** Our risk services identify actual and potential threats around the world and help our clients understand the implications for their organisations.
- **Industry Analysis:** Five year forecasts, analysis of key themes and news analysis for six key industries in 60 major economies. These forecasts are based on the latest data and in-depth analysis of industry trends.

EIU Consulting

EIU Consulting is a bespoke service designed to provide solutions specific to our customers' needs. We specialise in these key sectors:

- Healthcare: Together with our two specialised consultancies, Bazian and Clearstate, The EIU helps healthcare organisations build and maintain successful and sustainable businesses across the healthcare ecosystem. Find out more at: eiu.com/healthcare
- Public Policy: Trusted by the sector's most influential stakeholders, our global public policy practice provides evidence-based research for policy-makers and stakeholders seeking clear and measurable outcomes. Find out more at: eiu.com/publicpolicy

The Economist Corporate Network

The Economist Corporate Network (ECN) is The Economist Group's advisory service for organisational leaders seeking to better understand the economic and business environments of global markets. Delivering independent, thought-provoking content, ECN provides clients with the knowledge, insight, and interaction that support better-informed strategies and decisions.

The Network is part of The Economist Intelligence Unit and is led by experts with in-depth understanding of the geographies and markets they oversee. The Network's membership-based operations cover Asia-Pacific, the Middle East, and Africa. Through a distinctive blend of interactive conferences, specially designed events, C-suite discussions, member briefings, and high-calibre research, The Economist Corporate Network delivers a range of macro (global, regional, national, and territorial) as well as industry-focused analysis on prevailing conditions and forecast trends.

Contents

1

Overview: industries in 2021	2
The global economy in 2021	4
Automotive in 2021: clean mobility	5
What to watch for in automotive in 2021	8
2021 calendar	9
Consumer goods and retail in 2021: the shift online	11
What to watch for in retailing in 2021	14
2021 calendar	15
Energy in 2021: the green recovery	17
What to watch for in energy in 2021	20
2021 calendar	21
Finance in 2021: a rocky recovery	23
What to watch for in finance in 2021	26
2021 calendar	27
Healthcare in 2021: in the eye of the storm	29
What to watch for in healthcare in 2021	32
2021 calendar	33
Telecoms in 2021: the tech wars	35
What to watch for in telecoms in 2021	39
2021 calendar	40

Overview: industries in 2021

ach year The Economist Intelligence Unit publishes an annual report giving its outlook for six global industries: automotive, consumer goods and retail, energy, financial services, healthcare and pharmaceuticals, and telecommunications. Much of what we predicted in **last year's report** turned out to be wrong. As we all know, the coronavirus (Covid-19) pandemic overturned assumptions about the development of the global economy and destroyed any hope of steady growth for many industries.

This year more uncertainties and risks lie ahead as the world stutters into a recovery (see box on page 4). One imminent risk is the US presidential election on November 3rd, which may result in policy changes if the Democratic Party candidate, Joe Biden, wins—and yet more uncertainty is likely in the event of a disputed result. Yet, underlying this political and economic volatility are trends that have remained consistent, or have even been amplified by the pandemic. While these trends will vary from industry to industry, this year's report highlights at least four that are already reshaping the global economy and the industries that we cover.

Job losses and bankruptcies will mount

With their finances already weakened by the pandemic and resulting lockdowns, many companies will not be able to take advantage of a recovery that is likely to be fitful. The **consumer goods and retail sector** in particular is likely to see a wave of bankruptcies and store closures as more business goes online. The **financial sector** will also have to cope with a sharp rise in non-performing loans that, in some cases, may overwhelm the provisions that banks have put in place.

Restructuring will reshape even those industries, such as **telecoms**, which have emerged from the pandemic relatively unscathed. However, there will be some winners from this process as markets consolidate around surviving companies and opportunities open up for new business models.

Some governments will aim to support a green recovery

With many industries lobbying for support, governments whose tax revenues are already depleted will have to focus support and incentives on sectors with the strongest growth prospects, or those that feed into long-term policy goals. These are likely to include protecting jobs, promoting investment (particularly in innovation) and tackling climate change.

In the **energy sector,** policy will focus on increasing the use of renewable energy. Even Poland, previously a staunch defender of its coal sector, will begin a phase-out, while markets in South-East Asia will see particularly strong growth in renewables. In the **automotive sector**, generous incentives will continue to encourage purchases of electric vehicles, particularly in Europe, although countries such as France will start to trim back funding as the sector develops. China, meanwhile, will shift its focus towards hydrogen fuel cell vehicles, previously an area where Japan led the way.

Trade spats and international disputes will remain disruptive

As countries and companies try to rebuild, their focus is likely to turn inwards, with domestic markets and operations becoming a priority. However, as pressure to reshore production and secure supply chains increases, this will have implications at an international level, too. The US-China conflict, which overshadowed the pre-pandemic world, will continue regardless of the outcome of November's

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

presidential election in the US. However, as we predicted last year, its focus has turned from tariffs to technology.

In the telecoms sector, this has particular implications for Huawei, a Chinese telecoms company that is now being targeted by US export controls. The technology war will also affect other sectors, including automotive and consumer electronics, while in the **financial services sector** concerns over China's intentions could undermine Hong Kong's role as an international hub. The UK, meanwhile, will face its own international challenges, as Brexit finally takes full effect on January 1st, drastically changing the business environment for financial firms, automakers and many others.

Digitalisation will offer the biggest opportunities

The final trend covered by this report, digitalisation, will affect nearly every industry sector. In the **consumer goods and retail** sector (and even the automotive sector) the growth of online shopping will generate new companies and new jobs, making up for some of the cuts seen in real-world retailing. However, online retailers will not have it all their own way, with cash-strapped governments keen to raise digital taxes that are likely to exacerbate international tensions.

The rise in online shopping and other activity will also fuel the growth of new **financial services**, starting with digital payments and progressing into digital currencies, including national ones in China and elsewhere. Even **healthcare** providers, spurred by the pandemic and social distancing measures, are expanding their online services, with new regulations widening access to telehealth—while at the same time reining back its use where it could affect patient care.

The implications for growth

As they navigate these four trends and others pinpointed by this report, companies will be focused on the search for sales growth to aid their recovery. We expect all six industries to report demand growth at a global level, at least compared with a disastrous 2020, but it will be unevenly spread. In some industries—particularly the automotive, retail and energy sectors—it will not be enough to make up for 2020's slump in any but the fastest-growing markets, one of which will be China. In those sectors that were hit less hard in 2020, such as telecoms and healthcare, the recovery in 2021 will be more complete. However, companies will still need to navigate considerable changes in business models, economic conditions and consumer needs.

Our key global forecasts for the six industries covered by this report are:

- Asia will be the first region to rebound to 2019 levels in most industries, given its relatively shallow slump in 2020;
- Latin America and Africa will see the slowest recovery, held back by low commodity prices and high debt levels;
- new-car sales will recover to grow by 15% globally, while commercial vehicle sales will rise by 16%, but only China, Ukraine and Turkey will see sales return to their 2019 levels;
- global retail sales volumes will grow by 3% but still fall 2% short of 2019 levels;
- energy consumption will rebound partially—by 2.6% worldwide—but demand for oil and coal will remain lower than in 2019 as the use of renewables surges ahead;

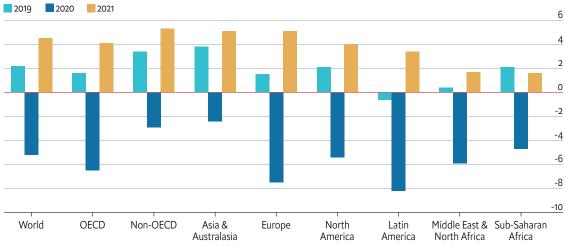
A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

- financial firms will face weak demand for their services amid mounting debt defaults, while their income will be hurt by low interest rates;
- healthcare expenditure, which dipped in 2020 despite spending on the pandemic, will surpass 2019 levels, rising by 7% worldwide in US dollar terms; and
- global mobile subscriptions, which also dipped in 2020, will increase by 3%, again surpassing 2019 levels.

As these decidedly mixed forecasts demonstrate, there will be nothing straightforward about the global economic and business recovery in 2021. Even if the coronavirus is brought under control, many companies will face challenges that they will not be able to meet. Nevertheless, there will also be opportunities on offer for companies that are nimble enough to take advantage of rapid changes in the economic, business and political environment.

Asia ahead, after a shallow slump

(real GDP growth; % at market exchange rates)



Source: The Economist Intelligence Unit.

The global economy in 2021

In 2021 global GDP will increase by 4.5% in real terms, the fastest growth recorded since 1988. However, given the 5.2% contraction expected for 2020, next year's growth will not be enough to return the global economy to pre-coronavirus levels. Indeed, we do not expect a full recovery before at least 2022, meaning that 2020 and 2021 will be lost years for growth.

Asian countries will be the fastest to recover, with some (including China) regaining their 2019 levels as early as 2021. Major economies will broadly recover in 2022. Emerging markets will have to wait until 2024.

This scenario rests on the assumption that

the worst of the pandemic will be felt this year, and that people develop some immunity to the virus after infection. There will be no return to normalcy until a safe and effective vaccine is rolled out, which we do not expect before end-2021. As a result, local outbreaks and lockdowns are to be expected in 2021, putting most countries under severe economic, fiscal and social strain.

The likeliest long-term scenario for advanced economies is one of low growth, low inflation and high levels of debt, as is already the case in Japan. Amid the pandemic-fuelled debt pile-up, the outlook for emerging markets is gloomier. Many will have no choice but to restructure debt in the medium term.

4

Automotive in 2021: clean mobility

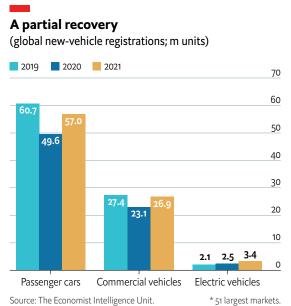
Key forecasts:

- After a disastrous 2020, sales of new passenger cars will rise by 15% in 2021, while those of commercial vehicles (CVs) will increase by 16%. Even so, only four countries—China, Turkey, Taiwan and Ukraine—will see annual sales return to 2019 levels.
- The Covid-19 pandemic will force vehicle makers to review their supply chains, production plans and sales operations. Additional risks in 2021 include renewed quarantines, an escalation of the US-China trade war and Brexit.
- The global market for new electric vehicles (EVs) will expand from a predicted 2.5m units in 2020 to 3.4m units in 2021, supported by government incentives, more stringent emissions legislation and new models.

Pace of the recovery

Double-digit growth in global new-vehicle sales is almost inevitable in 2021, but only because of the depth of 2020's decline. In most of the 51 countries covered by our forecast, including the US, Germany and Japan, the pace of the recovery will be strong—but not strong enough to make up for the slump caused by the coronavirus pandemic. Only four countries—China, Turkey, Taiwan and Ukraine—will surpass 2019's annual sales, and in most cases this will be partly because their vehicle markets were already in decline before the pandemic, leaving them with a lower base to rebound from.

Low interest rates and attractive financing deals will fuel some of the rebound in China and other major markets. Government-led infrastructure spending will also buoy sales of new CVs, which will



outpace those of cars. Nevertheless, the most promising growth market will be that for EVs, aided by government incentives, the enforcement of stricter emissions targets and the launch of new EV models. We expect global EV sales to increase by 37% in 2021, to 3.4m units, although they will account for just 4% of global car sales. Sales of diesel vehicles will slump further, with governments desperate for revenue likely to raise fuel and emissions taxes further.

With most model launches focused on EVs, competition for market share will be fierce.

Vehicle makers will also face new fines and costs:
EU emissions targets will take full effect in January, unless automakers' pleas for leniency succeed.

Although China has delayed enforcement of its

new emissions standards, its targets for sales of new-energy vehicles will rise further. Automakers face additional risks from renewed quarantines, Brexit and the continuation of the US-China trade war.

Four key trends for 2021

Restructuring and bankruptcies will reshape the industry

Automakers will accelerate their consolidation and restructuring plans in 2021 in a bid to repair their severely damaged finances. Several plants will close: in January, Marelli, an auto-parts maker that emerged last year from the merger of Calsonic Kansei (Japan) and US-Italian Magneti Marelli, will stop production at an automotive-lighting plant in Michigan. In July Honda (Japan) will close its Swindon plant in the UK, formerly the company's only EU car factory. At about the same time Nissan (also Japan) will close a large facility in Barcelona, which primarily makes electric vans and pick-ups. Suppliers for these plants and others will suffer, with bankruptcies multiplying.

Consolidation will gather pace among global automakers, including the mega-merger of Fiat Chrysler Automobiles (FCA) and Groupe PSA, which will create Stellantis. Although the two will have to tread carefully, their merger is likely to result in the restructuring of their operations, particularly in Europe. PSA's UK plants are especially vulnerable, given the challenges of Brexit, which also threaten Japanese and even British-owned operations in the country. Asia will see less restructuring, but also less investment, with many companies putting expansion plans on hold and global automakers withdrawing from their weakest markets. Those that are strong in China will fare best, although they will remain wary of international expansion.

Government incentives will support EV sales, particularly in Europe

In the EV market, dynamics are likely to be different, with Europe's market outpacing that of China. This will push up the EU's share of the global EV market from 22% in 2019 to 31% in 2021, while China's share will drop from 52% to 45%. The main reason will be the generous incentives and subsidies on offer in the EU in 2021 as governments try to fuel a green recovery.

In Germany, EV buyers will get up to €9,000 (US\$9,500) towards their car in 2021, benefiting BMW and Volkswagen, as well as Tesla, which will start production at its Berlin Gigafactory next year. However, France will limit its EV incentives to €6,000 from 2021, affecting the market leader, Renault, while Italy has not yet decided whether to extend its increased incentives, which expire by end-2020.

In China, EV subsidies are slowly being cut, particularly for more expensive cars, while delays to emission standards will reduce the pressure on automakers. The subsidy caps have already forced Tesla to reduce its car prices to qualify, with knock-on effects for its cheaper Chinese competitors. EV subsidies also remain low in the US compared with those on offer in the EU and China, although the US election may change that if Joe Biden, the Democratic contender, wins. Mr Biden plans to restore full tax credits and provide an additional rebate on EV purchases, which could support EV sales—and domestic rivals Tesla and General Motors—in 2021.

China's role in automotive supply chains will remain controversial

Regardless of who wins the election, the rivalry between the US and China will continue to cast a shadow over the automotive industry in 2021. Both the current president, Donald Trump, and Mr Biden are prepared to impose heavy tariffs on auto parts imported from China—increasing input

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

costs for US-based automakers—in order to encourage them to source supplies closer to home. This time, however, the US and China will battle not just over tariffs but also over technology, including the high-tech components vital for the development of EVs and autonomous vehicles. Sanctions and investment restrictions may even force third-party countries to choose between the two rivals.

The US will not be alone in raising barriers against China. Australia, which is a major market for Chinese car exports, will also be managing an increasingly bitter trade spat. Rising tensions between India and China could affect Chinese automakers such as SAIC Motors, which have previously been keen to enter or expand in the Indian market, as well as Indian automakers reliant on Chinese auto parts. Meanwhile, Brexit is likely to roil the UK automotive industry, regardless of whether a deal is struck, with the EU unlikely to grant zero-tariff access for UK-made cars with too many foreign components.

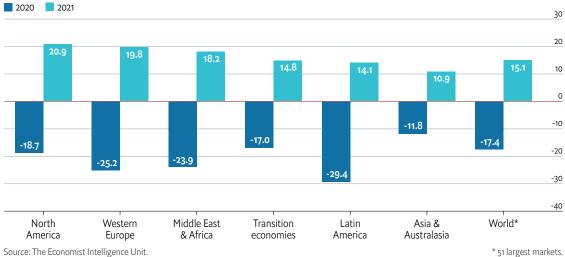
Digitalisation will offer new ways to buy cars

With motorists likely to remain wary of visiting dealerships in 2021, car companies and dealers will make it more convenient to purchase vehicles from home. Although the process began in 2020, after Covid-19 hit the sector, it will gather pace next year. We forecast that the share of online sales in the overall newcar market will rise to 10% in 2021, up from a pre-pandemic estimate of 5%.

Digitalisation will take several forms. Automakers will increasingly see online sales via their own websites as a way to regain control over pricing and over their relationship with their customers. Volkswagen, for example, will sell its ID.3 electric car at a uniform price in Germany, regardless of whether it is bought online or from a dealership. Dealers will fight back either by focusing on customer service or by building up their own online presence. In January 2021 the consumer-finance arm of Banco Santander, a Spanish bank, plans to launch an online marketplace for cars in the UK. About 100 dealers partnering with Santander have signed up to sell cars on the platform and will have to pay a fee only when a vehicle is sold.

Clawing their way back

(new-vehicle sales; % change year on year)



A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

Meanwhile, online car supermarkets or marketplaces offering multiple brands will vie for business. All will struggle with similar problems: how to ensure that buyers engage with their brand, how to arrange test drives and how to win the sale in a year that could prove difficult for the automotive sector—if not as difficult as 2020.

What to watch for in automotive in 2021:

Chinese EV makers in Europe

Several Chinese companies plan to enter Europe's EV market in 2021. BYD, a Chinese EV maker that already supplies buses to several European countries, is heading for Norway in January. Nio, a luxury EV maker, will move in during the second half of 2021 as part of a push that will see it expand globally by 2024. BYTON also plans to launch its first car, an electric sports utility vehicle called M-Byte, in several European countries, including Switzerland, Germany, Norway, France, Netherlands and Sweden, by the year-end. These firms will all face competition from Tesla as it opens its new German plant.

China's bet on hydrogen fuel-cell vehicles

After years of focusing on conventional EVs, China is now turning its attention to hydrogen fuel-cell vehicles (FCVs), previously seen as a Japanese-led technology. China's new FCV policy, rolled out in September 2020, aims to put 1m FCVs onto the country's roads by 2030. Unlike for EVs, there will

be no blanket subsidies. Instead, the government will give subsidies to a few selected cities if they meet the set sales targets. Domestic players including SAIC and BAIC are expected to benefit, as are foreign rivals such as Toyota (Japan) and Hyundai (South Korea). Great Wall Motors (China) plans to launch its first FCV in 2021.

Investment in EV battery recycling

As the demand for EVs soars in 2021, the need for battery recycling will increase. Several battery companies and EV makers, including Tesla,
Northvolt (Sweden), American Battery Metals
(US) and Umicore (Belgium), plan to launch or expand their battery-recycling operations.
Northvolt will start battery recycling in Norway in 2021 via its newly formed venture, Hydro Volt.
It will also establish a giga-scale lithium-battery recycling plant in Sweden and may push ahead with a joint venture announced in 2019 with Volkswagen, whose sister company, Audi, was planning a similar venture with Umicore. American Battery, meanwhile, aims to open a lithium-battery recycling plant in Nevada by March 2021.

2021 calendar

January

1: EU CO2 emission standards take full effect

1: China's new-energy vehicle quota rises to 14% of total production

11-14: International Consumer Electronics Show (CES 2021), Las Vegas, US

15-24: European Motor Show, Brussels, Belgium

February

3: Volvo Group reports 2020 results

9-11: National Automobile Dealers Association Virtual Show

12-14: Osaka Auto Messe, Japan

12-21: Canadian International Auto Show, Toronto, Canada

13-21: Chicago Auto Show, US

18: Daimler reports 2020 results

18-28: Indonesia International Motor Show, Jakarta, Indonesia

19: Groupe Renault reports 2020 results

Ford, General Motors, Fiat Chrysler report 2020 results^a

March

22-April 4: The 42nd Bangkok International Motor Show, Thailand

26-April 4: The Washington Auto Show, Washington DC, US

April

1-11: Seoul Motor Show, South Korea

2-12: New York International Auto Show, US

13-15: Commercial Vehicle Show, Birmingham, UK

21-28: Auto China 2021, Shanghai, China

28-30: International Vienna Motor Symposium, Austria

May

6-16: Salón Internacional del Automóvil, Barcelona, Spain

21-31: Los Angeles Auto Show, US

25-26: TU Automotive '21, Detroit, US

Toyota reports 2020 results^a

July

16-18: The London Motor Show, UK

Honda to shutter Swindon plant in the UK^a

Tesla to begin manufacturing at Berlin, Germany^a

China 6 emissions standards for new heavy-duty vehicles take effect^a

August

19-22: British Motor Show, Farnborough, UK

23-26: MIMS Automechanika, Moscow, Russia

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

September

14-16: Electric and Hybrid Vehicle Technology Expo, Michigan, US

7-12: IAA International Motor Show, Munich, Germany

28 - October 9: North American International Auto Show, Detroit, US

28-30: North American Commercial Vehicle Show, Georgia, US

October

1: Dubai Expo opens, Dubai, UAE

November

9-13: Dubai International Motor Show

December

Nissan to close plant in Barcelona, Spain^a

^a precise date to be confirmed

Consumer goods and retail in 2021: the shift online

Key forecasts:

- Global retail sales volumes will grow by 3% but still fall 2% short of 2019 levels.
- Asia will be the only region to see 2021 consumer spending exceed pre-pandemic levels, gaining even more importance as a consumer market.
- Online retail will increase its share of total retail sales but face headwinds in the form of regulatory scrutiny, taxes and cyber threats.

Pace of the recovery

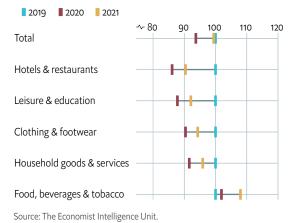
Uncertainties will plague the consumer and retail industry in 2021. After a 4.3% decline in 2020, we forecast a 3% rise in global retail volumes. However, volumes will trail behind 2019 levels, reflecting high unemployment and insecure incomes. Consumer confidence will remain subdued. We forecast that consumer spending will recover the fastest in Asia in US dollar terms (growing by 6.6% year on year in 2021) and exceed estimates for 2019. Western Europe and North America will have to wait another year.

Overall, food and essential retailers will continue to outperform non-food retailing in 2021. We forecast that the share of food in total retail sales will increase from 47% in 2019 to over 50% in 2021. In developing countries, such as Saudi Arabia and India, organised retailers will continue to seize market share from informal retailers, even as overall retail sales remain sluggish.

However, there will be divergences between real-world trends and those seen online. Globally, we do not expect footfall around real-world stores to return to 2019 levels in 2021. This bodes well for online retail, but will prolong the pain for shopping malls, food-service companies, cinemas, department stores and other non-essential retailers. Superstores (hypermarkets and big-box stores) will flourish where malls flounder. By drawing in a steady flow of customers shopping for staples, these

Food fuels spending

(global consumer spending; US\$ m; 2019=100)



retailers will also expand their market share in non-essential categories, such as electronics.

Price and convenience will remain key considerations for consumers. Competitive, one-stop-shopping destinations, including online marketplaces (such as Tmall, Shopee and Amazon) and real-world superstores (such as Walmart, Costco and Carrefour), will do well. However, price competition will hurt bottom lines, even for some essential retailers, which have otherwise seen sales surge during the pandemic. Any new lockdowns or heightened geopolitical tensions would also disrupt complex supply chains, especially in food and electronics, leading to price volatility and profitability pressures.

Job losses and bankruptcies will mount

Retail bankruptcies, which accelerated in 2020, will spill over into 2021. We expect a fresh wave of companies to close early in the year as the extent of the damage waged by the Covid-19 pandemic and the limitations of the recovery become clearer. The US retail market is likely to see more Chapter 7 filings (liquidation), as the prolonged downturn will leave many companies unable to come up with a reorganisation plan or the funds needed for a Chapter 11 filing (allowing restructuring).

Department stores, which were struggling even before the pandemic, will be particularly vulnerable. Some that emerged from bankruptcy in 2020 (such as JC Penney in the US or Galeria Karstadt Kaufhof in Germany) now risk turning into zombie companies as consumers cut back on non-essential spending. Location will matter, too. In countries such as the UK and US, where remote working remains popular, stores, pubs and restaurants in city centres will suffer.

Some of the resulting job losses will be replaced by new jobs in warehousing and delivery services as online business expands. For example, according to the US Bureau of Labour Statistics, retail employment fell by 1% in the US in 2019, while employment in the transportation and warehousing sector rose by 3.5%. However, the coronavirus outbreak will interrupt this trend. While e-retail penetration and jobs will increase, the slow recovery in demand means that rising employment in the sector will not make up for the loss of retail jobs.

Government support and incentives will be carefully targeted

Government support for consumer companies during the pandemic has come primarily in the form of loans, tax relief and rent relief in 2020, as well as the more general support offered to consumer incomes. While income support will wane, we expect many governments to extend some of the more targeted measures into 2021. Tourism-dependent countries, especially in Europe and Latin America, will likely continue tax reliefs for the food-service, hospitality and cultural sectors. For example, Bulgaria will charge a 9% tax on food served at restaurants and cafes throughout 2021, down from the usual 20%.

However, rent relief in particular could prove a double-edged sword if it undermines commercial real-estate companies and mall operators further. Moreover, some governments, after spending heavily on tax relief in 2020, will need to raise some taxes in 2021 to repair weak public finances. Middle-Eastern countries such as Kuwait are likely to introduce value-added tax (VAT) in 2021 to offset the loss of oil revenue. Others will increase taxes on specific products (such as alcohol, sugar and tobacco) so as not to dampen already weak consumer demand in healthier segments. Poland and Thailand, for example, plan to tax sugary drinks.

The slow recovery in tourism will dampen retail prospects

The outlook for international tourism remains closely tied to governments' ability to manage future outbreaks. Lockdowns and border closures will derail recovery in 2021, which at best will be modest. Developments in video-conferencing technology will hold back recovery in business travel, as companies focus on cost management. Domestic tourism will recover faster than international tourism.

The loss of tourism will haunt the retail sector, particularly the luxury goods sector. Even as domestic sales surge in China, with luxury retailers and duty-free stores embracing omnichannel strategies, the

rest of the world will reel from the loss of high-spending Chinese tourists who will be cautious about venturing abroad. The US-China trade war will add to uncertainties, disrupting supply chains and raising prices for some goods, particularly consumer electronics.

Digitalisation and online retail will offer new opportunities

Even as retail markets struggle to recover, online sales will increase their share in total sales. In many markets we expect food and groceries to account for the lion's share of online sales, a marked change from pre-Covid days. This will bode well for supermarkets, online marketplaces (such as Poland's Allegro and Vietnam's VinShop) and food delivery companies (such as Instacart in the US and GoJek in Indonesia) that connect sellers with online shoppers and ensure timely deliveries.

Mergers and acquisitions in online retail will increase as companies position themselves to benefit. In emerging markets, strong local players (such as Reliance in India) will look to buy out smaller rivals to offer strong competition against Western giants such as Amazon. Many e-commerce companies will seek partners in technology, analytics, delivery or payments to strengthen their offering or their customer base.

However, there will be headwinds. Online retailers will be susceptible to data theft and will need to invest in cybersecurity. Regulatory scrutiny will increase, especially for international e-commerce giants such as Amazon and Walmart. The EU will keep a particularly close eye on anti-competitive practices as governments debate ways to rescue bricks-and-mortar retailers.

Recovery ahead

(retail sales volumes; % change year on year)



What to watch for in retailing in 2021

E-commerce taxation in the EU

The EU will implement e-commerce VAT reforms in July 2021, after delaying them from 2020. The new rules will remove exemptions on low-value orders and make online marketplaces responsible for collecting and reporting VAT on cross-border transactions by third-party sellers. Amid a surge in online retailing, this will be good news for public finances. A single-window system will require companies to register as taxpayers with only one member state, making it easier for non-EU companies to expand in the region.

Adoption of contactless technology in physical stores

The 'Just Walk Out' technology that allowed consumers to pay automatically as they exited Amazon Go stores was revolutionary in the pre-pandemic era. However, in 2021 contactless

technology will become widespread, with 30 more Amazon-Go stores planned for the UK. Walmart has also started offering 'scan & go' facilities to members of Walmart+, its paid membership service. In China, Tencent and JD are also experimenting with checkout-less stores. Meanwhile, Amazon is making more strides: its Amazon One biometric system allows users to pay for their shopping or get access to office buildings by scanning their palms.

End of tax-free sales at airports in the UK

In a severe blow to an already crumbling aviation and retail industry, the UK government will remove tax-free sales at airports, ports and Eurostar stations from January 2021. The new set of rules do away with VAT refunds offered to both EU and non-EU travellers. High-street retailers, luxury brands, travel retailers and airport authorities all stand to lose.

2021 calendar

January

December 26- January 24: Dubai Shopping Festival, UAE

9-11: London Men's Fashion Week, UK

11-14: International Consumer Electronics Show (CES 2021), US

15-19: Milan Men's Fashion Week

17-19: Retail's BIG Show (virtual event)

19-24: Paris Men's Fashion Week, France

25-28: Paris Haute Couture, France

February

4: Unilever reports 2020 results

13: New York Fashion Week

19-23: London Women's Fashion Week, Autumn/Winter, UK

18: Walmart reports fiscal 2020 results

18-24: Milan City Fashion Week

26: Metro Annual General Meeting

Yum! Brands reports 2020 results^a

March

1-9: Paris Women's Fashion Week, France

2-5: The Global Food Safety Initiative (GFSI) conference

Carrefour reports 2020 results^a

April

14: Tesco reports 2020/21 results

27-29: The World Retail Congress, Rome, Italy

29-30: Global Retailing Conference, Tucson, Arizona

May

2-3: Retail Business Technology Expo, London, UK

June

6-8: Retail's BIG Show, New York, US (Chapter 2)

12-14: London Fashion Week Men's, UK

22-27: Paris Men's Fashion Week, France

23-25: The Global Consumer Goods Summit, London, UK

Milan Men's Fashion Week, Spring/Summer, Italya

July

4-8: Paris Haute Couture, France

September

17-21: London Fashion Week Spring/Summer, UK

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

27-October 5: Paris Women's Fashion Week, France Milan Women's Fashion Week, Spring/Summer, Italy^a New York Fashion Week, Spring/Summer, US^a

October

1: Dubai Expo opens, Dubai, UAE

November

11: Singles Day, China26: Black Friday29: Cyber Monday

December

18: Super Saturday

^a precise date to be confirmed

Energy in 2021: the green recovery

Key forecasts:

- Demand for oil and gas will recover, but weak demand will keep a lid on prices. Upstream oil and gas
 producers will reduce dividends and cut back on operational and capital spending.
- Solar and wind combined will record the strongest growth among all sources in 2021. Policy drivers,
 priority on the grid and lower technology costs will make renewables a more attractive investment
 option.
- Recovery in coal consumption will be weaker than that for oil and gas. Whether demand for coal
 returns to its 2019 level after 2021 will depend on whether growth in Asia will mitigate structural
 decline in the US and Europe.

Pace of the recovery

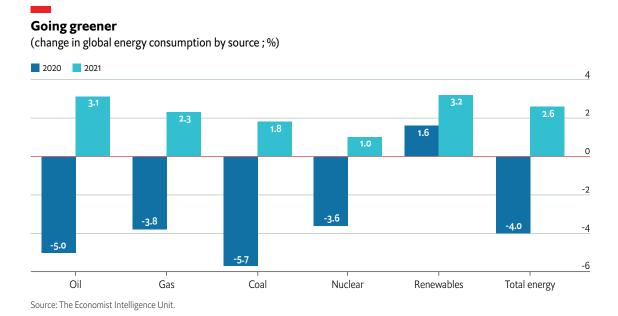
The Covid-19 pandemic upended energy markets in 2020, with lockdowns, crimped industrial activity and restrictions on travel causing global energy consumption to contract by an estimated 4%. Demand for oil, gas and coal all fell this year, although consumption of renewables, especially solar and wind, increased. In 2021 energy consumption will rebound partially, by 2.6%, as global GDP growth returns, but not strongly enough to return to 2019 levels. This scenario assumes that the pandemic is contained; if this does not happen, energy consumption will weaken again.

This year and 2021 will therefore be lost years for the three fossil fuels. Of the three, gas will be impacted the least, with consumption returning to 2019 levels by 2022 as the economic recovery drives demand from the industrial sector. Gas will also continue to be competitive with coal in the power sector, especially in the US and Europe.

Oil consumption will show a strong rebound in 2021, rising by 3.1%, but coming off a sharper collapse in demand than gas. Changed behavioural patterns, such as more people working from home and lower levels of air travel, are likely to continue into 2021, preventing a bounce-back to pre-Covid levels. It may not be until 2023 that oil demand returns to the level of 2019.

Following a severe contraction of nearly 6% in 2020, coal consumption will grow by a modest 1.8% in 2021, recovering only slightly from sharp falls in the US and Europe as power demand recovers. Demand for coal may now be in long-term decline, unless renewed demand from Asia outstrips the structural declines in the US and Europe.

Consumption of renewables (including solar, wind, hydro, geothermal and biomass) will grow in both 2020 and 2021, outpacing fossil fuels. For solar and wind, however, growth will be much stronger next year. We forecast a combined increase of 13%, which reflects the resilience of low-carbon sources even as the Covid-19 pandemic depresses overall energy consumption.



Four key trends for 2021

Government policy will support growth in renewable energy

Climate-friendly approaches to economic growth will dominate in 2021, although not everywhere. Of the four big greenhouse-gas emitters (China, the US, the EU and India), the EU will be the most focused on reducing climate change, using its stimulus spending to promote a green recovery. In 2021 it will set higher climate targets for 2030 and officially target a net-zero greenhouse gas economy by 2050. In the US, much depends on the outcome from November's presidential election. A win by the Democratic Party candidate, Joe Biden, would align US climate policy with the EU, as Mr Biden has pledged US\$2trn in climate-related spending over four years.

China will also set its sights on reaching peak emissions before 2030 and carbon neutrality by 2060. South Korea, which has pledged carbon neutrality by 2050, is likely to advance its green agenda as well. However, the outlook for the rest of Asia is less certain. ASEAN member states want renewables to account for 23% of energy demand by 2025, but this seems like an ambitious target. Indonesia, Malaysia, the Philippines and Thailand have renewables targets on paper, but growth in solar and wind deployment has been slow.

Prices for fossil fuels will remain subdued

Oil, gas and coal prices will remain subdued in 2021, as consumption will only recover partially from the falls experienced this year. There is also a question mark over whether oil producers will stick to OPEC production cuts into next year. Overall, we expect oil prices (Brent) to average US\$45/barrel (b) in 2021, only marginally higher than the annual average for 2020 (US\$42.16/b). US natural gas prices will average US\$2.74/b, reflecting a 43% increase from an all-time low of US\$1.92/b this year.

Low prices will weigh heavily on revenue streams of upstream producers of oil and gas, as well as coal companies, and hurt their market value. Traditional energy majors risk being upstaged by

renewables companies. For example, in October 2020 it was reported that NextEra, a utility with significant solar and wind assets, had grown to rival ExxonMobil in terms of market capitalisation.

Restructuring and bankruptcies will affect US shale operators

The price slump will continue through 2021, placing pressure on oil and gas producers, especially those in the US shale patch. After some years of explosive growth, US oil production is expected to fall further in 2021, although not as severely as this year. The continuation of prices in the US\$40/b range means that many shale operators, especially those more exposed to debt, will struggle, and bankruptcies are likely to continue. Thirty-six shale operators went bankrupt in the first three quarters of 2020, compared with 42 in the whole of 2019. The rapid increase in shale output that was seen until 2019 is unlikely to be repeated.

Meanwhile, oil majors such as BP, Shell and Exxon Mobil, have announced job cuts in response to the price slump, with no real recovery in prices expected until after next year. Some oil majors will continue to slash costs as they steer towards renewable energy, and others will look to divest non-core businesses.

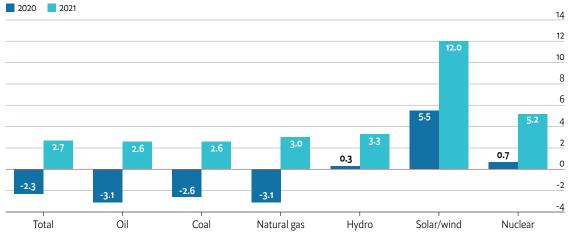
Investment in the power sector will outstrip that in oil and gas

Energy investment declined in 2020 amid the economic downturn caused by Covid-19, and this will continue into 2021. According to the International Energy Agency, investment in the power sector will exceed investment in upstream oil and gas supply in 2020 (although investment in both sectors will fall), which suggests a shift in investment in the sector towards electricity supply. We expect this shift to become more prominent in 2021.

The decision by BP and Shell earlier in 2020 to target net zero emissions by 2050 shows that a growing number of upstream oil and gas producers think that there is a better business case for investment in low-carbon sources of power. This is underlined by the fact that Trafigura, a large oil trader, has plans to set up a joint venture that would invest US\$2bn in renewables by 2025, focusing on solar, wind and storage.

Asia opts for renewables

(energy consumption for Asia & Australasia; % change)



Source: The Economist Intelligence Unit.

What to watch for in energy in 2021:

China's upcoming five-year plan

China announced in September 2020 that it would target peak emissions before 2030 and carbon neutrality by 2060. If it achieves this, it is likely to alter the trajectory of global emissions and help the world to control climate change. The government's next five-year plan for 2021-25, which will be released in early 2021, will show how China plans to meet its new climate goals.

COP 26 Conference 2021

The 26th session of the Conference of the Parties (COP 26) to the UN Framework Convention on Climate Change (UNFCCC) has been postponed by a year to November 2021 because of Covid-19. The meeting, to be held in Glasgow, UK, will force member states to review their progress against the

targets set at the ground-breaking Paris Climate Conference in 2015. The conference will therefore be decisive in determining the path ahead for global action on climate change.

The future of Nord Stream 2

The future of the Nord Stream 2 gas pipeline hangs in the balance in 2021. At the end of 2019 US sanctions halted construction of the pipeline, which will pipe gas directly from Russia to Germany (in addition to the existing Nord Stream 1). The US view is that the pipeline will increase Europe's dependence on Russian energy supplies. Recent geopolitical tensions have increased pressure on the German government to abandon the project altogether. As Russia tries to complete the project by itself, the next US administration will have to decide whether it wants to prevent Nord Stream 2 from becoming a reality.

2021 calendar

January

2-3: International Conference on Green Energy and Environmental Technology (ICGEET), Singapore

3-5: International Conference on Renewable Energy and Conservation, Shenzhen, China

18-21: World Future Energy Summit, Abu Dhabi, UAE

Santos, Novatek, Peabody, ConocoPhillips report 2020 results^a

February

1-4: Arctic Frontiers, Tromso, Norway

23-24: Climate Risk Summit, New York, USA

23-25: International Petroleum Week, London, UK

BP, Ørsted, Equinor, Eni, Naturgy, OMV, Ecopetrol, Pemex, Acciona report 2020 results^a

Sasol reports 2021/21 interim results^a

March

10-12: International Conference on Clean and Green Energy, Prague, Czech Republic

11-12: 2021 MIT Energy Conference

20-21: Oil and Gas Asia 2021, Karachi, Pakistan

22-24: Sustainability Summit, Economist Events, London, UK

Petronas, Engie, E.ON, Petrobras, Rosneft, Enel, Petrochina, Sinopec, Orano, Saudi Aramco report 2020 results^a

April

CNOOC, Energean, Gazprom, CEPSA reports 2020 results^a

TEPCO reports 2021/21 results^a

May

3-6: Offshore Technology Conference, Houston, US

Equinor Annual General Meeting^a

KEPCO reports 2020 results^a

ONGC reports 2021/21 results^a

June

8-10: Oil and Gas Asia 2021, Kuala Lumpur, Malaysia

8-10: Global Petroleum Show, Calgary, Canada

July

6-7: Vienna Energy Forum

August

15-18: Oil & Gas Conference

Sasol reports FY 2020 results^a

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

September

13-18: World Renewable Energy Congress, Lisbon, Portugal Pakistan Petroleum reports 2020 results^a Annual Asia Pacific Petroleum Conference, Singapore^a

October

OPEC releases World Oil Outlook 2021^a Singapore International Energy Week, Singapore^a

November

1-12: UN Climate Change Conference (COP 26), Glasgow, UK OSEA, Singapore^a

December

5-9: World Petroleum Congress, Houston, US

^a Precise date to be confirmed

Finance in 2021: a rocky recovery

Key forecasts:

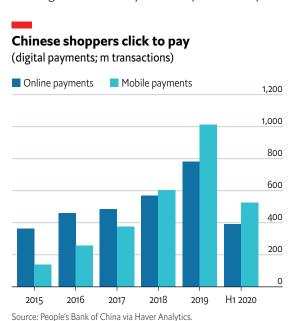
- Financial firms will face weak demand for their services, ultra-low interest rates and mounting defaults by businesses and households in 2021.
- Robust levels of reserves, base capital and liquidity should allow most firms to survive.
- Separately, the UK and Hong Kong will begin to chart new courses as financial centres.

Pace of the recovery

Most financial firms have managed to survive the global economy's current disease- and recession-wracked conditions, and will continue to do so in 2021. Next year will remain ugly as economies start a tepid recovery. Banks, insurers and other financial firms will draw on the stronger base capital and liquidity that they have built up over the past decade to soldier on until conditions improve, a development that will depend less on finance than on medicine.

Fortunately for the sector, there was no major freeze up in essential markets in early 2020 when the pandemic hit, nor was there a run on deposits like those experienced in some markets in 2007-08. No major financial firms had to be bailed out by governments and taxpayers.

Unfortunately, conditions for financial firms are likely to grow tougher over the next year. A weaker economy in general will hurt financial businesses. Households and businesses suffering from reduced incomes are likely to cut back on purchases, including those involving financing and insurance coverage. Discretionary financial products in particular—such as for new cars, pension plans and



holiday spending—could see demand tumble.

Historically low interest rates—known as "lower for longer"—will not help. They will leave little room for the margins between deposits and lending rates that generate most bank income. They will make it difficult for insurers to earn investment income and will spur investors to scrutinise, and reject, the fees that asset managers want to charge.

Nevertheless, low interest rates will be essential if countries, businesses and individuals are to manage their debts in 2021. If financial firms can withstand their effects and remain solid over the next year, then they will be poised to enjoy the recovery without the major legislative changes that followed the 2008-09 financial crisis.

Four key trends for 2021

Governments will support the financial sector, but less so than in 2020

The relative stability of the financial system, compared with the situation in earlier crashes, is a result of rapid interventions of central banks, which cut interest rates, provided official lending and agreed to currency swap lines among themselves. It is also a result of the improvements in financial firms' resilience because they met Basel III standards, and related rules, that bolstered their balance sheets. Following the initial panic, volatility and its dangers are now unlikely to return in 2021.

Governments in developed markets also put in place vigorous stimulus packages to support companies and workers in early 2020, but these are likely to fade in 2021 as their heavy fiscal costs become apparent (see chart). The US has already rolled back support for businesses and the jobless, while European governments are making plans to do so as well.

Poorer countries were never able to afford such measures in the first place. However, they can take some solace in a new approach by the IMF and other global lenders to be generous in lending packages and relatively lenient in the conditions attached to them.

Banking-sector risks will mount in some countries

With less government support, we expect financial distress to rise. Bad loans have remained manageable so far in most markets, but we anticipate that they will start to pile up as firms in less-fortunate sectors—such as hospitality, travel, bricks-and-mortar retail and commercial real estate—fail and default on their obligations. Likewise, financially strapped households will run through their emergency savings and will have to decide which bills to skip, whether on home loans, car payments or credit card balances. So far, many stressed borrowers have taken advantage of government-decreed or voluntary forbearance programmes, but these will begin to wind down in 2021.

Most big banks worldwide set aside large chunks of their profits in the first three quarters of 2020 to cover future loan losses, following new global accounting rules that recently took effect. The lenders that did not build reserves will probably have to do so in the coming quarters. Those with the strongest reserves have now put aside sums equivalent to 3% or more of their total loan portfolios. Losses could rise even higher than this, forcing banks to divert more profits to reserves.

Digitalisation will offer opportunities for online finance

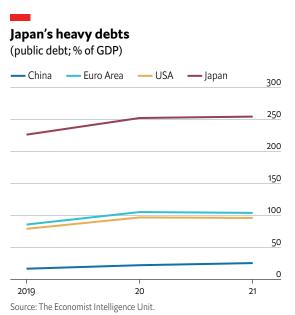
Some types of financial firms will benefit from the new environment. For example, as consumers have adapted to lockdowns and quarantines, they have turned to digital and contactless payments, including for burgeoning e-commerce purchases. Capital markets operators will enjoy a surge in new business, satisfying corporate demand for bonds and drawdowns on credit lines. The rebound in equities, especially among technology stocks, will attract new listings requiring underwriting services.

In many ways the Covid-19 crunch has accelerated on-going trends in financial services. Customers, who were already flocking to online portals and mobile apps, will now be less likely to visit branch locations. This will allow cost-conscious financial firms to cut back on these expensive outlets and their teams of employees. Automation of tasks as diverse as damage claim processing and trade reconciliation will also permit cost-cutting. Passive investment funds, largely led by index-tracking algorithms, are much cheaper than active funds with highly paid star portfolio managers.

A shift in international hubs will affect Hong Kong and London

We anticipate the beginning of a major shift in financial centres starting in 2021. Although the process will take many years to play out, London and Hong Kong will have to trim their global ambitions and focus increasingly on national economies. Brexit is likely to result in UK financial firms losing "passporting" rights to operate across the EU in 2021. They will gradually shift responsibilities and jobs to locations in Frankfurt, Paris, Dublin and Luxembourg in the coming years, especially if the EU insists that firms do so. For London, the core problem is that more UK business cannot make up for less EU activity.

Meanwhile, China's suppression of autonomy in Hong Kong, under its National Security Law, will



make the city a less appealing business location, including for financial firms. Although the city will retain its deep capital markets, vibrant financial ecosystem and well-developed legal system, the reduction of personal liberties and the postponement of scheduled elections will drive away firms that rely on free exchange of information, financial discretion and data security.

China's growing financial needs—combined with new dual listings of many firms now traded overseas—are likely to bolster securities markets and investment banks. However, global companies in pan-Asian or global insurance, asset management and private advisory will look for a new base of operations. In short, basic business for China will compensate for a loss of sophisticated pan-Asia activities.

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

What to watch for in finance in 2021

A phase-out of UK-EU financial links

From January 1st 2021 Britain-incorporated financial firms lose their "passports" giving access to conduct business in the EU27, and EU-based firms lose similar rights in the UK. However, some transitional arrangements remain in place: EU banks can continue to use some London-based clearing services until June 2022. In April Irish corporate bonds and exchange-traded funds must move their clearing location to the EU27. They are slated to shift to Brussels-based Euroclear Bank, from London-based Euroclear UK & Ireland.

Giving up on Libor

After 2021 financial firms and contracts must

abandon Libor (London interbank offered rate), a venerable but scandal-scarred benchmark for US dollar interest rates. The benchmark for US dollar lending, like that in other currencies, is moving to actual market rates rather than the average of banks' quotations that undergirded Libor. The Secured Overnight Financing Rate (SOFR) is the designated replacement of the US dollar Libor.

A rare female boss at a big bank

Jane Fraser has been appointed as CEO of Citigroup, the most international of the US's big bank groups, effective February 2021. The Scottishborn banker, currently the head of its consumer division, will seek to relaunch the firm, perhaps by further trimming its formerly far-reaching overseas activities.

2021 calendar

January

- 14: Citigroup, Wells Fargo report 2020 results
- 15: JP Morgan, Bank of America reports 2020 results
- 20-21: Bank of Japan's first monetary policy meeting (outlook report)
- 21: European Central Bank (ECB) monetary policy meeting
- 26: UBS Group reports 2020 results
- 26-27: First US Federal Reserve meeting (Federal Open Market Committee)

February

- 04: Deutsche Bank reports preliminary 2020 results
- 11: Barclays reports 2020 results
- 18: Credit Suisse reports 2020 results
- 19: Allianz, Swiss Re reports 2020 results
- 22: HSBC reports 2020 results

March

- 11: ECB's monetary policy meeting
- 16-17: Second US Federal Reserve Meeting (summary of economic projections)
- 18-19: Bank of Japan's second monetary policy meeting
- 24: Minutes of Bank of Japan's first monetary policy meeting
- 25: General Council meeting of the ECB in Frankfurt

April

- 14: JP Morgan, Wells Fargo report Q1 2021 results
- 15: Citigroup, Bank of America report Q1 2021 results
- 22: ECB monetary policy meeting
- 22: Credit Suisse reports Q1 2021 results
- 26-27: Bank of Japan's third monetary policy meeting (outlook report)
- 27-28 Third US Federal Reserve meeting (Federal Open Market Committee)
- 27: UBS Group reports Q1 2021 results
- 28: Deutsche Bank reports Q1 2021 results
- 30: Barclays, Swiss Re report Q1 2021 results

May

- o6: Minutes of Bank of Japan's second monetary policy meeting
- 12: Allianz reports Q1 2021 results
- 18-20: FINRA Annual Conference, Washington DC, US

June

- 10: ECB monetary policy meeting
- 15-16: Fourth US Federal Reserve meeting (summary of economic projections)
- 17-18 Bank of Japan's fourth monetary policy meeting

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

- 23: Minutes of Bank of Japan's third monetary policy meeting
- 24: General Council meeting of the ECB in Frankfurt

July:

- 13: JPMorgan reports Q2 2021 results
- 14: Citigroup reports Q2 2021 results
- 15-16: Bank of Japan's fifth monetary policy meeting (outlook report)
- 16: Wells Fargo, Bank of America reports Q2 2021 results
- 22: ECB monetary policy meeting
- 22: Minutes of Bank of Japan's fourth monetary policy meeting
- 27-28: Fifth US Federal Reserve meeting (Federal Open Market Committee)
- 28: Deutsche Bank, Barclays report Q2 2021 results
- 29: Credit Suisse reports Q2 2021 results
- 30: Swiss Re reports Q2 2021 results

August

- 06: Allianz reports Q2 2021 results
- 09: ECB monetary policy meeting
- 21-22: Bank of Japan's sixth monetary policy meeting; Sixth US Federal Reserve meeting (summary of economic projections)
- 28: Minutes of Bank of Japan's fifth monetary policy meeting

October

- 13: Citigroup, JPMorgan report Q3 2021 results
- 14: Bank of America, Wells Fargo report Q3 2021 results
- 21: Barclays reports Q3 2021 results
- 27: Deutsche Bank reports Q3 2021 results
- 27-28: Bank of Japan's seventh monetary policy meeting (will release outlook report)
- 28: ECB monetary policy meeting
- 29: Swiss Re reports Q3 2021 results

November

- 02: Minutes of Bank of Japan's sixth monetary policy meeting
- 02-03: Seventh US Federal Reserve meeting (Federal Open Market Committee)
- 10: Allianz reports Q3 2021 results

December

- 02: General Council meeting of the ECB in Frankfurt
- 16: ECB monetary policy meeting
- 14-15: Eighth US Federal Reserve meeting (summary of economic projections)
- 16-17: Bank of Japan's eight monetary policy meeting
- 22: Minutes of Bank of Japan's seventh monetary policy meeting
- 31: Inter-Bank offered rates to be replaced or reformed by end-2021, according to Financial Stability Board

Healthcare in 2021: in the eye of the storm

Key forecasts:

- After declining in 2020 amid a slump in non-Covid treatment, global healthcare spending will increase by 7% and pharmaceutical sales by 5% in 2021.
- However, budgets for both public and private healthcare will be tight, and pricing pressures may force restructuring among healthcare funds, providers and suppliers.
- New opportunities will emerge in telehealth, as well as in the production and distribution of the much-needed coronavirus vaccines.

Pace of the recovery

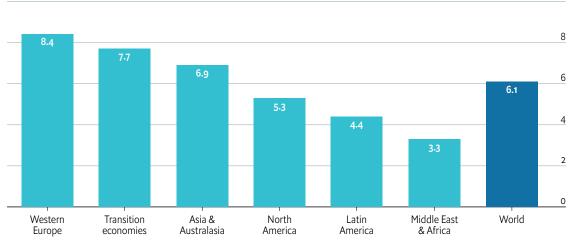
The healthcare and pharmaceutical industries have never come under so much global scrutiny as they have during the coronavirus pandemic, when their ability to provide care, equipment and medicines has been in doubt. This scrutiny will not disappear in 2021. The world is waiting impatiently for the arrival of a coronavirus vaccine; it is also more conscious than ever of gaps in care, whether at old peoples' homes, at rural clinics or in cancer wards.

Unfortunately, the funding to fill these gaps will be limited in 2021, even if the global economy recovers. We expect healthcare spending to rise by 6% worldwide, a respectable increase. However, some of this will be a rebound from 2020's decline and a sizeable chunk will be devoted to Covid-19, including vaccine procurement. The same will be true for pharmaceutical sales, which will rise by 4%. The funding available for non-Covid treatment will be tight, leading to prolonged pricing pressures.

Even so, some countries will take the opportunity to undertake far-reaching reforms to improve access to health. The fastest growth in health spending will be in Europe and Asia (even if Europe's

Health spending growth in 2021

(% change in nominal US\$)



Source: The Economist Intelligence Unit.

10

growth partly reflects the depth of 2020's decline). Demand for telehealth and other online services will be particularly strong as social distancing leads to a rethink of the way that care is provided.

Four key trends for 2021

The search for a Covid-19 vaccine will present new challenges

After an unprecedented research and development push, we expect at least one coronavirus vaccine to be ready to roll out by mid-2021. However, this is by no means a certainty. Even with six candidates in mid- to late-stage clinical trials, 35 or so in clinical trials and 151 in pre-clinical tests, the search for a Covid-19 vaccine could be prolonged. Many of the leading US and European candidates are new types of vaccines, with no track record of approval. The more traditional vaccines being developed by China and Russia are more likely to pass safety trials, but may be more difficult to produce at scale effectively.

Even if approval is granted, production and distribution will be another major challenge in 2021. Pharmaceutical companies such as AstraZeneca (UK) are already signing deals with contract manufacturers such as Catalent (US) or the Serum Institute (India). However, the World Health Organisation (WHO) calculates that at least 7bn vaccine doses will be needed for global immunisation. So far, over 4bn have been ordered, far outstripping production capacity. Distribution will be difficult, too, particularly given that some vaccines will need to be kept at temperatures as low as -80 degrees Celsius.

Governments will be under pressure to shore up non-Covid care

While coronavirus will be by far their biggest priority in 2021, governments will also need to spend heavily on other parts of their healthcare systems. They will have to address the backlog in treatments and diagnosis for non-Covid care—in the UK, nearly 1m patients are waiting for breast cancer screening, for example. Long-term care will be another priority, given the number of elderly people who have died during the pandemic. Scotland is one of several countries planning reforms.

Moreover, 2021 will also see more progress towards universal healthcare. The Chinese government plans to expand reimbursement of outpatient care under its Basic Urban Employee Insurance scheme, in the first reforms to employee insurance since 1998. It also wants to expand the separate Basic Medical Insurance scheme to cover more people. Mexico, meanwhile, will complete the rollout of a new public health insurance system, the Instituto de Salud para el Bienestar (Insabi), expanding it to all 32 states by the end of 2021. Insabi, which replaced Seguro Popular, is free at the point of service but will still struggle to match the coverage and treatment offered to employees under the Instituto Mexicano del Seguro Social.

Companies will need to strengthen supply chains, possibly by reshoring

The pandemic has tested healthcare supply chains to the limit, amid unprecedented demand for particular types of medical equipment, including masks and diagnostics. It has also tested the ability of healthcare companies to ramp up production quickly to meet demand. Companies that specialise in rapid antigen tests for Covid-19, such as Abbott (US), may find that demand outstrips supply well into 2021. Specialists in cancer diagnostic and treatment, such as Roche (Switzerland), may also come under similar pressure as hospitals rush to clear patient waiting lists.

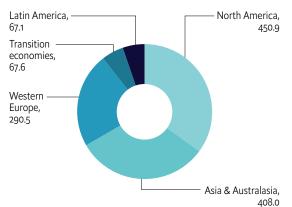
Governments (and some companies) are also keen to reshore production, in order to avoid supply chain problems in future. In June 2020 the French government unveiled a reshoring action plan, starting with paracetamol. The US president, Donald Trump, and his Democratic Party rival, Joe Biden, are using the slogans "America First" and "Made in America", respectively, in their drive to promote domestic investment in healthcare manufacturing. Countries in Asia are making similar moves. Indonesia, for example, wants to attract investment in medtech and pharmaceuticals. Yet, with revenues squeezed by the global downturn, companies will weigh the costs of reshoring carefully in 2021.

Digitalisation and telehealth will offer new opportunities

The sudden impact of the Covid-19 pandemic brought a surge in online healthcare as hospitals and clinics scrambled to adapt to social distancing. In 2021 public funding for telehealth will continue. In the US, the Centres for Medicare and Medicaid Services (CMS) has extended its rules for reimbursement of telemedicine, adding new types of care to the proposed fee schedule for next year. In Australia, the emergency telehealth provisions put in place under Medicare have been extended until March 2021, at a cost of US\$2bn.

This expansion will encompass digital health apps, with investment pouring in. Rock Health, a seed fund, reports that US\$9.8bn was raised in digital health funding in the third quarter of 2020. In 2021

Pharmaceutical spending in 2021 (US\$ bn)



*60 biggest countries only. Sources: The Economist Intelligence Unit; World Health Organisation. companies will try to fill the gaps between the specialist-led telehealth services available from hospitals and clinics, and the consumer-focused fitness and wellness applications available from retailers. Mental health is likely to be one priority.

However, the shift online may hit roadblocks in 2021 as governments, insurers and healthcare providers issue new guidelines to improve the quality of care. In Australia, only a patient's regular doctor or a referred specialist will be allowed to offer them telehealth. In the US, the CMS and some private insurers plan to exclude some types of telehealth from their coverage. As for digital health apps, some will come under greater scrutiny amid concerns over safety or data privacy (see box page 31).

What to watch for in healthcare in 2021

The EU Medical Devices Directive

The long-awaited directive, agreed in 2017 and due to be enforced from January, has now been postponed until May 2021. Its aim is to improve the safety of medical devices across the EU by tightening standards for the notified bodies that provide approval. It will also draw in newer digital types of medtech, such as the cardiograms contained in Apple watches. Despite the delay, implementation will be a challenge, especially given that the launch of an accompanying IT system, Eudamed, has been delayed until May 2022, when the In vitro Diagnostics Directive takes effect.

Liquid biopsies

Cancer screening and diagnosis came under huge pressure during the pandemic as countries focused on Covid-19 treatment. However, cancer diagnostics could receive a major boost from liquid biopsy technology being developed by several companies. One is Grail, a US startup that has just been bought by Illumina (US) and is due to roll out Galleri, a laboratory-based blood test, in 2021. In

trials conducted by Grail, the test has been able to detect about 50 different types of cancer among patients aged over 50. Liquid biopsies offer a non-invasive way of detecting biomarkers of cancer so that it can be treated before it progresses to later, more deadly stages. However, Grail's claims that Galleri could avert 39% of cancers depend on governments funding national screening programmes, which may prove too expensive an option for the next few years.

The future of the WHO

In July 2020 Mr Trump moved formally to withdraw the US from the WHO, a process that will take until July 2021 to complete. The decision will be reversed if Mr Biden wins the presidency in November 2020. Even so, the WHO and its US\$2.5bn annual budget will come under increased scrutiny next year following US criticism of its actions during the pandemic. The US has already withdrawn some of its funding contribution, at a time when other countries will be in poor shape to raise their shares. The timing is particularly difficult given that the WHO (through COVAX, part of the WHO's Access to Covid-19 Tools accelerator) will be leading efforts to ensure distribution of a coronavirus vaccine around the world.

2021 calendar

January

- 26: Pfizer reports 2020 results
- 29: Eli Lilly reports 2020 results

Challenge trial for Covid vaccines begins in UK^a

February

- 1: Bristol-Myers Squibb reports 2020 results
- 3: Novartis reports 2020 results
- 3: GlaxoSmithKline reports 2020 results
- 4: Roche reports 2020 results
- 5: Sanofi reports 2020 results
- 9: Gilead reports 2020 results
- 11: AstraZeneca reports 2020 results
- 25: Bayer reports 2020 results

March

- 4: Merck KGaA reports 2020 results
- 22-25: Ageing Well Summit Asia 2021, The Economist Events
- 24: WHO World Tuberculosis Day

April

- 7: World Health Day
- 11: AstraZeneca reports Q1 2021 results
- 11: 17th Annual World Health Congress, Washington DC
- 15-17: HIV and Hepatitis in the Americas Congress, Buenos Aires, Argentina
- 19-23: WHO's 23rd Expert Committee on Selection and Use of Essential Medicines, Geneva,

Switzerland

- 20-25: WHO World Immunisation Week
- 25: WHO World Malaria Day
- 27: Eli Lilly 2021 Q1 results
- 28: Sanofi reports 2021 Q1 results

May

- 12: Bayer reports 2021 Q1 results
- 12: Merck KGaA reports 2021 Q1 results
- 12-13: Pharma CI Conference 2021 US, Newark, New Jersey
- 15-19: ISPOR Annual International Meeting, Montreal, Canada
- 24-June 1st: 74th World Health Assembly, Geneva, Switzerland
- 26: European Medical Devices Directive comes into full force

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

June

14: WHO World Blood Donor Day31: WHO World No Tobacco Day

July

1-2: Pharma CI Conference 2021 Europe, Zurich, Switzerland 16-17: International Conference on Medical, Biological and Pharmaceutical Sciences, Guangzhou, China 28: WHO World Hepatitis Day

August

3: Eli Lilly 2021 Q2 earnings results

September

WHO Regional Committee for Europe, Copenhagen, Denmarka

November

WHO Antibiotics Awareness Week^a

December

1: WHO World AIDS Day

^aPrecise date to be confirmed

Telecoms in 2021: the tech wars

Key forecasts:

- Mobile subscriptions and revenue will stage a strong recovery in 2021. Asia and the Middle East will see the strongest growth in mobile usage.
- The US-China trade dispute shows no sign of abating, complicating the prospect of a 5G rollout and increasing costs for operators.
- Consumer 5G is unlikely to take-off in 2021, with the enterprise segment offering greater potential.

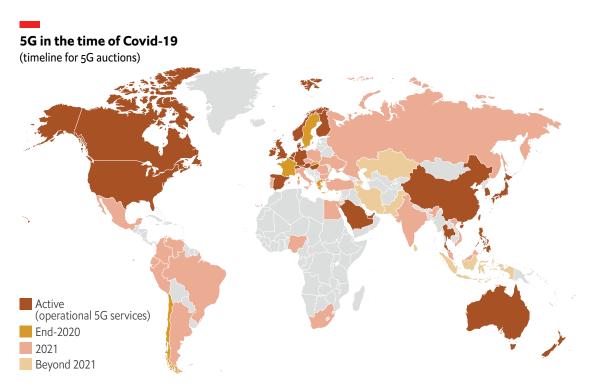
Pace of the recovery

Compared with other sectors, the telecommunications industry has so far seen a minimal impact from the coronavirus crisis. Indeed, the pandemic has made connectivity even more critical for everything from business and communication to shopping and entertainment. Nonetheless, subscriptions growth has fallen slightly in countries where consumers are price-sensitive and communications services are expensive. Some operators have offered extensive discounts, eating into their revenue.

Despite the continuing threats to the global economy and to consumer incomes, revenue prospects will improve in 2021. Mobile subscriptions will recover particularly strongly next year, from a fall of just over 2% in 2020 to growth of 3.4%. On a regional basis, Asia and the Middle East will see strong recoveries in mobile subscription growth, from falls of around 3% in 2020 to growth of 4.7% and 4% respectively in 2021.

However, the ongoing US-China trade dispute, centred around technological primacy, could hit operator balance sheets. Chinese component manufacturers, such as Huawei, ZTE and SMIC, have been hit with punitive trade restrictions, which could force some operators to shift suppliers, incurring considerable costs and delaying 5G rollout plans in 2021.

Cloud infrastructure providers will fare better. The cloud businesses of Google, Amazon and Microsoft experienced double-digit rises in revenue in the first half of 2020. Further growth is expected in 2021, which will also benefit data centre companies that provide essential data storage and cloud services.



Sources: Telecoms regulators; The Economist Intelligence Unit.

Four key trends for 2021

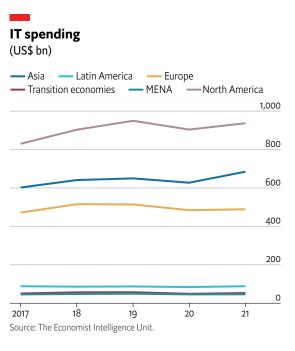
Investment in 5G will force restructuring for some companies

Operators will continue to focus on improving their 4G networks and rolling out 5G in 2021. We estimate that around 47% of the 60 markets that we cover will launch commercial 5G services by end-2020 (see map). The remaining countries will finalise the auction process in 2021, with some launching 5G services in the first half of the year, while the rest delay until the second half as they negotiate over spectrum availability and reserve prices. However, even once networks are launched, demand for 5G will not increase rapidly. With many consumers failing to see the advantage over 4G, consumer 5G is unlikely to take-off in 2021. The enterprise segment offers greater potential, given the rapid rise in digitalisation throughout the economy.

With most capital investment set aside for 5G auctions and fibre expansion, operators will seek to minimise costs through measures such as restructuring drives and tower asset sales. Telecoms infrastructure companies will also be looking out for new commercial opportunities, such as fibre to the tower and mobile-edge computing, which will enable operators to improve network capacity as demand increases alongside the launch of 5G services. Merger and acquisition activity will also intensify in 2021 as companies set out to deliver bundled services.

Government support will aim to improve digital access

Telecoms tariffs have been a focus for regulators in several markets in 2020. Operators in Chile and India were taken to task over mobile broadband tariffs, and this scrutiny could extend to 5G pricing.



Although operators justify high tariffs on account of high demand for data and its impact on network performance, governments could offer assistance through spectrum concessions. In South Africa, for instance, the regulator temporarily released additional spectrum to help operators manage lockdown spikes in data traffic.

Spectrum fee payment extensions and infrastructure sharing incentives could also be on the cards, as is the case in some EU markets. In the meantime, in Asia Pacific, where countries remain largely focused on 4G network improvements, governments will continue to incentivise low-cost local manufacturers, threatening the popularity of low-cost Chinese smartphone brands in the region. In India, for example, Reliance Jio, a leading operator, is contemplating launching affordable

4G smartphones in 2021. Worldwide, 4G connections are expected to number around 6.1bn in 2021, with Asia accounting for over half of the total.

Digitalisation will offer new opportunities

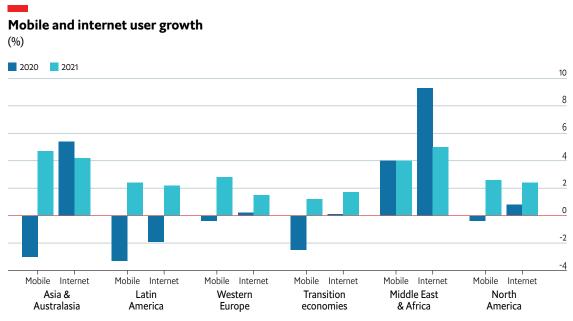
E-commerce and online shopping, which have surged in popularity over the course of the Covid-19 pandemic, will offer new business opportunities in 2021. Although these increases are largely due to lockdowns earlier this year, the pandemic has accelerated a shift in consumer habits that is likely to last into 2021 and beyond. Gaming has also surged since March, with mobile gaming faring particularly well as console and PC gaming declines. Within mobile gaming, cloud gaming will show particular promise. The recent launch of cloud subscription platforms from players such as Microsoft could help to drive cloud gaming revenue to US\$4bn in 2021.

Cloud gaming will, in turn, help drive growth in cloud and edge infrastructure, which allows data analysis and processing to be done closer to the data source. With patterns of remote working likely to remain widespread, enterprises are shoring up their businesses through cloud migration. Indeed, cloud investments are expected to account for nearly one-third of total IT budgets in 2021. At the enterprise level, companies will look to cloud-based solutions to help in areas such as network resilience, cybersecurity, disaster recovery and identity management.

Trade spats and international disputes will remain disruptive

The ongoing US-China trade dispute shows no signs of abating. Thanks to US sanctions blocking its access to clients and supplies, Huawei now finds itself cut off from parts of the global technology supply chain, putting its survival in doubt. While the US clamps down on other Chinese tech firms, including SMIC, TikTok and WeChat, China will push for greater self-sufficiency. However, this could take years to reach fruition. In 2021 the risks are high that an escalating technology spat will split global tech standards and delay the rollout of 5G.

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT



Source: The Economist Intelligence Unit.

With the US pressuring other countries to ban Huawei, national governments will face a tough choice in 2021. After some dithering, the UK is following the US's lead, delaying its 5G rollout and inflating the costs. Other countries may baulk at the additional costs. The UK's dilemma will be exacerbated by Brexit in 2021, with regulations over mobile roaming charges, import barriers and data processing requirements still mired in uncertainty.

The global electronics supply chain is also at risk in 2021. Although the worst effects of the Covid-19 crisis have subsided—at least for the time being—travel curbs and other virus-related disruptions mean that manufacturers still risk falling short of production targets. Delays to shipments and product launches are likely in 2021, while component shortages could push up the prices of electronic products.

What to watch for in telecoms in 2021

Data regulations

Regulations over data sharing are expected to tighten in 2021. These include a proposed EU Data Act, which would offer guidelines for sharing co-generated data between business and government, as well as EU legislation governing the use of artificial intelligence (AI). Other issues on the table in 2021 are data localisation and privacy, most notably in India, where new regulations will be introduced in 2021.

Digital taxes

Cash-strapped governments are likely to be looking for new sources of tax revenue in 2021, including from digital companies, which have long been under fire for tax avoidance and for side-stepping competition laws. Discussions over a digital tax, ongoing at the OECD, have

been delayed owing to the Covid-19 crisis and entrenched disagreements. US authorities are concerned that a digital tax would unfairly target US tech giants, while France is keen to implement a tax, with or without a consensus, in the first half of 2021.

New competitors

Some markets will see enticing new entrants next year. The Philippines will welcome Dito as a third player in its mobile market in March, while in Mexico, Televisa's new mobile virtual network operator (MVNO) could challenge the dominance of América Móvil. MVNO acquisitions could become more widespread in 2021, as operators seek revenue opportunities away from a saturated post-paid segment. Leading US operator Verizon acquired low-cost MVNO operator Tracfone for US\$6.9bn in September 2020. This could be the first of many such moves in the US and elsewhere.

2021 calendar

January

5-9: International Conference on Communications Systems and Networks, Bengaluru, India

9-12: IEEE Consumer Communications and Networking Conference, Las Vegas, US

11-14: The International Consumer Electronics Show, US

11-12: International Conference on Network Infrastructure and Communication Technology, Singapore

15-17: Asia Pacific Information Technology Conference, Bangkok, Thailand

25-26: Cybersecurity for Critical Assets, MENA, Dubai

Kickstart Europe 2021, Amsterdam, The Netherlandsa

Of com to conduct 700MHz spectrum auctions^a

February

2-4: CSTB Expo, Krasnogorsk, Russia

4-5: International Conference on Networks and Communications, Bangkok, Thailand

16-17: Submarine Networks EMEA, London, UK

22: ITU's Global Standards Symposium, Hyderabad, India

March

2-4: Embedded World Conference, Nuremberg, Germany

5: ITU's World Telecommunications Standardisation Assembly, Hyderabad, India

8-9: Cybersecurity Asia, Kuala Lampur, Malaysia

17-18: IoT Tech Expo Global, London, UK

17-18: Cybersecurity and Cloud Expo Global, London, UK

17-19: SEMICON China, Shanghai, China

22-25: International Wireless Communications, Expo, Las Vegas, US

24-26: Convergence India, New Delhi, India

25: ITU's Broadcast Service Assembly and Access, Geneva

28- April 1: The Optical Networking and Communication Conference, California, US

Open Compute Project, California, USa

Telecoms World Asia, Bangkok, Thailanda

April

5-7: COMEX- Technology Expo, Muscat, Oman

13-17: Open Data Science Conference India 2021, Massachusetts, US

21-22: Dublin Tech Summit, Dublin, Ireland

25-28: Annual Fiber Network Owners Alliance Conference, Georgia, US

28-30: International Conference on Cloud Computing and Services Science, Prague, Czech Republic

29-30: International Conference on Communication Technologies and Internet of Things, Jerusalem, Israel

MVNO's World Congress 2020, Berlin, Germanya

Network Virtualisation & SDN Europe, Berlin, Germanya

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

May

13-11: IoT Solutions World Congress, Barcelona, Spain

17: World Telecommunication Day (UN)

18-20: Digital Enterprise Show, Madrid, Spain

19-22: SmartEX, Beirut, Lebanon

21-23: ITU's World Telecommunication/ICT Policy Forum, Geneva, Switzerland

June

3-5: Vietnam ICTCOMM, Ho Chi Minh, Vietnam

8-9: ANGA COM, Cologne, Germany

14-17: Icann Policy Forum, the Hague, the Netherlands

20-21: 5th International Conference on Wireless, Telecommunication & IoT, Rome, Italy

28-July 1: Mobile World Congress, Barcelona, Spain

CommunicAsia 2021, Singapore^a

Annual European Spectrum Management Conference, Brussels, Belgiuma

July

1: Spectrum Summit 2021, Baden, Germany

7-9: International Conference of Wireless Networks, London, United Kingdom

August

18-20: The Africa Peering and Interconnection Forum, Rwanda

18-21: Global Sources Mobile Electronics, Hong Kong

Verizon Communications and AT&T H1 2021 results^a

PLDT and Globe Telecom H1 2021 results^a

SK Telecom, KT Corp and LG Uplus H1 2021 results^a

Taiwan Mobile and Chunghwa Telecom Co H1 2021 results^a

September

1-30: ITU Telecom World, Hanoi, Vietnam

3-8: IFA Consumer Electronics 2020, Berlin, Germany

8-9: World Telecommunication Development Conference, Addis Ababa, Ethiopia

16-18: CE China 2020, Guangzhou, China

20-23: IoT Tech Expo, North America

October

18: Ericsson reports Q3 2021 results

28-Nov 22: World Radiocommunication Conference 2021, Sharm El Sheikh, Egypt

Body of European Regulators for Electronic Communications, 9th Stakeholder Forum, Brussels,

Belgium^a

Mobile World Congress, Los Angeles^a

8th World Machine Learning and Deep Learning Congress, Helsinki, Finlanda

PT Expo China, Beijing, China^a

MVNOs Europe 2021^a

A SPECIAL REPORT FROM THE ECONOMIST INTELLIGENCE UNIT

November

25-27: World Telecommunication/ICT Indicators Symposium (WTIS-19) Open Mobile and Digital Experience Summit, California, US^a World Optical Fibre and Cable 2021, North Carolina, US^a

December

International Conference on Wireless Networks and Embedded Systems, Bangkok, Thailanda aPrecise date to be confirmed

Country Analysis

We monitor the world to prepare you for what's ahead

Country Analysis provides you with the best forward-looking data and analysis to understand a country's political, policy and economic outlook.

From financial institutions to corporates, governmental departments and universities, the world's leading organisations rely on our Country Analysis service to keep them informed about the world and what it will look like tomorrow. Included in our service:

- Global outlook and daily insights spanning politics, economics and market-moving topics.
- Overviews of country forecasts over the medium-term outlook.
- Medium-term country forecasts on 200 countries' political and economic landscape.
- Long-term country forecasts on the structural trends shaping 80 major economies.
- Industry analysis on the outlook for six major industries in 70 markets.
- Regulatory intelligence on the policies that will impact the business environment in 50 key economies.
- Commodity forecasts on supply, demand and prices of 40 critical goods.
- Macroeconomic data on forecasts, as well as historic trends.
- Industry data on demand and supply of key goods, now and in the future.
- Proprietary ratings on the business environment.

How Country Analysis helps you to stay ahead

Unparalleled coverage - global, regional and country-level analysis for over 200 markets. 20,000 data series every month, led by our worldwide network of expert analysts and on the ground contributors.

360-degree view - our approach is unique; deliberately designed to intersect politics, policy and the economy, our methodology leads to a more nuanced perspective than simple number crunching.

Beating consensus - with over 70 years of experience, we have a track record of making bold calls and getting them right.

"Severe contest" - our editorial team is fiercely independent and rightly so. This ensures you can trust our analysis and apply the insights it offers with confidence.

Find out more information about our service features, delivery platforms and how Country Analysis could benefit your organisation by visiting:

eiu.com/n/solutions/country-analysis

Copyright

© 2020 The Economist Intelligence Unit Limited. All rights reserved. Neither this publication nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of The Economist Intelligence Unit Limited.

While every effort has been taken to verify the accuracy of this information, The Economist Intelligence Unit Ltd. cannot accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in this report.

LONDON

The Economist Intelligence Unit 20 Cabot Square London E14 4QW United Kingdom

Tel: + 44 (0) 20 7576 8181 Email: london@eiu.com

GURGAON

The Economist Intelligence Unit Skootr Spaces, Unit No. 1, 12th Floor, Tower B, Building No. 9 DLF Cyber City, Phase – III Gurgaon – 122002

Haryana

India

Tel: + 91 124 6409486 Email: asia@eiu.com

NEW YORK

The Economist Intelligence Unit The Economist Group 750 Third Avenue 5th Floor New York, NY 10017, United States

Tel: + 1 212 698 9717 Email: americas@eiu.com

HONG KONG

The Economist Intelligence Unit 1301 Cityplaza Four 12 Taikoo Wan Road Taikoo Shing

Hong Kong

Tel: + 852 2802 7288 Email: asia@eiu.com

DUBAI

The Economist Intelligence Unit PO Box No - 450056

Office No - 1301A Aurora Tower Dubai Media City

Dubai

United Arab Emirates Tel +971 4 4463 147 email: mea@eiu.com