



Industries in 2017

A special report from The Economist Intelligence Unit

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Overview

Despite an improved global economic backdrop, mounting uncertainties will weigh on companies in 2017—especially given the election of Donald Trump as US president.

Two surprising and contradictory events took place in early November, with important ramifications for business in 2017. First, the Paris Agreement on Climate Change entered law, sooner than many (including The Economist Intelligence Unit) foresaw as recently as a year ago. Shortly after this, Donald Trump, an avowed climate-change sceptic, was elected US president.

This report, which brings together our 2017 forecasts for six industry sectors, is not primarily about Mr Trump. However, as the surprise result sinks in, it is clear that his administration could bring huge changes for all six industries: automotive, consumer goods and retailing, energy, financial services, healthcare and telecoms.

First, a sample of successful predictions from *Industries in 2016*:

- We predicted that the scandal over emissions from Volkswagen's diesel vehicles would only slightly affect its car sales, which in the event rose 2.1% in the first nine months of 2016 (albeit lagging global market growth of 4.7%). As we also foresaw, however, regulators' attitudes to emissions have hardened, with on-the-road testing on its way in the EU.
- We forecast that seasonal sales like Black Friday, Cyber Monday and Alibaba's Singles Day would begin morphing together into a solid period of discounting lasting from early November until the New Year. In 2016, Alibaba started Singles Day a month early, as the concept extended beyond China to Hong Kong and Taiwan. Meanwhile US-based Amazon will run its Black Friday deals from November 1st to December 22nd.
- Although US shale-oil drillers are suffering amid low oil prices, as we predicted their production has not dipped sharply enough to cause a sharp upswing

in global prices. The price of Brent crude in 2016 is likely to come in to average US\$45/barrel, even lower than our prediction of US\$53/b.

- We said that emerging-world financial systems would become more market-oriented, with China slowly dismantling exchange controls. China proved us right by easing up quotas on flows of funds for foreign institutional investors.
- We predicted that the backlash against tax inversion deals in pharmaceuticals would intensify. In the event, Pfizer was forced to cancel its planned mega-merger with Allergan after US tax rules changed.
- We expected telecoms utilities to start investing in gigabit fibre broadband technology. BT in the UK is among those to have stepped up its rollout, with an announcement that it will provide gigabit broadband on its Openreach business network.

The year ahead

When it comes to 2017, our forecasts are necessarily subject to some uncertainty. Although Mr Trump has promised to keep his campaign promises, many of those promises were vague ones. What seems certain is that trade barriers are likely to rise, while Mr Trump is likely to take a harder line than his predecessor on issues as diverse as the Iranian nuclear deal, Mexican immigration and the pressure to reduce emissions. In Europe, meanwhile, many companies remain unnerved by the UK's decision in June to leave the EU. Although Brexit will not be finalised for several years, it could encourage other anti-EU protest votes in 2017.

In addition to this broad picture, this report outlines other key trends in the six industry sectors.

For the **automotive** sector, the outlook at a global level is once again one of steady expansion, with car sales rising by a forecast 2.4% overall. Yet there are several legal, political and regulatory risks to this outlook. In the US, tax cuts, higher infrastructure spending and looser environmental rules would all help the industry. Yet Mr Trump's antipathy to free trade could hurt makers of cars and components. His expressed intent to scrap the US-Iran nuclear deal also calls into some doubt the renaissance in the Middle East's biggest auto market, where France's PSA and Renault are among those banking on rapid growth (see box, p14).

A greater source of worry is the world's largest car market, China, which is forecast to slow in 2017 once a tax cut for small cars expires at the end of 2016. That is yet more bad news for Volkswagen, a market leader there. Globally the German company seems unable to draw a line under its diesel emissions scandal, threatening its financial stability and prompting greater scrutiny in many markets.

In parallel, nearly every major carmaker is hiking investment in electric vehicles, despite low oil prices. Future cars will increasingly be electric, connected and self-driving, and 2017 will bring progress on all three fronts.

In **consumer goods and retail**, meanwhile, consumer sentiment could be fragile in 2017. Although US growth may be boosted by tax cuts, sales growth in Western Europe will stagnate, with price sensitivity still high and many consumers unnerved by the implications of Brexit. Things look better in the emerging world, as important developing economies like Russia and Brazil show renewed life. Although China's sales volumes will slow, India's will take up some of the slack. Looser rules there have paved the way for foreign brands such as IKEA to open flagship stores in 2017 (see box, p22).

Technology will continue to drive spending, yet product launches in 2017 will tend to revolve around ideas to make technologies cheaper and more convenient, including artificial intelligence and virtual reality. Technology will also make purchasing easier, as multichannel retailing expands. Web-based players will open more physical stores in 2017; bricks-and-mortar rivals like Wal-Mart will hit back by ramping up their own online offerings.

Mr Trump's policies also cast a potential pall over the **energy** sector. Renewable energy generation is on the rise globally and the Paris Climate Change Agreement will add to the momentum. Yet Mr Trump's Republican administration will try to disentangle the US from the pact, or ignore it altogether. The US Clean Power Plan looks as good as doomed. Globally, fossil fuels will remain the mainstay of energy usage, helped by a boost to export capacity for liquefied natural gas and continued low oil prices.

Brent crude prices will edge up to an average of US\$56.5/barrel, but remain well below recent highs. A fractious OPEC would like to push prices higher, but nimble US shale drillers' ability to rapidly reverse recent output falls will provide a severe test. (For an example of a big national oil company keen to expand production in 2017, see our box on *Petróleos Mexicanos*, p27).

When it comes to **financial services**, weak growth, low interest rates and tough regulations will continue to darken the outlook in 2017. Financial services in emerging markets will expand their reach nicely, aided by technological innovations such as mobile banking. However, Western financial stalwarts have no room for complacency, given their dependence on advanced economies. A slow-growing EU, under the shadow of Brexit, holds the greatest risk for finance. Clouds of uncertainty will gather especially over the City of London, which will begin to lose competitiveness—and business, to the likes of Frankfurt and even New York.

Financiers will find further reason to fret in the form of China's debt mountain, although our forecast for 2017 is fairly sanguine (not so for 2018). Low interest rates will restrict lenders' profits. After Mr Trump's victory we have altered our view and now believe that the US will raise rates twice in 2017, but other rich-

world central bankers will keep rates exceptionally low. Quantitative easing will gush through the global economy.

Regulators will also keep gradually tightening the screws, although US banks may enjoy a slight let-up in regulatory pressure in some areas with Mr Trump's arrival in the White House. The Trump administration may roll back certain planks of the US's 2010 financial reform package, for example, and may overhaul capital requirements, bringing the US in conflict with globally harmonised reform efforts such as the Basel III accords.

Healthcare companies, too, may benefit from looser regulation in the US after Mr Trump's victory. Some may also welcome the prospect of renewed Republican attacks on the Affordable Care Act of 2010 (ACA) and the resulting public health insurance system known as Obamacare. Even if Mr Trump decides not to pursue a full-scale repeal of the ACA, Obamacare may be degraded to the point where it is unsustainable. What could replace it is not yet clear, although it may involve state-level rather than federal insurance programmes.

Elsewhere pharma companies will encounter more regulation, not least to hold down drug prices in both developed and developing markets. However, over 30 nations are also set to push through significant upgrades of their healthcare systems in 2017, resulting in higher overall spending. Patent expiries, another bane for the pharma industry, have passed their peak yet some companies are still suffering (see our box on Eli Lilly, p42). Approvals of biosimilars—generic versions of biotech drugs—will gather pace in 2017, especially in the US.

Deep-seated structural change in the **telecoms** industry will keep the pressure on many operators. The EU will add to their troubles with its imposition of a digital single market and, by June 2017, the phasing out of roaming fees. Straining their balance sheets further, many will decide that they must bid for expensive new spectrum. Auctions—such as those slated to be held in 2017 in South Africa, Mexico and the UK—could eventually push up the prices consumers pay for phone contracts.

Consumers' penchant for cheap over-the-top service providers like WhatsApp is a serious problem for utilities, just as their desire for superior functionality and portability is a burden for smartphone makers like South Korea's Samsung. In 2017, the top smartphone maker will strive to recover from its crisis over combustible phones. It faces a tough battle to put behind it the reputational damage the episode has caused.

Despite these concerns and the wider uncertainties unleashed by Mr Trump's unexpected victory, our core economic outlook for the global economy in 2017 is relatively benign (see p6). Our forecasts for the business environment are also mostly benign, at least when it comes to market growth. Nevertheless, companies in all six sectors will need to monitor the trends highlighted in the following sections carefully indeed in the year ahead.

The global economy in 2017

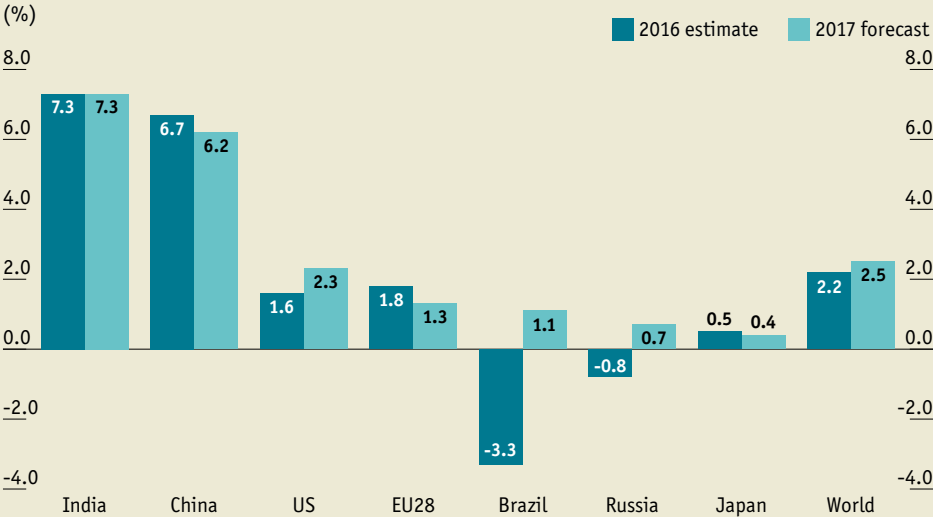
Threats to global economic growth are mounting. Populist, anti-globalisation sentiment has triggered Donald Trump’s election in the US and Britain’s planned exit from the EU. Yet, despite the raised risks, the world economy is in fact set for a slightly better year in 2017.

Many emerging markets will be helped by a firmer outlook for commodities. The EIU forecasts that average prices of Brent crude oil will climb by a quarter on 2016, to US\$56.5/barrel; non-oil commodity prices will tick up for the first time in years. Beneficiaries will include Russia and Brazil, both recovering from recessions. This will speed economic expansion in the non-OECD world to 4.3% at market exchange rates. The OECD will see a smaller acceleration to 1.8%, while global growth will rise to 2.5%.

One risk to this sanguine story lies in the world’s biggest economy. Our core forecast for the US economy is a sunny one, with GDP rising by 2.3%. Although we expect faster monetary tightening by the Federal Reserve, the central bank, this may be offset by Mr Trump’s promised tax-cuts and infrastructure spending. However, if Mr Trump pushes ahead with protectionist trade policies, he could undermine US and world growth.

Monetary policy elsewhere in the advanced world will remain overwhelmingly loose. Governments will also turn to fiscal policy to stimulate demand. In Japan, for example, the prime minister, Shinzo Abe, is throwing yet more stimulus at the economy and the fiscal deficit is set to widen. Meanwhile, debt-laden China will avoid a sharp slowdown in 2017 (not so in 2018), as Asia grows by a healthy 3.9%.

Recharge: Real GDP growth at market exchange rates



Source: The Economist Intelligence Unit.

Europe will once again let the side down, thanks partly to Brexit. The consequences of the UK's decision to leave the EU will be long-lasting, profound and clouded in uncertainty. As consumer and business sentiment in the world's fifth-biggest economy sag, recession will ensue in 2017. Europe will manage only 1.4% growth. With important elections in France and Germany to come in 2017, the fear is that the forces ranging against globalisation will gain further ground.

Automotive: Preparation time

With the auto industry facing widespread challenges, the focus on research and development has intensified. But will traditional vehicle-makers lose out as mobility becomes more high-tech?

One year ago, when we wrote the last edition of this annual report, the Chinese car market was fragile, the Russian and Brazilian car markets were in decline, oil prices were low and Germany's Volkswagen was mired in a scandal over diesel emissions. A year later, not too much has changed on these fronts. Yet carmakers are now forging ahead with development plans that should help them cope with these threats and new ones looming on the horizon.

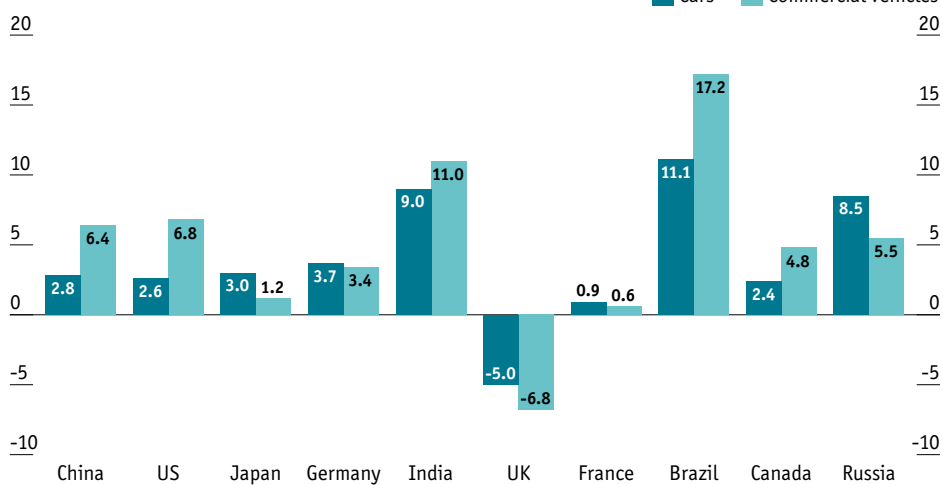
In 2017 the global auto market will carry on expanding, as it has almost every year for decades. We expect global car sales to rise by 2.4%, and commercial vehicle sales to climb by 3.2%. For cars, that will be a slowdown from 2016, largely because of lower growth in Europe and Asia. For commercial vehicles, it will mark an acceleration, as markets in both North and South America gather pace. Even so, the past few years have shown that both developing and developed markets can be volatile, and political and economic conditions can shift rapidly.

Changing gears

A prominent example in 2017 will be the US, after Donald Trump's unexpected victory in the presidential election. Although details of his proposals are hazy, there are three areas of policy that could affect the auto industry. One is in terms of demand. The effect here could be positive if Mr Trump pursues measures such as cutting taxes, boosting infrastructure spending and stepping up oil output. Given Mr Trump's well-documented scepticism about climate change and dislike of business regulation, another way the industry may benefit is from less pressure on emissions and fuel economy standards.

Big difference: Vehicle registrations in 2017

(% change)



Markets in order of 2017 sales.

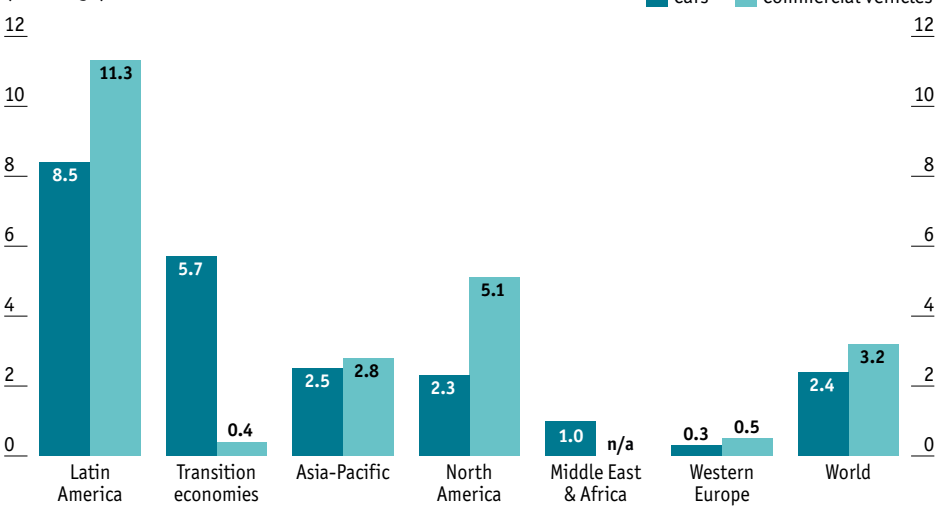
Source: The Economist Intelligence Unit; local sources.

Less positive, because it stands to raise carmakers' costs, could be Mr Trump's attitude to free trade. He has said consistently that he would raise tariffs and label China a currency manipulator. This may affect both makers of components and vehicles—General Motors recently started importing China-made vehicles to the US. More serious would be Mr Trump's promise to renegotiate the North American Free Trade Agreement and impose high tariffs on vehicles made in Mexico. NAFTA has become integral to the auto industry supply chain, and trade disruption could be damaging unless offset by incentives to boost US production.

The US is not the only market where 2017 will bring profound political changes, however. In Iran the lifting of sanctions has already encouraged PSA to return to a market it used to dominate (see box, p14), while its French compatriot Renault has expanded its investment. Volkswagen is also eyeing what could again become a sizeable market. Mr Trump has vowed to overturn the US-Iran deal, however, raising the risks substantially. Then there is the UK, where the government plans in 2017 to trigger the process of leaving the EU. Although Japan's Nissan, the country's biggest auto investor, seems to have committed to investments in the country after receiving top-level reassurance, others are waiting to see what deal will be struck.

Already, the fall in the value of the pound has caused disruption for manufacturers in the UK, making component imports more expensive. New tariff barriers would add to the problem, though they could also help locally produced vehicles gain market share from imports. Huge uncertainty will surround this market in 2017—and there may well be knock-on effects for the broader EU. The Economist Intelligence Unit expects a slowdown in EU car sales in 2017, after what has been an unexpectedly strong rebound.

The corrections: Vehicle registrations in 2017
(% change)



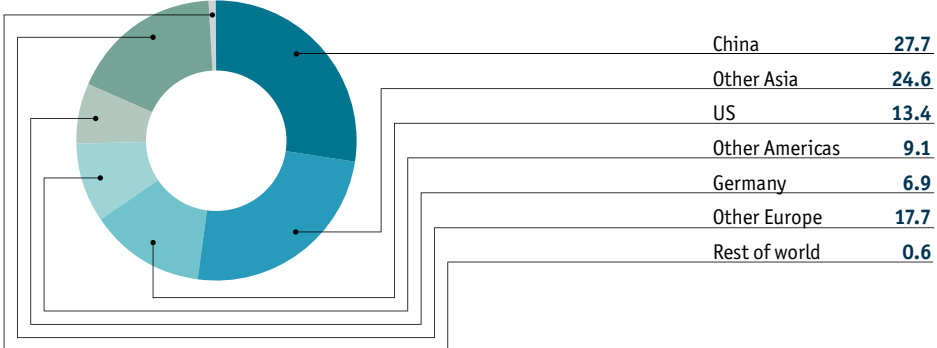
World=60 biggest economies only.
Source: The Economist Intelligence Unit; local sources.

China syndrome

A slowdown in the Chinese car market, long a worry for global carmakers, is also likely to materialise in 2017. A tax cut for small cars, introduced in October 2015, has kept the Chinese market more robust than expected, but is set to expire at the end of 2016. Unless it is renewed, a hangover may well ensue. With the economy slowing, stock markets vulnerable and the used-car market taking off, we expect car sales to rise by just 3.4% in 2017—far below historical growth rates. That holds far-reaching ramifications, particularly for the market leaders, Volkswagen and the US’s General Motors (GM), which rely on China for nearly 40% of their global sales.

Workshops of the world: Vehicle production, H1 2016

(% of total)



Note: Total global production = 46.5m units.
Source: OICA.

A sharp market slowdown would also exacerbate fears about China's production overcapacity. According to government figures, in 2015 China already had the capacity to build 31.2m vehicles, but only 24.6m were sold. And the problems go beyond vehicle-making, into the auto component and steel industries, where structural overcapacity is an international issue.

Despite this, carmakers, including Toyota (Japan), PSA (France), Renault (France), Ford (US) and Hyundai (South Korea) are forging ahead with plans to build more plants in China. GM's joint ventures are coming towards the end of a US\$12bn investment plan that involved opening five new plants and launching 60 new or revamped models by 2018. In 2017 GM-SAIC will launch its second production line in Wuhan, to build SUVs. As for Volkswagen, despite the cost of its emissions scandal it has tentatively stuck by its 2014 plans to invest US\$20bn in China by 2018—although it now says it will monitor market conditions.

For global carmakers, however, China is no longer the cash cow it once was, particularly since their indigenous rivals are slowly regaining market share. In 2017 India is likely to take up some of the slack, with sales growth accelerating to 8.9% after a dismal few years, but remains a far smaller market. Both Brazil and Russia should finally turn the corner in 2017 following four painful years of decline. Nevertheless, they will remain a long way below their recent peaks, with Fiat and Renault, as their biggest investors respectively, bearing the brunt of their collapse.

The future is electric...

As carmakers adapt to shifts in sales patterns in 2017, they will also have to step up their long-term investment plans. The broad outline of these will be unchanged: carmakers have been lowering emissions, developing alternative-fuel vehicles, investing in connected-car technology and adapting to changing patterns of vehicle use. Yet in 2017 their moves will take on a new urgency.

Take lowering emissions and developing alternative-fuel vehicles. Although emissions standards have been tightening, particularly in the EU, US and Japan, the collapse in global oil prices in 2014 deterred many drivers from making the switch away from petrol and diesel. Put simply, the savings from buying low-emission vehicles, whether through subsidies or lower fuel use, were too small to offset their higher prices and added inconvenience.

We do not expect oil prices to rebound much in 2017, while the US policy environment may now change. Yet the Volkswagen scandal has put emissions under new scrutiny in many markets, prompting the EU to introduce tests performed in real driving conditions, from September 2017. China, meanwhile,

has finally announced the rollout of the stricter China 5 standard in 2018. Volkswagen's failings have also dented trust in vehicle-makers' efforts to develop cleaner oil-based cars, leading some countries to scrap subsidies on diesel.

At the same time, electric vehicle (EV) markets are taking off in earnest in many countries, a trend likely to gain ground in 2017. In China, sales of new energy vehicles (a category including EVs) are expected to double from around 331,000 in 2015 to 700,000 units by end-2016, according to the China Association of Automobile Manufacturers (CAAM). This would put them within sight of 1m in 2017. In the EU, EV sales are likely to top 200,000 units in 2017.

Not surprisingly, nearly every major carmaker is stepping up its investment EVs. Market leaders Renault, Nissan, Mitsubishi and GM are already investing heavily, while in 2015 Ford announced plans to spend US\$4.5bn in the area. Volkswagen Group is promising 30 new EVs by 2025, when it expects its annual EV sales to reach 2m-3m units. Tesla, a US electric carmaker, has an ambitious plan to ramp up its annual production from around 50,000 to about 500,000 units by 2018. As for Chinese carmakers, their efforts to develop EVs are gathering pace, aided by substantial government subsidies that aim to make China a centre for EV technology.

... connected and self-driving

While they are stepping up their investment in EVs, however, carmakers will also need to devote an increasing share of their resources to connected-car technology. Many are already doing so, souping up "infotainment systems" and vehicle-monitoring software, as well as high-tech driver assistance. Cars are also increasingly tapping into the "internet of things". In 2016, for example, Volkswagen teamed up with South Korea's LG as part of its efforts to link vehicles with connected homes. Such moves are likely to take on a new impetus in 2017, helped by the US government's decision to publish its first rulebook on self-driving cars in mid-September 2016.

Self-driving is not the only goal for connected-car technology, but it is likely to prove the most groundbreaking. If vehicles can eventually travel without intervention by a driver, the way that people use cars will change completely. Cars could, for example, pick up pre-ordered shopping while their owners are at work. Combine that technology with a sharing economy, as the taxi-hailing company Uber envisages, and vehicles may also start to become not private possessions but an extremely adaptable and convenient form of public transport.

Vehicle-makers are already positioning themselves for this future. From next year, German carmakers Audi, BMW and Daimler, having acquired Nokia's mapping

technology, plan to equip their cars with the ability to hunt out parking spaces. Ford claims that it will produce a self-driving car by 2021, while Tesla and others already allow drivers to switch to autopilot on major highways and motorways.

Still, carmakers face a gathering challenge in 2017 from technology companies like Google, Apple and Uber that have the potential and ambition to disrupt the industry. It is by no means clear that traditional carmakers will lose out. After all, Apple seems to have quietly shelved plans to develop its own car. For a technology company, breaking into an industry with very different economics is far from straightforward. Although Apple continues to develop self-driving software, it may well need to team up with a vehicle-maker to make that technology available to customers.

What to watch for

- **Fewer fumes.** New Real Driving Emissions (RDE) tests will apply to all new models sold in the EU from September 2017 and for all new vehicles from September 2019. The tests are being phased in: in the first stage the RDE limit for NOx emissions will be 2.1 times the laboratory limit, but that gap will be reduced to a maximum of 1.5 in 2020 for new models and 2021 for new vehicles.
- **Tesla's test.** The California-based electric carmaker plans to start production of the long-anticipated Model 3 in late 2017. The cheapest Tesla to date, at around US\$35,000 before government incentives, it will require the company to ramp up annual production tenfold from the current 50,000 units. Customers have already put in pre-orders for nearly 400,000 of the cars. They will be dismayed if delivery is delayed.
- **Geely's ambitions.** 2017 will be a key year for Geely, the Chinese carmaker that took over Sweden's Volvo Cars in 2010. The company plans to launch Lynk & Co, a new brand of connected cars developed with Volvo's help. It will start with a sports utility vehicle. Meanwhile Volvo itself is rolling out several models, including the new S90, based on the group's new global chassis.

COMPANY IN FOCUS

PSA revs up in Iran

Local production of Peugeot vehicles will resume in 2017.

For more than 30 years, Iran was an important market for France's PSA Group, parent company of the Peugeot and Citroën marques. Iran's second-largest carmaker, Saipa Group, was established in 1966 with the sole purpose of building Citroën vehicles. Peugeot, meanwhile, had a long-standing relationship with Iran Khodro, the country's biggest automaker. By 2012 the success of these deals had turned Iran into PSA's second-biggest market after France.

Yet in 2013 the French company was forced out of Iran when trade sanctions were imposed and its own financial woes compounded matters. Little wonder that when trade sanctions were lifted in January 2016, the French carmaker became one of the first Western companies to announce its return to the Middle Eastern country.

Under a joint venture agreement announced in January and signed in June 2016, PSA Group and Iran Khodro are investing €400m (about US\$440m) over 2016-21 in a 50-50 venture to produce and launch the Peugeot 208, 301 and 2008 models. The first locally made cars are scheduled to roll off the production line at a plant in Tehran in the second half of 2017. Not to be outdone, Citroën is also heading back to Iran. In July 2016, PSA Group renewed its agreement with Saipa Group to sell Citroën vehicles there from 2018.

The deal therefore marks PSA Group's re-entry into Iran after a three-year hiatus. With the new agreement, PSA Group is aiming to revive its position as the market leader in the largest automotive industry in the Middle East. In 2011 PSA Group sold over 450,000 vehicles in Iran and there are still around 4m Peugeot cars on the road there. In 2017 PSA Group hopes to sell 300,000 vehicles in the country, while The Economist Intelligence Unit expects the total car market to expand by 12%.

Yet this time round PSA Group may find the competition tougher. Iran Khodro and Saipa also have manufacturing deals with other carmakers, notably Industrial Development and Renovation Organisation (IDRO), the local joint venture of PSA's French rival Renault. IDRO and Renault signed a new deal in September 2016 under which they plan to build a new plant. In addition, Saipa builds vehicles licensed from South Korea's Kia Motor, and Khodro builds models from Japan's Suzuki. Germany's Volkswagen is also

mulling a venture with an Iranian automotive company.

Moreover, the years of isolation have hardened the Iranian carmakers' own ambitions. Crucially, the joint-venture agreement with PSA allows Iran Khodro to develop its own cars on the same PSA platforms. The Iranian automaker plans to raise its annual production to 600,000 through the venture. The new plant is also expected to use locally developed parts to manufacture the vehicles, as opposed to importing them from France and South Korea as before.

The biggest risk, however, lies with the election of Donald Trump to the US Presidency. Mr Trump has previously denounced the US-Iran nuclear deal, and has vowed to "dismantle" it. He will encounter strong international opposition, given the deal has been confirmed by the UN. Nevertheless, a harder US line on Iran could yet undermine PSA's hopes of an Iranian revival.

2017 calendar: Automotive

January

8-22: North American International Auto Show, Detroit, US

14-22: European Motor Show, Brussels, Belgium

Jan 27- Feb 5: The Washington Auto Show, Washington DC, US

27: Fiat-Chrysler Automobiles reports 2016 results

28: Ford reports 2016 results

February

3-9: New Delhi Auto Expo, India

4: Daimler reports 2016 results

11-20: Chicago Auto Show, US

17-26: Canadian International Auto Show, Toronto, Canada

March

9-19: Geneva International Motor Show, Switzerland

10: Volkswagen reports 2016 results

16-20: Cairo Automech Formula, Egypt

March 29- Apr 9: The 38th Bangkok International Motor Show, Thailand

March 30-April 9: Seoul Motor Show 2017, South Korea

April

14-23: New York International Auto Show, US
5-10: Zagreb Auto Show, Croatia
20: Istanbul International Auto Show
21-28: Auto Shanghai 2017, China
27-28: International Vienna Motor Symposium, Austria
April 27-May 7: Indonesia International Motor Show

May

5-7: The London Motor Show, UK
6: Toyota reports 2016-17 results
24-27: Kiev International Motor Show, Ukraine
13-21 May: Salon Internacional Automovil, Barcelona, Spain

June

7-8: TU Automotive 2016, Detroit, US
10-20: Buenos Aires International Auto Show, Argentina

July

13-16: Seoul Auto Salon, South Korea

September

1: EU enforces Real-Driving Emissions tests and adopts World Harmonised Light Vehicle Test Procedure
4-9: Moscow COMTRAMS, Russia
12-14: Electric and Hybrid Vehicle Technology Expo, Michigan, US
14-24: 67th International Motor Show, IAA, Frankfurt, Germany
26-30: FISITA 2016 World Automotive Congress, BUSn, South Korea
26-Oct 16: Mondial de l'Automobile, Paris, France

October

27 Oct- 5 Nov: Tokyo Motor Show, Japan

November

8-20: Sao Paulo International Motor Show, Brazil
15-27: Los Angeles Auto Show, US

December

4-13: Bologna Motor Show, Italy

Consumer goods/retail: Uncertainty but little austerity

Political events may dampen consumer confidence in 2017 but new technologies will continue to drive global retail sales upwards.

2016 was a year in which external events overshadowed the retail industry. The biggest were Brexit and Donald Trump's victory in the US presidential elections, but others included fears of a slowdown in China, loosening regulations in India and elections or referendums in countries as diverse as Austria, the Philippines and Colombia. These factors will bring further uncertainty in 2017, yet global retail sales will continue to accelerate as new technologies bring fresh ways to spend and new products to buy.

Ambiguity vs stability

In the 60 major economies that make up our global forecast, we expect combined retail sales to rise by 2.6% in volume terms in 2017, up from 2.4% in 2016. Although the price sensitivities that bedded in during the 2009 global economic crisis persist, monetary policy in most countries will remain loose and few governments will pursue austerity policies. Even so, each region will throw up at least one big cause for concern.

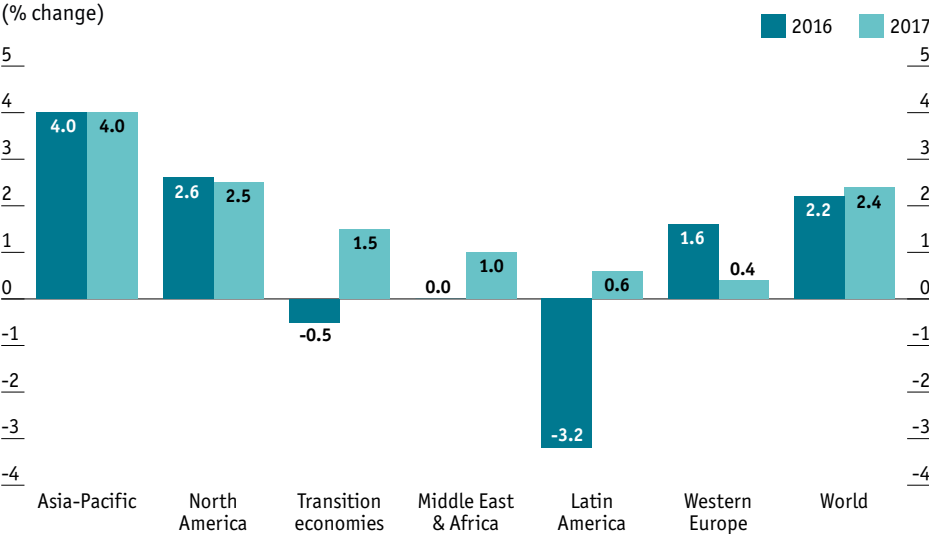
The UK's decision to leave the EU has encouraged further anti-EU movements across the continent. 2017 will see elections taking place in France, Germany and the Netherlands, all of which are seeing sizeable and growing opposition to EU membership. This will cause consumer uncertainty and will cause sales volumes in Western Europe to stagnate. The UK faces even greater uncertainty as negotiations on Brexit begin. The prospect of rising import prices will weigh on demand, prompting a decline in sales.

For other regions the outlook is more positive. In North America the economy may benefit in 2017 from the ending of a long and bitter US election campaign

as well as tax cuts promised by Mr Trump. However, consumer confidence may be dampened in the short term by Mr Trump’s victory. The negative impact on Canada’s retail market may be longer lasting, particularly if the US president goes ahead with plans to renegotiate the North American Free Trade Agreement (NAFTA).

Asia will see retail volume growth accelerate in 2017 as a slowdown in China is offset by improved demand in countries such as India. In Latin America, Central and Eastern Europe and the Middle East and Africa, retail sales volumes will rebound strongly from 2016’s decline, as oil and commodity prices move upwards and political and economic stability improves in markets such as Russia, Brazil, Nigeria and Saudi Arabia. However, with oil revenues still subdued, growth will

Rebounding regions? Retail sales volumes



Sources: The Economist Intelligence Unit; Planet Retail.

remain modest on a regional basis (see chart). Meanwhile, countries such as Mexico and Iran could suffer if US trade barriers rise.

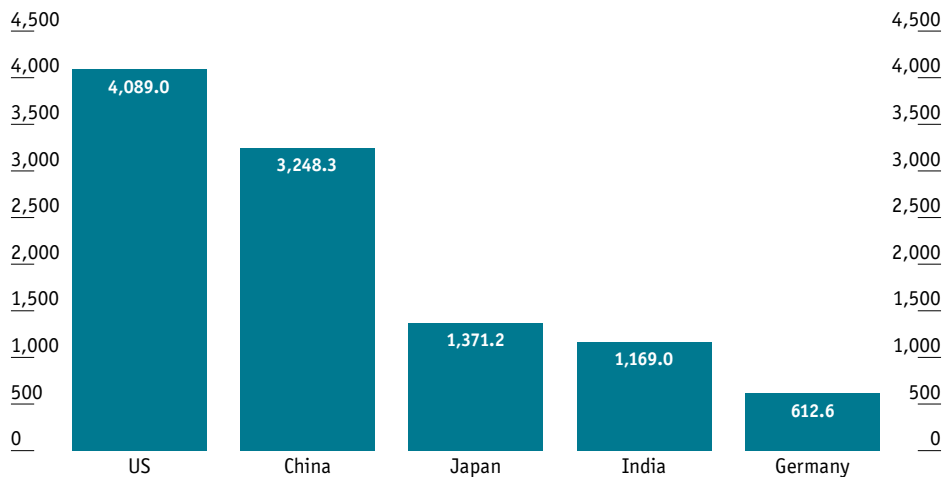
Ones to watch?

This broad regional picture masks country-level trends that will need to be monitored by multinational companies. One will be the economic balance between China and the US, particularly if the two become embroiled in a trade spat sparked by Mr Trump’s desire to raise tariffs. With retail sales growth in China slowing and that in the US likely to stay relatively strong, the former is unlikely to overtake the latter as the world’s biggest retail market until well into the next decade. However, China will remain the second-largest in 2017.

Japan will also keep its position as the third-biggest retail market in 2017, holding off competition from India despite the latter’s rapid growth. However,

The giants: Five biggest retail markets in 2017

(US\$ bn)



Sources: The Economist Intelligence Unit; Planet Retail.

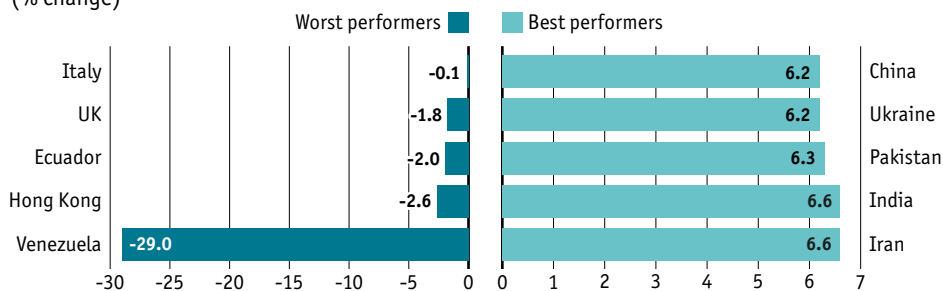
India will be buoyed by the relaxation of foreign direct investment (FDI) restrictions on retail which will encourage a host of foreign brands to open stores there in 2017 (see box, p22). Rounding off the top five biggest retail markets will be Germany, where volume growth will decelerate in 2017 to a minimal 1%.

China and India will also rank among the five fastest-growing retail markets in 2017 (see chart). Alongside them will be Pakistan, although growth here will continue to be hampered by security concerns. Ukraine will experience a strong rebound in 2017, although this will largely reflect the very poor sales performances of recent years. In nominal US dollar terms, 2017 sales in Ukraine will still be lower than they were a decade ago. We currently forecast strong retail growth in Iran, too, after the relaxation of international trade sanctions in early 2016 released pent up demand for foreign goods and brands. However, Mr Trump has vowed to “dismantle” the trade deal, and the other signatories may not be able to prevent him from doing so.

The five worst-performing retail markets in 2017 will be a diverse bunch, with diverse reasons for their poor performance. Venezuela’s volatile economy will

Best and worst performers: Retail sales volumes in 2017

(% change)



Sources: The Economist Intelligence Unit; Planet Retail.

continue to drag down retail sales far faster than in any other market. However, the UK will experience a contraction due to the falling value of the pound, rising inflation and Brexit uncertainty. Sales in Hong Kong will decline further as domestic demand weakens and Chinese retail tourists are deterred by the strength of the Hong Kong dollar. The markets in Ecuador and Italy, which have been weak for several years, will both see retail volumes fall in 2017.

Getting smarter?

Amid these political and economic trends, consumer behaviour will also be driven by innovation and the development of technology. However, for the most part 2017 will be a year in which product launches make existing technologies cheaper, more accessible and more usable for consumers, rather than introducing new ideas or concepts.

Products such as ultra-high-definition television and “smart” televisions, which have been around for some time, will become mainstream as prices fall. Ironically this will hasten the decline of television as a media form as viewers increase their use of streaming channels such as Netflix and Amazon Prime. The internet of things will also become more relevant, as more households start using smartphone apps to control appliances. The incorporation of Amazon’s “Dash” button into fridges, for example, will allow consumers to stock up on certain essentials with a single touch.

As well as new products, technology will also bring changes to the ways that consumers engage with retailers. Growth in e-commerce and, in particular, m-commerce will outpace overall retail sales, while contactless payment systems will make spending easier. 2017 will also see excitement mount over delivery innovations such as drones.

The real progress will be in multichannel development, however, as bricks-and-mortar giants ramp up their online offerings and online pure players enhance their physical stores. Wal-Mart’s recent investments in JD.com and Jet have signalled a strong intent to move into e-commerce in 2017. Meanwhile the likes of Amazon, Google and Apple have all been experimenting with a variety of real-world outlets, from pop-up shops to showrooms and high-profile flagship stores. Such crossovers will gather pace in 2017.

All this will offer consumers more choice in terms of the retail channels they use, the products they favour and the price they choose to pay. The effect will be greater consumer empowerment, and a more volatile innovation cycle. Consumers will quickly adopt new products or services that offer them simple and cost-effective solutions to their problems, in a process that could overturn established incumbents.

What to watch for

- **Amazon gets fresh.** The battle for the future of retail is heating up, pitting online giants against traditional retailers. In the US Amazon has announced plans to push deeper into the grocery business in 2017 by opening convenience stores and drive-in locations where customers can pick up pre-ordered groceries without leaving their cars. The firm, which already offers free same-day delivery in 29 US cities, has also started rolling out fresh-food deliveries in markets including the UK, Spain and France.
- **AI, AR and VR.** These three technologies will underpin a host of production innovations in 2017. Artificial intelligence (AI) will become more sophisticated, encouraging children to play with AI dolls while their parents play music, order taxis or buy goods using Alexa, Amazon's virtual personal assistant. Augmented reality (AR) has taken on a new impetus, thanks to Niantic's addictive Pokémon Go game, and 2017 will see other brands jumping onto the bandwagon. Virtual reality (VR) will offer a more immersive experience, with Samsung, Sony, HTC and Microsoft all launching products that will be more affordable than pioneering offerings such as Oculus Rift.
- **Making a difference.** Differentiation will be key as retailers jostle for position online and offline. Some retailers will woo consumers by addressing their ethical or environmental concerns, with food waste likely to be a particularly big issue. Others will shun costly loyalty schemes in favour of rewards and treats tailored to individual consumers. Still more will turn to big data, using algorithms to learn more about their consumers and their purchasing history.

COMPANY IN FOCUS

IKEA sets up shop in India

The Swedish retailer will open its first Indian store, part of a telling new trend.

As growth in China wanes, shop chains are looking to India to plug the gap. IKEA is in the vanguard of this trend, which is being sped by an encouraging outlook for demand and more welcoming rules for foreign investment. The Swedish furniture retailer will open its very first flagship store in the southern city of Hyderabad by end-2017, followed by a shop in Mumbai and further openings thereafter.

Expansion in China has been a core element of IKEA's strategy for many years. It has opened an average of three stores there each year over the past one and a half decades. But the days of double-digit Chinese market expansion are gone. As the economy slows, shops must contend with a dip in overall volumes growth to below 5% by 2020.

By contrast, we forecast India will be the joint-fastest-growing retail market in the world in 2017. Low oil prices and wage hikes are lifting consumers' spirits, leading to spiking demand. Indian volumes are set to grow by an average of around 6% in the latter half of this decade, while India is on course to overtake Japan as the third-largest retail market by 2019.

If ramping up in India sounds obvious, infrastructure and pricing present sizeable barriers for foreign players. So too does regulation, although the scale of it was lowered appreciably by reforms made in November 2015. Whereas single-brand foreign shops had been required to source at least 30% of products locally within five years of their initial investment, the clock does not now start ticking until the first store is opened. The government is reported to be mulling further concessions in future.

Ikea will invest Rs7bn (US\$105m) in its 400,000-sq-ft Hyderabad store, which will employ about 500 people and sell around 7,500 products. In all, the company aspires to have 25 stores in India by 2025, in cities including Bengaluru, Delhi and Kolkata, while also expanding its e-commerce business. It will not be alone in piling into the Indian market. Other retailers have also been granted permission to make their own single-brand plays, with a clutch of clothing and luxury brands examining opportunities on the subcontinent. Apple, too, has looked seriously at opening stores in India—a prestigious potential addition.

2017 calendar: Consumer goods and retailing

January

- December 26, 2016–Jan 28: Dubai shopping festival
- 5–8: International Consumer Electronics Show (CES), Las Vegas, US
- 10: Metro Group releases trading statement for Christmas quarter 2016
- 15–17: Retail's BIG Show, New York, US
- 16: Carrefour reports 2016 results
- 26: Unilever reports 2016 results
- 25: McDonald's reports 2016 results
- 30–Feb 2: New York Fashion Week, Men's, US

February

- 9: Yum! Brands reports 2016 results
- 8: IGD Asda Trade Briefing, Harrogate, UK
- 9–16: New York Fashion Week, Women's, US
- 17–21: London Fashion Week Fall/Winter, UK
- 22–28: Milan Fashion Week Fall/Winter, Italy
- 27– March 2: Global Food Safety Conference, Houston, US
- 28– March 8: Paris Fashion Week Fall/Winter, France
- 13: Reckitt Benckiser reports 2016 results
- 21: Wal-Mart reports 2016–2017 results
- 25: Tesco reports fiscal 2017 results

April

- 4–6: The World Retail Congress, Dubai, UAE
- 18–20: Next Generation Retail Summit, Texas, US
- 20–21: Global Retailing Conference, Arizona, US

May

- 8–9: Retail Business Technology Expo, London, UK
- 17: The Retail Conference, Nottingham, UK
- 20: Marketing Unbound, The Economist Events, Hong Kong

June

- 15–17: NG Retail Summit Europe, Scotland
- 20–23: The Global Consumer Goods Forum, Berlin, Germany

21-25: Paris Fashion Week, Men's, France

July

10-13: New York Fashion Week, Men's, US

September

7-14: New York Fashion Week, Women's, US

15-19: London Fashion Week Spring/Summer, UK

20-26: Milan Fashion Week, Spring/Summer, Italy

26-Oct 4: Paris Fashion Week Spring/Summer, France

November

11: Singles Day, China

24: Black Friday

27: Cyber Monday

December

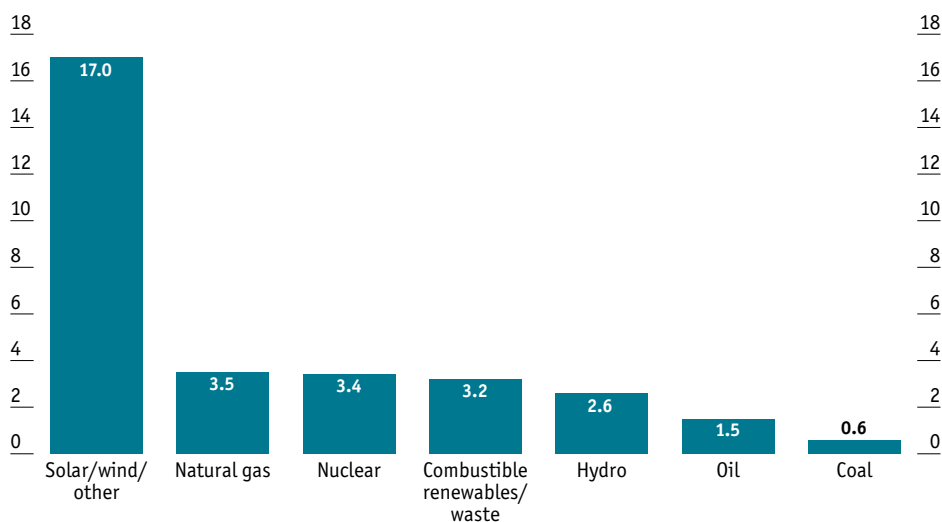
23: Super Saturday falls on Christmas Eve

Energy: A transition trumped?

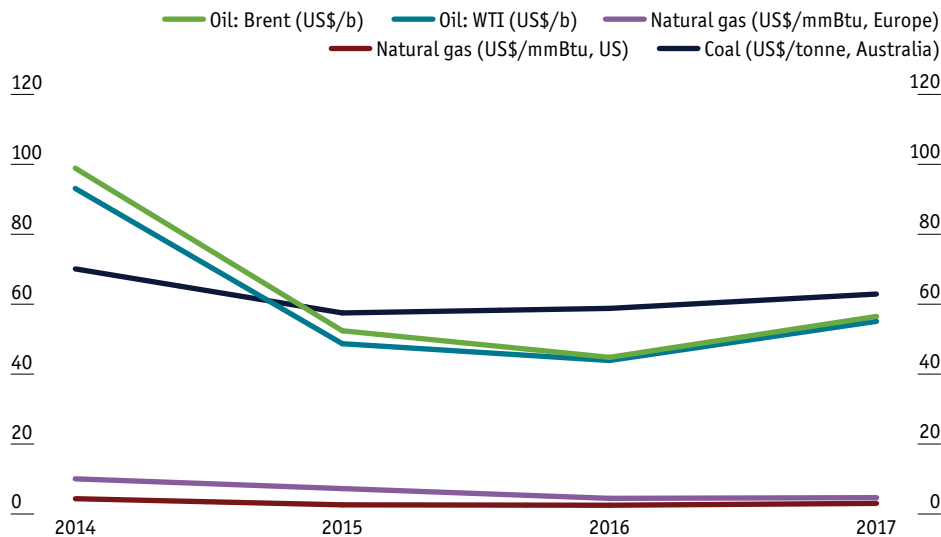
Climate policies will keep chipping away at fossil fuels' role as the mainstay of global energy use, despite Donald Trump's appointment as US president in 2017.

Energy markets will enter 2017 shortly after passing an important milestone. On November 4th 2016 the Paris Agreement on Climate Change entered into force, a feat that twelve months ago few would have believed could be achieved so soon. By October, 55 parties responsible for 55% of global emissions had ratified the agreement, less than a year after the Paris meeting, opening the way for it to become law. The agreement binds those that have signed up to it to hold down "the increase in the global average temperature to well below 2°C above pre-industrial levels" and to pursue "efforts to limit the temperature increase to 1.5°C

Sustainable shift: Energy consumption in 2017
(% change)



Source: The Economist Intelligence Unit.

Gaining the edge: Energy prices in 2017

Source: The Economist Intelligence Unit.

above pre-industrial levels”.

Dramatic changes to the energy mix take longer than a year; de-carbonisation is a gradual process. Worldwide, moreover, current measures do not go far enough to achieve the 2°C pledge. Yet the speed with which the pact has come into force is evidence of a global will to tackle climate change. Even the election of a Republican US president is not likely to halt the transition towards cleaner energy globally, although it is likely to slow it. It will be difficult for a Donald Trump administration to disentangle the US from the Paris Agreement now that it has already come into force, but indifference to addressing climate change at the top policy level of the world’s second-largest emitter will be a setback.

Indeed Mr Trump’s election will have global implications for energy: US-China co-operation, an important pillar of the climate policy agenda, will be affected. Domestically, the Trump administration is likely to abandon his predecessor’s emissions-cutting agenda, casting a pall of uncertainty over the future course of US energy policy. Implementation of the US’s Clean Power Plan, currently stalled because of litigation, is now in severe doubt.

But this does not mean, however, that the global trend will be reversed. In 2017 we expect some of the largest emitters—the EU, India and China, all Paris signatories—to follow through on policies designed to cut emissions, or at least to lower the carbon intensity of their economies. The EU, having already hit its 2020 target to reduce carbon emissions by 20% from 1990 levels, partly owing to slower economic growth, will be on the road to slashing them by 40% by 2030. The high-profile shift in its largest economy, Germany, towards using more renewables in power generation will change tack in 2017 and could be slower, though financially steadier, as a result (see box, p28). India’s power minister wants renewables to

make up 40% of generating capacity by 2030, and China will continue its own renewables roll-out while placing caps on coal consumption and coal-fired power capacity.

Fossil fuels still the mainstay

Renewables now attract two-thirds of the investment in power generation worldwide. Yet countries will need to put in place more ambitious policies over time, if climate change is to be halted. Paris will add to the momentum; so too will the falling costs of wind turbines, solar panels and batteries for electric vehicles.

For now, however, fossil fuels remain the mainstay of the energy system, and hydrocarbons account for 85% of primary energy consumption. In 2017, they will be comparatively cheap. The EIU believes that the prices of oil, natural gas and coal have already bottomed out, but over the year we expect them to remain well below recent highs. OPEC will strive to regain some control over market dynamics (see box, p28). However, with Brent crude averaging US\$56.5/barrel in 2017, up from US\$44.8/b in 2016, the capacity of US shale drillers to reverse recent output falls will test OPEC's ability to push prices higher.

Natural-gas and thermal-coal prices will also show modest increases in 2017. Production of liquefied natural gas (LNG) will surge in the US and Australia (see box, p28). However, stronger consumption growth of 2% in 2017, accelerating from 1.5% in 2016, means LNG prices will nonetheless climb. This will be especially pronounced in the US, where prices will average US\$3/mmBt in 2017, up from US\$2.5/mmBt in 2016, while in Europe LNG will creep up to US\$4.7/mmBt from US\$4.5 mmBt. Owing partly to those slightly higher gas prices, switching from coal to gas in the power sector will slow in the US.

Strategic cuts in Chinese coal output, driven by climate policy and safety concerns, will tighten market conditions somewhat. We forecast a modest increase in coal (Newcastle thermal) prices, to US\$62.9/tonne in 2017 from US\$58.8/tonne in 2016. Weak consumption globally will prevent prices from rebounding further. The demand for coal in electricity generation will be stagnant in the US and Western Europe, while losing momentum in China.

Despite low fossil-fuel prices, in 2017 the effect of advances on the environmental policy front, most notably the ratification of the Paris agreement, will gradually filter through. Globally, the spread of policy drivers, as well as the falling costs of solar and wind power, will ensure that the de-carbonisation of the energy system continues. However, the extent to which Mr Trump reverses the momentum of the Obama administration on green issues will be a key development to watch in 2017 and beyond.

What to watch for

- **LNG boom.** LNG export capacity will be substantially boosted in 2017. Australia will add 15m tonnes per year (mtpy) to reach 66 mtpy, catching up the top LNG exporter, Qatar, with 78 mtpy. The US, which began exporting LNG from the mainland in 2016, will ramp up capacity in 2017. The Cove Point plant—which has three trains with a combined capacity of 13.5 mtpy—will start up, while two trains will come online at the already operating Sabine Pass plant, adding 9 mtpy. All this new capacity will mean that LNG prices in 2017 will rise just slightly on 2016 (on the back of higher oil prices), to US\$7.31/mmBtu from US\$6.82/mmBtu, languishing at less than half of the 2014 level of US\$16.04/mmBtu.
- **Energiewende changes tack.** Germany's Energiewende, or energy transition, will enter a new phase when the Renewable Energy Act enters effect on January 1st. Renewables usage has shot up sharply and now accounts for over 30% of German power generation. Germany's green schemes have come under criticism for their expense, however. Under the new law, the existing system of feed-in tariffs will be axed in favour of competitive auctions, with a set amount of capacity opened up to competitive bidding each year. The spread of renewable capacity is thus set to be slower but more stable. Yet by slashing the cost of rolling out renewables the new scheme could put it on a more financially and politically sustainable path.
- **OPEC's last stand?** The US shale boom has put OPEC on the back foot. When oil prices collapsed in 2014 OPEC kept its spigots open, hoping that low prices would cause havoc in the US shale patch. US crude oil output grew by nearly 4m b/d on an annual basis in 2011-15. Output since mid-2015 has declined by nearly 10%, but shale drillers are still pumping due to productivity improvements and continued availability of cheap credit. OPEC members, worried by haemorrhaging oil export revenues, began to mull output cuts in September 2016, in an effort to keep prices above US\$50/b. Individual member states' commitment to observing quotas is often skin-deep, however. Even if cuts are successful US shale players may simply deploy more rigs, moreover, keeping prices depressed. 2017 will be a testing year for OPEC.

COMPANY IN FOCUS

Pemex: Open to recovery

Troubled Pemex will bring in foreign cash to develop untapped resources in 2017.

2017 will be a crucial year for Petróleos Mexicanos. Despite falling production and strained finances, Mexico's indebted national oil and gas company hopes to emerge from the global oil slump leaner and stronger. In 2017, Pemex will be bringing in foreign oil firms to develop promising untapped resources, aiming to revive output and return to profit. Foreigners taking a share of the country's oil wealth has long been taboo in Mexico, but desperate times call for desperate measures.

Pemex has lost money for 15 straight quarters as of the second quarter of 2016; in the three months to June, production fell 3% to 3.1m barrels of oil equivalent per day (boe/d). The company recognises that in 2017 it urgently needs to dig itself out from under its debt pile, which is set to soar to nearly US\$100bn before the new year is in. In 2016 the company has raised US\$4bn through long-term debt and exchanged US\$1.6bn of bonds to help meet its near-term obligations. It has also sold non-core assets and set about slashing costs to focus spending on its upstream operations.

Foreign participation in the sector is the big hope. To spur national oil production, a vital source of government income, the government liberalised energy policy in 2014, allowing foreign involvement. Pemex has since sought out some of the world's leading oil and gas producers to help it tap Mexico's capital-intensive offshore fields. Not only their expertise will be valuable; they will bring crucial funding, as cash-strapped Pemex strives to control costs.

The first field to be developed will be the deepwater Trion oil play in the Gulf of Mexico, with deposits of around 480m boe, reportedly in need of investment of nearly US\$11bn over 15 years. (Nearby, Pemex has also discovered light-crude deposits of around 200m boe.) Developing these resources without external funding would be impossible given Pemex's straitened finances. To lure in partners, Pemex is cutting its stake in the field, touted as Pemex's first foreign joint venture, by five percentage points to 40%, to encourage private investors.

Drilling at 30 exploratory wells is scheduled for 2017. Moreover, Mexico will carry out a second round of auctions in March 2017, after a first round in December 2016 taking in ten oil blocks with deposits worth more than US\$10bn. Over 20 energy firms, including US-based Exxon Mobil Corp and Chevron Corp, as well as Europe's Total SA, Statoil ASA, BP plc and Royal Dutch Shell plc, have signed up to

bid for stakes in Mexico's offshore oilfields.

The foreign majors will all hope to pick up reasonably priced assets. Keenly conscious of sagging oil prices, they will try to drive a hard bargain. Mexico itself will need to decide how cheaply it will auction its resources. Only once the haggling is out of the way could Pemex's turnaround take hold.

2017 calendar: Energy

January

21: Schlumberger reports 2016 results
17-24: World Future Energy Summit, Abu Dhabi, UAE
22-27: Arctic Frontiers, Tromso, Norway

February

2: ExxonMobil reports 2016 results
2: BP reports 2016 results
4: Royal Dutch Shell reports 2016 results
5-9: 16th World Renewable Energy Congress Perth, Australia
11: Total reports 2016 results

March

9: E.ON reports 2016 results

May

1-4: Offshore Technology Conference, Houston, US

June

13-15: Global Petroleum Show, Calgary, Canada

July

11-13: Oil and Gas Asia 2017, Kuala Lumpur, Malaysia

September

27-29: World Energy Engineering Congress, Atlanta, US

November

6-17: UN Climate Change Conference (COP 23)

Financial services: Negatives trump positives

Finance will enjoy boosts in 2017 from fintech, mobile money, an emerging market rebound and expanding customer ranks. However, the three villains of the post-crisis era—weak growth, low rates and tough regulations—will keep a damper on the sector.

A number of positive developments will animate global finance in 2017. Bright minds in the rich world will apply big-data and mobile applications to promising financial technology (“fintech”) start-ups in banking, payments and insurance. Meanwhile, firms, governments and do-gooders in much of the developing world will find intriguing new ways to promote financial inclusion—such as through the adoption of mobile money in parts of Africa. Most such experiments will fail, but it is very likely that several will be transformational.

Certainly, in 2017 individuals and businesses worldwide will enjoy a wider range of ways to save, borrow and transfer money. Many of these will be dramatically simpler and cost less than ever before. Bright spots in the global economy will also support the development of finance. Large emerging markets like Brazil and Russia will rebound from recessions in 2017, The Economist Intelligence Unit forecasts. Meanwhile, India’s economy will expand in leaps and bounds, and China’s will stay strong (before suffering a downturn in 2018 as the authorities reorient its debt-laden economy).

Most important, the unfulfilled financial needs of firms and households are large, representing a huge opportunity. Millions of smaller companies worldwide will benefit, over time, from greater access to investment capital and day-to-day services. Nearly 40% of the world’s population lacks even a basic financial account, according to the World Bank’s latest reckoning. Even more lack the simplest of insurance and investment tools.

Megatrends weigh on finance

Yet finance as a global industry remains heavily skewed towards developed OECD markets like the US, Europe and Japan. It will thus continue to suffer as those economies struggle to rebound from the financial crisis of nearly a decade ago. Such markets currently account for 70% of bank assets, 77% of share value, 81% of insurance premiums and 92% of investment funds, far above their 64% weight in global economic output.

In addition, three key underlying trends will dampen down the financial industry: first, overall low levels of economic expansion; second, exceptionally low interest rates and, crucially for financial firms, interest spreads; and third, the impact of much stricter financial regulations designed to deter market abuses and avert the failure of major firms requiring government rescues. None of these trends will go into reverse in 2017 or probably for many years to come.

The rich world will not shake off its doldrums in 2017, growing by just 1.7% in real terms, up from 1.6% in 2016, we forecast. Consumers will continue to restrain their spending and pay down net debt. Business investment and borrowing will stay feeble. Mindful of public debt burdens, governments will spend frugally.

As a result, central banks will keep base interest rates at historically low levels and in most countries continue to employ quantitative easing policies designed to keep longer-term rates low. Low rates and spreads mean banks earn less on lending, while insurers and fund managers enjoy reduced returns on fixed-income securities.

Following the surprise election of Donald Trump as president, US financial firms may enjoy a little let-up in regulatory pressure over consumer protection and financial stability indicators. Indications are that the Trump administration will try to roll back certain planks of the US's 2010 financial reform package, such as the rule that bars deposit-taking banks from trading for their own profits, as opposed to transacting for their clients or to make markets in certain securities.

Other new provisions coming into force will include a US fiduciary standard requiring most investment advisors to offer clients the most suitable products (rather than simply reasonable ones) from April, although again some of Mr Trump's advisors say they want to repeal the policy. Firms will be preparing for additional measures that take effect in January 2018, including the first-ever Basel leverage rule and new European capital market rules known as MiFID 2.

However, Republican plans to overhaul capital requirements could bring the US in conflict with globally harmonised reform efforts such as the Basel III accords, which are being implemented elsewhere alongside Solvency 2 requirements for European insurers. The world's biggest banks (G-SIBs in the jargon) must boost

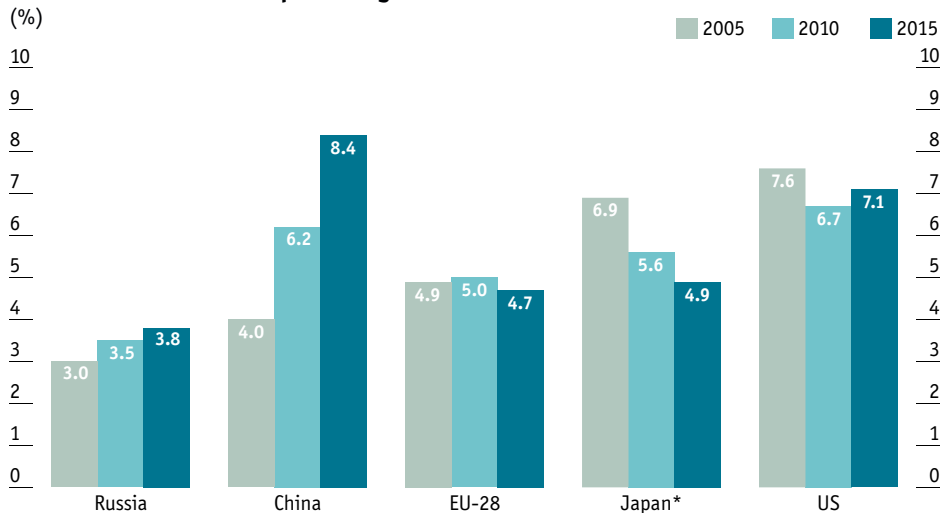
their capital by January 1st to meet new standards on their ability to absorb losses. All banks covered by Basel III will have to raise their capital conservation buffers, an element in their capital bases, and bolster their minimum liquidity positions.

This constellation of forces has led to weak growth, or even contraction, in revenue from firms’ primary activities—making loans or selling insurance. Investment returns remain weak on the bonds that make up the bulk of their securities portfolios. Meanwhile, they face escalating costs for additional compliance and legal staff.

Shrinking at home and abroad

Because of these three factors, the financial industry has shrunk as a proportion of most rich economies over the past decade. That trend is set to continue in 2017 and beyond. By contrast, finance will continue to expand and deepen its role in many emerging markets.

Fair shares: Finance as a percentage of GDP



* 2014.

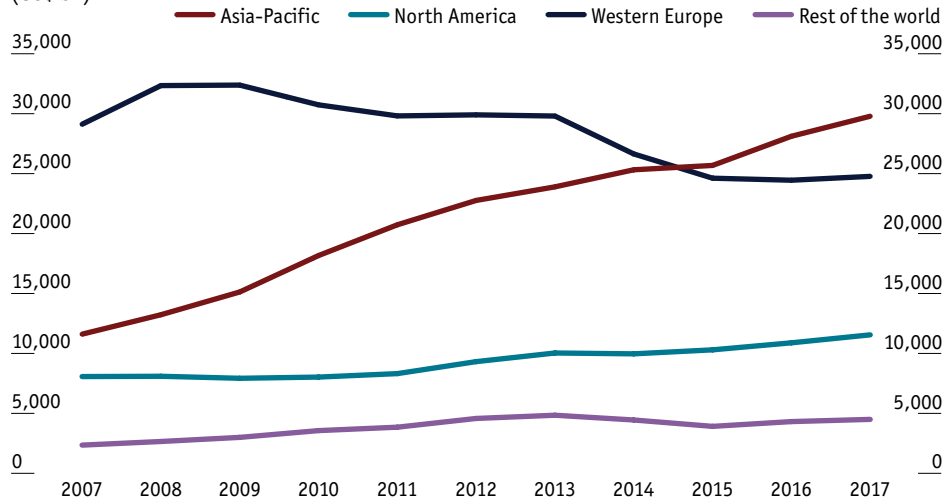
Source: The Economist Intelligence Unit.

The industry is also growing less international as big firms pull back from once-sprawling empires to cut costs, concentrate on their core markets and allow managers to focus their efforts. Emerging market financial firms, once eager to foray abroad, will generally remain reluctant to do so in 2017 as their home economies suffer from still-weak commodity prices.

Regulators’ recent efforts to buttress the financial sector appear to have made it safer, but history teaches that new crises are inevitable. China’s debt-fueled

Asian advance: Total bank lending

(US\$ bn)



Source: The Economist Intelligence Unit.

expansion poses a danger, though we forecast that the authorities will shift to a new strategy. The greatest risk in 2017 lies in Europe, however, with keystone banks in both Germany and Italy struggling to restore profitability and meet regulatory requirements. Although governments have sworn off bank rescues, officials would face little choice but to step in to avert a brewing crisis.

What to watch for

- Brexit Maybes.** Theresa May, the British prime minister, says she will invoke Article 50 to start the two-year countdown to Brexit in the first quarter of 2017. Anticipating the eventual loss of “passporting” rights facilitating cross-border business with EU members, UK-based financial firms will be busy moving business, and jobs, to new and existing subsidiaries elsewhere. Frankfurt, Paris, Dublin and even New York across the Atlantic are expected to gain.
- Europe’s dodgy deal.** Deutsche Börse and the London Stock Exchange hope to conclude their planned merger, but face anti-trust scrutiny in Germany, the UK and by the EU Commission in Brussels. The Brexit vote has made the deal more difficult. EU regulators are loath to allow euro-denominated derivatives to continue to clear in a location that will be entirely outside their jurisdiction.
- India’s bad-debt danger.** Urjit Patel, the new governor of India’s central bank, is expected to follow his predecessor’s policy of regularly licensing new banks, but it is less clear that he will keep the regulatory pressure on the country’s bad-debt-laden public-sector lenders. Bank bosses, and labour unions, have substantial political clout to resist reforms.

COMPANY IN FOCUS

NBAD: Size matters

The merger of NBAD and First Gulf Bank will create the Middle East's largest lender, with impacts that could go beyond the region.

By early 2017 a new force in Middle Eastern banking will be born. The merger between National Bank of Abu Dhabi PJSC (NBAD) and First Gulf Bank PJSC (FGB) will create the region's largest lender, with Dh642bn (US\$175bn) in assets and a market capitalisation of Dh107bn—making it more valuable than the likes of Deutsche Bank. With 26% of loans in the United Arab Emirates, the bank's creation could spur an overdue wave of consolidation in its crowded banking sector, where fifty local and foreign lenders cater to the UAE's population of around 9.3m. Yet the deal's implications could stretch well beyond its borders.

Presented as “a merger of equals”, the remade firm will inherit FGB's retail strengths and state-owned NBAD's market leadership in wholesale banking and advisory operations. With an increase in capital reserves and operations in 19 countries, the company will be well-placed to expand in emerging markets. Provided the operations of the two ancestor firms can be combined smoothly it could become a powerhouse not just in the Middle East, but also beyond.

While the combined firm will inherit NBAD's brand name, FGB shareholders—the Abu Dhabi ruling family prominent among them—will own 52%, with NBAD's shareholders taking the rest. (FGB's shares will be delisted from the Abu Dhabi Securities Exchange on the date of the merger.) As the new lender consolidates its branch network and exploits lower borrowing costs and opportunities for cross-selling of products, it aims to achieve annual cost savings of Dh500m.

Getting the needed approval by regulators and at least 75% of shareholders should be a formality. Even if regulators are leery on anti-competitive grounds, they are unlikely to force swingeing asset selloffs. After all, the merger is a key component of the government's reform agenda. The Abu Dhabi government and related parties will hold a 37% share of the new company, while the ruling family will control around 33%.

In pursuing the merger, Abu Dhabi is looking to counter the growth of regional banking-sector rivals such as Qatar National Bank SAQ. It also comes at a time when the UAE is grappling with an economic downturn

stemming from low oil prices, leading to a liquidity crunch. Government deposits have dropped sharply. For the second quarter of 2016, net profits at NBAD fell by 5% and First Gulf's earnings tumbled 10%. A stronger bank would be a valuable support for Abu Dhabi's policy agenda.

2017 calendar: Financial services

January

- 13: JP Morgan, Wells Fargo and Bank of America report 2016 results
- 18: Citigroup reports 2016 results
- 31: First US Federal Reserve meeting of the year (Federal Open Market Committee)

February

- 2: Deutsche Bank reports 2016 results
- 3: Santander reports 2016 results
- 15th: Impact Investing Summit, Economist Events, New York, US
- 21: HSBC reports 2016 results
- 23: Barclays reports 2016 results

March

- 8: Standard Chartered reports 2016 results
- 14-15: US Federal Reserve Meeting

May

- 3-5: Africa Financial Services Investment Conference, London, UK

June

- 26-28: Money20/20 Europe 2017, Copenhagen, Denmark

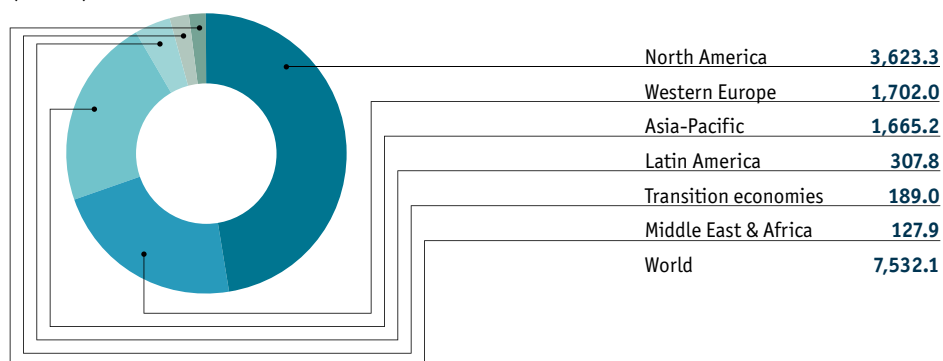
Healthcare: Universal momentum?

Plenty of countries will be trying to expand access to healthcare, but the US may step back from Obamacare.

Unsurprisingly for an industry that accounts for nearly 10% of global GDP, according to the World Health Organisation (WHO), there will be a lot happening in 2017 for healthcare and life sciences. Yet two things stand out. One will be a change at the top for the WHO itself, which gets a new director-general (see box, p41). More momentous is a probable shift in health policy in the US, the world's biggest healthcare market, as the new president makes his mark.

Neither event will do much to change the generally positive picture of progress in global health. The Economist Intelligence Unit expects combined health spending in the 60 richest economies to rise by 4.4%, its fastest rate for six years. Life expectancy in those same countries should rise by another two and a half months to 73.2 years. That includes South Africa, the only one of the 60 where, until 2006, life expectancy had been falling. Now it is finally tackling its AIDS epidemic in earnest, it too should see its citizens living longer and more healthily.

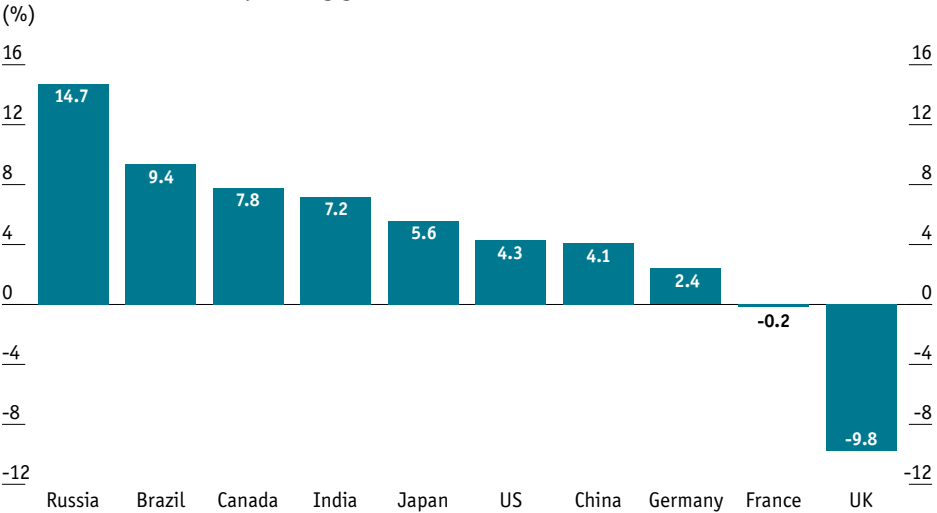
America's dominance: Total health spending
(US\$ bn)



World=60 biggest countries only.

Source: The Economist Intelligence Unit; World Health Organisation.

Brexit effect: Health spending growth in nominal US\$

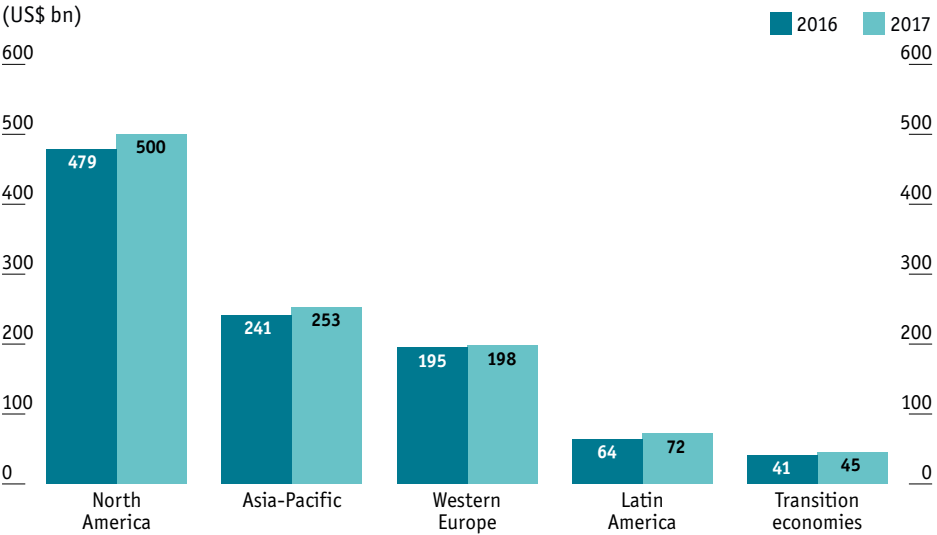


Source: The Economist Intelligence Unit.

Even many poorer countries should benefit. Around 30 countries in Sub-Saharan Africa—out of 37 worldwide—have seen life expectancy jump by more than 10% since 2000, according to the IMF. They have been helped by global initiatives such as the Bill and Melinda Gates Foundation, but many countries are also defying poverty, political instability and corruption to expand their own healthcare systems. Overall, the WHO, which claims to have supported more than 75 countries as they try to provide universal health coverage, forecasts that more than 30 nations will push through noticeable improvements to their health systems in 2017.

Among these are India, Pakistan, Indonesia and the UAE. All will see health spending rise rapidly in 2017 as they try to extend public health systems, albeit in

Growth markets: Pharma spending by region



Source: The Economist Intelligence Unit.

fits and starts. In 2017 India plans to revise the draft healthcare policy drawn up in 2014, which will provide the framework for a universal healthcare system based on insurance—though plans may be delayed again. Pakistan will expand its Prime Minister's National Health Insurance Programme, a card-based scheme launched in 2015, while Indonesia will continue with reforms that aim to establish universal coverage by 2019. In the UAE, meanwhile, all Dubai-based employers will have to provide health insurance by January 2017, or face a fine.

In China, meanwhile, the 13th five-year plan, released in March 2016 and covering the period 2016-20, made health a central goal. The government is aiming to make public healthcare services more efficient and to encourage private companies to take a greater role in healthcare provision. One concrete step is likely to be the merger of China's urban and rural health insurance programmes, although this is not sure to be achieved in 2017. China should, however, start to see the results of its decision to move to a universal two-child policy from 2016. The coming year could well see a baby boom, although it may well peter out after the initial surge.

Presidential policies

It is not just developing countries that will see changes to their health systems in 2017, however. President Donald Trump has vowed to repeal the Affordable Care Act of 2010, which underpins Obamacare, and replace it with an alternative (as yet unformulated) policy to make healthcare affordable. That may involve devolving decisions about health coverage to a state level. Even if he decides against an outright repeal, which would risk millions of people losing their health insurance, he may opt to dismantle Obamacare piece by piece instead. For example, the government could revive a budget reconciliation bill that was rejected by President Obama in early 2016 and thereby block Medicare expansion, or it could set limits on how much insurers are able to charge.

The biggest element—the insurance mandate—is likely to be the main target, but may be hard to repeal entirely. The Republicans' alternative proposal of tax credits has not been scored and there would be a lot of opposition from Democrats in the Senate. But the mandate could be weakened by reducing the level of cover that people have to buy—and therefore the price. Other questions pertain to the risk adjustment policies designed to share the cost burden more fairly between insurers, for instance, and the value based purchasing programme that aims to make health spending more cost-effective.

Such moves to dismantle Obamacare could wound it fatally, making a later repeal easier. They may also gain widespread support, including among health insurers and pharmaceutical firms, given the current strains on the system.

Even before the election, premiums for a standard policy for 2017 were up by an average of 25%, as insurers scale back their involvement in Obamacare or raise prices to make up for the heavy claims of previous years. If the two big insurance mergers mooted for 2017—which would see Anthem take over Cigna and Aetna buy Humana—go ahead, the market will become even less competitive. Mr Trump may well be able to argue that Obamacare was intrinsically untenable, yet the pressure to make health insurance more affordable than it was before 2010 will remain strong.

Sickness funds

The desire to ease access to care, however, will come into conflict with the perennial problem of resourcing. The global demand for healthcare means that countries are competing for doctors and nurses. The UK is one country where that will become a real issue in 2017, as it begins to pull out of the EU single market. Around a fifth of UK doctors and the same proportion of its new nurses come from EU countries, and may well head home unless efforts are made to retain them. An even bigger issue in some countries will be unhealthy national finances. We expect oil prices to remain low, which means that countries reliant on oil revenues will struggle to find health funding. That has already affected health spending in countries as diverse as Nigeria, Brazil and Russia. Not much will improve in 2017 despite efforts to protect health from proposed government budget cuts.

Countries will thus remain keen to maximise the health benefits they get from their health funding. As usual the pharmaceutical industry is likely to bear the brunt of these efforts. Japan, a relative late-comer to the idea of value-based healthcare, plans to introduce a system of health technology assessment (HTA) in 2018, to ensure it uses only the most cost-effective treatments. Its health authorities will be busy preparing in 2017. It is already starting to clamp down on the prices of some key drugs, stepping away from its usual biennial reviews. India, too, plans to overhaul its drug regulations in 2017, partly to improve safety but also to help it hold down prices so that it can afford its universal healthcare plans.

Fortunately some other pressures on the pharmaceutical industry will ease in 2017. The patent cliff is now around five years past its peak, although some companies are still suffering (see box, p42). Pro-generic policies are already in place in most countries, although the approval of biosimilars (generic versions of biotech drugs) will gather pace, particularly in the US. Market consolidation, partly thanks to the merger boom of recent years, has already started to firm up pricing—dramatically so in some disease areas. New drug approvals have also

gathered pace in major markets, reflecting both new regulations and the efforts of researchers. As a result we expect global pharma spending to rise by 4.9% in 2017, faster than growth in health spending.

What to watch for

- **WHO's boss?** On July 1st 2017 the World Health Organisation (WHO) will get a new director-general to replace Margaret Chan, who has held the post since 2006. There are currently six candidates in the running: two former health ministers from Ethiopia and Hungary; a WHO assistant director-general from Italy; two UN special advisors from France and the UK; and a Pakistani politician. The final vote will take place in May 2017.
- **Longshots or moonshots?** In early 2017 the Cancer Moonshot programme in the US will decide what cancer initiatives to fund. It was set up by President Obama in January 2016 as a way of getting funding to groundbreaking projects that may – or may not – prove crucial to eliminating cancer entirely. In 2017, barring policy changes, it will have US\$775m to spend.
- **Court in the crossfire.** In early 2017, the EU was supposed to establish a Unified Patent Court under an agreement signed in February 2013. The court will specialise in patent litigation for medical technologies and should help to iron out international patent disputes. But as of October 2016 the planned timetable for the UPC was being revised in the light of the UK's decision to leave the EU. Part of the UPC was originally supposed to sit in London.

COMPANY IN FOCUS

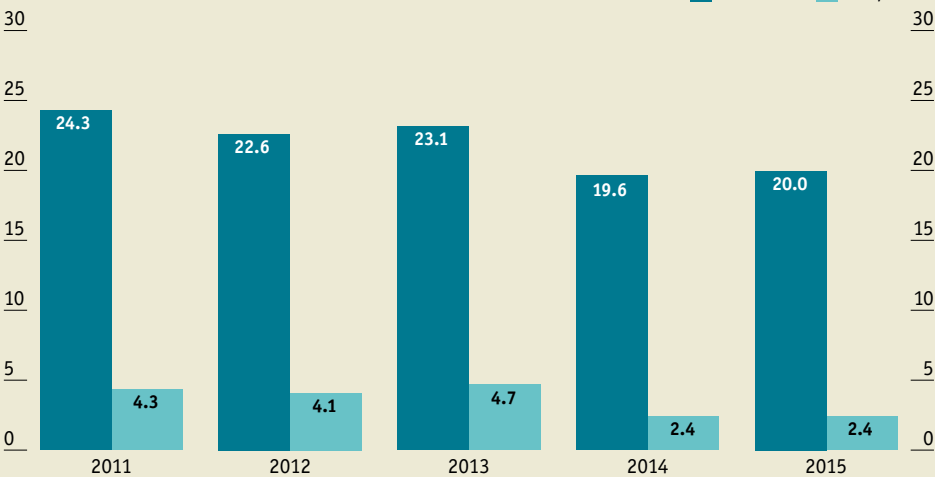
Crunch year for Eli Lilly

In 2017 the new head of Eli Lilly will need to cope with a major patent expiry.

For most pharma companies, the patent cliff has now eased after patent expiries for blockbuster drugs peaked in 2012. Yet Eli Lilly of the US still faces a major challenge in November 2017, when it will lose home-market exclusivity for Cialis (tadalafil), its best-selling erectile dysfunction drug. This will provide an early test for Dave Ricks, who takes over from Lilly’s long-time president and chief executive officer, John Lechleiter, in January 2017.

Eli Lilly results

(US\$ bn)



Cialis brought in revenue of US\$2.3bn in 2015, a big sum for a company that is already feeling a squeeze on revenues and profits (see chart). Indeed, Cialis itself eked out worldwide sales growth of just 1% in 2015, the smallest annual rise since it was launched in 2003, as the prices of rival drugs, such as Pfizer’s Viagra (sildenafil citrate), tumble and sales shift online. This is in comparison with the 30% sales growth posted in the drug’s early years and 12% growth as recently as 2013.

Eli Lilly does have other blockbusters to which it can turn. Humalog, an insulin, managed a 2% rise in revenues in 2015, to US\$2.8bn, even though its main US patent expired in 2013. There was less good news for Alimta (pemetrexed), a cancer treatment, whose worldwide revenues fell by 11% to US\$2.5bn as patents expired outside the US. However, in 2015 Lilly won a key legal battle ensuring

that, although one of Alimta's US patents runs out in January 2017, the other should protect it from generic competition until 2022.

Winning legal battles like this is important to Lilly's revenues in the short term, but more significant in the long term will be its success in finding new products. In late 2016 Eli Lilly delivered bad news on this front, when it reported trial data for solanezumab, an experimental Alzheimer's treatment. Earlier trials had sparked hope that the drug might slow cognitive decline in patients with mild Alzheimer's, but the latest data was so disappointing that Lilly will no longer seek approval for solanezumab.

It is a huge setback for patients and for the company. Nevertheless, Eli Lilly will continue with its Alzheimer's research, as well as its other research and development projects. It had earlier said that its pipeline should allow it to launch up to 20 new products by 2023, some of which could be big sellers.

Among the most promising experimental drugs is abemaciclib, one of a new generation of immuno-oncology drugs targeting the CDK4 and CDK6 genes that cause cancer cells to grow rapidly. Abemaciclib is currently being tested for advanced breast cancer, but may also be effective against other cancers, including pancreatic and non-small-cell lung cancers.

Unlike with Pfizer's Ibrance (palbociclib), the first CDK4/6 inhibitor to gain approval, the evidence for abemaciclib has so far not been good enough to stop the Phase III trials early. But Lilly is still expecting that its final trial results in the first half of 2017 will allow to announce some very welcome good news.

2017 calendar: Healthcare and pharmaceuticals

January

- 1: Dubai enforces health insurance requirement
- 9: JP Morgan Health Conference
- 25: Novartis reports 2016 results
- 31: Eli Lilly reports 2016 results

February

- 1: Roche reports 2016 results
- 2: Merck & Co and AstraZeneca report 2016 results
- 8: Sanofi reports 2016 results
- 21-22: European Pharma CI Conference, Prague, Czech Republic
- 22: Bayer reports 2016 results

March

- 9: Merck KGaA reports 2016 results
- 20-21: 15th World Congress on Biotechnology and Biotech Industries, Rome, Italy
- 24: WHO World TB Day
- 30th: Healthcare Forum: War on Cancer, The Economist Events, Singapore

April

- 6: HIV and Hepatitis in Americas, Rio De Janerio, Brazil
- 7: WHO World Health Day
- 25: WHO World Malaria Day

May

- 20-24: ISPOR 21st Annual International Meeting, Washington DC, US
- 22-26: World Health Assembly, Geneva, Switzerland
- 31: WHO World No Tobacco Day

June

- 2-6: American Society of Clinical Oncology (ASCO) Annual Meeting 2017, Chicago, Illinois, US
- 4-5: 19th International Conference on Medical Pharmaceutical Sciences, New York, US
- 14: 31: WHO World Blood Donor Day
- 29-30: 2nd World Congress on Health Economics Policy and Outcomes Research, Madrid, Spain
- June 29-July 1: 11th International Conference on Clinical Paediatrics, London, UK

July

25-26: 1st Global Health Economics Summit, Berlin, Germany

31: WHO World Hepatitis Day

September

6-8: 6th Annual Credit Suisse Healthcare Conference, Scottsdale, Arizona, US

8-12: European Society for Medical Oncology (ESMO) Congress 2017, Madrid, Spain

20-22: APAC Forum, Sydney, Australia

October

16-17: 9th World Congress on Healthcare and Medical Tourism, Dubai, UAE

December

1: WHO World AIDS Day

Telecoms: Treading the line

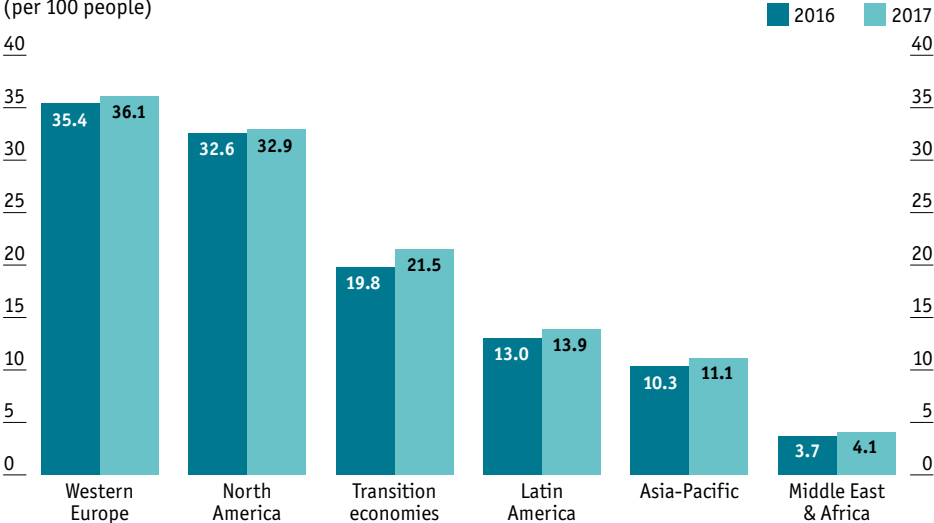
Telecoms companies will seek new sources of revenue as traditional streams dwindle and pressure from growing mobile broadband usage mounts.

The dominant trends in telecoms hold good cheer for consumers in 2017. Mobile phone usage is increasing in most markets, including emerging ones where many users choose to bypass ownership of desktop computers, instead wielding their phones like portable computers. As mobiles become more ubiquitous while fixed-line subscriptions fall, broadband uptake is rising. Also benefiting consumers is the rush to create 4G infrastructure and to improve coverage in difficult-to-reach areas. So too is growing take-up of internet-of-things-related technology. For telecoms operators, however, the news is not so rosy.

Declining revenue from traditional channels like voice calls and text messaging is eroding utilities' balance sheets. They are struggling to meet the need for

Fixed assets: Broadband penetration*

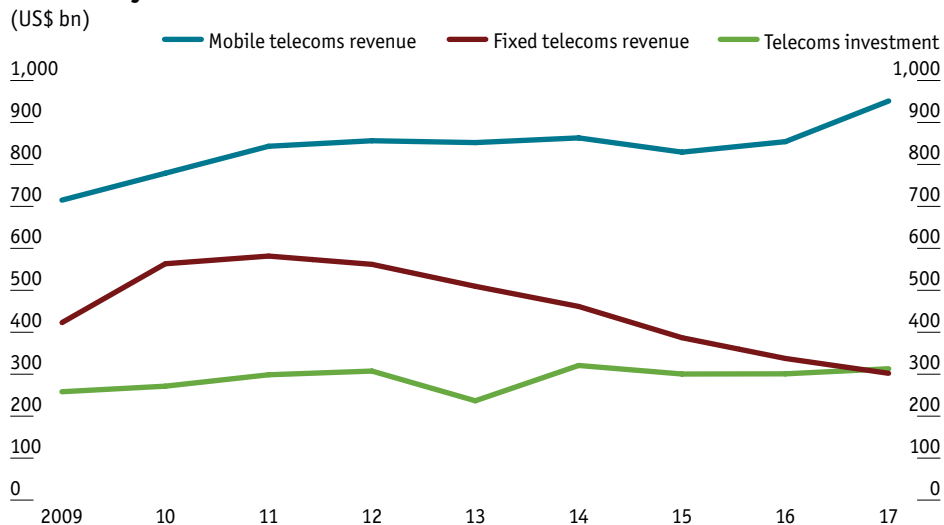
(per 100 people)



* Fixed broadband only.

Sources: Pyramid; The Economist Intelligence Unit.

Different dynamics: Telecoms investment and revenue



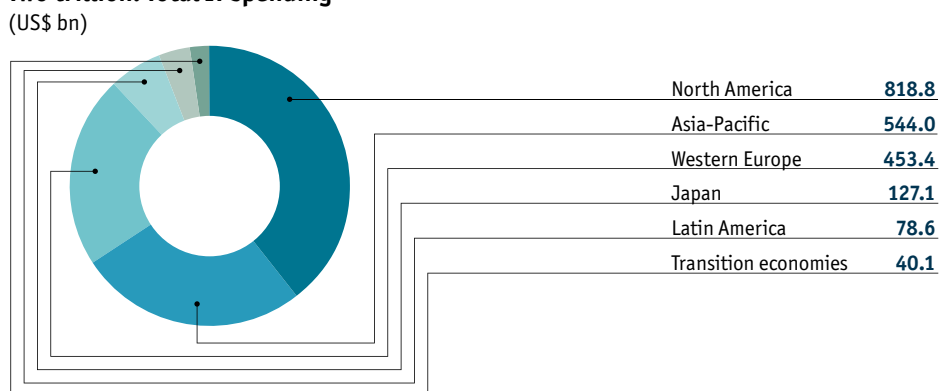
Source: The Economist Intelligence Unit.

investment in infrastructure while trying to lighten the load on strained balance sheets. Sophisticated phones are spurring mobile broadband demand in emerging and developed markets alike, forcing operators to modernise and take part in costly spectrum auctions to increase capacity. Add to this mix increasing demand for smart devices, the strain placed on wireless networks by internet-of-things technology—including connected cars—and a burgeoning market for wearables (everything from smartwatches to fitness trackers) and operators have an almighty headache.

That is unlikely to abate. Spectrum auctions in countries such as South Africa, Mexico and the UK are scheduled for 2017. In the UK’s case, telecoms executives argue it still faces a spectrum shortage, which could eventually drive up the price of phone contracts for consumers. This is a scenario that may well be replicated in other markets as governments fail to free up spectrum in line with demand.

Operators, then, face slow growth as they find it hard to monetise offerings

Two trillion: Total IT spending



Source: The Economist Intelligence Unit.

such as mobile broadband. Besides spectrum constraints, utilities face competition from providers of over-the-top (OTT) services like Netflix and WhatsApp, whose online offerings are spreading worldwide. With research into 5G progressing apace, operators must also seek to ensure their network investments are “future proof”. Most players in the market are sticking to a five-year horizon for the evolution of 5G. This may well change, however, as collaborations and research begin to determine the shape of 5G networks.

Operators must also deal with regulatory pressure from national and regional authorities keen to ensure that telecoms markets are competitive, delivering consumers choice and reasonable prices. The EU is already well on the way to imposing a digital single market and will phase out roaming fees by June 2017. In the US, the new president, Donald Trump, has previously spoken against net neutrality and in favour of internet censorship, although his policy aims remain unclear so far.

Even worse for telecoms players, especially in the developed world, many markets are saturated. According to IDC, a US-based research company, in the third quarter of 2016 worldwide smartphone shipments saw a slight return to growth after a period of stagnation. Shipments totalled 363m units, up just 1% from the same period last year. One problem is that smartphone makers are struggling to tempt consumers to shorten their replacement cycles. In addition, prices are falling, at least at the top end of the smartphone market, while competition is intensifying.

As a result, manufacturers are having to stretch the limits of handsets’ capability, improving functionality, portability, and image and sound quality. In 2017 Samsung will strive to put behind it a crisis that appears to have stemmed from pushing at those limits (see box, p49), while others attempt to steal some of its market share. Many will also aspire to take on Apple, with handsets designed to succeed at the high end of the market. Apple itself will push its latest iPhone 7 model, although a lacklustre reception from tech reviewers will fuel rumours about a possible launch of the iPhone 8 in 2017.

New lines of attack

Capitalising on new technologies will be important, too, for revenue-poor operators. Vehicle connectivity is a prime example. Already connected cars were responsible for 32% of cellular connections in the US in the first quarter of 2016, outstripping phones (31%) and tablets (23%), according to a US-based consultancy, Chetan Sharma. As more connected cars take to the roads—eventually incorporating self-driving technology—this trend is only likely to gain ground. The revenue-earning opportunities of utilities are significant, but they

may require a readiness to collaborate with a wide range of actors who would benefit from information about drivers, from restaurants to chain stores.

Like connected cars, the internet of things (IoT) is already upon us, with around 20bn things already using the technology—from thermostats in the home to ATM machines and retailers' distribution systems. The IoT is the engine powering all these, diligently running beneath the surface. How precisely to define the IoT, how it will develop and how telecoms players can best monetise its potential remain unclear. Yet its capacity to transform telecoms is undoubted. In 2014, Cisco, a telecoms equipment maker, predicted that the IoT would have a five-to-ten times greater impact on society than the internet.

Cisco's comments chime with a recent report by Citigroup. The banking giant argued for telecoms operators to embrace the "digital transformation" and to do more to develop IoT-related technologies such as mobile banking, cloud-based TV, smart home functionality and e-health services. Utilising connected devices and the IoT will mean investing heavily in infrastructure. Companies will also have to look carefully at their strategies for using big data.

What to watch for

- **Brexit: Good to talk?** Negotiations between the UK and the EU over the former's exit from the bloc stand to have big knock-on effects for the telecoms sector. Stricter immigration controls could harm staff retention, for instance. Doubts also hover over the UK's participation in the coming digital single market and the abolition of roaming charges. With talks set to last years, the outcome is clouded in uncertainty.
- **Product bundling.** To combat declining average revenue per user (ARPU) from mobile and fixed services and aid customer retention, operators increasingly "bundle" together services. Offering some combination of landline, mobile, cable TV and broadband—known either as "triple play" or "quad play"—has taken hold as a strategy. This may again mean forging partnerships, whether with cable TV players or broadband providers, as utilities seek to counter the threat from OTT providers.
- **Samsung's year after.** In October 2016 Samsung halted production of one of its flagship Galaxy Note 7 smartphones, the batteries of which were prone to catching fire. The biggest smartphone manufacturer, with one-fifth of the global market, faces a recall involving over 4m devices. Operating profit in the third quarter was dented by Won2.2trn (US\$1.9bn) year-on-year; the company forecasts a further hit of "mid-Won3trn" in the six months to March 2017. Lasting reputational is the longer-term worry. More Galaxy smartphones could be unveiled in 2017. Unless it can regain consumers' trust and loyalty, however, Samsung's market-leading position could be in jeopardy.

COMPANY IN FOCUS

China Telecom: Fixed problem, mobile strategy

The state-owned carrier makes a push in 4G telephony, but has a lot of catching up to do.

China Telecom has a problem. It owns about 60% of China's telecoms infrastructure and is its leading internet provider and fixed-line operator. But the business to be in is mobile telecommunications. There, it is dwarfed by another state-owned titan, China Mobile. 2017 will see the smaller player pursuing plans to claw back lost ground in 4G mobile telecoms.

A pivotal initiative during the year will be to launch Voice over LTE services. (VoLTE provides an infrastructure-conserving means of making voice calls via a 4G LTE network, rather than over older networks.) Thanks to an agreement signed in August 2016, China Telecom will be assisted in this by Nokia, which will help it deploy high-speed 4G technology in 19 out of 34 Chinese provinces. (The Finnish equipment-maker is positioning itself for the long-haul, with the intention of eventually creating 5G networks with its Chinese partner.)

All this is part of China Telecom's plan to build a nationwide, state-of-the-art 800MHz LTE network, extending 4G coverage to rural areas and enhancing it in cities. To this end, it is redeploying spectrum in the countryside, aiming to complete the process across its entire Chinese network within 2017.

Unsurprisingly for China, all this is in tune with government prescriptions for the telecoms market. According to plans hatched in May 2015 to raise internet speeds by the end of 2017, China was set to invest Rmb430bn (US\$69.3bn) in 2015 and another Rmb700bn in 2016-17. Fibre-optic networks and 4G base stations are the focus. The three state-run operators (China Unicom is the third) also signed up in January 2016 to co-operate over expanding 4G networks and are committed to share infrastructure.

So much for co-operation. When it comes to competition, China Telecom's position looks less propitious. Its 4G subscribership is growing fast, with 49m users added in the first nine months of 2016 for a total of 107.5m. Yet China Mobile had an overwhelming 481m subscribers. It was, after all, gifted a 4G operating permit in December 2013, more than a year before rivals. Some state-owned carriers are more equal than others, it seems.

2017 calendar: Telecoms

January

- 5-8: CES Conference 2017, Las Vegas, US
- 9-19: ITU-D Rapporteur Group Conference, Geneva, Switzerland
- 15-18: Pacific Telecommunications Council Conference, Hawaii, US
- 21: Etisalat reports 2016 results
- 23-24: Internet Of Things (IoT) Tech Expo Global, London, UK
- 24: Verizon reports Q4 results for 2016
- 25-27: INTRONIKA, Celje, Slovenia
- 26: Ericsson reports results for 2016
- 26: Nokia reports 2016 results
- 27: Samsung reports 2016 results

February

- 7-9: Electrical, Telecommunications, Lighting & AV, Jyvaskyla, Finland
- 8-9: IoT Expo, New Delhi, India
- 14: America Movil reports 2016 results
- 27-March 2nd: Mobile World Congress, Barcelona, Spain
- 28: Innovation Summit, The Economist Events, Chicago, US

March

- 1-3: SPS Industrial Automation Fair, Guangzhou, China
- 2: Deutsche Telekom reports 2016 results
- 8-9: IT Partners, Paris, France
- 8-10: INTRONIKA, Belgrade, Serbia
- 9: European VoIP Summit, London, UK
- 5-7: EuroCIS 2017, Dusseldorf, Germany
- 12-14: Enterprise Mobility Exchange – Asia, Thailand
- 15-16: Cloud Expo Europe, London, UK
- 19-21: ITCN Asia 2017, Karachi, Pakistan
- 22-23: Cloud Computing World Expo, Paris, France
- 21-22: Telecoms World Asia 2017, Bangkok, Thailand
- 27: International Wireless Communications Expo, Las Vegas, US
- 29-30: The IoT Asia conference, Singapore
- 28-April 1st: COMEX, Muscat, Oman

April

- 5-7: Fiber Optics Expo, Tokyo, Japan
- 12-14: InfoComm China, Beijing, China
- 18-21: Tibo Minsk, Belarus

20: Verizon reports results for Q1 of 2017
20: Nokia reports results for Q1 of 2017
25: Ericsson reports results for Q1 of 2017
25: Etisalat reports results for Q1 of 2017
25-27: Broadband Latin America 2017, Rio de Janeiro, Brazil
25-28: Sviaz 2017, Moscow, Russia
26-27: IPExpo, Manchester, UK

May

10-11: Internet of Things Applications Europe, Berlin, Germany
11: Deutsche Telekom reports results for Q1 of 2017
10-12: Cloud Japan Spring, Tokyo, Japan
10-12: IoT/M2M Expo, Tokyo, Japan
10-12: Smartphone & Mobile Expo, Tokyo, Japan
14-17: International Telecoms Week, Chicago, US
17: World Information Society Day
17-18: Unified Communications Expo, London, UK
23-25: CommunicAsia, Singapore
23: Vodafone reports 2016-2017 results

June

15: EU ends roaming charges
12-16: World Summit on the Information Society Forum 2017, Geneva, Switzerland
25-27: ITS Asia-Pacific Conference, Kyoto, Japan

July

18: Ericsson reports results for Q2 of 2017
30-August 2nd: ITS European Conference, Passau, Germany
26-28: International Joint Conference on e-Business and Telecommunications, Lisbon, Portugal
27: Verizon reports results for Q2 of 2017

August

3: Deutsche Telekom reports results for Q2 of 2017
6: Saudi Telecom reports half-year results for 2017
15-17: Netcom, Sao Paulo, Brazil

September

5-7: Cloud Connect China, Shanghai, China
12-14: MobileCon, Las Vegas, US
18-19: Telecoms World Middle East, Dubai, UAE
20-21: IP EXPO Nordic, Stockholm, Sweden

October

4-5: IP EXPO Europe, London, UK

9-20: World Telecommunication Development Conference, Buenos Aires, Argentina

19-20: expoTEL, Kiev, Ukraine

19: Verizon reports results for Q3 of 2017

26-27: Canadian Wireless Trade Show, Toronto, Canada

30: Ericsson reports results for Q3 of 2017

November

9: Deutsche Telekom reports results for Q3 of 2017

14: Vodafone reports half-year results for 2017/18

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