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The World in 2019

From the editor



It's the year
of the vegan,
"slow social",
gender self-ID
and civil
partnerships

GOING INTO 2019, the world looks wobbly. From Brazil to Italy, more populists are in power, the global economy is more fragile than it was a year ago, the markets are jittery, a trade war between America and China is under way, technology (and giant tech companies) arouse growing angst and the rules-based international order is under threat. That makes this a tricky time for predictions, but also an intriguing one.

What do *The Economist's* journalists and our guest contributors foresee for the year ahead? Here are a dozen takeaways.

1. The economic wind is changing. By mid-year America will break its record for its longest uninterrupted expansion, but by the end of the year it could be heading into a recession. China's growth rate will slow down, while India's speeds up. Post-chaos Syria will top the global growth league; at the other end will be a shrinking Venezuela and Iran. In Europe, Italy will flirt with financial crisis.

2. The markets converge. But which way? Will America's stockmarket fall back, or the rest of the world rise? The smart bet is on the latter. America's bosses, however, should enjoy life while they can: the good times for USA Inc won't last.

3. Democracy has a big year. Countries with more than a third of the world's population will hold nationwide elections—including India, the world's biggest democracy, as well as Indonesia and Nigeria. Optimists hope this will bring the beginnings of a reversal in the global trend of recent years towards declining freedoms.

4. Brexit happens. And as Britain leaves the European Union the recriminations will intensify. The EU, meanwhile, will get a new commission, a new parliament and a new head for the European Central Bank.

5. China gets nervous about the number nine. Years ending in nine bring a clutch of awkward anniversaries that worry China's leaders. In 2019 it is 100 years since the May Fourth Movement, a much-celebrated protest, and 30 years since the bloody suppression of student-led demonstrations in Tiananmen Square.

6. Famous figures return to the limelight. They do so thanks to their anniversaries: 150 years since Mahatma Gandhi's birth, 500 years since Hernán Cortés arrived in Mexico and since Leonardo da Vinci's death (the Tuscan genius time-travels to 2019 to share his observations

about the modern world, and his drawings inspire our cover).

7. A new Moonrush begins. Fifty years after Neil Armstrong took his giant leap for mankind, spacecraft (some of them private) are heading back to the Moon. Meanwhile, NASA's *New Horizons* probe reaches Ultima Thule, in the most distant encounter in the history of spaceflight.

8. There's no hiding from, or for, tech. Whether it's artificial intelligence or facial recognition, tech will be everywhere. But Silicon Valley may have peaked, and the tech giants

will be in regulators' sights in both America and Europe.

9. Big Culture makes a splash. America has the excitement of The Shed in New York (a giant new space for the arts). Germany experiences the shock of the controversial new Humboldt Forum in Berlin.

10. Statistical landmarks concentrate minds. Half the world is online, India's GDP overtakes Britain's, Nigeria's population reaches 200 million and in America millennials outnumber baby-boomers to become the country's largest generation.

11. It's the year of...the vegan, "slow social", gender self-ID and civil partnerships (gaining ground on traditional marriage in a growing number of countries). Thanks to the UN, it is also the year of indigenous languages. Businesses will need to be increasingly alive to social trends and the politics surrounding them.

12. The battle of 2019 begins. The fighting is between President Donald Trump and a Democrat-controlled Congress. And it will be fierce.

You will find a feast of forecasts in these pages. We include a range of voices—from Britain's Labour leader, Jeremy Corbyn, to Stacey Cunningham, the head of the New York Stock Exchange, and Tencent's boss, Pony Ma. There is a special section on Open Future, a conversation on how to reinvent liberalism for the 21st century, launched as part of *The Economist's* 175th anniversary, including contributions by Yuval Noah Harari and Christine Lagarde. And if you feel dizzy amid all the wobbliness, you can restore your sense of balance by reading Steven Pinker on the longer-term trendlines, which point to a remarkable amount of progress.

Daniel Franklin
Editor, *The World in 2019*

The Trump show, Season Two

How history views America's 45th president will be determined by decisions made in 2019, says Zanny Minton Beddoes

FOR THE past two years the global political stage has been overshadowed by one man. President Donald Trump has divided America and dominated world affairs to a degree that has no modern precedent. That is partly thanks to Mr Trump's style: diplomacy by tweet to his 55m followers, contempt for conventional norms of presidential behaviour and a reality-television star's gift for attracting attention. But it is mainly because Mr Trump's world-view—a zero-sum, grievance-laden, mercantilist, racially tinged nationalism—marks such a wrenching change from that of his predecessors and from his country's post-war role. The leader of the free world is the embodiment of an angry, populist backlash to politics-as-usual.

The outsize presence has brought extreme reactions. To his critics, Disastrous Donald has been a catastrophe, a man whose abuses of power and divisive rhetoric threaten the fabric of American democracy; whose transactional and bullying approach to America's international leadership is economically illiterate, morally bankrupt and geostrategically short-sighted. To his supporters he is Tough Trump: boorish and embarrassing, but someone who has delivered a roaring economy and called time on an outdated global order. He has shaken up geopolitical stalemates (such as the standoff over North Korea's nuclear weapons) and forced a reckoning on long-standing problems, whether it is China's cheating at global trade rules or European allies' paltry defence spending. Both sides acknowledge he is a wrecking ball. At issue is whether the destruction is creative or just damaging.

The evidence so far points to somewhere in between. Serious damage has been done, particularly to America's political culture. The president's habitual lying, his attacks on the press and his wilful stoking



of grievance among his supporters have all contributed to a mood in American society that is more divided, febrile and angry than at any point since at least the late 1960s. This was especially evident in the run-up to the mid-term elections, from the furore over the appointment of Brett Kavanaugh to the Supreme Court to the murderous rampage at the Tree of Life synagogue in Pittsburgh. Mr Trump's economic stewardship is less stellar than his supporters claim. Yes, the economy has been booming. But that is largely because it is in the midst of a sugar high thanks to a fiscally irresponsible tax cut.

In foreign policy, the damage from the wrecking ball has been obvious and immediate. Mr Trump's penchant for abandoning commitments he considers "a bad deal" has caused America to pull out of—or threaten to pull out of—a remarkable number of international agreements, from the high-profile Paris climate accord and the Iran nuclear deal to the lesser-known Universal Postal Union. This has sometimes obscured areas where the Trump approach has been prescient or created genuine opportunities.

Beyond the wrecking ball

In North Korea, Mr Trump's dizzying shift from insult-trading to self-described love-affair with a suddenly wooable Kim Jong Un has brought an opening for a better relationship with a rogue nuclear power; though it has yet to yield substantive results, the affair will simmer on in 2019. From Syria to Afghanistan the Trump administration's approach is proving better, or at least no worse, than Barack Obama's. And, most important, the Trump team's view of China as a strategic threat, whose economic assertiveness must be countered even as its geopolitical ambitions are parried, has resonated with both political parties and with America's foreign-

At issue is whether the destruction is creative or damaging

► policy establishment.

The jury is still out on the tactics, especially the president's penchant for weaponising tariffs. However, the evidence from the past year suggests that American bullying on trade brings results, albeit at a price. Yes, Mr Trump has weakened the global trading system, not least by emasculating the World Trade Organisation (WTO). But in his stand-offs with South Korea, Canada and Mexico as well as, to a degree, with the European Union, he has also compelled large trading partners to agree to changes that, defined in terms of narrow mercantilist American self-interest, amount to modest negotiating successes.

Rather than Trumpism being about simply smashing the international order, these mini-deals could be evidence of a strategy to tilt its terms, declare victory and move on. If so, China will be the biggest test of that strategy. The outcome will be decided in 2019. And it will be the single most powerful piece of evidence of whether there is anything to the Trump show beyond the wrecking ball.

Brand new plot lines

The circumstances will be different. In 2019 Mr Trump will face bigger constraints. He will also be less buoyed by good fortune.

For a start, with Democrats in control of the House of Representatives, the Trump administration will face aggressive questioning from committees with subpoena power. Mr Trump himself will see a spotlight shone on his tax payments (or lack thereof) and whether his use of Trump properties violates the constitution. Unless Robert Mueller, the special prosecutor looking into links between Mr Trump's campaign and Russia's meddling in the 2016 election, comes up with explosive material, Democratic leaders will hold back their colleagues who are itching to start impeachment proceedings against the president. Nevertheless, the House will be combative and determined to hold the executive to account.

In addition, stock prices (a favourite barometer of Mr Trump's) will sag and the economy will begin to weaken during 2019. That is because the fiscal boost from the tax cut will start to fade even as higher tariffs and higher interest rates both slow growth. On January 1st Mr Trump's tariffs on \$250bn-worth of Chinese goods are set to rise from 10% to 25%. The Federal Reserve will continue along its path towards tighter money: at least two more quarter-point rate rises are

likely by the middle of 2019. Hitherto, most of the impact of higher American interest rates has been felt in the emerging world. In the year ahead it will increasingly be felt at home.

How will Mr Trump react? If Disastrous Donald is the right frame of reference, he will dial up the aggressive rhetoric to deflect attention from these troubles. The result will be countless Twitter rages against Democrats, ever more pointed attacks on the central bank and a slew of aggressive executive actions in areas, such as immigration control, that appeal to his base. Another country will become even angrier. And the economy will not be helped one iota.

For that reason, it is possible that Mr Trump, keen to confound prognosticators, will try a different approach. He could cook up a deal with Democrats to extend the fiscal boost, and hence prop up the economy. A tax cut focused on workers rather than the wealthy is one option; more likely is a package to boost American infrastructure spending.

The extent of the economy's slowdown also depends on Mr Trump's biggest foreign-policy decision: how to deal with China. In many ways Mr Trump is in a strong position. America, so far, is suffering less from the trade war than China. He has wrong-footed the Chinese leadership, which did not anticipate the aggressive scale of America's tariff strategy. But Mr Trump is constrained: on one side by the damage that an escalating tariff war will wreak; on the other by the extent of America's new Sinophobia. A quick and dirty deal does little to change China's underlying trade practices. He could see Mr Trump attacked at home for caving in on America's ascendant rival.

Bring on the builder

How Mr Trump deals with this trade-off will say much about his presidency. A far-sighted president will see it as a historic opportunity to remake the world's relationship with China. He would enlist allies to work within the WTO framework to reshape global trade while bolstering military alliances in Asia to counter any Chinese attempts at encroachment. He would move from two years of wrecking-ball tactics to make a start at building a new world order, more reflective of 21st-century realities and designed to manage the relationship between the United States and China that will define the century. The fact that it is hard to imagine Mr Trump doing this is, alas, a powerful pointer to how his presidency will assess him. ■

A far-sighted president would see it as a historic opportunity

The peril of nine

He has amassed extraordinary power, but Xi Jinping is worried about 2019, says James Miles

THIRTY YEARS ago, as 1989 approached, political storm-clouds were gathering over China. Bitter divisions had emerged within the leadership over how far and how fast to pursue economic reform. Inspired by the Soviet Union's liberalising leader, Mikhail Gorbachev, some people in China were daring to suggest that their own country should loosen up, too. The calendar for the coming year included big anniversaries of political events in China's modern history. Many intellectuals were awaiting those dates with excitement, hoping the occasions would provide them with a pretext to air their grievances about the party's record in power.

The run-up to 2019 is far less febrile. But once again, anniversaries loom. The Communist Party is nervous.

This may seem odd. Since 1989 China has grown enormously in wealth and influence. The party is firmly in charge. Yet the security forces will be on full alert. Censors will work round the clock to scrub any unapproved references to the anniversaries. That will not be easy: the list of anniversaries that fall in years ending with 9, and that have sensitive connotations for the party, has grown. At its top is the date of the bloody suppression of the pro-democracy protests in 1989 that were the culmination of that heady mood three decades ago.

As in 1989, it will not be easy for the censors to ensure political conformity. That is because some of the anniversaries are ones that the party itself likes to commemorate, so it cannot simply ban all mentions of them. Take May Fourth. That day in 2019 will mark 100 years since the student movement that led to the party's founding in 1921—much, then, for the party to celebrate. But in 1989 the 70th anniversary of the May Fourth Movement was a huge inspiration to the protesters in Tiananmen Square. They described themselves, not the party, as the true inheritors of the patriotic and pro-reform spirit of the students in 1919. There is little sign of campus unrest today. But China's leaders know that moods can be fickle. In 1988 Chinese dissidents lamented that students seemed more interested in playing mah-jong than in politics. How wrong they were.

The 70th anniversary on October 1st of the founding of the People's Republic will be another occasion that the party and the public could interpret in different ways. Early in 1989 Fang Lizhi, a prominent Chinese dis-



sident (who died in exile in 2012), wrote that the anniversaries that year on May 4th and October 1st would be "eloquent symbols of China's hope and despair" that would show how the "naive sincerity" of Chinese people at the start of Communist rule in 1949 had been "betrayed". Few Chinese would put it so starkly now. Many express pride in their country's growing international clout. But in regions populated by ethnic minorities, October

1st will be less of an occasion for cheer.

Security will be intense across Tibet and Xinjiang to prevent those who chafe at Chinese rule from expressing their discontent. In March it will be 30 years since the imposition of martial law in the Tibetan capital, Lhasa, after riots triggered by the anniversary of the uprising in 1959 that prompted the Dalai Lama to flee to India. Expect the 60th anniversary in 2019 of the Tibetan leader's exile to be tense.

Perennial paranoia

As usual, censors will erase almost any mention of the Tiananmen Square protests, the 30th anniversary of the crushing of which falls on June 4th. China's leader, Xi Jinping, has shown no interest in reviving any memories of that regime-threatening episode. For all his swagger on the world stage, Mr Xi acts at home as if the party is still in danger. He has presided over a sweeping clampdown on civil society with the arrests of many lawyers, NGO workers and rights activists. "Colour revolutions" that have toppled other authoritarian regimes appear to haunt him. He has shown no inclination to ease the brutal campaign, launched in July 1999, to eradicate Falun Gong, a quasi-Buddhist sect that once had millions of followers. Attempts to mark this date by the faith's diehard adherents in China (and supporters abroad) will add to Mr Xi's anniversary woes.

Especially in a year so resounding with historical echoes, Mr Xi will do nothing in 2019 to relax his vice-like controls. Instead, as a trade war rages with America, he will redouble his efforts to prevent unrest at home. He well knows that dissidents in China have long used patriotism as a cloak for attacking the establishment, as protesters did in both 1919 and 1989. So the party will be on guard lest public anger with America turn against Mr Xi and the party itself. ■

The security forces will be on full alert

Economic trouble ahead

America's longest-ever expansion will approach its end, forecasts Leo Abruzzese

RED LIGHTS are flashing—not everywhere and not all at once, but enough to signal economic trouble in 2019. Borrowing costs are rising, debt is soaring, stockmarkets are volatile and cash is leaving emerging economies. The world's two biggest economies are in a trade war, and though America is booming, China's consumers and markets seem to have lost their mojo.

Emerging markets will be particularly unsettled. A decade of ultra-low interest rates in the rich world is ending: America's Federal Reserve, having raised its main borrowing rate several times in 2018, will do so again in 2019. Higher financial returns in America, Europe and Japan will pull capital away from emerging economies. Rising interest rates go hand-in-hand with a stronger dollar, making it harder for developing countries to repay dollar-denominated debt. The result has been faltering currencies in Turkey, Argentina, South Africa and Brazil.

The underlying weakness, as ever, is debt. The world is more indebted today than it was before the start of the global financial crisis. The Bank for International Settlements, the central bankers' think-tank, put global debt at an eye-watering 217% of GDP at the end of 2017, up more than 20% from 2007. In emerging markets, debt is 50% higher. Rising interest rates and soaring debt are a toxic combination. Central bankers say they will not raise rates too quickly, but avoiding harm amid a mountain of debt is tricky.

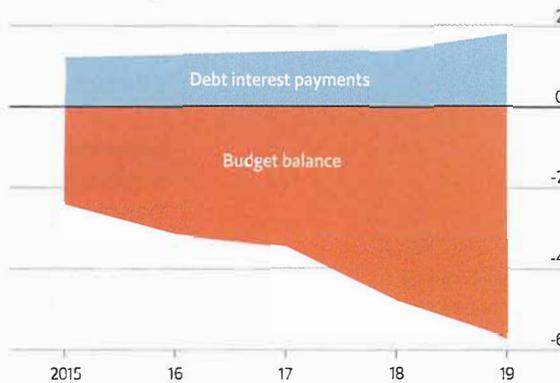
American economic policy is not helping. President Donald Trump's tax cuts have boosted growth at home, but at a cost: the country's budget deficit will approach 6% of GDP in 2019 (see chart), the highest ever when the country wasn't fighting its way out of a war or a recession. Mr Trump has chastised the Fed for raising interest rates, but it won't stop doing so, given the spurt in economic growth—and early evidence of higher prices. Businesses, mainly in America but also in Europe, piled on debt during the cheap-money era. Their capacity to service that debt will be tested as rates rise.

Defaults are common towards the end of business cycles, and this one is showing its age. The global economic slump ended in mid-2009, and America's ex-

The underlying weakness, as ever, is debt

Deep-red Donald

United States budget, % of GDP



Source: The Economist Intelligence Unit

pansion, if it lasts until July, will reach 121 months, the longest ever. Bond investors are certainly cautious. The yield on ten-year US government debt has been climbing as markets demand higher returns to offset an uptick in inflation. Higher bond yields are often bad news for stockmarkets as companies are forced to grapple with higher borrowing costs. A slump in America may look unlikely when the unemployment rate is below 4%. But the last two times the jobless rate was near that level, the country was in a recession less than a year later.

Mr Trump's trade war with China has high stakes. His tariff hikes alone could shave a few tenths of a percentage point from America's GDP growth in 2019, and even more from China's and that of other emerging markets. But the greater effect will be on business confidence. Most exporters are worried, and worried companies invest less.

Even if China decides to compromise with America on trade, it has other problems. The government is tightening credit after a borrowing binge, and the inflated property market is a big concern. Household debt in China is more than 110% of disposable income, higher than in America, Japan and France. China's consumers, who were supposed to drive global consumption, are instead spending less.

India's consumers are doing just the opposite: they will push GDP growth to 7.6%, the best of any big economy. Europe will grow, but the

pace will slow, and the European Central Bank will agonise over raising lending rates. A widening budget deficit in Italy, the euro zone's most indebted country, risks plunging the single currency back into crisis.

The Trump slump?

A global downturn in 2019 is not inevitable. Banks are better capitalised than in 2007, and countries and companies are better at managing risks. Pent-up demand may extend the business cycle a bit longer. Any American recession, in any case, won't begin until the back end of the year, as the fractures in the economy widen. But signs of stress are evident, and the world has never escaped the reckoning that comes from rising interest rates, excessive borrowing and risky policies. It won't this time, either. ■

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Who killed Brexit?

As disappointment sets in, the search for a culprit will begin, says Tom Wainwright

BREXITEERS SAID March 29th 2019 would be celebrated as Britain's independence day. Red, white and blue bunting would line the streets to mark the country's escape from the European Union after 46 years under its thumb. The terms of the divorce would be heavily in Britain's favour, because in its negotiations with Brussels it would "hold all the cards", as one cabinet minister put it. There would be "no downside...only a considerable upside", another claimed.

Yet come Brexit day, Britain will not be celebrating but sulking. Assume the country leaves the EU in an orderly way (messier, though less likely, possibilities range from crashing out without a deal to holding a second referendum). Even those who voted Leave will feel short-changed. The version of Brexit they were sold, in which Britain would keep most of the benefits of EU membership without its costs, will bear little resemblance to the painful compromise they will get. To many it will feel like betrayal. March 29th will mark the start of a search for someone to blame. Whodunnit?

As in any murder mystery, suspicion will fall first on a foreigner, in this case played by the EU's Brexit negotiators. Britain's government has already been warming up the case against them, recalling the two world wars and comparing the EU to the Soviet Union. It is true that the EU's veneration of the single market's "four freedoms" is both theological (since there is no earthly reason why one cannot have free trade without free movement of people) and hypocritical (as the trade in services across the EU is hardly free). But the notional indivisibility of these freedoms has been a central principle of the bloc since 1957. Likewise the complex status of Northern Ireland, which has ruled out some Brexit options, was established by treaty in 1998. Britain can hardly claim to have been ambushed.

So suspicion will fall on the enemy within: a "Remoaner" establishment that voted to stay and then mobilised to thwart the will of the people when they revolted. A majority of MPs backed Remain. The chancellor and the governor of the Bank of England are openly sceptical of Brexit. Most civil servants consider it a mistake. Yet if there is an establishment plot to stop Brexit, it has not had much success. The Supreme Court ruled that triggering Brexit required Parliament's consent, but



MPs went ahead and gave it almost unanimously. The Bank of England calmed markets after the referendum, when Brexiteer politicians still seemed stunned by the result. The civil service's late, skimpy Brexit arrangements owed more to ministerial indecision than bureaucratic resistance.

Anger will therefore be turned on the government and its Remain-voting prime minister. Theresa May made a calamitous mistake by start-

ing exit talks before she had decided what kind of deal to go for. She presented her first detailed proposal only in July 2018, with three-quarters of the negotiating time used up. She squandered the Conservatives' majority in a needless, botched election, leaving her reliant on the Democratic Unionists of Northern Ireland. Yet Britain's hand was always weak. Some Brexiteers still claim that, with better preparation, the threat of leaving with no deal would have forced the EU to offer generous terms. This is deluded. Reaching Britain for an unmediated rupture with its main partner in trade and vital ally in security would be the work of decades.

The plot thickens

It is tempting to conclude that, as in "Murder on the Orient Express", all these suspects played some role in killing the Brexit dream. An inflexible EU, a divided Britain and a weak, unimaginative prime minister combined to ruin Britain's great opportunity. That would be the wrong conclusion. Although a better deal, perhaps modelled on Norway's semi-detached relationship with Europe, was possible, the Brexit that was advertised to voters before the referendum was never on the table. Some promises, like the idea that Brexit would free up £350m (\$460m) a week, were lies. Others, like the notion that Britain could stay in the single market while opting out of free movement, were unrealistic.

And Brexit's aims were mutually inconsistent. A country cannot write its own regulations without erecting barriers to trade with countries that have different ones. It cannot reject the jurisdiction of foreign courts without losing membership of bodies whose rules are enforced by them. "Taking back control" means giving up influence and prosperity. That is the painful lesson of the past two years, and the answer to 2019's murder mystery. No one killed Brexit. It was never alive. ■

As in any murder mystery, suspicion will fall first on a foreigner

Regulating artificial intelligence

There are no killer robots yet—but, says Tom Standage, regulators must respond to AI now

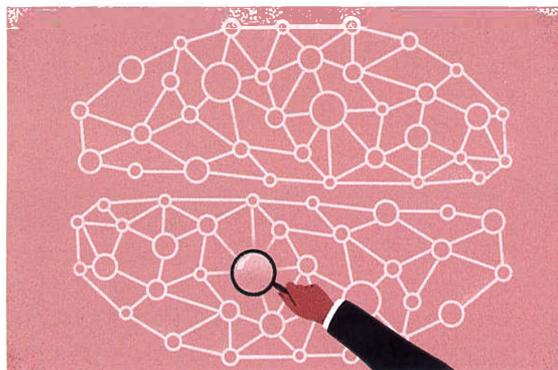
MENTION ARTIFICIAL intelligence (AI), and the term may bring to mind visions of rampaging killer robots, like those seen in the “Terminator” films, or worries about widespread job losses as machines displace humans. The reality, heading into 2019, is more prosaic: AI lets people dictate text messages instead of typing them, or call up music from a smart speaker on the kitchen counter. That does not mean that policymakers can ignore AI, however. As it is applied in a growing number of areas, there are legitimate concerns about possible unintended consequences. How should regulators respond?

The immediate concern is that the scramble to amass the data needed to train AI systems is infringing on people’s privacy. Monitoring everything that people do online, from shopping to reading to posting on social media, lets internet giants build detailed personal profiles that can be used to target advertisements or recommend items of interest. The best response is not to regulate the use of AI directly, but instead to concentrate on the rules about how personal data can be gathered, processed and stored.

The General Data Protection Regulation, a set of rules on data protection and privacy introduced by the European Union in May 2018, was a step in the right direction, giving EU citizens, at least, more control over their data (and prompting some internet companies to extend similar rights to all users globally). The EU will further clarify and tighten the rules in 2019 with its ePrivacy Regulation. Critics will argue that such rules hamper innovation and strengthen the internet giants, which can afford the costs of regulatory compliance in a way that startups cannot. They have a point. But Europe’s approach seems preferable to America’s more hands-off stance. China, meanwhile, seems happy to allow its internet giants to gather as much personal data as they like, provided the government is granted access.

As AI systems start to be applied in areas like predictive policing, prison sentencing, job recruitment or credit scoring, a second area of concern is that of “algorithmic bias”—the worry that when systems are trained using historical data, they will learn and perpetuate the existing biases. Advocates of the use of AI in personnel departments (for example, to scan the résumés of job

The answer is not to create a specific set of laws for AI



applicants) say using impartial machines could reduce bias. To ensure fairness, AI systems need to be better at explaining how they reach decisions (an area of much research); and they should help humans make better decisions, rather than making decisions for them.

A third area where AI is causing concern is in self-driving cars. Many companies are now testing autonomous vehicles and running pilot “robotaxi” services on public roads. But such systems are not perfect, and in March 2018 a pedestrian was killed by an autonomous car in Tempe, Arizona—the first fatality of its kind. The right response is to require makers of autonomous vehicles to publish regular safety reports, put safety drivers in their cars to oversee them during testing and install “black box” data recorders so that investigators can work out what happened if something goes wrong.

In short, given how widely applicable AI is—like electricity or the internet, it can be applied in almost any field—the answer is not to create a specific set of laws for it, or a dedicated regulatory body akin to America’s Food and Drug Administration. Rather, existing rules on privacy, discrimination, vehicle safety and so on must be adapted to take AI into account.

What about those killer robots? They are still science fiction, but the question of whether future autonomous weapons systems should be banned, like chemical weapons,

is moving up the geopolitical agenda. Formal discussion of the issue at a UN conference in August 2018 was blocked by America and Russia, but efforts to start negotiations on an international treaty will persist in 2019.

Get real

As for jobs, the rate and extent of AI-related job losses remains one of the most debated, and uncertain, topics in the business world. In future workers will surely need to learn new skills more often than they do now, whether to cope with changes in their existing jobs or switch to new ones. As in the Industrial Revolution, automation will demand changes to education, to cope with shifts in the nature of work. Yet there is little sign that politicians are taking this seriously: instead many prefer to demonise immigrants or globalisation. In 2019, this is an area in which policymakers need to start applying real thought to artificial intelligence. ■

Tom Standage: deputy editor, *The Economist*

The next front in the culture wars

Prepare for intense argument over gender self-ID, warns Helen Joyce

FOR THOSE tired of identity politics, 2019 will bring little respite. On the most polarising subjects—including abortion, Brexit and immigration—few people will change their minds. But a new identity issue has emerged, and it is one where allegiances are not yet fully formed. That will start to change in 2019.

That issue is “gender self-identification”: the notion that humans are best classified, not according to biological sex, but by whether they say they feel more like a man or a woman, or something in between. On many liberal university campuses, in America and elsewhere, it has become orthodoxy that all students should wear “pronoun badges” declaring their preference for he, she or—if they identify as non-binary, gender-fluid or some-such—they, ze, hir or one of a host of other neologisms.

In October a leak from the Trump administration suggested that America’s federal government was planning to withdraw all recognition of diverse gender identities. At the same time, though, in Democrat-controlled cities and states gender self-ID is passing rapidly into law. That means access to single-sex facilities such as toilets, changing rooms, and even domestic-violence shelters and rape-crisis centres is according to self-ID.

The same is true in Canada, where in 2017 the government granted gender identity and gender expression the same status in human-rights law as sex, race and religion. In Britain, where people can change their legal sex if two doctors concur in a diagnosis of gender dysphoria—distress caused by feeling that you live in a body of the wrong sex—self-ID is becoming the norm in practice, and may soon become the law. New Zealand is mulling a bill that would allow the sex on birth certificates to be changed by a simple declaration. Some Australian states are considering leaving sex off all official documents. The information would instead be held on a private government database. Citizens could change their listed sex up to three times.

The intention of self-ID is to be fair to transgender people—those who regard the sex that doctors observed when they were born as a poor fit for the way they feel or wish to be perceived. The liberal approach is to let them present themselves as they wish. But self-ID goes much further. It forces everyone else to accept a subjective feeling as reality, and everything that flows from it, including access to spaces and facilities designated for the opposite sex. That is both illiberal and dangerous, as will become clearer in 2019.

Britain, where the press is feisty and feminists have run a canny campaign against the planned legal

Self-ID laws have been vague and sweeping



changes, is ahead of the trend. Newspapers have publicised several cases of predators taking advantage of de facto self-ID, including a convicted rapist moved to a women’s prison after identifying as a woman, who sexually assaulted other inmates. The *Sunday Times* collated figures showing that sexual offences are far more common in mixed-sex pool changing-rooms than in single-sex ones. Girlguiding UK, which is now open to all self-declared girls, not just biological ones, faced tough questions about child protection after it expelled two leaders who asked whether it had assessed the risks.

Many on the religious and conservative right have always opposed such policies on principle. Those on the left, more instinctively sympathetic to accepting trans people’s self-declared genders, will find it harder to accept the evidence of harm, even as more comes to light. Many have dismissed as “transphobic” any concerns that rapists and other violent men might exploit gender self-ID, or that natal women may prefer the privacy of single-sex spaces. That has inhibited the open debate needed for good policymaking. As a result, self-ID laws have been vague and sweeping, lacking the safeguards that might have made them workable.

Lost in translation

The spectacle of so-called progressive people dismissing assaults on women and children as collateral damage will alienate many feminists with whom they are accustomed to share common cause. Transgender people, already fodder in the culture wars, will suffer from being tarred with the same brush as opportunistic predators. There is still time to search for ways to protect them without harming others. But without a rethink, battle lines will harden. ■

Speak up or be silenced

Democracy's fans should resist its erosion, argues Robert Guest

THE PAST year has been dismal for democracy. From Cairo to Caracas, despots (most of them posing as democrats) have locked up dissidents, murdered protesters and shut newspapers. Government of, by and for the people is in retreat. What can be done to defend it in 2019—when countries with over a third of the world's population will hold nationwide elections—and start to reverse more than a decade of global decline?

First, don't fall for the argument that because democracy is flawed, a strongman might be better. Sure, voters sometimes make bad choices. But the checks and balances of a mature liberal democracy limit the damage, and usually prevent it from becoming permanent. Whatever you think of Donald Trump (to pick a random example), he is constrained by laws, a free press and a

professional civil service. In 2019 a hostile House of Representatives will obstruct and investigate him with vim. If voters tire of him, they can sack him in 2020, and he cannot serve more than eight years. None of this is true of China's president, Xi Jinping.

Second, resist every assault on pluralism. In many countries strongmen will claim that shadowy enemies are subverting the state, undermining the national culture or insulting the majority religion. This is often a pretext to purge disloyal judges, muzzle mouthy journalists and put the strongman's chums in charge of supposedly independent institutions. Democrats should treat every such act as the thin end of the wedge.

Such assaults will be common in 2019. The space for dissent in China will shrink as artificial intelligence empowers the surveillance state. In Tanzania President John Magufuli, aka "the Bulldozer", will sack or arrest anyone who gets in his way. Egypt and Iran will torture more blameless protesters. Brazil's populist new president, Jair Bolsonaro, will show whether he accepts democratic restraints.

In Europe, Poland's ruling party will gut more institutions and stuff them with incompetent loyalists; yet it will remain popular thanks to copious social spending. Hungary's prime minister, Viktor Orban, will vow to protect his people from Muslim migrants; meanwhile, his cronies will transmute power into gold. European taxpayers should stop subsidising both regimes.

The outlook is not all gloomy. In April or May India

will stage the biggest election in world history, as it does every five years. The ruling Hindu-nationalist Bharatiya Janata Party may lose. Indonesia will hold huge and reasonably fair elections in April. The pragmatic president, Joko Widodo, will probably win, despite dirty tricks from supporters of his opponent, Prabowo Subianto, a former dictator's henchman.

Africa will do better in 2019 than before. Nigeria's ballot in February will be nasty and bloody but will broadly reflect the will of the people. Muhammadu Buhari, the ailing president, will accept the result if he loses. South Africa under President Cyril Ramaphosa will mend some of the institutions that his predecessor sought to corrupt. Ethiopia's prime minister, Abiy Ahmed, having released thousands of political prisoners

and made peace with Eritrea, will allow more space for dissent. Donors should help him.

Autocratic governments often sow the seeds of their own demise. When dissent is silenced, leaders stop hearing wise but unwelcome advice. When checks and balances are dismantled, graft metastasises and weakens the regime. In 2018 popular disgust at official thievery brought down authoritarians in Malaysia and South Africa. In 2019 the

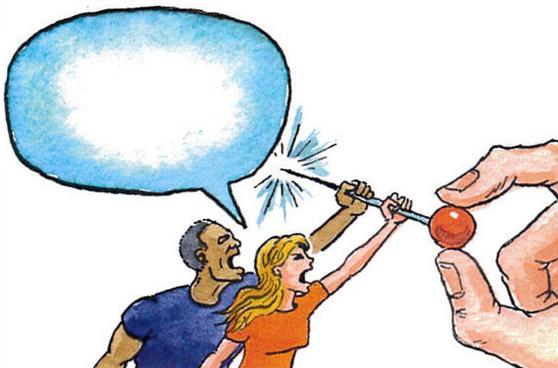
violent, crooked regimes in Venezuela and Nicaragua look vulnerable. So does Zambia's thuggish president, Edgar Lungu, who faces a debt crisis. Absent serious reform, donors should not bail him out.

Truth to power

Even Russia's Vladimir Putin is looking weaker. In 2018 he could not even force through a moderately sensible pension reform. Surveys suggest that less than half of voters back the regime. Outsiders should maintain sanctions on Mr Putin's cronies.

They should also answer the Kremlin's propaganda with real news. As the writer Anne Applebaum recently put it, the dictatorships of yesteryear were built on the "big lie" (think of the grand theories of Stalin, Mao and Hitler). Today's are built on medium-sized lies (think of Mr Orban's pretence that George Soros plans to flood Hungary with Muslims). Such lies need frequent debunking. Those who think democracy the least bad form of government must speak up for the values that underpin it, including truth itself. ■

Lies need frequent debunking



The year of the vegan

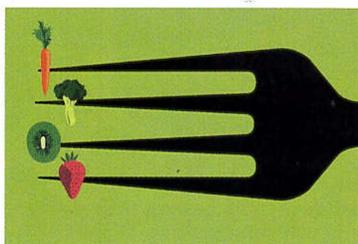
Where millennials lead, businesses and governments will follow, predicts John Parker

FOR THE past half-century, veganism has been a minority within a minority. In America in 2015, according to one survey, 3.4% of the population were vegetarian and just 0.4% were vegan. But 2019 will be the year veganism goes mainstream.

Interest in a way of life in which people eschew not just meat and leather, but all animal products including eggs, wool and silk, is soaring, especially among millennials. Fully a quarter of 25- to 34-year-old Americans say they are vegans or vegetarians.

The business of providing vegan meals is booming. McDonald's has started selling McVegan burgers. Sales of vegan foods in America in the year to June 2018 rose ten times faster than food sales as a whole. Giant food firms are clambering onto the bandwagon, creating vegan lines of their own, buying startups, or both. Tyson Foods, a meat behemoth, has a 5% stake in Beyond Meat, which sells meat-free patties to TGI Friday's, a restaurant chain. Even Big Meat is going vegan, it seems.

The school district of Los Angeles, America's second-largest, will start serving vegan meals in all its schools



Patties ooze with blood made of beetroot juice

John Parker:
correspondent,
The Economist

during the 2018-19 academic year. In its annual meeting in 2018, the American Medical Association called on hospitals to offer more such meals. But most national governments have been reluctant to encourage veganism. That could start to change in 2019 when the European Commission at last begins the

process of formally defining what counts as vegan (and vegetarian) food, providing a measure of legal certainty.

At the same time, vegan firms are making meat substitutes that actually look and taste like meat. Beyond Meat's patties ooze with blood made of beetroot juice. When a vegan steak made by a Dutch firm, Vivera, arrived on supermarket shelves in June, 40,000 were sold within a week. If plant-based "meats" take off, they could become a transformative technology, improving Westerners' protein-heavy diets, reducing the environmental hoofprint of animal husbandry and perhaps even cutting the cost of food in poor countries. ■

Truth in advertising

What if companies' slogans had to be accurate, asks Andrew Palmer, rather than aspirational?

ON APRIL 1ST 2019 a new European Union regulation comes into force that promises to transform the corporate landscape. Inspired by the success of Europe's "GDPR" data-protection effort in 2018, it will require companies operating in the EU to adopt slogans that are factually accurate—and to do so by the end of 2019 or face fines of up to 2% of global annual revenue. This will expose the gap between the ambitions of firms' slogans and the reality of their actions.

Nike has been telling people to "Just Do It" since the late 1980s. Stung by accusations about a "boys' club" culture, and resignations by senior executives, it is expected to change to "Just Check with HR First".

Deutsche Bank, which has been floundering for years, is rebranding under the tagline "A passion to underperform". YouTube will change its slogan in Europe from "Broadcast yourself" to "Broadcast yourself. Get taken down by our content moderators later".

Companies that have been hit by cyber-attacks and other security breaches will also have to make painful

changes. Equifax, a credit-scoring company that was hacked in 2017, exposing the personal information of almost 150m people, currently boasts that it is "Powering the World with Knowledge". In 2019, it will substitute "Knowledge" with "Your Stolen Data".

A series of system failures will force a rethink at companies that rely on secure, ubiquitous connectivity. Visa, which suffered an embarrassing payments outage across Europe in 2018, will extend its marketing slogan to "Everywhere you want to be, unless we have to reboot the system". American Express's legendary tagline will become "Don't leave home without cash".

Pedants will rejoice as the need for factual accuracy finally forces change on a number of companies whose corporate mottoes have long offended grammar, spelling and common sense. In 2019 Adidas will inspire its customers with "Impossible is not a noun", and Heinz will tell people that "Beans means edible seeds".

Will honesty pay? For the ad industry, certainly. For firms no longer able to fool people, maybe not. ■

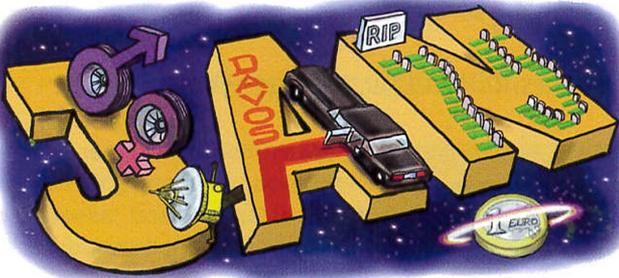
Pedants will rejoice

Andrew Palmer:
business affairs editor,
The Economist

The World in 2019 | Calendar

The World in 2019

Our selection of events around the world



On New Year's Day NASA's *New Horizons* probe whizzes past 2014 MU69, also known as Ultima Thule, an object in the Kuiper belt, far beyond the orbit of Neptune. The mysterious body, thought to be about 30km across, becomes the most distant object in the solar system to be visited by a spacecraft.

Happy birthday to euro! Europe's single currency turns 20.

California becomes the first state in America to allow people to choose a gender other than male or female for state-issued IDs such as driving licences. Members of the global elite gather at the World Economic Forum in Davos, in the Swiss Alps, to discuss how to change the world so that it works for more than just the global elite.

In St Petersburg, Russians commemorate the 75th anniversary of the lifting of the siege of what was then Leningrad. More than 1m people are believed to have died in the siege, which is thought to have been the deadliest in history.

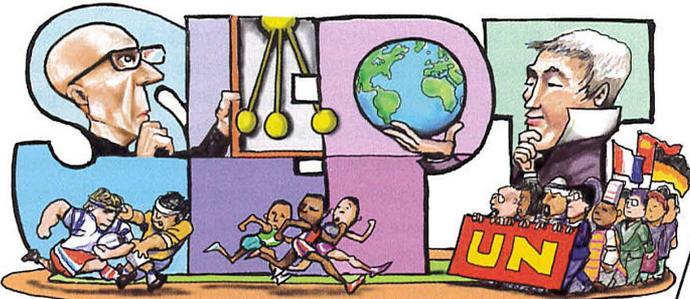


Art-lovers pay homage to the genius of Leonardo da Vinci, who died 500 years ago at the chateau of Amboise in the Loire Valley.

Voters across 27 EU countries head to the polls to elect members of the European Parliament—but without much enthusiasm. Turnout in Euro-elections has been well below 50% in the three polls since 2004.

Queen Victoria was born 200 years ago this month.

The Cricket World Cup, held every four years and involving 16 countries from Afghanistan to New Zealand, gets under way. The one-day games are held across England and Wales, leading up to the final at Lord's in London in mid-July.



Japan stages the Rugby World Cup—the first time the tournament has gone to Asia.

The UN General Assembly gathers in New York: a chance to take stock of the twists, turns—and tweets—of global diplomacy.

Germans honour the life of Alexander von Humboldt, one of their greatest cultural figures. The Prussian polymath was born 250 years ago this month. The French, meanwhile, toast the physicist Léon Foucault (and his famous pendulum), born 200 years ago.

The starting gun is fired in Doha, Qatar, at the World Athletics Championships, held every two years.

And the winner is: American Football's Super Bowl LIII touches down in Atlanta; while in Hollywood, the Academy of Motion Picture Arts and Sciences hands out its Oscars.

Nigerians vote for their president and parliament.

Like it or not, Facebook celebrates its 15th birthday.

Good deeds proliferate around the world during Random Acts of Kindness Week.

Chinese welcome in the year of the pig. People born in pig years are said to be honest, generous and optimistic.



Major League Baseball comes to Europe for the first time in its regular season, as the New York Yankees and the Boston Red Sox face each other in a two-game series in London.

Leaders of 20 of the world's biggest economies gather in Osaka for the G20 summit, the 14th in the series and the first to be held in Japan.

On June 6th it is 75 years since the D-Day landings, the largest seaborne invasion in history. And June 28th is the centenary of the Treaty of Versailles, which formally ended the first world war exactly five years after the assassination of Archduke Ferdinand, which triggered it.

The FIFA Women's World Cup kicks off in France. And the first UEFA Nations League winner emerges in the final of a football competition involving 55 countries.



India marks the 150th anniversary of the birth of its national hero, Mahatma Gandhi, with a global celebration of the great man.

Canada must hold its general elections by now, and Argentina holds a presidential poll.

It's end of term in Europe—both for the members of Jean-Claude Juncker's European Commission in Brussels (after their five-year stint) and for Mario Draghi as president of the European Central Bank in Frankfurt (after eight years in the job).





Barring an unlikely change of heart, Britain leaves the European Union, after 46 years in the club.

Vive le français! The world is reminded that it has around 300m French-speakers on International Francophonie Day. Meanwhile, those in vacant or in pensive mood can celebrate World Poetry Day.

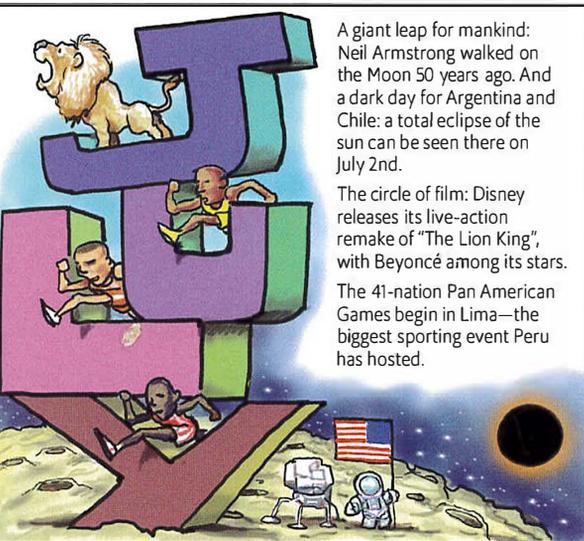
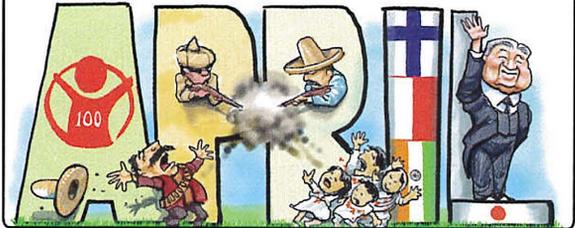
Athletes with intellectual disabilities compete in the Special Olympics World Summer Games in Abu Dhabi—the first Middle Eastern country to host an Olympic competition.

Ukrainians pick a president.

A worthy centenary: Save the Children, a charity dedicated to child welfare, was set up 100 years ago in London. A revolutionary one: Emiliano Zapata, leader of peasant rebels in Mexico and an iconic figure in the country, was killed in an ambush in April 1919. And a sombre one: the Amritsar massacre, also known as the Jallianwala Bagh massacre, left at least 379 people dead when troops of the British Indian army fired into a crowd in India's holy city for Sikhs. The killing stirred the country's independence movement.

Indonesians vote for their president and parliament. Finns hold a parliamentary poll. And India, the world's biggest democracy, is due to hold general elections around now.

A new era begins in Japan as Emperor Akihito abdicates, making way for his son, Naruhito.



A giant leap for mankind: Neil Armstrong walked on the Moon 50 years ago. And a dark day for Argentina and Chile: a total eclipse of the sun can be seen there on July 2nd.

The circle of film: Disney releases its live-action remake of "The Lion King", with Beyoncé among its stars.

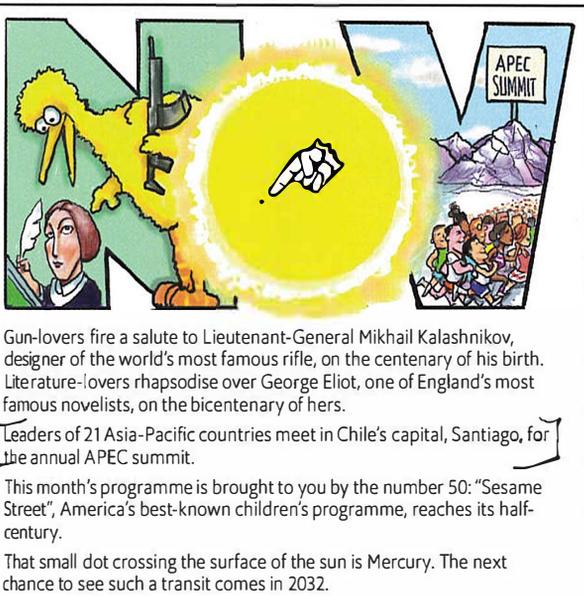
The 41-nation Pan American Games begin in Lima—the biggest sporting event Peru has hosted.



The FIBA Basketball World Cup begins in China. The tournament was moved from 2018, to avoid clashing with the football World Cup, and expanded from 24 teams to 32.

South Africa must hold parliamentary elections by now.

The first regularly scheduled international flight took off 100 years ago, from London to Paris. The airline was Aircraft Transport and Travel, a precursor to today's British Airways. Napoleon was born 250 years ago.

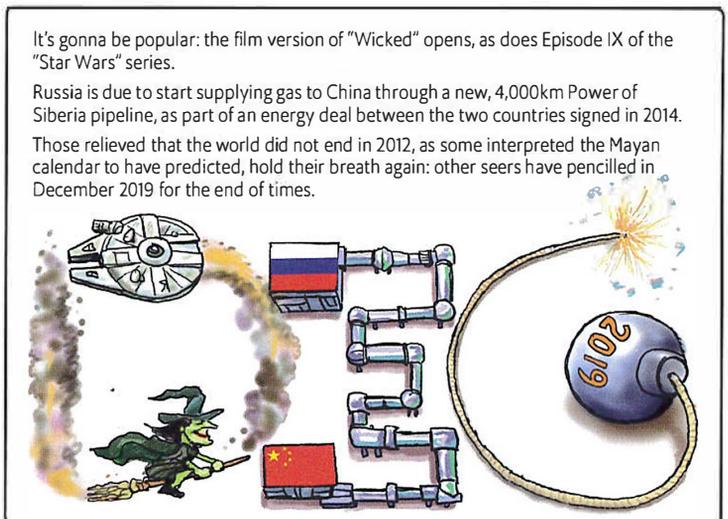


Gun-lovers fire a salute to Lieutenant-General Mikhail Kalashnikov, designer of the world's most famous rifle, on the centenary of his birth. Literature-lovers rhapsodise over George Eliot, one of England's most famous novelists, on the bicentenary of hers.

Leaders of 21 Asia-Pacific countries meet in Chile's capital, Santiago, for the annual APEC summit.

This month's programme is brought to you by the number 50: "Sesame Street", America's best-known children's programme, reaches its half-century.

That small dot crossing the surface of the sun is Mercury. The next chance to see such a transit comes in 2032.



It's gonna be popular: the film version of "Wicked" opens, as does Episode IX of the "Star Wars" series.

Russia is due to start supplying gas to China through a new, 4,000km Power of Siberia pipeline, as part of an energy deal between the two countries signed in 2014.

Those relieved that the world did not end in 2012, as some interpreted the Mayan calendar to have predicted, hold their breath again: other seers have pencilled in December 2019 for the end of times.

Europe

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Rainbow in Strasbourg

European Parliament, share of seats by group Since May 2014, %

Empty seats

25% S&D Progressive Alliance of Socialists & Democrats (parliamentary group of the Party of European Socialists, or PES)

7% GUE/NGL European United Left/Nordic Green Left

7% Greens/EFA European Free Alliance

9% ALDE Alliance of Liberals & Democrats for Europe

29% EPP European People's Party

10% ECR European Conservatives & Reformists

3% NI Non-attached

6% EFDD Europe of Freedom and Direct Democracy

5% ENF Europe of Nations and Freedom

Source: European Parliament

After Jean-Claude

The contest between an old establishment and new challengers will define European politics

Jeremy Cliffe Charlemagne columnist, *The Economist*
BRUSSELS

BRITONS MIGHT like to think that their country's exit from the European Union on March 29th will be Europe's defining moment of 2019. And the European Commission might like to think that the informal summit of leaders on May 9th in Sibiu, the historically German capital of Transylvania, under Romania's presidency of the union, will be the pivot. Jean-Claude Juncker, the president of the commission, the EU's executive, and his team want to secure agreements there on everything from migration to single-market expansion before his term ends later in the year.

But in practical terms the European political year will turn on May 23rd-26th, when the 27 member states left in the EU after Britain's exit will elect a new, slightly smaller European Parliament. About half of Britain's seats will be distributed among the remaining members; the rest will simply vanish, reducing the size of the parliament from 751 seats to 705. Turnout may drop even further beneath its 2014 low of 43%.

The election and its aftermath will be a battle between old and new forces. On one side will be the European establishment: the centre-right European People's Party (EPP) and the centre-left Party of European Socialists (PES). These two blocs have together obtained majorities at every European election to date, though their combined share of the vote has fallen over the past two

decades from 66% in 1999 to 55% in 2014. It may well dip below 50% in May's vote, as conventional Christian-democrat and social-democrat forces lose out to rivals.

Those rivals will span the spectrum. On the left will be Jean-Luc Mélenchon and his Unsubmissive France as well as the Dutch left-liberal force GreenLeft. In the centre there will be insurgents like Citizens (Ciudadanos) in Spain and Emmanuel Macron's The Republic on the Move (La République En Marche) in France. And on the right there will be newly dynamic populist forces like Matteo Salvini's Northern League in Italy and the Sweden Democrats. These outfits will be united by little apart from a general scepticism towards the *Spitzenkandidat* process, by which the designated "lead candidate" of the largest group, almost certainly the EPP, becomes the next president of the commission. Introduced in 2014, this process had limited support then and has become less popular since. Still, the two main blocs cleave to it as their best chance to retain influence.

The elections will be a scrappy affair. The *Spitzenkandidaten* will conduct several television debates, all in English. Relatively few Europeans will pay attention. Debates in individual member states will, as ever, concentrate on national grievances. But the election will be more European than before, with EU policies on migration and, to a lesser extent, the euro featuring in the national debates of most member states. The enduring EPP membership of Fidesz, the authoritarian right-wing party that is trashing liberal democratic norms in

2019 in brief

Within the European Union twice-yearly seasonal clock changes may stop after October

Happy birthday to euro

At 20, Europe's single currency is still a work in progress

Rachana Shanbhogue Europe economics correspondent, *The Economist*

THE COMMON CURRENCY TURNS 20 in January 2019. Sceptics doubted it would survive this long. Yet worries over its future have not gone away.

For the first half of its life, things appeared to go smoothly enough. Then crises in Greece, Ireland, Portugal and Spain exposed the flimsiness of its foundations. Structural repairs hastily followed.

The euro zone is more resilient as it enters 2019. Mechanisms to supervise banks, resolve failed lenders and lend to troubled sovereigns are now in place. The economy has been expanding for the past five years. Still, more tests are looming.

The European Central Bank (ECB), the euro's chief guardian, will see changes both in policy and in personnel. For years ultra-loose monetary policy has buttressed the euro zone. That support will be withdrawn gradually from the autumn of 2019. An untimely or badly communicated interest-rate rise risks jolting financial markets, or upending the fragile recoveries in Italy or Greece.

Raising interest rates will be one of the last actions Mario Draghi, the bank's president, takes before his term ends in October 2019. His successor will be chosen earlier in the year after backroom horse-trading. Controversial candidates—such as Jens Weidmann, the head of the German Bundesbank and an outspoken critic of the ECB's policies—will be passed over. Instead a Finn or a Frenchman (and it will be a man) will take charge, promising continuity in policy.

The euro zone's changing relationship with its nearest trading partners will test its resilience. Britain is due to leave the European Union at the end of March. A disorderly Brexit could cause economic and financial disruption to spill over to the currency bloc. America's president, Donald Trump, could finally lose patience with Germany's huge current-account sur-

plus and declare a trade war. Uncertainty surrounding such potential shocks will keep growth in check. The economy will expand by a solid if unspectacular 2%.

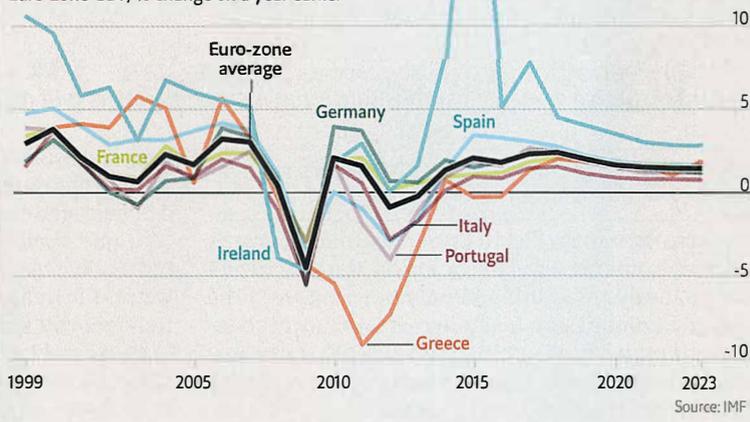
The greatest damage, though, could come from within. Italy's populist coalition has made expensive promises to its voters and is given to bouts of euro-scepticism. Ahead of the European Parliament elections in May, it will test how far it can push its rhetoric, which could provoke a bond-market sell-off. If Italy, the bloc's third-largest economy, were to descend into crisis, the walls of the euro project would start to cave in.

Hence the argument for further reinforcing the currency bloc before trouble hits. Member states will make some progress towards achieving private-sector risk-sharing through a capital-markets union. But with northerners wary of being on the hook for promiscuity in the south, efforts to set up a common deposit-insurance scheme or a common budget will only inch forward. The euro may be into its third decade, but the building work goes on.

The greatest damage could come from within

A rough ride

Euro-zone GDP, % change on a year earlier



► Hungary, will cause controversy. Mr Macron's efforts to subvert the *Spitzenkandidat* process with his own, new group of liberal pro-Europeans will grab headlines.

Afterwards, the time will come to parcel up the big five jobs: the presidencies of the commission, the European Council, the parliament, the European Central Bank and the job of high representative on foreign affairs. The commission job will go to the winning *Spitzenkandidat*, unless Mr Macron can somehow bend or break the system—but that would involve winning over a parliament with a veto over the appointment and widespread commitment to the process. Potential candidates include Manfred Weber, the EPP's parliamentary leader, Alexander Stubb, a former prime minister of Finland, Peter Altmaier, Germany's multilingual economy minister, Michel Barnier, the commission's lead negotia-

tor on Brexit, and Margarethe Vestager, the competition commissioner who has taken on the American technology giants. The presidency of the European Council might go to Mark Rutte, the Dutch prime minister, Dalia Grybauskaitė, Lithuania's president, or Helle Thorning-Schmidt, a former Danish prime minister. Some in Brussels speculate about a last-minute candidacy for either the commission or council job by Angela Merkel. But that is improbable.

The headline, however, will be a familiar one: the populists' surge. Even if they do not form a common group in the parliament—a goal that has long fallen foul of internal divisions—the far right will be a significant force in the next European Parliament. So will the far left. The pressure on the political centre in Europe is building. It will either adapt, or fail. ■

The epiphany of German weakness

Germany will feel impotent rage at not being able to declare independence from America

Andreas Kluth editor-in-chief, *Handelsblatt Global*
BERLIN

IN 2019 GERMANY will face a crisis: not an economic or political one, but an intellectual and psychological crisis that could be just as wrenching. For the first time, the German public at large will fully absorb what Berlin elites have known for years: Germany has no viable foreign or security policy to survive the passing of Pax Americana.

This will be independent of questions about who will govern Germany after Angela Merkel leaves the chancellery (possibly in 2019, at the latest in 2021). It is an open secret that she did not want to run again in 2017. What changed her mind was not the refugee drama, which will count as her legacy, but the election of President Donald Trump. Sooner than most other Germans, Mrs Merkel grasped that Trumpism nullified every assumption that Germany had made since 1945.

Since the time of Konrad Adenauer, West Germany's first chancellor, the premise of German foreign policy was to submit to a double "Western bond": first, to America within NATO, and second, to France within the European Union. The American army and nuclear aegis provided protection against Russia. In turn, the Germans forfeited militarism—and ostensibly national self-interest—in favour of a rules-based multilateral order in both trade and security. Germany benefited from this arrangement. It prospered economically, and it was able to adopt a sanctimonious tone in diplomacy.

America grew fed up with this division of labour long before Mr Trump's election. In 2011 its defence secretary, Robert Gates, warned Europe, and Germany, about its looming military irrelevance and demanded an end to Germany's free-riding on American spending. The German elite gradually accepted this logic. In 2014 the country's president, Joachim Gauck, called for a greater German role in world affairs. Others echoed him. But the debate did not reach the public. Election campaigns continued to be waged purely on domestic issues.

Then came the shock of Mr Trump's victory. For about a year, the stalwart Atlanticists (often Christian Democrats) in Mrs Merkel's advisory circle kept hope alive that Mr Trump would be moderated by the dignity of his office. Those already sceptical of America (often Social Democrats) concluded that it was time for emancipation from it. The more Mr Trump kept making Germany feel like a foe rather than a friend, the more the consensus tipped towards the emancipators.

The declaration of independence, such as it was, was delivered in 2018 by Heiko Maas, the foreign minister. Germany, he argued, had to become a "counterweight" to America where necessary. And the only way to do this was as part of a more unified Europe and a new alliance of "multilateralist" countries from Canada to Japan.

As 2019 dawns, Germany thus finds itself broadly opposed to America. Conflicts include the Paris climate agreement (Germany for, America against), the Iran



nuclear deal (ditto) and the Nord Stream 2 gas pipeline between Russia and Germany (ditto). The disagreement spans fights about trade and the dominance—and tax avoidance—of American internet firms in Europe. It culminates in arguments about military spending, the meaning of NATO's Article 5, and "Western values".

Throughout 2019, German policymakers will labour with their European counterparts to work towards Mr Maas's goal. They will try to build an international payments system that (unlike SWIFT) cannot be manipulated by America. They will try to cobble together European alternatives to NATO, with characteristically obscure acronyms like PESCO and CARD. And again and again, they will discover two things. First, Europe is too divided to unite behind German ideas. Second, the overwhelming mass of America's systemic power simply allows no counterweight, and certainly not a German one.

Sturm und Drangry

In frustration, German populists on the left and right (who agree in being pro-Russian and anti-American) will warm up old fantasies about German "equidistance" between East and West. Other politicians will wage a phantom debate, unimaginable until recently, that Germany should get its own nuclear weapons. Most will stick to their accustomed stance of denial.

Germany is "too big for Europe, too small for the world", Henry Kissinger once said. Today this explains the special feeling of impotent rage many Germans have towards Mr Trump. As Sigmar Gabriel, Mr Maas's predecessor, puts it: "He reminds us every day how weak we are." It is a dangerous world, and Germany is not ready for it. In 2019, Germans will understand that—and despair. ■

2019 in brief

A new leader is at the helm of Germany's Christian Democratic Union party after Angela Merkel's decision to step down from the position

Back to Earth with a bump

Russia's leader will start to look like a mere mortal again

Noah Sneider Moscow correspondent, *The Economist*
MOSCOW

DURING VLADIMIR PUTIN'S third presidential term from 2012 to 2018, he ascended to the Russian pantheon. The annexation of Crimea transformed him from an earthly president into a symbol of Russia's resurgence on the world stage. His approval ratings soared to over 80% and remained there, despite a grinding recession. In late 2016 one Kremlin pollster told *The Economist* that the president had become "a charismatic leader of the Promethean type: a demigod, a Titan, who brought the people fire."

As his fourth term revs up in 2019, Mr Putin will begin to look mortal again. The grandeur of geopolitical gamesmanship will give way to the gritty realities of day-to-day life: a stagnant economy and mounting social problems. The reverse metamorphosis has already begun. Although approval ratings are an imperfect measure of Mr Putin's true support, given his control over the country's media and his elimination of political alternatives, their trends are nonetheless revealing. From approval of around 82% just after his re-election in March 2018, his ratings dropped to 67% in September, the lowest since before the annexation of Crimea. His trust ratings also fell from 60% at the beginning of 2018 to 39% in September.

The proximate cause was a government proposal



Kitchen politics

to raise the retirement age from 60 years to 65 for men and from 55 to 63 for women. Hoping to avoid public discontent, the Kremlin tried to distance Mr Putin from the decision, and he even emerged to decree that women's pensions should kick in at 60—but to little avail. Protests broke out on the streets and at the ballot box in the autumn of 2018: Kremlin-backed candidates from the ruling party lost gubernatorial elections to stand-in opponents in four regions, a

No shortage of drama

Yet after its elections Ukraine will again resist radical change

Arkady Ostrovsky Russia editor, *The Economist*

FEW COUNTRIES go through as many upheavals but ultimately change as little as Ukraine. In the span of a generation, it split from the Soviet empire, staged two revolutions, lost part of its territory and fought a war. Yet a system of governance where a few oligarchic groups control access to economic and political resources survived throughout. According to the World Bank, in Ukraine 2% of firms are politically connected, but they control over 20% of the total turnover and over a quarter of the assets of all Ukrainian companies. Because of this entrenched and corrupt system, and despite its fertile land and educated population, Ukraine (which in 1990 was on a par with Poland) has become the second-poorest country in Europe, with a GDP per person a fifth of Poland's level.

The Revolution of Dignity in Kiev, a popular uprising in 2014 which overthrew the Moscow-backed president, Viktor Yanukovich, promised an overhaul of the entire

system. But five years on, Ukrainians are still waiting.

In 2019 Ukrainians will go to the polls to elect a new president (in March) and parliament (in October). Despite many names on the ballot paper, their choice will be limited. The stage will be dominated by two old-timers: Petro Poroshenko, the current president and an oligarch, and Yulia Tymoshenko, a populist and Mr Poroshenko's old rival. Both have been on the scene since the early 2000s and neither inspires much trust among voters. Secondary parts (for now) are played by Anatoly Gritsenko, a former defence minister who is free of oligarchic interests (and resources), and Yuri Boiko, a controversial former energy minister, who served under Mr Yanukovich and who represents the interests of clans from the south-east of the country.

Waiting in the wings is Slava Vakarchuk, a popular rock star and activist, who has been pondering a presidential run. If he does, he would galvanise dispirited reformers but would face a perilous path to victory; if not, his endorsement could help swing the race. The election itself will be akin to a show. But spectators have seen it all before and don't bother to read their politicians' empty promises. Politicians, for their part, deploy slogans which locate them on a geopolitical map but have little to do with everyday life.

Mr Poroshenko's main slogan, "Army, language, faith: we follow our own path", presents him as a Ukrainian patriot defending his embattled country against Russia.



2019 in brief

Plovdiv in Bulgaria and Matera in Italy are European Capitals of Culture. Finland's capital, Helsinki, and Lyon in France are the first European Capitals of Smart Tourism

rare glitch in Russia's "managed democracy".

In 2019, as the pension reform starts to be phased in, the malaise will deepen. Pessimism about the country's direction is rising. Russia's economy will stagnate, with GDP growth below 2%. As fallout continues from the poisoning of Sergei Skripal in Britain, and as Robert Mueller's investigation into Russian interference in the American elections in 2016 intensifies, heavier Western sanctions will put downward pressure on the rouble and crimp investment. The central bank will have to keep interest rates up to counteract the inflationary effects.

In the past, foreign adventurism and the spectre of enemies abroad have helped Mr Putin consolidate public support. This will be an increasingly tough sell. The euphoria from the annexation of Crimea has worn off. Russians have tired of hearing about the war in Syria. Sociologists note creeping dissatisfaction with foreign policy: most people want their leaders to focus on domestic problems. The Kremlin may be tempted to fall back instead on campaigns against "fifth columnists" at home. Repression against young activists and social-media users, which grew in 2018, could intensify further.

All of this will unfold amid preparations for a post-Putin Russia. By 2024 Mr Putin must decide whether he wants to fiddle with the constitution in order to stay in charge, and if not, how and to whom he plans to hand over power. At first glance, 2019 seems like a small step along the way, a post-election year free of major political dates. But as Gleb Pavlovsky, a former Kremlin adviser, says: "In Russia, events always happen when your calendar is empty."

What if

Might Balkan neighbours Serbia and Kosovo strike a deal? They have been at odds for decades. A settlement would speed up Serbia's negotiations to join the EU, and open the way for Kosovo to apply for membership. But if a deal involved redrawing borders—say, swapping ethnic Serb territory in northern Kosovo for a majority-Albanian area of southern Serbia—it could open Pandora's box. It would have knock-on effects in Bosnia, where Serb and Croat nationalists would step up demands for autonomy

Any sign of humility?

▶ To show it, he held military parades, enshrined Ukraine's aspiration to join the European Union and NATO into the constitution, and lobbied for the independence of the Ukrainian Orthodox Church from Russia. Ms Tymoshenko makes similar claims, but she feels that it is her turn to run the country and divvy up its shrinking riches. Sworn enemies, the two are united in their cynicism and opposition to serious reform and a genuine crackdown on corruption. The presidential contest, however, will be decided in the run-off, and that could produce surprises.

To complicate matters further, Ukrainians will not be the only ones taking part in their elections. Ms Tymoshenko would suit Russia's president, Vladimir Putin, best. He has done business with her before and he recognises in her a fellow cynical populist with a penchant for deal-making. In the parliamentary elections the Kremlin will push for a coalition of forces from the country's Russian-speaking south-east, hoping that it will give it, in effect, a veto over Ukraine's future.

Injured by Russia and weakened by its own treacherous elites, Ukraine risks losing its sovereignty. The best outcome would be a radical break with the past, but given the entrenched interests that is unlikely. Rather, Ukraine will muddle through and improve gradually, despite all the upheavals. Its ability to avoid dramatic change may prove to be a saving grace. ■

Delivery time

France's president needs to show that reform works

Sophie Pedder Paris bureau chief, *The Economist* PARIS

IT WILL BE crunch time for Emmanuel Macron, France's young president, in 2019 as voters try to work out whether they elected a self-regarding regal leader or a resolute reformer who can get their country moving again. By the end of the year Mr Macron will be halfway through his term in office. The French will want to see the results of his reforms—in growth and jobs—if they are to indulge his often-imperious leadership style.

Mr Macron will shrug off criticism and press ahead with his domestic programme. On January 1st France will move to a system of taxing income at source, putting an end to its old method of collecting income tax a year in arrears. This will cause hiccups, and some dismay at thinner upfront pay packets. Apprehension will also greet Mr Macron's attempt to reform unemployment benefits and reorganise the pension system. He will try to regroup 35 different regimes into a unified, points-based scheme, in order to make pensions fairer, more transparent and better suited to mobile careers. The aim will be to encourage job mobility and prepare the French welfare state for an increasingly unstable world of work.

On his side Mr Macron will have a robust parliamentary majority and one of the few stable, single-party governments in Europe. His government, reshuffled in October, will go into 2019 more settled and focused on the job. Later in the year he could see fresh departures, as candidates for mayorships in 2020 quit to start their campaigns. There might even be a change of prime minister, if Edouard Philippe decides to run for mayor of Paris. But opposition in the National Assembly will remain fragmented and largely subdued.

As Mr Macron's poll ratings take a further knock, though, impatient voters will voice their frustrations. The chief beneficiary will be the far right's Marine Le Pen, who will take her renamed party—National Rally—into elections to the European Parliament in May as the champion of the dispossessed against Mr Macron's root-



▶ less pro-European elite. Despite her disastrous second-round debate performance in the presidential election of 2017, Ms Le Pen could top the voting this year in France, sending another shiver down liberal Europe's spine. Mr Macron will struggle to repeat at a European level the feat *La République en Marche* achieved in 2017, when his young movement upended party politics. His attempts to draw support from Europe's centre-right parties will strain relations with Germany's chancellor, Angela Merkel.

Yet Mr Macron will nonetheless emerge as the leading European voice shaping an alternative narrative to protectionism and populism, casting himself as the champion of the progressive liberal order against the dark forces of nationalism. Undeterred by German reticence or the Eurosceptics at his door, he will push for a more integrated Europe and try to nudge Germany on

euro-zone reform. Despite limited return on his efforts to bring President Donald Trump into the multilateral fold, and a lack of diplomatic traction in Russia, Syria or Iran, the French president will remain active on the world stage. Mr Macron will push the fight against climate change in particular when France hosts the G7 in Biarritz in August.

Arguably the greatest challenge for Mr Macron, a former investment banker, will be to persuade the French that his domestic reforms are not designed to favour only the better-off and fellow members of the globalised elite. It is all too easy to caricature his policies thus. Mr Macron needs to show that his guiding philosophy, based on maximising individual opportunities and "emancipation" from disadvantage, is genuinely about improving life chances for all—and to do so in a way that does not convey haughty disdain for ordinary people. ■

2019 in brief

Sweden loosens restrictions on the gambling industry by opening up to online betting platforms

Three score years and ten

A nervous NATO prepares to celebrate

Shashank Joshi defence editor, *The Economist*

IN APRIL 2019 NATO will have a 70th birthday party. It has reasons to celebrate. It is the largest, strongest and most enduring peacetime military alliance in history. Its military spending will keep rising, its exercises will get bigger and it will gain new members. But trouble lurks, with populist movements in Europe and America threatening the cosy transatlantic consensus that prevailed for decades.

First, the good news. NATO has transformed itself in the years since Russia invaded Ukraine and annexed Crimea in 2014. Ties between NATO and the EU—"trench warfare" a few years ago, according to one diplomat—are improving dramatically. It will keep getting easier for commanders to funnel their troops and tanks across Europe's borders without becoming snared in red tape.

NATO will conduct increasingly large war games, relearning skills that it honed in the cold war but lost in the 1990s. Its footprint will also expand. Macedonia, which is tantalisingly close to resolving a dispute with Greece over its name, could start on the long road to membership in January. A new divisional headquarters is due to open in Latvia in 2019, overseeing thousands of alliance troops recently sent to the Baltic states. A new Atlantic Command will address challenges in the Arctic, including a resurgent Russia. And a NATO training mission in Iraq will work to prevent a revival of Islamic State.

But the alliance is not immune to the forces that have roiled Western politics of late. One source of tension is the growth of populist parties, such as Italy's Northern League. These tend to be sympathetic towards Russia, and will attack NATO as expansionist.

A second conflict will pit south against north. States like Poland and Estonia look nervously at Russia. But southern allies, such as Greece and Spain,



Marching towards 70

worry more about immigration across the Mediterranean and raging conflicts in north Africa and the Middle East. They will press NATO to do the same.

A third problem is Turkey, which is on increasingly bad terms with its Western partners. Worse still, it plans to import a cutting-edge Russian air-defence system in 2019. This would be incompatible with NATO's air defences and might allow sensitive information about Western warplanes to flow to Moscow.

But the biggest fly in the ointment remains America's president, who will harangue allies for shirking their responsibilities. Though military spending in Europe has been rising for four consecutive years and more than half of NATO members are on track to meet a target of spending 2% of GDP on defence by 2024, this may not be enough for Donald Trump. He has urged allies to double that to a fanciful 4%.

On April 4th NATO foreign ministers will gather in Washington, DC, to celebrate the signing in 1949 of the Washington treaty, which established the alliance. Europe and Canada will be hoping it will be an occasion for celebration, rather than public tantrums.

The biggest fly in the ointment remains America's president

Splintered Spain

In need of another round of reforms

Michael Reid senior editor, Latin America and Spain, *The Economist* MADRID

SPAIN'S POLITICS have been in flux since 2015, when a two-party system splintered into four and Catalan nationalism mutated into separatism, ushering in weak minority governments. A series of elections in 2019 will confirm that the four-party system is here to stay—but could open the way to stronger, formal coalitions.

The big question is when Pedro Sánchez, the Socialist prime minister, will call a general election. Having ousted his conservative predecessor in a censure motion in May, he insists he will govern until the end of the parliament in 2020. But the Socialists have only 84 of its 350 seats.

If Mr Sánchez fails to get support for a budget for 2019 he may opt to go to the country early in the year. The tribulations of such a frail minority may anyway prompt him to call an election for November. The Socialists can hope to do well at the expense of Podemos (We Can), a far-left party which is declining. Ciudadanos (Citizens), which calls itself a liberal party, has chosen to battle the conservative People's Party for leadership of the right.

Catalonia will again loom large. Hearings in the trial of 18 separatist leaders, prompted by their illegal referendum and declaration of independence in 2017, are due to start in January. The trial, and especially a harsh jail sentence, will inflame and solidify the separatists, who command the loyalty of half Catalonia's voters.

A pointer to Spaniards' mood will come on May 26th, when European elections coincide with municipal polls and votes for regional governments. Attention will focus on the contest for mayor of Barcelona: Manuel Valls, a former French prime minister who was born in the city, is running on a unionist platform. He faces a tough battle against Ada Colau, the Podemos mayor, while the separatists will mount a determined challenge.

Spain needs a strong reformist government. Its vigorous economic recovery is starting to flag, education and pensions urgently need reform, and time alone will not solve the Catalan stand-off. After the voting, the politicians will have to collaborate. ■



Catalonelier

2019 in brief

Budget permitting, Italy's state broadcaster, RAI, launches a round-the-clock English-language service, giving the world a view of life and news in Italy

Avanti populism

Italy will flirt with financial danger

John Hooper Italy correspondent, *The Economist* ROME

ITALY IS seldom predictable. But it can at least be said with certainty that on May 2nd 2019, 500 years will have elapsed since the death of its most renowned polymath, Leonardo da Vinci. Many exhibitions will mark this, including one at the Louvre that aims to display as many as possible of the master's few paintings.

The glories of Italy's past have long contrasted uncomfortably with a present characterised by low economic growth and often clownish politics. Italians will start the year still poorer in real terms than they were in 2000. Most forecasters expect output in 2019 to grow by little more than 1%. But the government disagrees. The finance minister, Giovanni Tria, claims GDP could rise by up to 1.6%, keeping Italy's debt burden manageable.

Will it? Mr Tria's expansionary budget for 2019 raised alarm in Brussels and on financial markets. It set a deficit target of 2.4% of GDP. That might not seem much, but Italy is a special case because of its enormous public debt, of 132% of GDP.

The previous government, dominated by the centre-left, had said it would cut the deficit to 0.8% of GDP. Even after the formation in June of a cabinet yoking the anti-establishment Five Star Movement (M5S) and the hard-right Northern League, the expectation was for a target of below 2%. How the economy responds to its fresh stimulus will be crucial to the two parties' prospects.

When it came to a choice between upsetting Brussels and honouring their electoral pledges, the Five Stars' leader, Luigi Di Maio, and the head of the League, Matteo Salvini, opted to keep their word with voters. The M5S had promised an income guarantee for the poorest and jobless; the League had promised tax cuts. Both parties endorsed a costly plan to roll back a pension reform. Progress should be made on all three measures in 2019, but with the risk that Italy's public finances could get out of hand, sparking a renewed crisis in the euro zone.

Politicians who do what they say they are going to do are rare beasts. But with the European elections looming in May, Mr Di Maio in particular urgently needed to boost his party's popularity, which, according to polls, had slipped as support for the League soared. Within three months of the coalition government's inauguration, the League had doubled its poll ratings to more than 30% and overtaken the Five Stars, largely because of its aggressive stance on immigration. Voters warmed to Mr Salvini's pugnacious rhetoric, even if the underlying reason for a sharp drop in migrant arrivals in 2018 was a deal struck by the previous government with the UN-recognised Libyan administration in Tripoli.

Mr Salvini has the luxury of being able to choose between sticking with the Five Stars and returning as undisputed leader of a right-wing alliance with which he fought the last general election, in 2018. In deciding which way to lean in 2019, his inspiration will not be Leonardo—but Machiavelli. ■

Britain

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39 Harder times for the economy

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All about Brexit

The country will leave the European Union, but the uncertainties will drag on



John Peet Brexit editor, *The Economist*

BREXIT WILL again dominate British politics in 2019. Britain's departure from the European Union, endorsed by voters in June 2016, sucks the life out of all other political and economic concerns. Not only is Brexit fiendishly complex to negotiate, but its preponderance also explains why Theresa May's Tory government has often seemed bereft of ideas and policies.

The likeliest scenario (though there are plenty of others: see box on next page) is that Mrs May will at least secure a deal that ensures Britain formally exits the EU, as planned, on March 29th. For all her rhetoric about no deal being better than a bad deal, she and other EU leaders have always known that to leave without a deal would be highly damaging for all. The European economy has faltered. An acrimonious Brexit would be irresponsible at a time of growing geopolitical tensions. And businesses on all sides lobbied hard against no deal.

Yet the Brexit deal will leave uncertainties. True, it will usher in 21 months or more of transition during which little will change, and it will be designed to avoid a hard border with physical controls in Ireland. But it may presage regulatory checks in the Irish Sea that will be unpopular with the Democratic Unionist Party (DUP), which

props up Mrs May's government. And it will be but a prelude to tortuous negotiations over a free-trade agreement between Britain and the EU. For much of 2019 Brussels will be preoccupied with European elections and choosing a new European Commission. A future trade deal cannot be agreed on, still less ratified, within 21 months—so the transition period will have to be extended.

That will annoy many pro-Brexit Conservatives, who liken a transition in which Britain observes all the rules but no longer has any say in making them to being a vassal state. Such a concern may not be enough for Tory MPs to obstruct Mrs May's deal, as they fear this could mean that Brexit is overturned by a new referendum. But Tory restiveness will create more headaches for the prime minister, whose grip on the party leadership is insecure.

She became leader by default after David Cameron's resignation in June 2016. She then blew her parliamentary majority after calling an early election in June 2017, only to find that her campaigning prowess was outshone by that of Jeremy Corbyn, the Labour leader. Her dependence since then on DUP support makes her seem weak. And her Brexit plans provoke divisions in her party, which looks tired after eight years in office.

So the political focus after Brexit will switch to the question of who should take her place. She will argue that she is best placed to supervise the post-Brexit trade

2019 in brief

The central section of the Elizabeth line, which will eventually take rail passengers from Berkshire to Essex via Heathrow and central London, finally opens, nine months late. Transport for London apologises for any inconvenience

Catastrophe scenarios

Three ways that things could go horribly wrong with Brexit

Adrian Wooldridge Bagehot columnist,
The Economist

PARTY CONFERENCES always attract people with placards proclaiming that the end is nigh, from Marxists declaring that the long-awaited crisis of capitalism is finally upon us to religious fundamentalists spying the Four Horsemen of the Apocalypse on the horizon. Usually we journalists pass them by with nary a glance. But 2019 could prove that they were right all along.

For Brexit to succeed, a lot of improbable things have to go right. For it to fail, a lot of probable things have to go wrong. The Europeans do not want to damage the integrity of the single market. Theresa May is head of a minority government. The Democratic Unionist Party, on whose support she depends, does not want to damage the integrity of the United Kingdom. The Brexiteers do not want to betray a project that they have devoted their lives to. The Labour Party does not want to save a failing government. All this means the result could easily be chaos and paralysis—and chaos and paralysis could just as easily lead to one of three catastrophes.

The first is that Britain falls out of the European Union without a deal—that is, the EU decides to treat Britain as a third country without any co-operative agreements to facilitate trade. Given that the EU is Britain's biggest trading partner and that modern companies depend on just-in-time deliveries, this would be a hammer blow to the economy. Supermarkets might find it impossible to get fresh food. Lorries might be delayed at ports for days, producing massive traffic jams. Medicines might run out. Such short-term disasters would lead to longer-term problems as output declined, tax receipts plunged and the government had to cut back public spending.

The second is that Britain has a snap general election and Jeremy Corbyn's Labour Party wins. Mrs May could easily decide that the only way to escape paralysis is to ask the people to vote. If so, the public may decide that it has had enough of Tory incompetence, and give Mr Corbyn a chance. But Mr Corbyn is the most left-wing leader the Labour Party has ever had.

Supermarkets might find it impossible to get fresh food

He has threatened to confiscate 10% of the shares of all British companies with more than 250 employees. He wants to nationalise the utilities and railways, and give much more power to trade unions. The result could be a war between Labour and the markets, as global investors withdraw their money and the government responds by imposing capital controls.

The third is that Parliament decides to hold another referendum. Most Remainers, and EU officials, would jump for joy. But it might further confuse the situation. Would Britons be asked to choose between two options (remaining or leaving on Mrs May's terms) or three (remaining, leaving on Mrs May's terms, or leaving on world trade rules)? And if Britain can have a second referendum, why not a third? There could be riots on the streets if the Leavers feel they have had victory snatched from them.

Britain likes to think of itself as a sensible place that ultimately muddles through. The coming year could see that great illusion shattered.



- negotiations. Yet most Tory MPs, and even most ministers in her own cabinet, want her to step down well before the next election, which is due by mid 2022. The chances are that there will be a leadership challenge in 2019.

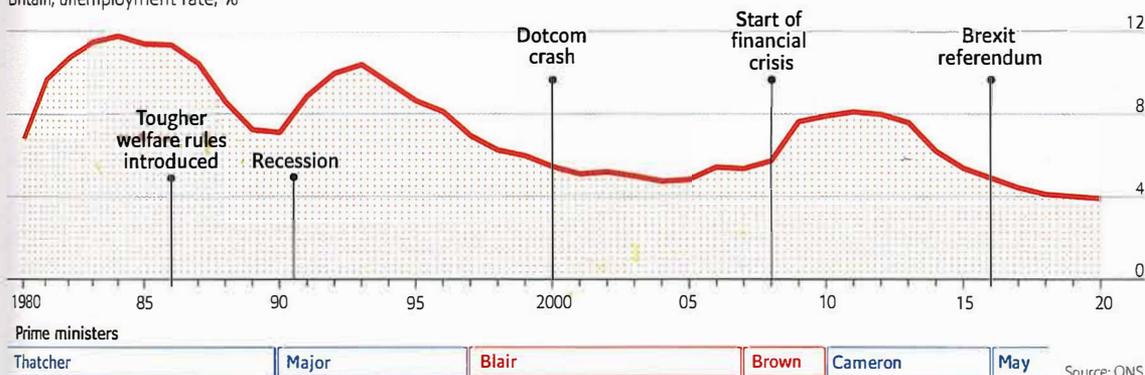
Mrs May could choose, as Margaret Thatcher did in 1990, to run herself. But like Mrs Thatcher, she is likely to lose. The front-runner to take over is Sajid Javid, home secretary and son of a Pakistani-born bus driver. There could be a late surge by another candidate, such as Jeremy Hunt, the foreign secretary. And a Brexiteer like Michael Gove, the environment secretary, or (less likely)

Boris Johnson, a former foreign secretary, could appeal more to the party members who make the final choice between the two leading candidates.

Whoever emerges as leader (and prime minister) will still have a job defeating Mr Corbyn. A Brexit that disappoints many and an economy that is stuttering could give Labour a good chance of winning for the first time since 2005. The prospect that the dislocation of Brexit may be followed by a far-left Corbyn government bent on nationalisation and more taxes will further unnerve businesses and investors. A bumpy ride lies ahead. ■

A long, uneven descent

Britain, unemployment rate, %



Brace yourselves

Whatever the outcome of the Brexit negotiations, the British economy faces a testing year

Callum Williams Britain economics correspondent, *The Economist*

SINCE THE Brexit referendum of 2016 the British economy has held up better than expected. True, because of higher inflation linked to the depreciation of sterling, real-wage growth has stagnated. The purchasing power of pay-packets remains below where it was before the financial crisis of 2008-09. Yet unemployment has fallen to a four-decade low of 4% or so (see chart), rather than increasing sharply as most economists had feared. And GDP has continued to grow, albeit at a slower pace than might have been expected if the country had voted Remain.

Will the economy continue to surprise the pundits? Hanging over the coming year is the risk that Britain will crash out of the EU with no deal at all. Hardline Brexiters argue that the country has nothing to fear. It is even possible that as companies and the government activate contingency plans in early 2019—stockpiling goods and reorienting supply chains, for instance—it will provide a short-term boost.

Yet the damage from a no-deal Brexit would surely be severe. No one knows for sure what would happen, but City traders are working on the assumption that sterling would fall from its current level of around \$1.30 against the dollar to more like \$1.10. That would prompt another bout of cost-push inflation, eating away at Britons' wages once again. The evidence so far suggests that Britain's exporters have not much benefited from a cheaper currency. Many of their wares contain goods imported from abroad, which have become more expensive.

Furthermore, the uncertainty generated by, in effect, throwing out half a century's-worth of law and replacing it with nothing would surely deter business investment and spending, weakening economic growth. The EU would have to treat Britain as a "third country" for trading purposes and raise barriers on British exports. Policy could soften the blow. The Bank of England would probably cut interest rates, now at 0.75%, in the event of no deal. The government might loosen fiscal policy a

smidgen. Even so, a recession, possibly a deep one, cannot be ruled out.

By far the preferable course would be for the government to strike a Brexit deal with the EU, which would result in some sort of transitional arrangement over the next few years. That could see sterling rise above \$1.40. The Bank of England would probably signal that it was ready to raise interest rates slowly but steadily. Companies would appreciate the additional certainty—and might think about deploying some of the enormous cash piles they have accumulated in recent years on extra investment. That could help raise Britain's rate of productivity growth, which has been stagnant since the financial crisis.

Yet even with the best possible Brexit deal, the British economy is unlikely to take off in 2019. No one expects productivity growth to hit the 3-4% a year that was common for much of the post-war period. And though the government has reduced the budget deficit from its post-crisis high of 10% of GDP to 2%, the fiscal squeeze will continue—unless a political crisis brings about a change of government to Labour, which would cause a further surge of economic uncertainty.

Philip Hammond, the chancellor, is one of the few politicians facing up to the long-term spending pressures linked to an ageing, sickening population. Official estimates suggest that to put the public finances on an even keel over the long run, the government would have to cut spending or raise taxes by 2% of GDP every decade, for many decades to come. Such austere government policy over such a long period would be unprecedented.

Unspectacular economic growth and continued fiscal tightness in 2019 risk creating fresh problems. The vote for Brexit demonstrated that too many Britons feel "left behind" by the country's service-sector-led, London-dominated growth. Less government spending means less help for those who need it most: those living in Britain's post-industrial areas, its young people and its elderly. If Britain struggles to tackle the root causes of the disaffection that led to the vote for Brexit, another backlash may not be too far away. ■

2019 in brief

Manchester marks the bicentenary of the Peterloo massacre, when soldiers killed more than a dozen people and injured hundreds more during a rally for political reform

The other path ahead



An alternative on the left points to the future for Britain, and beyond, argues Jeremy Corbyn, leader of the Labour Party

A DECADE ON, we are still living in the shadow of the great economic crash. But while there is widespread recognition that something fundamental changed in 2008, there is also denial about the necessary political response. The determination of powerful interests to cling to a failed economic orthodoxy has in many countries opened up a chasm between people's hopes and needs and the outdated prescriptions of the political class. Into that chasm have moved the fake populists of the far right, ready to rip up the fabric of our communities without real solutions to the crises facing our societies.

The lessons are clear. If left-of-centre parties look like they're part of the establishment, and cling to a failed economic system, they will be rejected—and smooth the path to power of the migrant-baiters of the hard right.

The old orthodoxy was not working for most people even before the crash. The formula of deregulation, privatisation, tax cuts for the wealthy and debt for the rest had already fuelled grotesque inequality and precipitated the crisis itself. But in many parts of the world the response of the political establishment to the failure of that model was simply to double down, unleashing destructive austerity programmes that multiplied its failings. No wonder there has been a backlash.

In Britain, the sixth-biggest economy in the world, over 4m children live in poverty and hundreds of thousands of families use food banks. As a rising share of national income has gone to owners of capital, pay has lagged behind growth and real wages are now £800 (\$1,060) a year lower than a decade ago.

It is against this economic backdrop that a majority voted to leave the European Union in 2016. In towns and cities hollowed out by industrial decline and neglect, with boarded-up shops and closed youth centres, many people voted for Brexit as an act of protest against a political system that simply wasn't delivering.

In 2019 the already weak British economy faces a serious threat from the government's shambolic handling of the Brexit process. Labour will hold it to account and seek to shape a new and close relationship with the EU. Leading Conservatives want to use Brexit to create a tax haven on the shores of Europe, and impose a race to the bottom in rights and protections.

So we stand at a fork in the road. Down one path lie the politics of xenophobia and scapegoating that are on the rise across Europe, the United States and other parts of the world. It seeks to divert the blame for voters' grievances onto minorities and foreigners. Its proponents woo the wealthy and corporations with tax cuts, but are unable to offer sustainable solutions to economic and social failure.

Labour has shown there is a popular alternative to austerity at home and conflict abroad. Beyond Brexit, a Labour government will champion our best international-

Those policies are popular. That has been a shock to the establishment

ist traditions, putting negotiation before confrontation, supporting the Paris climate-change accord and Iran nuclear deal, and promoting trade, not trade wars.

We are not yet in government. But in 2017 we recorded the biggest increase in the popular vote of any party in a general election since 1945 and deprived the government of its majority. We did that by offering people a clear choice beyond the narrow limits of the politics of the past generation. We gave voice to policies that command majority public support, but which the political class had long rejected, such as fair taxation and new forms of public ownership.

Left, right and the new centre

Our policies offer real change: rebuilding the public realm in a genuinely mixed economy, putting workers on boards, raising taxes for the richest to invest for us all in public services and the industries of the future, offering a new settlement for business. And those policies are popular. That has been a shock to the establishment. Far from being in any way extreme, they represent the real mainstream, the new centre ground of British politics and public opinion.

Labour has rediscovered its roots and purpose. We have bucked the trend of social democratic and socialist parties across Europe, which have seen support collapse as they have acquiesced in austerity and failed to protect their communities. These ideas for a more equal and prosperous society are shaping a new consensus in Britain, as our opponents seek to respond to our agenda. And I believe they can do so around the world. If not, others will surely fill the vacuum.

United States

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Wanted: better angels

Partisan polarisation and a president dedicated to exacerbating it will mean a nasty year ahead

James Astill Washington bureau chief and Lexington columnist, *The Economist* WASHINGTON, DC

AS AMERICA APPROACHED the mid-point of President Donald Trump's first term, sober commentators suggested it had not been so divided since the 1850s. That might sound ridiculous. Compared with the argument over slavery—the antebellum condition of 4m African-Americans and the economic basis of the southern states—today's partisan rows seem trivial. Congress is quarrelsome but unlikely to resort to mass brawling as it did one night in 1858. Colin Kaepernick is an admirable rights activist, but no Frederick Douglass. No one is predicting civil war. Yet the comparison underlines how pervasive America's divisions now are. In combination with a president dedicated to widening them, they will make 2019 another exceptionally discordant year.

In the 1850s arguments about national identity raged on both sides, fuelled by two decades of high immigration and the prospect of extending slavery into the western states. The northern and southern media were highly partisan. With politicians incapable of compromising over slavery, the Supreme Court was asked to weigh in, leading to its ruling, in *Dred Scott v Sandford*, that blacks were "so far inferior that they had not rights which the white man was bound to respect". Opposing the judges

was henceforth a rallying cry of the insurgent Republican Party. Similar circumstances are apparent today. Yet the biggest likeness between then and now is the way partisan polarisation is radicalising both sides.

Just as the argument over slavery came to be seen as existential to northerners and southerners alike, Republicans and Democrats have come to view the other as threatening their way of life. They are increasingly unlikely to marry, work or socialise with one another. Political scientists view this as a consequence of the way racial, geographic and partisan identities have become aligned. In the 1960s, arguably a time of weightier policy disagreements, Republicans still had many black supporters and the Democrats many southern ones. These days the Republican Party is for whites, especially in the South, and the Democratic Party for everyone else. Mr Trump views this as an opportunity. Exacerbating America's divisions, by lambasting Democrats, the media and immigrants, is his political method. It forces his supporters to choose between him and the enemy.

That explains why, through all the scandals and occasional triumphs of his administration, his approval ratings have hardly shifted. Somewhere between 37% and 42% of Americans are with him, a portion that makes him unpopular but still competitive. This will remain constant in 2019: even a damning report by Robert

What if

Now that Democrats control the House they could decide to launch impeachment proceedings against Donald Trump. Cautious types say this would be counter-productive. But what if the temptation proves too great? Even if the **House impeached the president**, the two-thirds majority in the Senate needed to remove him from office looks implausible—unless the special prosecutor, Robert Mueller, unearths such damaging evidence that Republicans decide it's time for President Mike Pence

The field for 2020

Democrats line up to challenge Donald Trump for the presidency

John Prideaux United States editor, *The Economist*

AMERICA'S COMBINATION of congressional elections every two years with lengthy presidential primary campaigns means that as soon as one election is over the next one is already coming into view. So it is with 2019: the race to be the Democratic Party's nominee will begin in earnest. Donald Trump declared he was running in June of the equivalent year in the last presidential cycle. That declaration, at Trump Tower in New York, was sparsely attended because it was not clear whether this was a real campaign or merely a publicity stunt—a cautionary tale for any prognosticator.

There is no obvious figure (like Hillary Clinton last time) whose turn it will be in 2020. Naming the likely nominee is mere guesswork. But it is possible to say something about what an ideal Democratic presidential candidate would look like.

One option would be to go for an experienced state governor, someone who seems reassuringly competent. Perhaps after four years of the Trump show, dullness will seem exciting. But Democrats do not have a lot of seasoned governors to choose from. And too many of those they do have are from the east or west coast. A good rule of thumb is that the party ought not to pick anyone who lives within a couple of hundred miles of the Atlantic or Pacific oceans.

An entrepreneur, preferably one (such as Michael



Bloomberg) considerably richer than the president, could be a tempting pick. But it is hard to see a plutocrat making it past the party's primary voters. And whereas Republicans like political novices—remember Herman Cain?—Democrats typically have a sober view that some prior experience in government is an asset in a presidential candidate. The cable networks may yearn for Trump v Oprah, but if Democrats behave as they usually do then celebrity candidacies are doomed too.

There is a mountain of political science suggesting that what really motivates voters is negative partisanship, or dislike of the other side. If that is right, then Democrats should pick the candidate least likely to activate Republican hostility. If large numbers of Trump voters are as prone to misogyny and racial bias as many Democrats think they are, then the party should probably nominate a white male. This helps to explain the theoretical appeal of Joe Biden, vice-president under Barack Obama. A younger man with some military experience would be even better.

Picking a white guy might seem cowardly. For many Democrats there would be justice in seeing the grabber-in-chief taken down by Senator Elizabeth Warren, Kamala Harris or Kirsten Gillibrand. Yet election campaigns seldom unfold like Marvel comics.

What is certain is that there will be lots of candidates, making the Democratic race chaotic in 2019. Plenty of would-be presidents will begin the year thinking that if Mr Trump can do it, why not them?

▶ Mueller, who is investigating allegations that Mr Trump's campaign team colluded with Russian election-hackers, will not reduce his support by much.

That will not deter the Democrats. Having regained the House of Representatives, and the subpoena power attached to its various committees, they will launch investigations into Mr Trump's financial and other affairs. The fallout will dominate Congress. There is little prospect of its passing important legislation, save for an outside chance of an infrastructure package. Launching congressional probes should also allow the Democratic leadership to resist their supporters' demands to impeach the president, which they fear would backfire. The Senate's Republican majority, bolstered by the midterms, is firmly behind Mr Trump, and a failed impeachment attempt could win him sympathy.

Who needs Congress?

Stymied by Congress, Mr Trump will test the limits of executive power. Another immigration fight is on the cards, with the administration mulling a resumption of its policy of separating migrant children from their parents as a deterrent. Mr Trump's foreign policy, the traditional resource of presidents frustrated at home, will show more substantial progress. His effort to denu-

clearise North Korea will generate more talk than action. Kim Jong Un will not play ball, but Mr Trump will be reluctant to acknowledge that fact, having already declared his diplomacy a success. Yet his administration will intensify its pushback against China's trade and other abuses. The result will be a worsening trade war, mounting military tensions in the South China Sea and serious moves by American companies to shift their supply chains outside China.

Such a pushback is overdue, but the chaotic and protectionist Trump administration is ill-equipped to carry it out responsibly. It will look even less able if Mr Trump pushes out his admirable defence secretary, James Mattis, which he is likely to do in 2019 if not before—causing consternation among America's allies. Mr Trump resents Mr Mattis's efforts to check his often impetuous instincts, which other members of his foreign-policy team (including Mike Pompeo, the secretary of state) are only encouraging.

Mr Trump will be increasingly distracted by the prospect of his re-election battle in 2020. The field of contenders for the Democratic ticket will be crowded (see box) and Mr Trump will rubbish them all and often. The year ahead is going to be a destructive time in American politics. But 2020 will be worse. ■

2019 in brief

Fifty years after the Stonewall riots in Greenwich Village, New York hosts the world's biggest Pride celebration of LGBTQ rights

The Kavanaugh court

America's Supreme Court hits its most conservative—and politically salient—point in generations

Jon Fasman Washington correspondent, *The Economist*
WASHINGTON, DC

NEARLY THREE months after President Donald Trump nominated him to the Supreme Court, Brett Kavanaugh won confirmation in the Senate by just two votes. That is the second-narrowest margin in history. It is attributable to Democrats' still-burning anger over the way Senate Republicans held a Supreme Court seat open for the last year of Barack Obama's presidency, as they refused to consider his nomination of Merrick Garland; to the multiple accusations of sexual misconduct Mr Kavanaugh faced, all of which he denied; and to the partisan intemperance he displayed before the Senate Judiciary Committee (he blamed "revenge on behalf of the Clintons" for the accusations against him—an evidence-free conspiracy theory).

By replacing Anthony Kennedy, the perpetual "swing vote", Mr Kavanaugh gave the Supreme Court its first durably conservative majority in decades. Both he and Mr Trump's other appointee, Neil Gorsuch, are in their early 50s; they could anchor that majority, and shape American life and politics, for decades to come.

For American liberals, two fears loom largest. First, Mr Kavanaugh takes an expansive view of executive power. Many worry that a court with him as the fifth conservative vote will turn as supine and malleable to Mr Trump's will as the Republican-dominated Congress has been. Fights between Mr Trump and a Democratic-led House eager to flex its subpoena power could end up before the court in 2019.

Second, liberals worry that a solidly conservative court could overturn *Roe v Wade*, the ruling in 1973 that declared abortion a constitutional right. Susan Collins, a pro-choice Republican senator who provided the decisive vote confirming Mr Kavanaugh, considered such fears overblown.

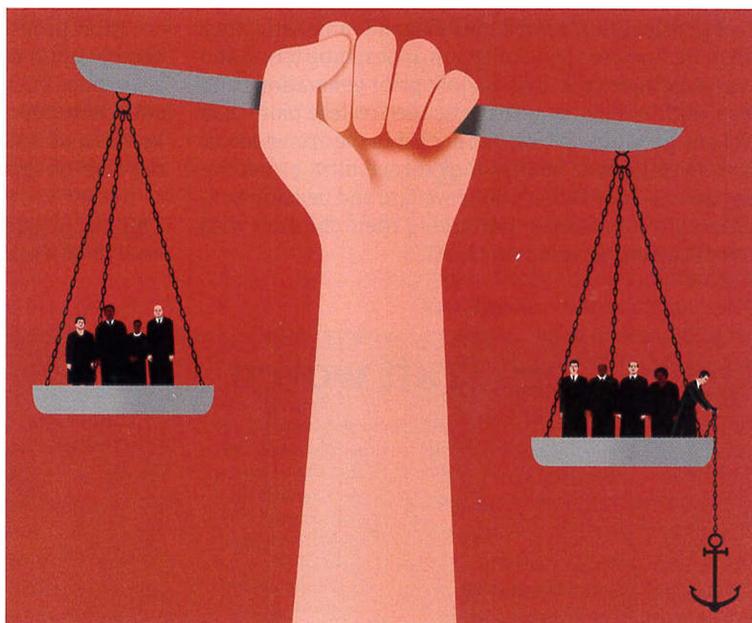
Change of direction

But are they? Americans may not have to wait long to find out. More than a dozen cases challenging state-level restrictions on abortion are wending their way through the federal-court system. In 2016 the court struck down regulations in Texas requiring abortion providers to hold (difficult to obtain) admitting privileges at local hospitals—with Mr Kennedy as the fifth vote. Abortion-rights proponents fear that Mr Kavanaugh could provide a fifth vote in the other direction.

Ever since the court upheld but narrowed *Roe* in a ruling in 1992 that allowed states to regulate abortions but forbade them from placing an "undue burden" on

women seeking one, conservative states have tested the limits of that phrase, with such burdensome and medically unnecessary requirements as dictating the size of hallways in abortion clinics, or forcing women to undergo ultrasounds and listen to a fetal heartbeat. By letting states decide for themselves what constitutes an "undue burden", abortion could become practically unattainable for women in conservative states, without the radical (and radicalising) step of overturning *Roe*.

Like Mr Gorsuch, Mr Trump's other Supreme Court pick, Mr Kavanaugh takes a relatively dim view of "Chevron deference", the notion that judges should defer to government agencies' "reasonable" interpretation of federal law. Liberals fear this could cripple federal functions, such as environmental protection, though



it could also cut in their favour: one of Mr Kennedy's last Chevron-sceptical rulings struck down a law that made it easier to deport immigrants. Steve Bannon, Mr Trump's former chief strategist, wanted to "deconstruct the administrative state"; Mr Kavanaugh looks likelier to slightly restrain it.

Perhaps the court's swing will be less marked than liberals fear. The justices do not operate in nine sealed vacuums; they affect each other. Though John Roberts, the chief justice, is conservative, he is also an institutionalist deeply concerned with the court's legitimacy. Mr Roberts is now the court's median justice, and he may be nervous about siding too often with the four justices to his right, lest the court be seen as just another instrument of partisan politics.

But as 2020 draws near, Democrats will not let their voters forget their outrage at Mr Kavanaugh's confirmation and the theft of Mr Garland's seat. Mr Roberts's institutional concerns may be too little, too late. ■

2019 in brief

Public companies with headquarters in California must have at least one woman on their board by the end of the year

Generation next

Millennials will outnumber baby-boomers in 2019

Jonathan Rauch senior fellow, Brookings Institution
WASHINGTON, DC

ONE GENERATION to rule them all! Baby-boomers, born between 1946 and 1964, have been the most numerous cohort in America for more than five decades. All four presidents since 1993 have been of that generation. But in 2019, their turn at the top will end.

Generations are squishy concepts, but using widely accepted definitions, the Pew Research Centre reckons that 2019 is the year when baby-boomers will be outnumbered. The group displacing them as the largest cohort, the so-called millennials, is very different.

Growing up at the peak of America's success and influence, and triumphant in their crusades for civil rights and against the Vietnam war, boomers felt entitled to rule. Often confrontational and moralistic, they were inclined to view politics in apocalyptic terms and waged culture wars first against prior generations and then within their own. They attended college more than did any previous cohort, and served in the armed forces less. Rebellious as youths, they turned ultra-protective as parents. They ladled public welfare and pension benefits onto themselves, burdening their children with unsustainable government debts.

Millennials, born between 1981 and 1996, grew up on a different planet. Traumatized by 9/11, the financial crisis and shooter drills at school, and observing the country's relative power in decline, they have been described as pragmatic idealists: hopeful of making the world better, but without the boomers' messianic streak. They are the first generation to feel fully at home in the digital world, yet also the last to remember doing research projects in physical libraries.

Compared with their parents, they are less attached to political parties, and they are more socially liberal. Interracial marriage, same-sex marriage and legal marijuana give them no pause. And they are more racially diverse: 56% of them are white, according to Pew, against almost three-quarters of boomers. They are also less religious (see box on next page).

Their progressive social views are already forcing change upon corporations and the culture. Millennials expect businesses to be local, green and socially conscientious. They do not necessarily expect to own homes and cars. As they showed to powerful effect in the #MeToo movement, they do not tolerate sexual an-

Jonathan Rauch is author of "The Happiness Curve: Why Life Gets Better After Midlife" (Green Tree, 2018)

Out of hopeful green stuff woven

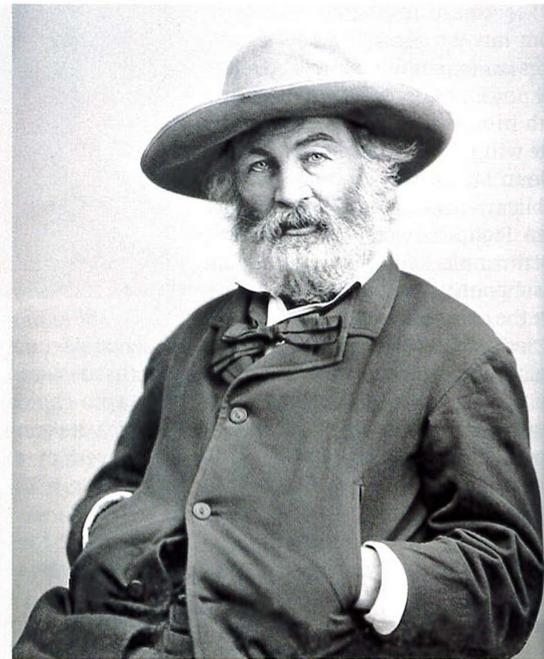
The bicentenary of America's Homer

Jon Fasman Washington correspondent,
The Economist WASHINGTON, DC

BORN IN a small Long Island town on May 31st 1819, Walt Whitman worked as a journalist, printer, builder and teacher before turning to poetry. His work expresses a rough, capacious, generous and therefore uniquely American sort of nationalism. It is pugnaciously democratic. "What I assume you shall assume," he wrote in "Leaves of Grass", his much-revised magnum opus, "For every atom belonging to me as good belongs to you." This was written at a time when much of the world thought democracy foolish, if not dangerous.

His young country, he wrote in "America", was the "Centre of equal daughters, equal sons, /...Perennial with the Earth, with Freedom, Law and Love, /A grand, sane, towering, seated Mother". Nobody would now dispute America's grandeur, though many fear that today it teeters more than towers. What would America's greatest poet make of his country on his 200th birthday?

Like many of the greatest Americans, Whitman had little use for organised religion: "There was

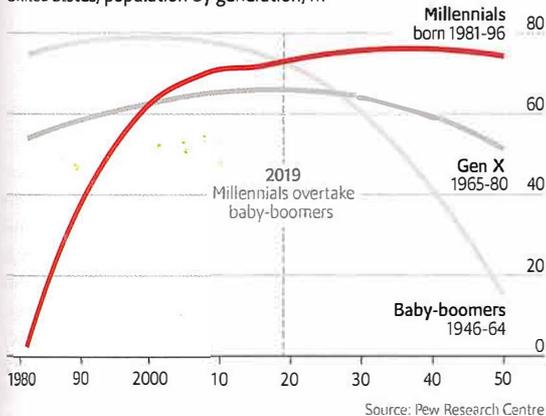


Walt, watching

never any more inception than there is now, /...And will never be any more perfection than there is now, Nor any more heaven or hell than there is now". He would no doubt feel as disgusted as Thomas Jefferson or Benjamin Franklin would be at the showy piety of

Millennials' moment

United States, population by generation, m



workplace practices which their parents took for granted. And they do not like President Donald Trump: his approval rating is stratified by age, with millennials disapproving of him the most. With their racial diversity and left-leaning views, millennials have the numbers to reset American politics.

But when? Unlike boomers, who stream to the voting booths, millennials stay at home; in presidential elections, only about half have bothered to vote. Though their share of the voting-eligible population will soon surpass baby-boomers', their clout lags well behind. Boomers may hold the stage long after their act has gone stale. ■

fuels American politics.

What about today's rampant partisanship? Having lived through the civil war (ardently anti-slavery and pro-Union, he did not fight, but visited wounded Union soldiers in the hospitals of Washington, DC), he would be unsurprised, if disheartened, by the country's deep political divisions.

And yet politics figures little in his work. He was above all a "first-class noticer" (in Saul Bellow's phrase) and a lyric poet of human connection. "I am with you, you men and women of a generation, or ever so many generations hence," he wrote in "Crossing Brooklyn Ferry", "Just as you feel when you look on river and sky, so I felt, /Just as any of you is one of a living crowd, I was one of a crowd".

Bridges rather than ferries now connect Brooklyn to New York. But what connects Americans to each other? This is today's most pressing question, and it is as much metaphysical as political. Whitman wrote when America was just beginning to define itself, both before and after its Civil War.

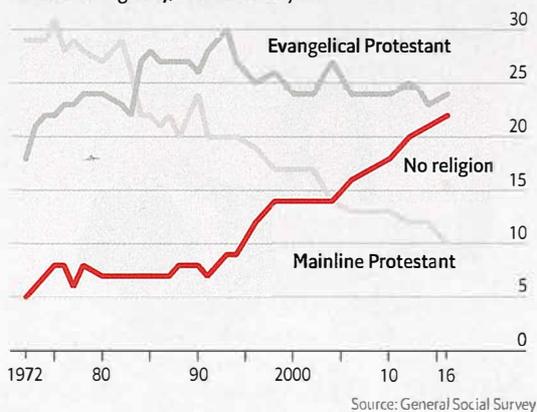
Though war does not loom today, America's polarisation is nearly as great. Americans live in wholly separate political tribes that fear and loathe each other. This would disturb Whitman more than anything else about his country's current condition. "Those who love each other shall become invincible," he wrote in "Leaves of Grass". Of those who do not he was silent.

2019 in brief

The 400th anniversary of the first documented arrival of Africans in what is now the United States marks a poignant turn in the country's history. In August 1619 some 20 Africans were forcibly landed in Point Comfort, Virginia

One nation under God?

American religiosity, % that identify as:

**Losing faith***A milestone on the path away from religion*Lane Greene Espresso editor, *The Economist*

AMERICA REMAINS unusual among rich democracies in being highly religious. Yet many have missed just how much less devout the country is becoming. As millennials, the least religious generation ever, overtake baby-boomers, their faithlessness portends a very different landscape.

Experts such as those at the Pew Research Centre have traditionally distinguished between Catholics, mainline Protestants, evangelical Protestants and black Protestants in their counting, given how these groups differ religiously and socially. They have also coined the term "Nones" to cover atheists, agnostics and those who say they have no religion. Nones already outnumber Catholics and mainline Protestants. In 2019 they could also outnumber evangelicals. There will soon be more Nones than any single group of Christians.

The oldest generations are the most religious; the youngest are the most nonbelieving. So simple cohort replacement is making America more irreligious. Moreover, whereas past generations became more religious as they aged, this effect seems to have paused: millennials became even less observant between surveys in 2007 and 2014. Indeed, people of all generations are leaving churches. The Catholic church has suffered the most dramatic exodus. Fully 13% of America's population is ex-Catholic: some join other churches, but just as many become Nones. Sexual-abuse scandals bear much of the blame.

Europeans will remain bemused at how often American leaders pray in public and invoke God in their decisions. But the country is secularising. And for all those already comfortable telling a pollster they are atheist or agnostic, there are surely many in the pews not quite ready to say it.



Noises off

The Obamas re-emerge as active public figures

Adam Roberts Midwest correspondent,
The Economist CHICAGO

FOR NEARLY two years after leaving the White House Barack Obama was absent from public life, something he called "gracefully exiting the stage". He spent time with his family, prepared a memoir and planned his Obama Foundation in Chicago. But for the mid-term elections he bounded back. First in a speech in September 2018 and then at many subsequent rallies he said moderate values and democracy were under threat. He attacked Donald Trump for "shameless" lying, saying his successor does "outrageous" things, such as failing to condemn Nazi supporters. Michelle Obama followed him into the spotlight. In November a national tour promoting her own memoir kicked off in Chicago.

This is just the start of the Obamas' return to prominence. The couple have struck a deal with Netflix to distribute non-political programmes made by their new firm, Higher Ground Productions. These will focus on stories of volunteering and civic work and should appear in late 2019.

Mr Obama's foundation will also start to take shape in Chicago. Builders will break ground for the presidential centre in 2019 and will then spend three years on construction. Already programmes are under way: 20 youthful fellows promote civic engagement, including schemes to help young black men in the city. "In 2019 we will be hitting the accelerator," says an organiser.

Returning to public life carries some risks for Mr Obama. He could again become a convenient foil for Mr Trump. Yet remaining quiet would also have a cost. Mr Obama wants to remind historians and voters of his achievements, such as the economic recovery, which Mr Trump claims as his own. The purpose of memoirs, foundations and other post-presidential activities is partly to defend his legacy, including his reform of health care. That is better done by speaking up than by staying silent.

The fizz factor

How a hot labour market could affect the economy

Soumaya Keynes US economics correspondent,
The Economist WASHINGTON, DC

AMERICA'S ECONOMY will be made greater again in 2019. Consumer confidence is booming, labour markets are tightening and a fiscal stimulus is still winding its way through the system. As President Donald Trump tweets about his economic successes, members of the Federal Open Market Committee (FOMC) will continue to raise interest rates, which for years were at rock bottom. Jerome Powell, chairman of the Federal Reserve, is trying to lift them towards a "neutral" point, where policy is no longer pumping up the economy. Ideally, his destination will generate both stable prices and as much employment as possible.

Yet no one knows where exactly this somewhat mystical spot lies. (Mr Powell has himself emphasised this point.) And even if it could be accurately estimated (which it cannot) it may change over time. So the FOMC will edge interest rates upwards, taking further signs of labour-market strength as evidence that the strategy is not tanking the economy. Monetary policymakers will nudge their communications upwards, too: starting in January, FOMC press conferences will increase in regularity, to be held after every meeting. The FOMC may even choose to lean against Mr Trump's fiscal stimulus. One of its members, Lael Brainard, has pointed out that by pumping up domestic demand, the stimulus can be expected to push up the shorter-run "neutral" interest rate.

Some hawks will squawk that the Fed should go faster. They will warn that the slack being squeezed out of the labour market is about to run out, and that inflation is around the corner. Central bankers have spent years trying to anchor inflation and inflation expectations at a low level, and their success gives them some room for manoeuvre. But if they are not careful, the hawks fear, there is a risk of a return to the 1970s, when policymakers overestimated the amount of scope for growth without inflation getting out of control. By the time they tried to correct their mistake, inflation and inflation expectations had become untethered. Mr Powell has said that if the FOMC were to see signs of inflation expectations accelerating upwards, it would intervene.

Left to fizz, a tight labour market could force companies to fight for workers by drawing from their profits to pay higher real wages. Optimists also hope to see the proportion of 25- to 54-year-old men in employment rise back towards its pre-recession high. But pessimists worry that deep trends make either outcome unlikely: they point to technological change with a tendency to leave low-skilled workers behind, a long-run decline in unionisation and a rise in market concentration. Against such forces, they reckon, even a tight labour market may not shift power in favour of workers in any sustained way. Yes, it could make firms raise wages. But the sceptics worry that companies will simply increase prices too. ■

2019 in brief

Nearly four decades after it closed its doors, restoration begins on Chicago's Uptown Theatre, one of America's greatest movie palaces

The real scandal of voting fraud



Laurene Powell Jobs,
founder and president of Emerson Collective, calls for a resurgence of public pressure in defence of voting rights

THE STORIES sound like dispatches from an earlier, darker era. In Kansas a state law demanding documentation of citizenship blocks more than 35,000 residents from registering to vote. In Georgia the secretary of state, a Republican gubernatorial candidate, wages a full-fledged assault on black voters that includes the suspension of more than 50,000 voter applications and an attempt to close seven of nine polling locations in a low-income, majority African-American county. In North Carolina the state legislature introduces a constitutional amendment requiring voters to present a photo ID at the polls, a measure a federal court previously ruled discriminatory against black voters. In North Dakota a state law, upheld by the Supreme Court, disenfranchises indigenous communities by requiring that voters present proof of residential address, a form of documentation few tribal residents possess.

Though these may sound like examples of a shameful past, they are in fact examples of a shameful present. All are part of a campaign of voter suppression that is being waged across the United States. In state after state, conservative lawmakers are erecting new obstacles to keep voters, particularly young people and minorities, from the ballot box.

These efforts bear all the hallmarks of Jim Crow, the system of legalised discrimination that prevailed across the American South until the mid-20th century, and the limits on voting established in the earliest days of the republic. The system of self-government created by the founders recognised voting as fundamental, yet extended the franchise only to white, male landholders. Voting, as the founders conceived it, was a privilege reserved for the few.

Truths that should be self-evident

It took 150 years of hard-fought progress—including a civil war, a decades-long suffrage campaign, amendments to the constitution and a civil-rights movement—to expand the pool of eligible voters to all citizens. In the process, voting was transformed in American law and consciousness from a privilege into a foundational right.

Even so, the right to vote has always been under siege, and it must always be reaffirmed and defended. The passage of the landmark Voting Rights Act of 1965, for example, marked a watershed moment in the

long struggle to secure the rights of African-American voters. Still, discrimination has persisted. In 2013 a conservative majority on the Supreme Court declared that “our country has changed” and that minority voters no longer needed certain protections. In a ruling that gutted a key enforcement provision of the Voting Rights Act, the court opened the floodgates for state legislatures and lower courts to codify an insidious array of discriminatory practices.

For more than 200 years, America has been on a journey towards greater enfranchisement. The past decade has seen this

What we need, starting in 2019, is more democracy

trend reversed with alarming speed and efficiency—often at the hands of those who claim today’s voters are engaging in widespread fraud. Yet the claim of widespread voter fraud is the greatest fraud of all. Study after study confirms that incidents of such misconduct are “vanishingly rare”. Instead, these measures specifically target groups that tend to vote Democratic: young first-time voters, immigrants, non-native-English-speakers, as well as the historically marginalised poor, Latino and African-American communities. The use of data and computer modelling has made voter suppression something of a science, cementing in place long-standing barriers to social and economic opportunity.

These tactics represent a fundamental threat to democracy. In America, voting is in danger of becoming a privilege extended only to the already privileged, further concentrating political power in the hands of the wealthy few. Our current path is a rejection of the values that have allowed generations of Americans to contribute to the making of “a more perfect union”.

What we need, starting in 2019, is more democracy: namely, a resurgence of the kind of public pressure and grassroots activism seen during the 20th century’s major social movements, this time aimed at reclaiming the vote as an unalienable right of citizenship.

To suppress a vote is to silence a citizen. Those of us with unfettered access to the ballot box must step up—and speak up—for our fellow Americans, and for our collective future. At stake is nothing less than the survival and strength of our democracy.

The Americas

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Now mend it

New governments in Latin America elected by angry voters will struggle to inject dynamism

Michael Reid Bello columnist and senior editor, Latin America & Spain, *The Economist*

POLITICAL POLARISATION in Latin America will make its effects felt in 2019. A heavy crop of elections is throwing up no clear pattern beyond voter anger with the status quo and the establishment. New governments of the left in Mexico and right in Brazil will try to deliver change within tight fiscal margins. Of the six elections in the region in 2019, those that will catch most eyes are in Argentina, where Mauricio Macri's liberal government has been undermined by a currency crisis, and Bolivia, where after 13 years in power Evo Morales, a socialist of Amerindian descent, faces growing opposition.

Economically the region as a whole is limping, losing ground in relation to the world. Overall economic growth will be a weak 2% or so in 2019, only slightly up on the past two years. The aggregate figure is depressed by slumps in Venezuela and, to a lesser degree, Argentina and Brazil. That said, the likes of Chile, Peru, Colombia and Bolivia will grow at 3-4% and the buoyant Dominican Republic and Panama at around 5%. But slower growth has brought fiscal austerity and fuelled public anger over corruption and rising crime. Chile, Colombia and Peru have seen a turn to the centre-right. In Mexico and Brazil, where anger over corruption and crime is particularly acute, elections saw a collapse of the centre.

In Mexico Andrés Manuel López Obrador (pictured), a veteran leftist populist, takes office on December 1st 2018

with a powerful mandate. He will seek to boost growth by raising public investment and social spending while slashing what he sees as waste. He shocked investors by promising to scrap a partly built new airport for Mexico City (Latin America's largest construction project) but he probably won't reverse an energy reform under which private companies have pledged around \$150bn in investment over the next 20 years. He will seek to rebuild the power of the presidency by reining in state governors. But his efforts to tackle crime and corruption will prove disappointing.

On January 1st Jair Bolsonaro, a former army captain and right-wing populist with Trumpian tics, will take office in Brazil after the country's most divisive election in 30 years. He won by promising an iron fist against crime and corruption, to defend family values and to shrink the state. His first task will be simply to govern: he has no executive experience, many Brazilians abhor him for his racism and sexism, and he will have to forge a majority in a congress shared among 30 parties. Restoring Brazil's fortunes requires radical reforms, to redirect public spending from vested interests to public services and investment. Markets will look for an early pension reform. Mr Bolsonaro's campaign promised all this. But will his heart be in it?

In Argentina the hopes of Mr Macri, a centre-right reformist, of cruising to a second term at an election in October were dashed when his gradualist approach to stabilising the economy was upended by a run on the currency. Now in the arms of the IMF, his government has committed itself to a tight fiscal and monetary

2019 in brief

Cubans vote in February in a referendum on proposed constitutional changes including the recognition of same-sex marriages

The shadow of Cortés

Modern Mexico would prefer to forget the man who paved the way for it 500 years ago

Richard Ensor Mexico correspondent, *The Economist*
MEXICO CITY

HERNÁN CORTÉS reached Mexico in April 1519. With 500 men and a dozen horses, he conquered a civilisation. But he does not tower, as either hero or villain, over the country that appeared in his wake. No modern Mexican politician invokes his name. Not a single statue or street commemorates him. Will Mexicans still shun him on the 500th anniversary of his arrival, or confront his complex legacy?

In 1518 Cortés took an unauthorised voyage from Cuba, where residents will celebrate the quincentenary of Havana in November 2019, to the shores of Yucatán and then a long trek inland from Veracruz. He had a lucky streak—and a ruthless one. A multilingual indigenous slave called La Malinche, whose name today is a byword for treachery in Mexico, helped Cortés speak with the Aztecs. With her help, Cortés was able to turn indigenous groups against each other. Within decades, a smallpox epidemic brought by the Spaniards had wiped out 90% of the 30m people living in Mexico. Those who resisted met a bloody end. By 1521 Cortés and his men had conquered Tenochtitlán, the jewel in the Aztec empire that would be rebuilt as Mexico City.

Though this voyage began as a conquest by one group, it ended as a convergence between two. Some three-quarters of Mexicans are *mestizo*—a mix of European and indigenous blood. Among the first was a child of Cortés and La Malinche. In the centre of Mexico City is a plaque commemorating the defeat by Cortés of Cuauhtémoc, the last Aztec emperor. It reads: "This was neither triumph nor defeat. It was the painful birth of the *mestizo* nation that is Mexico today." Cortés himself wrote that Mexico "is the cloth that I spun and wove". He died broken and alone. His bones languish in obscurity below a church in Mexico City.

His star has waxed and waned over the years.

The low point came in the mid-19th century, when Mexico lost half its land to the United States. Mexicans reached back into the past for grand tales of territorial defence. Cuauhtémoc, the Aztec leader who died fighting Cortés, became a national hero and the Spaniards were reviled. At other times Cortés has been presented as a founding father of a nation and a liberator of oppressed indigenous people. The latter argument has found a voice in parts of Spain, which is wading through a slew of colonial quincentenaries. A new television series made by Amazon, "Cortes", produced by Steven Spielberg and starring Javier Bardem, will render a fresh verdict.

The Cortés anniversary will pass through a country in the throes of change. The populist new president, Andrés Manuel López Obrador, an avid reader of history, has tended to prefer lionising Mexico's independence and revolution to tackling the moral complexities of the Cortés era. Cortés may end up honoured, decried or ignored. But without him, modern Mexico simply would not be as it is.

Conquest and controversy



► squeeze. Fortunately for Mr Macri, many Argentines dislike his predecessor, Cristina Fernández de Kirchner, even more. Still, the election will be difficult for Mr Macri's coalition. A moderate Peronist candidate would have a strong chance.

In Bolivia Mr Morales's claim to lead an irreversible socialist revolution will be tested in an election in October. Although his candidacy is constitutionally dubious, he may win, unless the opposition, which ranges from dissidents from the ruling party to conservatives, can unite behind Carlos Mesa, a centrist former president.

Defeat for Mr Morales would hearten the long-suffering opposition in Venezuela, where Nicolás Maduro's dictatorial regime will struggle on. A barracks revolt is the main threat to Mr Maduro. More Venezuelans will seek refuge in neighbouring countries, swelling the

largest migratory movement in Latin American history. Some Latin American governments may approve sanctions against individuals in the Venezuelan regime, but none is prepared to contemplate military action.

An air of frustration will hang over Latin American diplomacy. Donald Trump is due to make his first trip to the region as president in November 2018, visiting Colombia and Argentina. But nobody (except Mr Bolsonaro) expects much from him. Brazil takes over the annual presidency of the BRICS group of emerging powers. Efforts to join up the two main sub-regional trade blocs, the Pacific Alliance (Chile, Colombia, Mexico, Peru) and Mercosur (Argentina, Brazil, Paraguay, Uruguay) may stall on the indifference of Mr López Obrador, preoccupied at home. Latin America will muddle on but remain disappointingly far from fulfilling its potential. ■

2019 in brief

Cherry-pickers gather in Chile for the Global Cherry Summit and Colombia hosts the World Avocado Congress

Populism moves north

Justin Trudeau is in for a turbulent year in Canada

Madelaine Drohan Canada correspondent,
The Economist OTTAWA

THERE ARE plenty of reasons why Canada has been partly insulated from the populism and polarisation roiling its closest neighbour, the United States. A multi-party system means voters are not shoehorned into one of two opposing camps but can choose from parties along the political spectrum. Immigration and trade are less fertile ground for populists to cultivate in a country where both command majority support. Those who lose their job to trade or technology land in a more generous safety-net in Canada, which did not go as far as the United States in transforming welfare into workfare. And Canadians are generally more satisfied with their lives, making them less vulnerable to the siren call of populism.

Yet the sturdiness of this insulation will be tested in 2019 as the country heads towards a general election in October. Conservatives at the federal and provincial levels are already road-testing populist messages, some of which have been borrowed from Donald Trump, to woo voters outside the mainstream.

In June 2018 the Progressive Conservatives led by Doug Ford won the election in Ontario, Canada's most populous province, after promising to take on people who "drink champagne with their pinkies in the air" and look down on the common people. Jason Kenney, leader of the United Conservative Party in energy-rich Alberta, talks of "self-appointed smart people" and media elites who disagree with his take on climate change. Andrew Scheer, federal Conservative leader, calls the federal carbon tax due to be introduced on January 1st a cash grab

What if

Venezuela's economic crisis has created one of the biggest migrations in Latin America's history.

What if the economy gets even worse?

The IMF forecasts inflation could reach 10m% in 2019 and GDP will shrink further. Mounting chaos will push more people out of the country, straining neighbours such as Colombia and Peru. But rather than weakening Nicolás Maduro's dictatorial regime, this could strengthen it, by reducing the number of mouths to feed and removing some of its angriest critics

by elites who do not care about its impact on ordinary people. Justin Trudeau, the Liberal prime minister, says his opponents have been emboldened by successful populist campaigns elsewhere and that the campaign in 2019 will be a fight against polarisation in Canada.

The last year of his four-year term was already shaping up to be a turbulent one for Mr Trudeau. His grand bargain—Canada could develop its energy resources while combating climate change—is looking wobbly. He will find it hard to implement his national climate-change plan, which includes imposing a carbon tax in provinces that do not have an equivalent, now that Ontario has pulled out and joined the province of Saskatchewan in a court challenge. His plan to get a pipeline built to carry crude oil from Alberta to the west coast is encountering setbacks, including a court challenge by the left-leaning government in British Columbia. Immigration has unexpectedly become a divisive issue, with almost 35,000 people having walked across the border from the United States to claim asylum since January 2017. President Trump has done his bit to unsettle the Canadian economy by levying tariffs on Canadian exports of steel, aluminium, softwood lumber and solar panels. Trade peace will not be restored until existing tariffs are lifted and a deal reached in September to replace the North American Free Trade Agreement is ratified by the United States, Canada and Mexico.

Febrile fringe v mushy middle

Immigration is the most sensitive of these issues and the most vulnerable to populist attack. The government relies on public support for the more than 300,000 immigrants it accepts each year. The Conservatives, previously wary of stepping too far outside the mainstream consensus, have taken to calling the influx of asylum-seekers a crisis. They may edge further in this direction to discourage their supporters from defecting to the new People's Party of Canada, created in September by Maxime Bernier. Mr Bernier, who came second to Mr Scheer in the leadership contest in 2017, opposes what he calls the prime minister's "cult of diversity" and believes danger lies in "extreme multiculturalism".

The sweeping victory of the right-leaning Coalition Avenir Québec in provincial elections held on October 1st suggests there is plenty of support for a harder line on immigration. The coalition wants a 20% decrease in immigrants to the French-speaking province and the expulsion of immigrants who fail new language and values tests.

Populist voices will grow louder as the election approaches. Still, Mr Trudeau and the Liberals have one big advantage: the party occupies the mushy middle ground, along with most Canadians. Those at the fringes could be persuaded to stray, but they are also open to staying. The prime minister, whose party has been trading places with the Conservatives in the opinion polls, stands a good chance of winning the election—provided he can make the centre hold. ■

Welcome to Canada?



Asia

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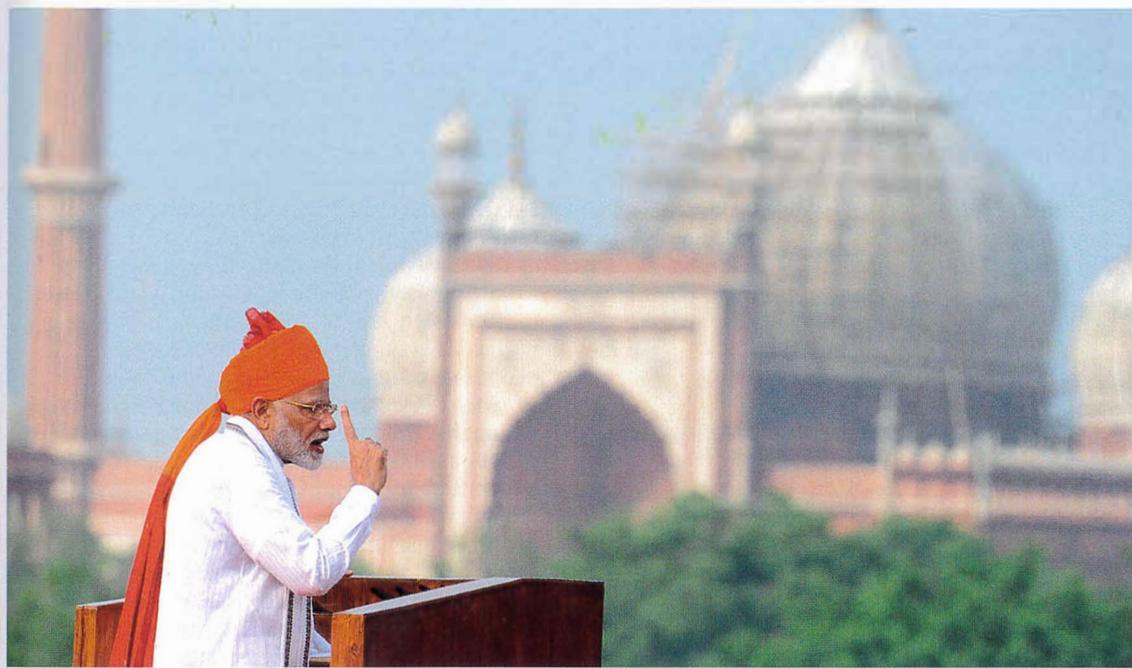
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The struggle for India's soul

What's at stake as the world's most populous democracy heads to the polls

Max Rodenbeck South Asia bureau chief,
The Economist DELHI

STOCK UP ON *namkeens*. The compellingly munchable snacks are what Indians will be craving in 2019, with their ringside seats for what promises to be one of the most nail-biting and most consequential elections in India's 71 years of independence. The world's biggest democracy heads to the polls some time in late spring, the pre-monsoon season when temperatures soar highest. It is not just the weather that will be hot.

The contest will in part be a referendum on Narendra Modi, the 68-year-old prime minister who in 2014 brought his Bharatiya Janata Party (BJP) India's first single-party parliamentary majority in three decades. That landslide suggested broad endorsement for its pro-business and Hindu-nationalist agenda, as well as support for Mr Modi's carefully tended mix of patriarchal mien, folksy talk and energetic boosterism. But after five years in office, the halo surrounding the former tea-boy from Gujarat has faded. Mr Modi's political magic button, marked "resentment at ruling elites", no longer produces Pavlovian roars of approval. With his perfectly pressed pastel-coloured kurtas and hugging matches with world leaders, Mr Modi himself now looks pretty elite.

His party and its platform, which seemed an unstop-

pable juggernaut until halfway through Mr Modi's term, has also grown less fearsome. The BJP still has more money by far than any rival, thanks to wealthy and loyal patrons. This is a key asset in Indian elections, as are the party's superior discipline, better tactical commanders and, crucially, its close ties with grassroots Hindu-nationalist groups that provide reliable shock troops across the country. Yet for all this strength, the party's record in power has looked surprisingly weak by many measures. This has alienated important constituencies.

One of these is businesspeople, many of whom had seen Mr Modi's powerful mandate as an opportunity to push through sweeping free-market reforms. Instead, misguided policies such as the overnight "demonetisation" of 86% of India's currency in 2016, or inept ones such as the clumsy imposition of needlessly high and complex national sales taxes in 2018, or a failure to address a looming bad-debt crunch in state-owned banks, have tended to overshadow achievements including Mr Modi's laudable fiscal probity and the passage of much-needed economic laws, for example on bankruptcy.

But when it comes to revising land and labour laws that constrain India's economic growth, or privatising unaccountable and inefficient state assets, the BJP has proved disappointingly timid. As for economic growth, Mr Modi has produced solid results, but his immediate

2019 in brief

The Durgam Cheruvu

suspension bridge (near Hyderabad), India's longest bridge of its kind, and the India-Myanmar-Thailand Trilateral Highway, a 1,400km (870-mile) road linking the three countries, open to traffic

Homage to a nation-builder

India celebrates Mahatma Gandhi's 150th birthday

Abhishek Kumar freelance correspondent MUMBAI

THE SHIRTLESS man with a toothless grin, a pair of glasses and a pocket watch disarmed the British empire with his *charkha* (spinning wheel) and fought battles by means of hunger strikes and long marches. Today people see his face on t-shirts and mugs that sport his teachings. October 2nd 2019 will be the 150th anniversary of Mohandas Gandhi's birth in Porbandar, in Gujarat. The Indian government will

Spinning a legend



go all out to celebrate the "father of the nation", both at home and abroad.

A global recycling drive in his honour is in the works. "Jaipur Foot camps" will distribute free artificial limbs to the poor, a tribute to his long march in 1930 to protest against Britain's tax on salt. Thousands of convicts jailed for minor crimes will be released in homage to Gandhi's humanitarian values. At a museum in Delhi, tourists can listen to his heartbeats, recreated from his ECG reading in 1937.

Gandhi would no doubt have liked his anniversary to be a low-key affair. He might applaud the "Clean India Mission", an ambitious scheme by the prime minister, Narendra Modi, that pledges to rid India of open defecation by the Mahatma's birthday. He would, however, be saddened by the rise of Hindu-nationalist violence (he himself was assassinated in 1948 by a Hindu nationalist), and by the inadequate efforts to abolish untouchability, a centuries-old scourge which he fought all his life. Manual clearing of human and animal excrement, outlawed 25 years ago, is still done by Dalits (formerly untouchables).

He would also bemoan the sense-of-humour failure among today's politicians. Cartoonists and stand-up comedians are routinely arrested for making fun of them. "If I had no sense of humour", Gandhi wrote in 1928, "I would long ago have committed suicide." For all his serious fights and austere living, Gandhi wasn't a humourless hermit. When a reporter asked him what he thought of Western civilisation, he responded: "I think it would be a good idea."

▶ predecessor's were better.

At the other end of India's vast social scale, farmers, lower-caste Hindus and religious minorities all have reason to have fallen out of love with the BJP. Mr Modi's tenure has seen an ugly surge in violence directed against India's less privileged, often by groups or individuals associated with the Hindu-nationalist right. The poor have also been hit by rising global oil prices, a weaker Indian rupee and falling farmgate prices. Intellectuals, journalists, academics and other opinion-makers, meanwhile, have been put off by the Modi government's dictatorial style: rather than upend the stuffy dominance of a long-entrenched establishment, as many had hoped, the BJP has simply inserted loyalists to run the same old system.

All this works to the advantage of Mr Modi's foes, most notably Congress, the legacy party of India's independence movement. And so too does a force often described as the most powerful in India's fickle political game, anti-incumbency. If this were the potent Congress party of past decades, the BJP's doom would probably have been sealed. But despite being the only real national-level rival to the BJP, and indeed the only other party with a presence in every Indian state, Congress is a shadow of its former self. Its leader, too, is no match for

Mr Modi in political skill: Rahul Gandhi may be younger, and may also have grown into his job as "crown prince" of the Nehru-Gandhi dynasty that has commanded Congress for four generations, but he lacks the BJP leader's street-fighting tenacity.

No one expects Congress to take on the BJP on its own, however, and Mr Gandhi has also been coy about whether he would actually seek to be prime minister. The likely strategy is for Congress to patch together a rainbow of anti-BJP forces, largely composed of the regional and identity-based parties whose growing importance has been a salient development in recent years. If Congress can hold together such a coalition—and that is a very big if—then Mr Modi's days might be numbered.

But that is not what makes this election so momentous. Beyond the struggle between parties and personalities, Indians sense an underlying struggle over the country's soul. If Mr Modi wins a second term, his party may be even blunter in imposing its Hindu-nationalist vision of a more muscular, less tolerant India. Should Congress and its multifarious allies capture power, their critics fear, India will return to its bumbling, corrupt old ways. The more likely result: whoever rules, India will remain too wildly diverse for any one trend to dominate. ■

2019 in brief

The people of Bougainville go to the polls in a referendum to decide whether to remain part of Papua New Guinea or become an independent nation



Yes we ryokan

Japan prepares for more foreign tourists

Sarah Birke Tokyo bureau chief, *The Economist* TOKYO

JAPAN IS endowed with an embarrassment of riches. Beyond the skyscrapers and Shibuya crossing in Tokyo, there are sublime temples and gardens in Kyoto, pristine tropical beaches in Okinawa and some of the world's best skiing in Hokkaido. Activities abound, from sumo wrestling and baseball to *onsens* (hot springs) and karaoke, complemented by sushi and sake. So it makes sense that Japan's companies and government see tourism as a key source of cash, especially as the archipelago's population shrinks (by around 1,000 people a day) and gets ever more wrinkly (the median age is 47). They aim to welcome 40m visitors a year by 2020.

In 2019 efforts to welcome foreigners will become more frenzied as Tokyo prepares to host the Rugby World Cup in the autumn and, in summer 2020, the Olympics and Paralympics. Getting people to come is unlikely to prove difficult, although the government would like more Westerners in the mix. It reckons they would spend more than Asians, who currently make up around 85% of visitors. Some 29m people visited in 2017, and the number is growing: more came in the first four months of 2018 than in the whole of 2013.

Rather, in 2019 efforts will concentrate on making the country more tourist-friendly once foreigners arrive—in the hope they stay longer and spend more, or come back again. One goal is to make the country easier to navigate without speaking Japanese. Already taxi drivers have been given translation sheets to help them communicate with foreigners. Signage around cities is increasingly in English as well as Japanese. Language lessons for hotel workers and the like are under way but take time; in the meantime they are being armed with translation apps.

In the year ahead one focus will be accommodation. There are few decent mid-range places to stay between fancy *ryokan* and run-down business hotels. A clumsy law on home-sharing in 2018 led to a drop in offerings by the likes of Airbnb, an American platform that matches hosts and guests. Making sure infrastructure is well equipped to cope is another area that needs work. More immigration officers are required immediately. With an eye to the future, plans for new runways, including one at Tokyo's Narita airport, will move ahead. More businesses need to accept credit cards in the cash-based country.

Situations vacant

Just as some things are made easier for tourists in 2019, other obstacles are likely to become more apparent. One is that few tourist businesses can get enough staff, let alone ones with the skills they need. Japan has a dire labour shortage, with 1.6 posts available for every person looking for a job. Some hotels are employing pensioners or lobbying for more immigration to fill the gaps. But that is not enough. Local media fret that even the Olympics will not be able to attract the 80,000 volunteers it needs to act as marshals at the event.

Yet perhaps the biggest challenge in 2019 to the government's push will be preventing a backlash from the Japanese towards the tourism boom. Grumbles have started as, along with cash, visitors bring noise and changes to the country's atmosphere and cultural norms. Residents of Kyoto have long complained that in parts of the city temples are obscured by endless shops selling sesame or matcha soft-serve ice cream and cheap souvenirs. The government needs to persuade visitors that there are delights outside the big three stars of Tokyo, Kyoto and Osaka, while making sure its citizens see the benefits of tourist bucks. ■

2019 in brief

Tourism is growing fast in New Zealand, and the country hopes to raise NZ\$80m (\$52m) in the first year of a tax on international visitors of NZ\$35. Australians and the 16 countries of the Pacific Islands Forum are exempt

The sequel

A familiar feel to Indonesia's presidential election

Guy Scriven South-East Asia correspondent,
The Economist SINGAPORE

AT FIRST BLUSH Indonesia's presidential election in April 2019 is a replay of the contest in 2014. Joko Widodo (known as Jokowi), a former furniture exporter who is seen as a man of the people, will again face Prabowo Subianto, a former army general. Jokowi won last time with 53% of the vote. But the battle lines have shifted in the world's third-largest democracy.

Religion will play a smaller part than it did in 2014. Jokowi has long been vulnerable to accusations of a lack of piety, a serious charge in a majority-Muslim country. He has used foreign policy to bolster his Islamic credentials—by, for instance, supporting Rohingya refugees from Myanmar and pushing for greater support for Palestine. He chose the leader of the country's largest Muslim organisation as his running-mate.

A change to electoral procedure will add a dash of novelty. For the first time the presidential and parliamentary votes will be held simultaneously. Which candidate this will benefit is unclear.

Jokowi's five years in charge have changed things too. He has rarely missed a chance for a photoshoot. How-

ever, he is no longer the reforming newcomer and must defend his record.

One battleground will be the economy. Huge spending on infrastructure has not delivered the 7% GDP growth that Jokowi promised. The economy has plodded along at around 5% instead. Turmoil in other emerging markets may spread to Indonesia and drag that rate down further. In September the rupiah fell to its lowest level against the dollar in 20 years.

Another issue is the president's apparent closeness to China. The topic is a sore one in Indonesia, where ethnic-Chinese dominate the business world. Many of Jokowi's infrastructure projects were financed by China. The subject will be brought to the fore in January. That is when Basuki Tjahaja Purnama, the ethnic-Chinese former governor of Jakarta and ally of Jokowi, will be released from prison. He lost his job and was jailed in 2017 on trumped-up blasphemy charges.

Jokowi's response to all this will be to serve up crowd-pleasing handouts. In his budget in August he announced a large rise in fuel subsidies and increased civil-service pay. Indonesia's man of the people will veer towards populism.

For his part, Mr Prabowo will offer a version of economic nationalism, including policies aimed at protecting Indonesians from the forces of global competition. Unlike his opponent, he is a formidable campaigner and stirring orator. That helped him summon up a late groundswell of support in 2014. Still, Jokowi has a healthy lead in the polls and is the clear favourite to win. The election is his to lose. ■



2019 in brief

Australia launches the Pacific Fusion Centre, to monitor regional security threats

Democracy bounces back

Across much of Asia authoritarians will be on the defensive

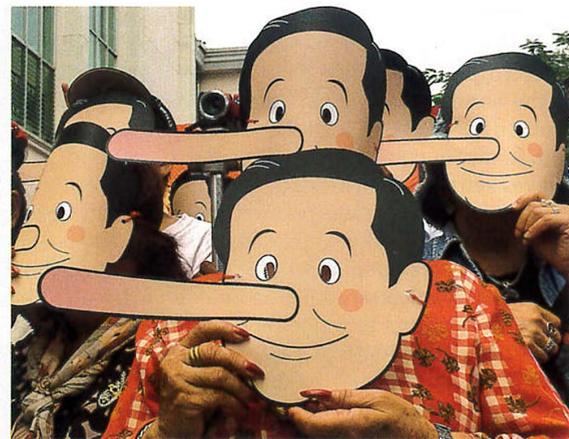
Edward McBride Asia editor, *The Economist*

FOR THE past few years in much of Asia, authoritarians have been in the ascendant and democrats on the defensive. From Kyrgyzstan to the Philippines, governments that had appeared democratic have been rounding on the opposition and trampling civil liberties. Men in uniform have either seized control, as in Thailand, or exercised it behind the scenes, as in Pakistan, or wantonly abused civilians, as in Myanmar. For every bright spark (strongmen removed via the ballot box in Malaysia and the Maldives, for example) there have been several cold showers (a rigged election in Cambodia, the postponement of elections in Thailand, the neutering of the opposition in Bangladesh). Yet in 2019 democracy will make a comeback.

The two biggest democracies in Asia, India and Indonesia, are holding elections. Together they account for roughly a fifth of the world's population. And the votes will show that democracy, although not in perfect health, is alive and kicking in both places.

There will be advances elsewhere, too. In each of the past five years, the generals who run Thai-

**Thai elections:
true or false?**



land have sworn to hold elections within the next 12 months, before postponing them. But in 2019 they will at last allow a vote. There will be flaws galore: the new constitution will succeed in its intended purpose of depriving candidates who support Thaksin Shinawatra, a former prime minister, of a majority for the first time since 2001. Prayuth Chan-ocha, the head of the ruling junta, will enter the fray in a bid to stay in power. Even so, the generals will have to deal with elected politicians, and democracy can be hard to steer.

Pakistan's top brass will also learn a lesson of that sort in 2019. Having helped engineer the installation of Imran Khan as prime minister in August, the army will

Head over heels

The strange bromance with North Korea flourishes

Dominic Ziegler, Banyan columnist, *The Economist*
SEOUL

CAN IT REALLY be just a year since President Donald Trump and Kim Jong Un, North Korea's dictator, appeared to be drawing their two countries into conflict, with boasts about who had the bigger nuclear button? In 2019 the positive developments that began on the long-divided Korean peninsula soon after those mutual taunts ceased in early 2018 will continue to astonish. Might there be a Nobel peace prize for the two leaders, along with the matchmaker in this most unlikely bromance, South Korea's president, Moon Jae-in?

In 2019 Mr Kim will maintain the suspension of nuclear and missile testing. He will become the first North Korean leader to travel to Seoul, the South Korean capital, after three summits with Mr Moon in 2018. During the last of those, in Pyongyang, Mr Moon made an open-air address to 150,000 North Koreans. That was an extraordinary development for the shuttered state. But it was not so mind-bending as the reality-TV spectacle of the American and North Korean leaders meeting in Singapore in May. At one point in Singapore, Mr Trump invited the young dictator, who has executed his uncle, assassinated his brother and keeps hundreds of thousands of

be surprised by how quickly tensions arise with his government. Mr Khan will want to prove he is not a puppet, and to reward his electoral base. Many of the Pashtuns who voted for him are angry about human-rights abuses committed by the armed forces amid their campaign against Islamist terrorists.

A similar fate awaits the commander-in-chief of the Philippines, Rodrigo Duterte. As his six-year term passes the halfway mark in June, he will find it harder to induce Congress to do his bidding. His plan to amend the constitution will come to nothing.

In Bangladesh and Cambodia, where the authorities have cracked down mercilessly on their critics in order to be sure of winning elections, repression will ease. The motives of Sheikh Hasina Wajed and Hun Sen, the two countries' leaders, will not be pure: they want to dampen international criticism of their governments. But it will still be heartening to see a few jailed opposition politicians emerging blinking into the tropical sunlight.

There will not be good news across the board, alas. There will be no redress for the Rohingya refugees who fled from Myanmar to Bangladesh over the past year. And whatever they think about negotiations with America over nuclear weapons, no one in North Korea will be foolish enough to vote against the ruling party in the sham elections there in 2019. Indeed, whatever happens in the talks, the grotesque abuse of ordinary North Koreans will carry on unabated.



We must go on meeting like this

North Koreans in the gulag, to peer admiringly into the "Beast", the American president's armoured limousine.

That get-together generated a joint declaration in which Mr Kim promised to dismantle his nuclear arsenal in exchange for security guarantees and peaceful relations with America. In early 2019 Mr Trump will keep praising Mr Kim's sincerity and general brilliance. And sceptical Korea hands will keep insisting that the agreement is not worth the paper it is written on. Mr Kim, they argue, will never give up his nukes, and Mr Trump is having the wool pulled over his eyes. Yet it will be a while before they can say "I told you so". Mr Trump, Mr Kim and Mr Moon will not lightly give up the highly unusual, improvisatory top-down diplomacy that has tied the three men's fates together, for the time being at least.

That triumvirate is what makes this attempted detente on the Korean peninsula so different. Certainly, the economic, security and strategic implications, should all go right, are mind-boggling. All three leaders are mould-breakers, differing markedly from their predecessors. Unlike his late father, Kim Jong Il, Mr Kim believes that economic isolation and a volatile belligerence do not help his regime's security. Mr Moon, a progressive who swept to office after corrupt and cynical right-wing administrations, sees a fork in the road for the tragic peninsula. And Mr Trump has a reptilian sense that he can make history and take credit for dissolving the world's most dangerous nuclear threat.

And so, in 2019, the reality show will run for a while. Mr Kim and his wife will meet the Trumps. Perhaps this time he will get to sit behind the Beast's wheel. A third summit may even take place. Some form of "peace declaration" calling for a formal end to the Korean war will be flourished.

At some point, however, actual results, in the form of concrete steps by Mr Kim to dismantle his arsenal, will be necessary. With Mr Trump's first term fast running out, he will want to close a deal. And then the pressure will be on Mr Moon above all. Should South Korea's leader fail to persuade the UN to ease at least some sanctions on North Korea, Mr Kim may lose any genuine interest in denuclearisation he might have had. But should Mr Moon move too enthusiastically to embrace Mr Kim, the many hawks in Mr Trump's administration will make their disquiet about the direction of travel very clear to their boss. ■

What if

Despite being brash and bawdy, the president of the Philippines, Rodrigo Duterte, does not enjoy rude health. **What if illness forced Mr Duterte to step down?** Would chaos follow? Mr Duterte abhors his deputy, Leni Robredo, elected on a separate ticket in 2016, saying she is too weak to take charge. He prefers the son of the deceased dictator Ferdinand Marcos, who has taken to the courts insisting Ms Robredo cheated and stole the vice-presidency. The case could take years to settle. If Mr Duterte cannot continue, other legal manoeuvres might settle the succession. The current administration already excels at workarounds

A successful chase

India's economy will finally overtake Britain's

Simon Cox senior economics writer, *The Economist*
HONG KONG

WHEN INDIA won independence in 1947, its GDP was less than half of Britain's, at the official exchange rate. And that official rate proved too strong to sustain. In 1991, after several dramatic devaluations, India's economy was less than a quarter the size of Britain's. Back then, it would have seemed fanciful to predict what now seems likely: that in 2019 India's GDP, at market exchange rates, will, at last, indisputably overtake that of its former colonial ruler.

The word "indisputably" is important. Many goods and services are cheaper in India than in Britain. That means 100 rupees stretch much further in India than the equivalent amount of pounds do in Britain. Taking this fact into account (by comparing India and Britain at "purchasing-power parity", or PPP, rather than at the market exchange rate), India's economy overtook Britain's long ago and is now far larger. But although PPP provides a better measure of sheer economic bulk, the more familiar market rate arguably provides a better measure of economic clout. You cannot buy global bragging rights at purchasing-power parity.

Since 1991 India's chase has proceeded faster than even some optimists once imagined. Near the start of this century, Goldman Sachs coined the term "the BRICS" to describe four big emerging economies (Brazil, Russia, India and China) that would eventually rival or overshadow the G7. In India's case, this future is arriving sooner than Goldman Sachs expected: its early projections foresaw India overtaking Britain only in 2022.

India is not the first colony to match the economic clout of its former ruler. Brazil and America long ago eclipsed Portugal and Britain respectively. These changes in the pecking order should be occasions of pride for up-and-coming powers. Yet they are not always auspicious. Mexico's moments of symbolic triumph have proven fleeting. Its economy overtook Spain's at the start of the 1980s, but it succumbed to default and disarray in the Latin American debt crisis shortly after. It drew close again in 1993, only to plunge into the tequila crisis of 1994.

Indonesia provides another cautionary tale. Its GDP exceeded that of the Netherlands in 2012. But its currency faltered soon afterwards, a casualty of the "taper tantrum" of 2013. Its GDP shrank in dollar terms for the next three years. The taper tantrum, the tequila crisis and the Latin American debt crisis were all triggered by American monetary policy and a strengthening dollar. Rising American interest rates also hurt emerging economies in 2018, driving India's rupee down to record lows against the greenback. Britain will soon be left behind, but the dollar's imperial reach is hard to escape. ■



2019 in brief

From October, tourists are no longer allowed to climb Uluru (Ayers Rock), the monolithic sandstone formation in central Australia that is considered sacred by the Anangu people

Australia decides

Hard choices about history and the future

Robert Milliken Australia correspondent,
The Economist SYDNEY

A STATUE OF William Ferguson will be erected in 2019 in Dubbo, an outback town in New South Wales. An Aboriginal activist, Ferguson helped launch a civil-rights campaign there for Australia's indigenous people in 1937. But his will not be the only statue in the spotlight. During 2019 the country must also decide how to commemorate the 250th anniversary, in 2020, of Captain James Cook's claiming the continent for Britain. Cook's 19th-century statue in Hyde Park, Sydney, says he "Discovered This Territory 1770". In late 2017, protesters sprayed it with graffiti.

Aboriginals trace their forebears back 50,000 years. Many see Cook's "discovery" more as an invasion that left them second-class people. So the Ferguson and Cook statues will both be caught up in the history wars swirling around the Cook commemorations.

Some of these themes will be reflected in Australia's politics. In 2018 the conservative Liberal Party sacked Malcolm Turnbull, a free-market champion and social progressive, as its leader and prime minister. Voters in his seat swung to an independent at a later by-election, leaving Scott Morrison, his successor, facing a hung parliament. Polls suggest the centre-left Labor Party, under Bill Shorten, will win a general election due by May. Mr Shorten's agenda will take at least some heat out of the history wars. He promises a referendum to recognise Aboriginals in Australia's constitution. He says he will hold a plebiscite on whether to end Australia's constitutional links with the British monarchy and become a republic.

Mr Turnbull was the fourth prime minister since 2010 to have been ditched by the Liberal and Labor parties before completing a three-year term. A decade of revolving leaders has left Australia with no federal energy strategy. Another question is how best to counter China's rising influence in the Pacific, given that China is Australia's biggest trading partner. As a friendship gesture, Australia invited China to join biennial naval exercises, involving 27 nations off its north coast, for the first time in 2018. But Australia will pursue even closer defence ties with Japan. The two countries talk of their "converging strategic interests", by which they mean their mounting worries about China's military activity in the South China Sea. Uncertainty about America's commitment to the Indo-Pacific region will only complicate the picture.

After a record 27 years without a recession, GDP will again grow solidly in 2019. Yet even here dangers lurk. Saul Eslake, an economist, calculates that the rapid expansion of Australia's population (it increased by almost 400,000 in 2017, and exceeded 25m in late 2018) is responsible for at least half its economic growth. Immigration, in turn, accounts for about two-thirds of population growth. But politicians have started blaming immigration for crowded city roads and high house prices. Calls for a clampdown on new arrivals could imperil Australia's golden economic run. ■

China

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2019 in brief

China overtakes Japan to become the world's top importer of natural gas as it turns away from coal-generated power

A great wall of distrust

Confrontation between America and China will spread to areas beyond trade

David Rennie Beijing bureau chief and Chaguan columnist, *The Economist* BEIJING

WHATEVER PERILS and setbacks face Xi Jinping and the Chinese Communist Party in 2019, they will be able to take credit for one remarkable achievement: uniting America's squabbling elites around the need to confront China.

That American unity will conceal big disagreements. One camp, comprising most of President Donald Trump's national-security aides, his generals, spy chiefs and members of both parties in Congress, will call China the foremost threat to global norms and rules. America's national-security establishment will accuse China of using the wealth and power of its one-party state to flout world-trade rules, to steal secrets, to bully American allies in Asia and to oppress the Chinese people at home and even when they travel abroad for work or study.

A second camp will comprise, in effect, one man: Mr Trump. An American president without precedent, Mr Trump can be expected to express cynical admiration for China's leaders for getting away with so much rule-breaking for so long. He will congratulate them for putting Chinese interests first, then suggest that America should play the same mercantilist, protectionist games, and win. In 2019, as so often before, Mr Trump will describe allies as free-riders who should pay for their own defence. He will pour scorn on global norms and on talk of universal rights. China's brutal treatment of the Muslim Uighur minority in the far-western region of

Xinjiang will be a painful case in point. Expect Congress to hold hearings to examine evidence that hundreds of thousands of Uighurs have been locked in re-education camps—then brace yourself for Mr Trump to express sympathy for Chinese claims that iron-fisted rule is needed to prevent Islamist terrorism.

Yet a big, simple idea will unite Mr Trump and his underlings in 2019. They will agree that China has shown its hand, and intends to become an economic, technological and military superpower at America's expense. Seeing a last opportunity to halt or to slow those Chinese ambitions, Mr Trump and his team will seek ways to act quickly. Laws may be proposed to tighten the screening of Chinese buyers of American businesses and assets. Congress may threaten to curb federal funds for American universities that allow Confucius Institutes to operate with Chinese money on their campuses. American intelligence agencies may leak or reveal unprecedented details of Chinese espionage and cyber-hacking, as the Trump administration joins Congress in pressing American technology firms to move sensitive manufacturing out of China.

China's response to all this may surprise. Though 2019 will begin amid much talk of tariff wars between America and China, that is not how the year will end. China's leaders will not enjoy 2019. Their country's economic growth will slow. Abroad, grumbles will grow about "debt-trap diplomacy", as governments across Asia, Africa and Latin America struggle to repay loans extended by China to build vast infrastructure schemes. Muslim countries will become more vocal about repres-

May flowers

Students and academics reimagine a century-old protest

Stephanie Studer China business correspondent,
The Economist SHANGHAI

IF THE STUDENT-LED protests of 1989, centred on Tiananmen Square, have been scrubbed from China's textbooks and its web, the history of another upheaval that took place there in 1919 is as alive as ever. The patriotic energy of the May Fourth Movement was long ago co-opted by the ruling Chinese Communist Party. Schoolchildren learn that the origins of the modern Chinese state lie in that anti-imperialist outcry: thousands of students, frustrated at their government's supine response to terms in the Treaty of Versailles that handed control of German-held portions of China, including the port city of Qingdao, to Japan, instead of returning them. The movement sparked intellectual ferment—and disillusionment with the West—that led to the birth of the Communist Party in 1921.

Yet alongside the stodgy state narrative, other discourses on May Fourth continue to thrum. Students in 1989 claimed its mantle in the hope of assuring authorities of their patriotism, publishing a "New May Fourth Manifesto". Even the party line acknowledges, uncomfortably, that the movement in 1919 was subversive.

Some unradical Chinese academics now want to rethink the event's exalted place in the country's history. At a time when China

May Fourth remains a convenient source for demonstrators to draw on

Still resonating, 100 years on



is reasserting its national identity, they would prefer an older, more domestic narrative of modern success.

In other corners of China's best universities, student activists are invoking the spirit of May Fourth. A small number have recently organised independent labour unions at factories in southern China and held demonstrations for workers' rights. Hundreds of other young people signed letters of support that circulated on social media. In one addressed to China's president, Xi Jinping, a recent graduate of Peking University, Yue Xin, explained that her activism took inspiration not from foreign ideas (objectionable), but from May Fourth. Emboldened by the #MeToo movement, students including Ms Yue have spoken out about sexual assault. Fittingly, 1919 galvanised the women's movement in China.

None of this shields activists from the Chinese state's brutality. Police have detained the most vocal students and put others under watch. As the 30th

anniversary approaches of the crushing of the Tiananmen protests, surveillance will only grow.

But at 100, May Fourth remains a convenient source for demonstrators to draw on, whether for inspiration, rhetoric or values. These are available to a student generation that is distant from the bloodshed of 1989, with less visceral fear of its horrors. It is hard to speak of May Fourth without also speaking about useful activism. Among its myriad interpretations, that is perhaps its greatest legacy.

▶ sion in Xinjiang. In the interests of domestic stability, the leaders in Beijing may prove more conciliatory than many fear.

They will not attempt to match Mr Trump's tariffs, like for like, with blanket duties of their own. They will open previously closed sectors to American and other Western companies, lift caps on investment in joint ventures and—more straightforwardly—open their chequebook to buy billions of dollars' worth of American commodities. There are good reasons why China will not use large-scale customs inspections, tax raids or other regulatory tools to retaliate against American companies, lest all foreign firms start to weigh the risks of investment. Some American companies will accelerate plans to diversify their production away from China anyway. Communist leaders in Beijing will aggressively woo European, Japanese and South Korean firms to enter the Chinese market, even as they urge domestic researchers and scientists to make the country self-reliant in advanced technologies.

As a result of these calculations of self-interest on the

Chinese side, trade tensions with America will smoulder in 2019 rather than explode. American supply chains in China will atrophy rather than be severed.

In the short term, the logic of competition will push China and America to different areas of confrontation. As Team Trump endures frustrating negotiations with North Korea over the Stalinist nation's nuclear-weapons programme, China will become increasingly unhelpful, easing its enforcement of existing sanctions and opposing any talk of new ones. China will take more risks in the South China Sea, installing new weapons systems on disputed reefs. The risks of a physical clash between American and Chinese warships and aircraft will be high. Chinese diplomats will play spoiler more often at the United Nations and in other international forums, often siding with Russia.

The world should brace itself for an unfamiliar sort of confrontation between America and China. Neither a trade war nor a cold-war clash of values (Mr Trump is too amoral for one of those), it will feel more like mutual containment: a great wall of distrust. ■



2019 in brief

China's Tiangong-2 space lab returns to Earth, in what is intended to be a controlled destruction

Wartime provisions

China will ease financial restraints to counter the blow from Donald Trump's tariffs

Simon Rabinovitch Asia economics editor, *The Economist* SHANGHAI

AFTER ENDLESS headlines about the trade war in 2018, it might seem like old news already. But it is only in 2019 that tariffs will really begin to affect China's economy. The biggest hit yet could come on January 1st, when America is due to ratchet up tariffs on \$200bn-worth of Chinese imports from 10% to 25%. Some advisers to President Donald Trump think that China will collapse under the weight of these levies. It will not. Growth will dip towards 6%—down from its pace of nearly 7% in the past few years, but still not bad for an economy the size of China's.

Yet the trade war will force China to shift policy in ways that it would prefer not to. For starters, it will bring its deleveraging campaign to an unofficial close. China has made some progress in stabilising debt levels, a grave threat to the financial system. But the government will be under pressure to relax its austerity. Already it has made it easier for cities to issue infrastructure bonds. In 2019 it will cut corporate taxes, run a bigger fiscal deficit and soften its crackdown on shadow banks. These moves will help cushion China's economy from weaker exports, but at the cost of taking on more debt. Another source of discomfort will be the yuan. China has fought hard over the past few years to prop up its currency and curb money outflows. That will again be a challenge in 2019 as its trade surplus narrows. Rather than easing capital controls, necessary if China is to make the yuan an international currency, it will instead have to reinforce them.

Expectations mounted over the past year that China would, at last, launch a property tax. The lack of a tax on home ownership has made for a bubbly housing market. But fears of a sharp slowdown in property investment

will derail plans for speedy implementation. On the positive side of the ledger, the slowdown will push China to make a couple of deeper reforms to prop up growth.

First, fiscal rules will be tweaked to give long-deprived provinces and cities more revenues. Public accounts in the north-east are especially dire. The central government, relatively flush with tax revenues, will try to fix the balance. Second, in a bid to stop foreign opposition from coalescing against it, China will do more to show that its growth can benefit the rest of the world. In 2018

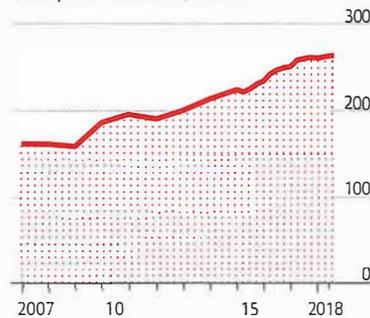
it cut tariffs on products such as machinery and textiles, reducing its average tariff from 9.8% to 7.5%. In 2019 it will take them even lower. It will also give foreign investors more access to its financial sector.

There are some issues on which China will not yield, however. American negotiators have demanded that it dismantle its system of industrial subsidies and stop forcing foreign companies to transfer technology to its firms. China denies doing the latter (despite evidence to the contrary) and views industrial policy as essential to moving up the value chain. It is not about to change its stance on either.

This makes it difficult to foresee China undertaking any commitments that, by themselves, would satisfy Mr Trump and bring the trade war to an end. Rather, it will dig in, and hope that the American economy, too, will suffer damage from the conflict. China's bet is that it can endure pain better than America can. More of this prickly defiance is in store in 2019. ■

In the red

China, total debt as % of GDP



Sources: Wind Info; *The Economist*

2019 in brief

The second Belt and Road summit takes place, probably in Beijing

Discordant notes

Forcing Hong Kong to sing from China's songsheet

James Yan China correspondent, *The Economist* HONG KONG

A CHORUS OF boos erupts across Mong Kok Stadium in Hong Kong. It is a familiar sound heard in football grounds the world over when a referee punishes a player from the home team. Except the rowdy fans on this breezy evening are not aiming their displeasure at the referee. They are trying to drown out China's national anthem, which is played before every match featuring Hong Kong's team. In 2019, however, Hong Kongers who "insult the national anthem in any manner" may face a fine of up to HK\$50,000 (\$6,380) and three years in jail. That

Many resent the mainland's interference

is because Carrie Lam, Hong Kong's chief executive, pledged in her annual policy agenda in October 2018 to push through a "national-anthem law".

An edict criminalising disrespect for the anthem already applies in mainland China. But the government in Beijing has ordered Hong Kong to enact its own version. Many in the territory, which was promised a high degree of autonomy under "one country, two systems", resent the mainland's interference (whether real or perceived). A recent poll found that Hong Kongers would sooner call themselves "Asian" and even "global citizens" than "Chinese".

According to an outline of the proposed bill, offences include changing the lyrics of the anthem and deliberately singing it out of tune. Refusing to stand when the anthem is played in public is another violation. Enforcement will doubtless be difficult. But those who disobey may find themselves having to face the music.

Doing good by doing tech



Pony Ma Huateng,
chairman and CEO,
Tencent, points to
technology's power to help
the underprivileged

AS MOBILE INTERNET and smartphones penetrate every corner of the world, social networks and value-added services are changing many aspects of our daily lives. In China, this evolution is happening even faster and going even further than it is in other parts of the world. The trend will be ever more evident in 2019, as it sweeps across industries such as retail and fintech.

Take Shenzhen, for example, the city in southern China where Tencent was founded 20 years ago. There we can shop online, order food at restaurants or take-aways, pay utility bills and fares for public transport, book a medical appointment or even register to get married—all with a few taps of our fingers on a smartphone screen. Thanks to the internet and other cutting-edge technologies, many of us are now living a better quality of life than we could have once imagined possible.

That is of course welcome. Yet a question crosses my mind: can we also deploy technology to alleviate the toil and hardship for the disadvantaged and offer help to those in need?

Many people will not hesitate to donate generously for disaster relief, or to help the sick and the poor. However, it takes time both to solicit donations and to get the money into the hands of the needy. Unexpected situations causing further delays may also occur.

Charitech begins at home

Four years ago, Tencent (through its Weixin social app, whose sister app in international markets is WeChat) launched the first-ever online donation campaign in China. It enabled donors to give money directly to their preferred charities or philanthropic projects via Weixin Pay and also monitor progress. So far, 9.9 Charity Day (so called because it is held, every year, on September 9th) has raised almost 2.1bn yuan (\$309m) from 49.5m people to support more than 7,300 charitable organisations across the country.

I believe that with the help of technology, philanthropy can be woven into the activities in our daily lives and be more fun, innovative and accessible to more people. For example, our Step Donation Programme converts Weixin users' step counts into matching contributions from participating companies. And our Voice Donation

Programme enables Weixin smartphone users to read out poems and stories, which will be transformed into audio books for the visually impaired.

If we look further ahead, the ageing population will put mounting pressure on health systems in China and globally. Can we use technology to help governments improve the efficiencies of health systems? What can we do to relieve the pain for patients and reduce stress for their families?

It takes about eight years to train a doctor in China, but the demand for medical services far outweighs what is available. There is no shortcut to train medical professionals, but technology can make a meaningful impact by assisting the industry to upgrade to smart health care.

Philanthropy can be woven into the fabric of our daily lives

For doctors, artificial intelligence (AI) is a big help in three ways. First, it can perform simple but onerous tasks, such as compiling reports, thereby saving doctors' time for patient care. Second, it can learn to examine medical images based on big data, thereby increasing the efficiency and accuracy of diagnosis. Nowadays, it takes only one-tenth of a second to locate lesions and develop a preliminary evaluation of polyp properties. Third, AI can learn to match medical images and pathological genes to generate recommendations for personalised medical services.

For patients, social platforms can connect them to doctors remotely, cutting hours of waiting in frustration for themselves and their families. Using their smartphones, people can book their preferred doctors for consultation simply with their fingertips. If they are unable to travel, they can talk to doctors via video chat, pay consultation and prescription fees over Weixin Pay, and then pick up the medicine at a neighbourhood pharmacy.

The internet has become deeply entrenched in our lives in ways that reflect the imaginations of the most creative minds, and 5G (the next generation of mobile technology) will speed up the digital evolution to help many traditional businesses make the transition to being smart industries. Let us embrace these opportunities, not only to drive business growth but also to create value for underprivileged communities.

Middle East

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The end of American hegemony

America will retreat from the mess in the Middle East, creating openings for Russia and others

Anton La Guardia deputy foreign editor, *The Economist*

IN 1972 ANWAR SADAT expelled Soviet military advisers from Egypt, setting the stage for decades of American dominance, and much violent disappointment, in the Middle East. In 2013 President Barack Obama surrendered America's hegemony when he refused to take military action against Syria's use of poison gas, and later sought a nuclear accommodation with Iran. Donald Trump, by contrast, has lobbed missiles at Syria and menaced Iran. But as he swings between threatening to crush foes and getting out entirely, the latter instinct will dominate. Sometimes events, his advisers or domestic politics may compel him to take action. But Mr Trump will mostly prove even more detached than Mr Obama.

That will make for unpredictability, ineffectiveness and prolonged chaos. Partial accords might be negotiated in Yemen, Syria and Libya, without finding lasting settlements to end the wars. Mr Trump's "ultimate deal" of peace between Israel and the Palestinians will be still-born, if a plan emerges at all. America's sanctions on Iran will not dislodge its clerical regime, and will strengthen its hardliners. Jihadists will exploit any space to regroup.

In this free-for-all, the danger of new wars will be ever-present in 2019, if not by design then by mistake. The shooting-down of a Russian spy plane last Septem-

ber, by Syrian air-defence batteries taking aim at Israeli bombers, was a warning of how things can go wrong when so many powers are fighting different wars at close quarters. One risk is of a war pitting Israel against Iran and its allies, notably Hizbullah, the Lebanese Shia militia. Another is of Turkey being drawn into fighting against Syrian forces (and their Russian and Iranian allies) if they try to retake the rebel-held enclave of Idlib.

The politics of the Gulf will be jittery. The macabre murder in October of Jamal Khashoggi, an exiled journalist, has weakened King Salman of Saudi Arabia and his son, Muhammad, the crown prince, on whom rested the hopes of social and economic reform. That could lead to more repression, intensify palace intrigues and deepen the country's cold war with Qatar and Turkey. Mr Trump's sympathy for autocratic chums ultimately feeds instability, but he will worry more about losing influence, and defence contracts, to Russia or China

Indeed, Russia will increasingly cast itself as the indispensable power in the Middle East. By intervening in Syria in 2015, Russia saved the regime of Bashar al-Assad yet has so far avoided falling into a quagmire of the sort that exhausted America in Iraq. Russia has shown that it will stand by its allies, no matter how repulsive. It has honed its warfighting techniques, and has created a showcase for sales of military equipment.

Russia is the only country to enjoy friendly relations

2019 in brief

Palestine chairs the UN's group of 77 developing countries, for one year from January 1st. The position allows Palestine, which has observer status at the UN, to participate in some general-assembly votes and join some international bodies

The battle to rebuild Syria

The pace of reconstruction will pick up in 2019—despite Bashar al-Assad, rather than because of him

Nicolas Pelham Middle East correspondent,
The Economist ISTANBUL

LUNCHING IN Beroea, a newly opened restaurant in Aleppo, is like banqueting in a graveyard. A fountain plays, a lute strums and Beroea's waiters serve its bustling clientele from trays laden with the delicacies of Syrian cuisine, while destruction lies all around. Above looms the citadel whose ancient parapets have looked down on many wars. On the streets outside are piles of rubble which only five years ago constituted one of the Silk Road's most colourful bazaars.

During 2019 Beroea will not feel quite so alone. The drip of reconstruction will quicken to a pitter-patter. Fresh from defeating a seven-year rebellion, the regime of Bashar al-Assad will reopen the country's borders and revive an ancient crossroads for East-West trade. Lebanon will connect its ports via a highway to Syria, and on to Jordan and the oil-rich importers in the Gulf. The road to Iraq, Syria's largest market before the war, will be secured after clearing the remnants of Islamic State. An agreement with Turkey on a ceasefire in the last rebel-held province of Idlib will mature into a trade deal, opening the roads running north to Russia and Europe.

People will flow in, not just out. The textile manufacturers who fled the threat of kidnapping and barrel bombs and sought refuge in Turkey will rebuild their outlets in Aleppo's shattered industrial zone, Shaykh Najjar. Merchants who parked their funds in Dubai and Cairo could follow. The influx will help Syria's private banks recapitalise and recover the confidence to resume lending.

Syrian refugees in Europe, flush with welfare benefits worth many times Syria's average wage, will send remittances so that relatives can repair their homes. Developers will tout schemes to rebuild housing, provided they can add extra floors on top. Gulf magnates anxious for alternatives to the Gulf's deflated housing

People will flow in, not just out

Brushing up on the future



market will scout for joint ventures. Turkish contractors rebuilding the Turkish-held enclaves in northern Syria will prospect farther south. The Syrian pound will rebound. By the end of the year Syria will be the Middle East's (and perhaps the world's) fastest-growing economy, albeit from a low and dreadful base.

Jordan and some Gulf states will send their intelligence chiefs to Damascus and propose a path for Mr Assad to return to the Arab League, a club for regional despots. To please his Iranian patrons, Mr Assad will snub the overtures of Muhammad bin Salman, the Saudi crown prince.

American sanctions will frustrate the World Bank's efforts to participate in the world's greatest reconstruction project. China will signal more interest. And many European leaders, whose overriding concern is to send Syria's refugees home, will wobble. Some will refuse to help Mr Assad, denouncing him as a war criminal. Others will highlight the risks of leaving a strategic stretch of the Mediterranean to the Russians and Iranians. Economic reconstruction, they will argue, will pave the way for a political transition, not vice versa. They will organise pledging conferences and resume official contacts, if not with the president, then with his provincial governors.

Mr Assad and his ilk will be the biggest brake on reconstruction. Fearful of being swamped by foreign finance, his family, their Alawite militias and their

foreign patrons will wish to consolidate their own hold on the spoils of rebel-held turf before opening the gates. They will delay unveiling a plan for reconstruction and shun a political settlement that could quicken Syria's opening. They will hamper the return of former foes and hostile Sunnis, with demands for security clearance and threats of punishment or conscription. They will pass laws allowing them to seize absentee (refugee) property. And they will strive to remake Syria in their own image, before outsiders swarm in and remake it in theirs.

▶ with all the main regional players, among them Israel, Turkey and, crucially, Iran. The key to any solution in Syria will be in the hands of Russia, not America. Even though Russia has provided air power to the region's "Shia axis", Saudi Arabia has co-operated with Russia to manage oil output and push up the price of crude, to the ire of Mr Trump.

Israel, Saudi Arabia and several Arab leaders have cheered Mr Trump at the risk of damaging future relations with America's Democrats. But Gulf states think

he is a fickle friend, a fear heightened by Mr Trump's warning that the Saudi king "might not be there for two weeks without us". Russia thus provides a useful hedge against American indifference.

China is making inroads, too. It has a naval base in Djibouti and its warships have called at Gulf ports. As the biggest buyer of Gulf oil, it has a vital interest in the security of the region. But China will mostly limit itself to pursuing economic deals. It will leave the maddening political and security problems to America—or failing that, to Russia. ■



Hardship ahead

Iranians face a difficult future as American sanctions bite, but regime change is unlikely

Roger McShane Middle East editor, *The Economist*

IT IS MORE a guarantee than a prediction: Hassan Rouhani, the president of Iran, says his country will defeat America's effort to isolate it economically. He is wrong. The Iranian people will suffer in 2019, as American sanctions leave international banks and businesses with little choice but to shun the Iranian market. Far from achieving victory over the "Great Satan", their nickname for America, Mr Rouhani and the leaders of Iran's clerical regime risk losing power themselves, as protests over the economy, corruption and foreign adventurism rock the country.

We have been here before. In 2012, as international sanctions on Iran piled up, inflation and unemployment rose, the country's GDP shrank and medicine and other basic goods ran short. Much the same is happening today. The Iranian rial collapsed and prices spiked in 2018, after President Donald Trump pulled America out of the international deal under which Iran agreed to curb its nuclear programme in return for sanctions relief. The aftershocks will be felt in 2019. The economy will shrink, along with trade and investment. Iran's all-important oil exports will take a big hit. And prices will keep rising, causing yet more pain for ordinary Iranians.

Iran is hoping that European states, which still support the nuclear deal, as well as Russia (another signatory) and China, two big trade partners, will bail it out. That won't happen. European "blocking" measures, meant to shield firms from American sanctions, will not work. Instead, European firms will heed Mr Trump's warning that anyone doing business with Iran will not be doing business with America. Those that have not already pulled out of Iran will do so in 2019. Moreover,

Russia will be all too happy to make up for the loss of Iranian oil on the international market. China may stand by Iran, purchasing its oil and providing investment, but it can do only so much.

Mr Rouhani says Iran has enough foreign reserves to survive two years of Mr Trump's economic offensive. The country's "resistance economy", developed in response to previous sanctions, aims for self-sufficiency. But for most Iranians, it means hardship. People already hoard food. As officials get poorer, they will grow more corrupt. That will increase the rage felt by many Iranians. Demonstrations in Tehran in 2018 were the biggest in the capital since 2012. Elsewhere around the country, protests were common. They will flare up in 2019, threatening the regime's grip on power. It will respond, as usual, with force and by blaming foreign conspirators for the country's problems.

Another revolution?

Mr Trump and his advisers hope that sanctions will weaken the regime, prompting it to return to the negotiating table. America wants a more stringent agreement that permanently ends Iran's nuclear-weapon and missile programmes, and stops it from financing terrorism and meddling in other countries' affairs. Some in the Trump administration are hoping that the economic turmoil will lead to regime change. But neither a new deal nor a new regime is likely in 2019.

Iran's leaders, many of whom did not support the original nuclear deal, will dig in. The regime's praetorian guard, the Islamic Revolutionary Guard Corps, will benefit from the sanctions, as more business flows to the companies under its control. The falling rial will also help the regime, because Iran's oil revenue comes in foreign currency. The opposition, by contrast, is unorganised and leaderless. Still, when making predictions about Iran, humility is in order. Few people foresaw the last revolution. ■

What if

If he stays in office until July, Binyamin Netanyahu will become Israel's longest-serving prime minister. But corruption investigations loom. **If Mr Netanyahu is indicted and if he steps down** (both big ifs), he will be replaced initially by a Likud party hack, either Yisrael Katz, the transport minister or Gideon Saar, a former interior minister. A weakened Likud will soon face defeat by Labour, or takeover by a more charismatic breakaway ex-Likudnik—Moshe Kahlon or Naftali Bennett of the centrist Kulanu and the right-wing Habayit Hayehudi parties

In rial trouble

Iran, unofficial exchange rate, rials per \$, '000
Inverted scale



Source: Prof. Steve H. Hanke, Johns Hopkins University

The dark prince

Khashoggi's shadow will loom over Saudi Arabia

Nicolas Pelham Middle East correspondent,
The Economist

UNLESS IT diversified from oil, Saudi Arabia's crown prince used to warn, the kingdom would collapse. After the fallout from the killing of Jamal Khashoggi, a Saudi critic and writer, in Istanbul, few believed it could be saved on his watch. The foreign investment Muhammad bin Salman once courted to fund his plans for a non-oil economy will run dry.

He will still hail himself as the solution. His people will fear he has become their problem. Fearful for their House of Saud, older princes will privately sneer he is damaged goods. Those nursing grievances over how Prince Muhammad publicly humiliated them, fleeced them and threw them in jail will seek to respond in kind. From the relative safety of Western capitals, contenders will woo the kingdom's foreign allies and suggest they might be dependable alternatives to Prince Muhammad.

They will find an audience. Western governments never looked kindly on the prince's riskier ventures. After four years, "Decisive Storm"—his offensive in Yemen—resulted in a bloody stalemate. His boycott of Qatar spread rancour. Both were distractions from the primary goal of America's leaders, namely hobbling Iran.

But Western powers will also flinch from more messiness. Prince Muhammad has ruptured mechanisms hitherto used for smooth transitions. He has reduced the many branches of the royal household to the rule of one man. Potential rivals in exile juggled the choice of returning to Riyadh, where they could be kept under watch, or forfeiting their in-country assets. Some will urge the prince's father, King Salman, to intervene and appoint a less impulsive son. But King Salman will remember that many an ambitious son in the Gulf has snatched the throne from a father in his dotage, and recoil.

As opposition grows, the prince will see threats everywhere. He will rely on intelligence fed by the same security services accused of murdering Khashoggi. The more ruthless he becomes, the larger his circle of enemies will grow, and the more harshly he will repress them.

Friction will increase with erstwhile Western allies. The prince will fear that the White House, even under President Donald Trump, might call the American mercenaries protecting him and advise them to stand down. The Russians, the Chinese and even the Iranians, he will recall, politely stayed silent when Western capitals fanned global outrage at Khashoggi's death.

Confined to his yacht off the Red Sea coast for his own protection, Prince Muhammad will cast a lonely figure. Shorn of his dreams of Alexandrian grandeur, the 33-year-old will remember the rock-star status he once enjoyed among the world's political and business elite. He will wonder if there could be a road back. Reconciling with Qatar? An amnesty for political prisoners? The promise of elections for his rubber-stamp Shura council? If only, he might ponder, Khashoggi were around to offer advice. ■



A special event

An Olympic first, and hopes for change

Lily Postlethwaite editorial assistant,
The World in 2019

IN MARCH 2019 around 7,000 athletes and 2,500 coaches from more than 170 countries will gather in Abu Dhabi in the United Arab Emirates (UAE) for the Special Olympics. It will be the culmination of the competition's 50th-anniversary celebrations. This sporting event, held every two years, enables people with intellectual disabilities (IDs) to triumph over physical and mental handicaps in a show of strength and skill.

IDs, such as Down's syndrome and autism, can make socialising, communicating and even physical contact a challenge, let alone competitive swimming, gymnastics and athletics (to name three of the 24 sports on offer). But what does hosting the Special Olympics mean for wider society? The event's founder, Eunice Kennedy Shriver, believed that it acts as a catalyst for change and acceptance.

The Special Olympics in Abu Dhabi—the first time an Olympic event has been hosted in the Middle East—will put this claim to the test. Unified Sports, an American-funded inclusion initiative in which athletes with and without disabilities come together to form teams in sports such as basketball and badminton, is set to play a role in the Special Olympics. Its game-changing decision in 2017 to refer formally to people with disabilities as "the determined ones" sets an admiring tone.

The event's patron, the crown prince of Abu Dhabi, Sheikh Mohammed bin Zayed Al Nahyan, intends its influence to permeate society long after the last starting pistol has been fired. Already, for example, it has inspired an initiative called Walk Unified, which aims to instil values of voluntary work and healthy living through a weekly organised walk, including people with disabilities.

The UAE keeps representatives of international human-rights organisations out of the country and is justifiably criticised for its treatment of migrant labourers. The Special Olympics gives it a chance to show the world a kinder, gentler face. If some lasting change comes of that, so much the better. Any opportunity to celebrate human resilience and collaboration is to be relished.



2019 in brief

Palmyra, an ancient Syrian city that was nearly destroyed by Islamic State, opens to tourists again after extensive restoration

Africa

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The 2.5-billion-person question

Demographic projections for Africa could prove wildly wrong

Jonathan Rosenthal Africa editor, *The Economist*
MAKOKO

AT THE LANDING jetty, one dugout canoe is packed with women in pristine white robes on their way to church. Another carries a family to their home, which is perched on tall stilts protruding from the lagoon cradling Lagos, Africa's largest city. Makoko, a watery slum of perhaps 250,000 people, has run out of space to grow. It has long since slipped over the dry edge of Nigeria's commercial capital: about a third of its inhabitants live above water. And despite a ban on further seaward expansion, it still keeps growing, this time upwards. Rising above the homes on stilts are new second-storey apartments, to make space for expanding families.

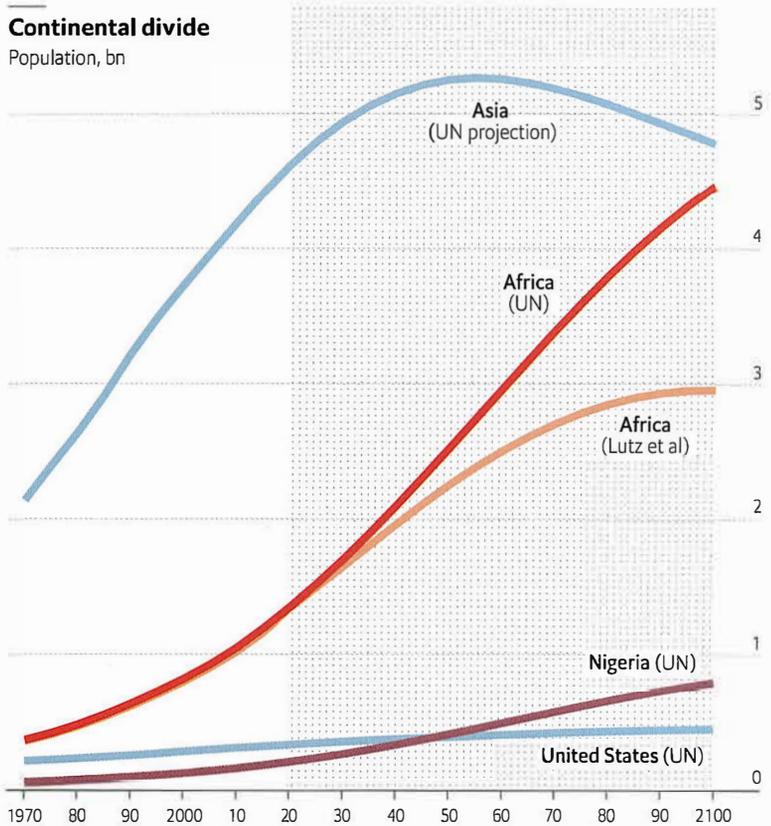
It will probably be in a crowded slum like this that a baby born in 2019 will tip Nigeria over two important thresholds. The first is that they will be Nigeria's 200-millionth citizen. Their birth will help the country zoom along its way to overtaking America by population, most likely before 2050, and becoming the world's third-largest, after China and India. The UN's people-counters reckon that Nigeria's population will keep on growing at a breakneck pace, reaching almost 800m by 2100, the limit of their statistical models. The second threshold is that this child could be the 100-millionth living in a city, pushing Nigeria's urbanisation rate past 50%.

To be fair, both predictions should be taken with a pinch of salt, because no one really knows exactly, or for that matter even within a few million, how many people there are in Nigeria today. Estimates of Nigeria's current population are based on a census conducted in 2006 that probably overstated the count for political reasons. Yet even if the numbers are wrong, their trend is clear. And where Nigeria leads, much of Africa will follow. The UN reckons the continent's population will double from 1.2bn today to 2.5bn by 2050, before almost doubling again to 4.5bn by 2100. Its cities, which already house about 40% of its people, will make up 21 of the world's 30 fastest-growing cities between 2018 and 2035. Many will more than double in size over that period.

These projections underpin much of how the world sees Africa over coming decades. Companies look at its fast-growing urban population and see a booming market opportunity. Manufacturers see it as a source of young employees at a time when the world's workforce is ageing. McKinsey, a consulting firm, reckons that by 2034 Africa will have a larger working-age population than India or China. Others see only peril, pointing to the risks of terrorism, conflict and mass migration to Europe if Africa cannot provide jobs and improved lives for the

Continental divide

Population, bn



Sources: UN; Wolfgang Lutz

millions of young people it will produce.

Yet both optimists and pessimists are probably wrong in thinking that Africa's population will grow at the rates predicted. The UN Population Division, whose models are usually seen as the gold standard, may well be overestimating Africa's population in 2100 by 2bn people or more. Its models are based mainly on two factors: how quickly fertility (the number of children born to the average woman) has fallen elsewhere in the world; and the recent trend in fertility across Africa. Like most other poor parts of the world, Africa's fertility rate has been falling since the 1970s. But the rate of decline slowed temporarily around 2000, as development stalled in many parts of Africa. With data indicating a slow decline going into the model, it produces projections showing a huge increase in population over the next 82 years.

More interesting than the model, however, are the underlying reasons why it almost certainly underestimates how quickly fertility will fall during the next few



2019 in brief

Ghana welcomes its diaspora during its Year of Return, which it hopes will encourage people of African descent to rediscover their heritage

The shifting sands of the Sahel

An often-ignored region will grow in importance, for the wrong reasons

Will Brown West Africa correspondent,
The Economist NIAMEY AND NOUAKHOTT

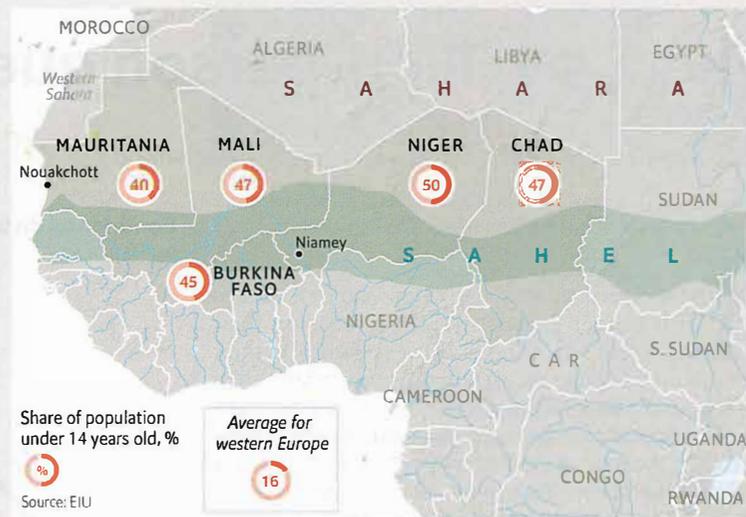
WHEN THE ancient Greeks saw the Sahara desert, they said the sun must have fallen from the sky and scorched everything to dust. In the two millennia since, Europe has continued to feel detached from the lands beyond the great desert. But slowly, the walls of the Sahara are crumbling. On the other side lies an arid and sparsely populated band of countries called the Sahel. The region has been a geopolitical backwater. But in 2019 it will climb up the West's agenda.

Fearful of African migration, Europe has pumped money into development and border security. This is most noticeable in the region's key transit country, Niger, where migration numbers have dropped from 330,000 in 2016 to around 10,000 in 2018. Yet the Sahel is more than just a transit region. It could become an extraordinarily disruptive force on its own.

Its population is exploding. In Niger an average mother will have about seven children. The population of the five countries known as the G5 Sahel—Mauritania, Mali, Burkina Faso, Niger and Chad—is 78m. By 2050 (if you believe the UN's projections) it could be over 200m. Their prospects are grim. The Sahelian governments are fragile and barely operate outside major towns. Corruption is endemic. Food production is not keeping up with population growth.

And climate change is hitting the region hard. In many areas the desert is slowly advancing. The World Food Programme estimates that over 5m people are struggling to find enough food in the G5 Sahel countries. The diminishing resources are leading to deadly clashes between pastoralists and farmers.

Jihadism is on the rise. Groups linked to al-Qaeda, Boko Haram and Islamic State have footholds in Mali, Niger and Chad. Insecurity is spreading to Burkina Faso. Troops from the UN, America, France and Germany are stationed across the Sahel, but spread thinly



in a region three times the size of western Europe. The UN's deadliest mission is not in Congo or the Middle East; it is in Mali, where over 170 peacekeepers have been killed. A "perfect storm" is brewing right under Europe, says a senior American military officer working on the Sahel. If the region falls into chaos, Europe can expect millions of refugees.

In 2019 eyes will be on Burkina Faso, where Operation Flintlock, an American-led counterterrorism exercise, will involve over a dozen countries. America has opened a huge drone base in northern Niger. But the Trump administration talks of cutting special-forces operations in Africa by as much as 50%.

Europe may step up its involvement in the region. A radical rethink is needed, warns Tony Blair, a former British prime minister who has been vocal on the issue; the point of no return may be only three to five years away. Europe's future is inextricably linked to what happens in the sands of the Sahel.

▶ decades. The first is that urbanisation and fast population growth do not make happy bedfellows. As families move from farms to cities the costs and benefits of having lots of children change. On the farm, an extra youngster can usefully be put to work watching the cattle or tilling the soil. In the city he or she is an extra mouth to feed and mind to educate. Women in Africa's capital cities have two to three fewer children than their rural peers.

Children living in cities are much more likely to go to school. This opens the door to a rapid shift in family size. As a rule of thumb the fertility rate falls from more than six for women who have had no formal education, to four for those who have finished primary school and two for women who have finished secondary school, says Wolfgang Lutz, of the International Institute for Applied Systems Analysis. He reckons that if Africa keeps up its

current rate of improving school enrolment, childbirth will slow so dramatically that the continent will have about 2.9bn people by the end of the century, about 1.5bn fewer than the UN models project.

A rapid expansion in schooling, in line with the UN's Sustainable Development Goals, would have an even bigger impact, keeping Africa's population below 2bn. That in turn would make it vastly easier to manage many of the continent's problems. Employment could expand at a more measured pace. Cities need not outgrow their infrastructure so quickly. And education departments would not have to build classrooms at such breakneck speed, allowing them to devote more resources to keeping girls in school longer and to building new schools in hard-to-reach places—including the floating slum in Makoko, which currently has none. ■

Last chance, ANC

Cyril Ramaphosa must convince South Africans that his party still deserves to lead

John McDermott Africa correspondent, *The Economist*, JOHANNESBURG

IN 1994 MILLIONS of South Africans queued from dawn until dusk to vote in the first democratic election in the country's history. Twenty-five years later life is in many ways better for the ordinary citizen. Average household income has increased by almost a third in real terms. Car ownership has doubled. The chances of a child dying before their fifth birthday have fallen by 40%. The murder rate has been almost halved.

Yet the optimism of 1994 has vanished. Under Jacob Zuma, president from 2009 to February 2018, South Africa descended into kleptocracy. Growth slowed, debt as a share of GDP soared and unemployment rose from 23.7% to 27.5%. The murder rate began to tick up again.

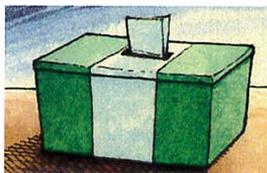
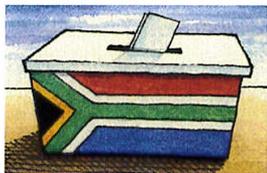
Many South Africans have begun to turn away from the African National Congress (ANC), the party that led the struggle against apartheid and which has been in power since 1994. In local elections in 2016 the ANC's share of the vote was 54%, down from 62% in the national vote in 2014, as its erstwhile supporters stayed at home or opted for one of the opposition parties, such as the liberal Democratic Alliance or the Economic Freedom Fighters (EFF), which preaches a toxic mix of hard-leftism and black nationalism.

Such was the inheritance of Cyril Ramaphosa when he took over as president in February. He has cleaned out some of the institutions corrupted by Mr Zuma and restored a sense of decency to the office of president. But the economy is still in deep trouble—it entered recession in the first half of 2018—and the ANC remains divided.

Mr Ramaphosa's supporters say he needs to win 60% of the vote for the ANC in parliamentary elections in 2019 to earn a mandate to reform both party and country. Another narrow majority would mean he could be under pressure from Zuma-era rogues who still seek his removal, or from rivals such as David Mabuza, the deputy president, who helped orchestrate the toppling of Mr Zuma. If the ANC were to fail to win a majority—once an unthinkable event—then it could mean South Africa's first enforced coalition since the advent of democracy.

In his campaigning Mr Ramaphosa is walking a fine line. To mollify internal critics, and those attracted to the EFF, he is talking up "radical economic transformation", for example on land reform. At the same time he is stressing to allies in business that he will not do anything to harm the economy. A vastly experienced ex-union boss, ANC negotiator and businessman, Mr Ramaphosa is trying to be all things to all people.

If anyone can achieve that task, he can. But even if Mr Ramaphosa were to win the election comfortably, the hard work of fixing South Africa's problems would have only just begun. ■



Nigerian apathy

A closely fought presidential election will fail to convince voters that anything much will change

Aman Rizvi foreign correspondent, *The Economist*

WHEN MUHAMMADU BUHARI won Nigeria's presidential election in 2015, his victory was greeted with euphoria. He unseated the People's Democratic Party (PDP), which had ruled uninterrupted since the restoration of democracy in 1999. Many hoped Mr Buhari and his All Progressives Congress (APC), a coalition of regional bigwigs whose party symbol is a broom, would sweep away the corruption and dysfunction that flourished under the PDP. But when Africa's most populous country returns to the polls in February, Mr Buhari faces a fight for his political survival.

The excitement of 2015 has long since dissipated. A collapse in the price of oil, Nigeria's main export, dragged the country into a recession in 2016 from which it is gradually emerging. The 75-year-old Mr Buhari spent much of 2017 in London being treated for an undisclosed illness. (Some felt the economy was better-run in his absence.) Corruption is less flagrant than it was under his predecessor, Goodluck Jonathan, who fired the central bank's governor in 2014 for pointing out that \$20bn of oil revenue had gone missing. But Nigerians still see too much of it in their daily lives to believe that things have changed.

Mr Buhari's approval ratings have languished below 50% for most of 2018. Ominously, he has been hit by a wave of defections to the PDP. Desertions to the APC four years ago, by many of the same people, felled Mr Jonathan. Mr Buhari's electoral opponent in 2019, Atiku Abubakar, is one such double-turncoat. He is also a septuagenarian, billionaire businessman, former vice-president, and three-time presidential aspirant. With Mr Abubakar distrusted for his wealth and opportunism, the election will be close. Its outcome will hinge on who arouses less apathy.

So who will win? Many Nigerians do not care. The back-and-forth floor-crossing has convinced them that the same people will be in charge either way. The PDP holds a slight edge, if only because expectations for Mr Buhari were higher and his failure to meet them was more recent. But with successive governments having failed to make Nigeria less oil-reliant, says Ayo Teriba, an economist, the country's economic health in 2019 will depend not on who rules it, but on the price of crude.

Relative calm and democracy at the federal level will obscure the small fires burning in some of Nigeria's 36 states. The war against Boko Haram in the north-east is stalling; the jihadists roam the countryside unimpeded. Bandits prowl the oil-rich Niger Delta. Fighting is escalating between farmers and herders across the country's middle belt. Things will not fall apart in the year ahead, but Nigerian voters have little reason to believe they will improve. ■

What if

Abiy Ahmed, Ethiopia's young prime minister, is unusual. When he says he wants to **make Ethiopia a democracy**, he means it. Not the "revolutionary" sort his predecessors preached but liberal and competitive, with a free press and all the trimmings. What if he succeeds? Ethiopia has known only emperors, dictators—and bloody revolution. Ominously, liberalisation under Mr Abiy has so far been accompanied by horrifying ethnic violence. If he delivers real democracy he will not only have bucked regional trends. He will have recast Ethiopia altogether

International

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Connectivity conundrum

Getting people online is not an unalloyed blessing

Ludwig Siegele technology editor, *The Economist*

"HALF OF World's Population Now Online". The headline will write itself in 2019 when, based on estimates by the International Telecommunication Union (ITU), a UN agency, more than 50% of humanity will have access to the internet.

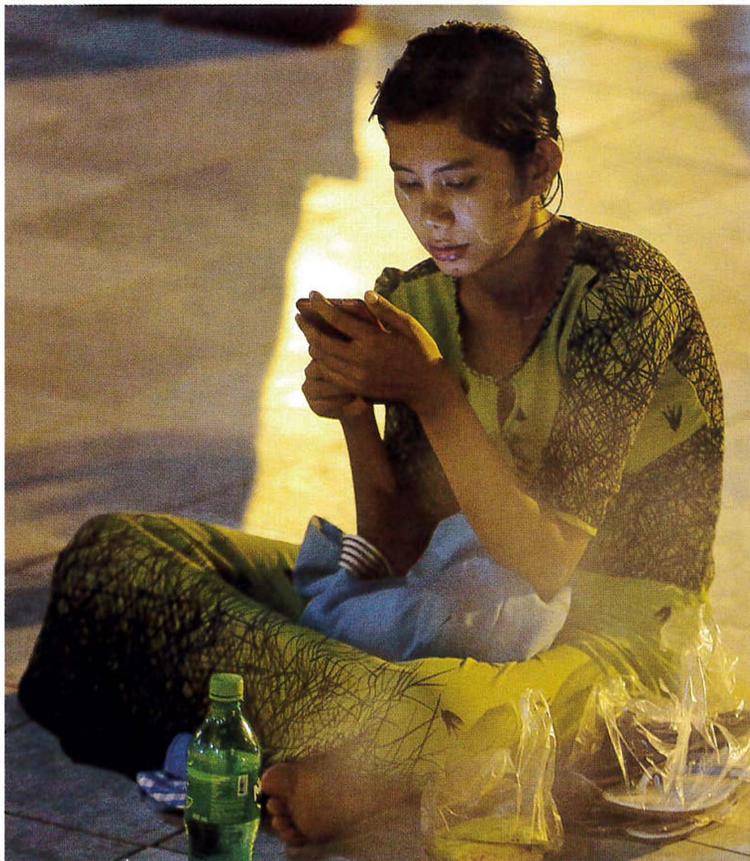
Although the ITU is generous in how it defines being online (it includes anyone who has used the global network of networks within the past three months), this will be an impressive landmark. A decade ago the fraction of humanity with internet access hovered around 20%. Closing the "digital divide" between the rich world and the poor would seem to be an unalloyed blessing, for economic development in particular. Studies suggest that a 10% increase in internet penetration is correlated with a 1.35% increase in GDP for developing countries.

Naturally, the ITU and other organisations have plenty of ideas about how to push penetration rates even higher—especially as the rise in internet access has slowed recently. The UN Broadband Commission for Sustainable Development, in a report published in September 2018, lists half a dozen recommendations for governments, including support for local digital businesses and reducing taxes on telecoms equipment. The Alliance For Affordable Internet (A4AI), an advocacy group, focuses on how the cost of access can be reduced, for instance by fostering competition and clever allocation of wireless spectrum. It thinks that governments should have the goal of bringing down costs to no more than 2% of average monthly income for one gigabyte of data—a target that is so far met by only 24 countries of the 61 covered in the group's "Affordability Report" from 2018.

Big tech firms, too, are making efforts to bring more people online. Facebook's Free Basics programme, for instance, is now available in 65 countries. It gives smartphone owners access to a limited selection of data-light websites and services, including Facebook and WhatsApp, the mobile messaging app it owns. These are "zero rated", meaning they can be browsed for nothing.

Yet the internet and the social-media platforms built on top of it do not just have the potential to boost growth and development. They can also cause serious trouble. This has been much talked about in rich countries in the wake of the online misinformation campaigns that were a factor in Americans electing Donald Trump as president and Britons voting for Brexit. But the consequences in poor countries have been more worrying.

"The problems are the same as in the West, plus more," says Sandy Parakilas of the Centre for Humane



Technology, another advocacy group. Users have often much less experience with other media, so they tend to believe more readily what they come across online. They have less choice, because the internet giants are often even more dominant in poor countries than elsewhere. (Novice users of Facebook's Free Basics scheme may be unaware that they are seeing only a tiny, handpicked selection of websites.) These countries also typically have weaker institutions that can be more easily undermined by misinformation. And autocratic regimes are often the worst offenders in spreading "fake news".

In Myanmar Facebook has been misused to deepen the hatred of the Rohingya minority. In the Philippines it helped Rodrigo Duterte, the populist president, get elected and he now uses it to mount smear campaigns against opponents of his bloody war on drugs. In India WhatsApp has had the most profound effect. The app, which boasts more than 200m users in the country, has at times become a rumour mill. In 2017 seven men in the eastern

2019 in brief

Ferdinand Magellan set sail from Seville 500 years ago on a voyage to circumnavigate the globe

Slow social

After years of optimising for attention, social networks are putting on the brakes

Leo Mirani news editor, *The Economist*

JUST AS the proliferation of fast food produced the "slow food" movement in the 1980s, and the spread of reality television inspired "slow tv" in the early 2000s, the constant buzzing of smartphones with notifications, messages, tweets and posts will, in 2019, give rise to "slow social". It has started already. Where once social networks did everything possible to make their services "frictionless", making it easy to share or forward posts and messages, they have begun, gingerly, to apply the brakes.

In July WhatsApp put a limit on the number of people or groups to whom a single message can be forwarded in one go. Instagram, a photo-sharing app, introduced a "You're all caught up" feature, which reminds users that they have "seen all new posts from the past two days" and should really go and do something else. Facebook launched a feature that allows

Slowing things down may keep users happy in the longer term

Not so fast



people to check how much time they are wasting on the social network, and to snooze notifications for a period. And in September Twitter announced that it would allow its users to go back to its older timeline, in which tweets are visible in simple reverse chronological order, rather than curated by an algorithm to maximise the time spent using the service.

If these changes work, and as others follow, social networks will find that their holy metric of "engagement"—how much time people spend on their services—may decline. But slowing things down, even if it also means slowing their own growth, is a good way to keep users happy in the longer term and avoid blame for viral misinformation and hate speech.

Twitter's algorithmic timeline helped things go viral more easily. So did WhatsApp's easy-forwarding features. Erecting barriers to virality is perhaps the fairest way for social networks to deal with the problem of misinformation without having to become arbiters of truth. Anecdotal evidence from India, where WhatsApp's controls on forwarding are tighter than elsewhere owing to a series of lynchings caused by viral (and unfounded) rumours, suggests that the speed bumps are indeed having the desired effect.

Facebook, which owns Instagram and WhatsApp, says it wants the time people spend on its networks to be "intentional, positive and inspiring". That is an acknowledgment that constant screen time is having a detrimental effect on users. Facebook would rather its users moderated their intake of polarising opinions and holiday snaps than burn out and quit.

The new time-counting features are akin to road signs and rest stops on the information superhighway. Expect to see more signs, and speed bumps, in 2019.

▶ state of Jharkhand were murdered after rumours circulated on WhatsApp warning of kidnappers in the area.

So should efforts to get more people online be slowed down until they are better equipped to handle the technology? That would be the wrong way to respond, says Mr Parakilas. As well as being paternalistic, it is unlikely to work. Even without policies to increase internet penetration, more and more people will want to go online. Keeping them from getting their hands on smartphones, whose prices continue to drop, for instance, would cause a political backlash. And blocking access to certain services is a temporary measure at best. When Sri Lanka shut down a handful of social-media services in March 2018 in an attempt to quell ethnic strife, many people turned to virtual private networks to bypass the blocks.

Policies to deal with these problems are only just emerging, says Dhanaraj Thakur of A4AI. Some existing proposals, such as improving media literacy, creating safe spaces online or taxing social-media use (as Uganda is trying to do), do not sound convincing. A more promising idea is to push online giants to change their ways. It

is also part of the "Contract for the Web", an initiative launched in November by Sir Tim Berners-Lee, the inventor of the web, which aims to keep it open.

One possibility is to make sharing content on social-media platforms less easy, for example, to slow down the spread of information (see box). Facebook has changed WhatsApp to make it harder for users to forward messages to large groups. Online firms also need to have more of a presence in the countries they serve so that they can work with the authorities to solve problems (for too long Facebook had no employees in Myanmar). Most importantly, given that misinformation often attracts a lot of attention, they need to rethink their business models, which typically involve harvesting as much of users' attention as possible in order to resell it to advertisers.

Whatever the policy mix, the problems caused by more connectivity will not go away quickly. "This is going to get worse before it gets better," predicts Renata Avila of the World Wide Web Foundation, a think-tank. Connectivity alone is not enough, she points out: "We have to prepare people better for what to expect." ■



2019 in brief

In February Pope Francis hosts a four-day summit at the Vatican on the theme of protecting children

Meme madness

Reality television's influence on political reality will only grow

An Xiao Mina technologist SAN FRANCISCO

IN 2019 GLOBAL realpolitik will continue on its collision course with reality television. Consider the events of 2018. The meeting of President Donald Trump and Kim Jong Un was a star-studded affair, with an official trailer released on YouTube that painted the two as superheroes meeting, while branded T-shirts and USB sticks were distributed to attendees. Israel's prime minister, Binyamin Netanyahu, held an AMA ("ask me anything") Q&A session using Instagram's Stories feature. Revelations about the activities of Russia's Internet Research Agency highlighted its prowess in the use of internet memes, published on Facebook, to stir controversy.

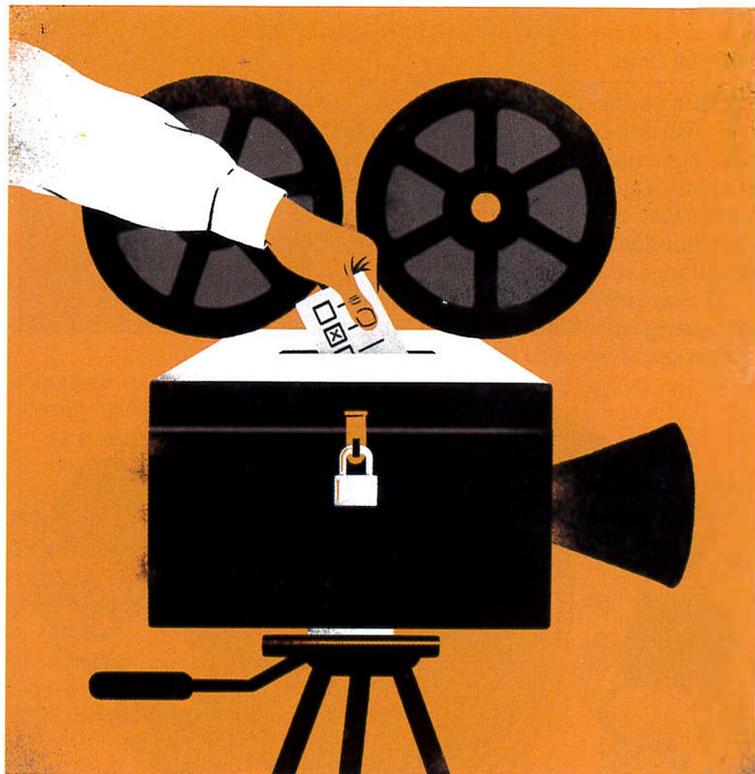
All this aligns with a broader trend of states embracing media strategies that owe more to entertainment than to traditional political communications. In 2017, for instance, China's Tencent platform released a video game that allowed players to clap for President Xi Jinping. And, for years, Myanmar's military rulers operated an online propaganda campaign through manufactured pop-star fan accounts.

The most famous example, of course, is that reality-star-turned-president, Mr Trump. Such is the staff turnover at the White House that it is often likened to a "Survivor"-style reality show. CBS's ex-boss, Les Moonves, declared that Mr Trump's candidacy "may not be good for America, but it's damn good for CBS"—great for ratings and therefore revenue. With a seemingly infinite array of media options now available to news consumers, providing a constant diet of surprises, scandals and dramas is an effective way for politicians and broadcasters to attract and retain attention.

The model also works beyond television. Depicting politics as a reality show helps online news sites, facing budget cuts and dependent on digital advertising revenue, attract viewers in a cut-throat media environment. Social-media platforms, which also have ad-driven business models, optimise their algorithms to maximise emotional engagement and hence revenue. As a result, users of such platforms are more likely to see posts about personality-driven controversy than straight politics.

The economic forces behind the rise of reality television are instructive here. Facing rising production costs and the need to fill airtime, studios sought out new formats with lower costs that were still capable of generating ad revenue. The most successful reality shows went on to maximise revenue per series by extending their personalities' brands far beyond television, with books, fashion lines, toys, video games and real-world experiences. Mr Trump has pioneered such merchandise in the political sphere, notably with red "Make America Great Again" caps. More politicians will follow suit in 2019.

Governments have embraced new forms of media in the past, so this is arguably the logical development of a historical trend. Goebbels and FDR alike used the power of radio. Reagan adapted his presidency to tele-



What if

Baby boxes, "starter kits" of products for newborns, were pioneered in Finland in the 1930s to reduce infant mortality and poverty. Every new parent is eligible for one free if they attend maternity care. Finland has one of the world's lowest infant-mortality rates. Worldwide, some 2.5m babies die in their first month of life. **What if baby boxes were adopted everywhere?**

Scotland started giving them out in 2017; New South Wales in Australia will do so from 2019. If the results match Finland's, more places may follow

An Xiao Mina is author of "Memes to Movements" (to be published in 2019 by Beacon Press)

vision broadcast cycles. The Chinese Communist Party produced films at the height of the Cultural Revolution. Today, the reality-television toolkit offers a model for states seeking to influence both their own people and a wider international audience.

Studios have long recognised that the power of reality television is its ability to seem real, while relying heavily on staged or scripted developments and clever editing. This is an ideal formula for states' media operations. In 2019 states will adopt the most practical blend of tactics for a given set of influence goals. Reality will matter less than the semblance of reality. In some countries, such as Russia (where President Vladimir Putin recently launched a weekly reality show), that is already the case.

Kim, Kanye and Taylor

In democracies, election-related news will feature the most scandalous and emotional statements from politicians. In more authoritarian countries, leaders will use pop culture, memes and games for propaganda purposes. Around the world, key events will be accompanied by Instagram trailers, branded merchandise and seemingly off-the-cuff statements that generate headlines, trending topics and search spikes. More world leaders will bicker and spar on Twitter, Instagram and other social platforms. To understand geopolitical dynamics in 2019, students of international relations would do well to analyse the social-media spats between Kim (Kardashian West, that is, not Jong Un), Kanye and Taylor. ■

The great political divide

Globalists and nationalists will slug it out around the world

Gideon Rachman chief foreign-affairs commentator, *Financial Times*

THE CONTEST between globalists and nationalists will be a central theme of world politics throughout 2019, fought out in different ways in Europe, Asia, Africa and the Americas. The terms "globalist" and "nationalist" are, of course, inexact. But they touch upon a genuine division that spans societies with very different cultures and levels of wealth.

The most influential politician to campaign explicitly against "globalists" is Donald Trump. The American president has used the term to decry an elite who,



he argues, have sold out American workers to foreign interests. Mr Trump's economic protectionism, which gathered strength in 2018, is presented as an effort to redress the balance of power and interests.

The economics behind his America First nationalism are dubious. But there is little doubt that the president identified a genuine divide in the American electorate. Trump voters are concentrated outside big cities and are much less likely to have gone to university than their opponents. In this respect, the Trump coalition was similar to the coalition that voted in favour of Brexit in 2016.

Inside the EU, politicians such as Italy's Matteo Salvini and Hungary's Viktor Orban are part of the new wave of nationalists. In Turkey, the small-town "black Turks" have been avid backers of President Recep Tayyip Erdogan and are bitterly opposed by the more secular and internationalist "white Turks", a division which could intensify if Turkey's economic malaise persists. In Asia, too, stark divides have emerged between middle-class voters in big cities and those in small towns. The split in Thailand between rural "reds" and Bangkok-based "yellows" will be tested in a general election in 2019.

The globalist-nationalist divide will grow in signifi-

cance, across continents, throughout 2019. America's "culture wars" will intensify after the mid-term elections. The European Parliament elections in May are also emerging as a set-piece battle between nationalists and globalists. The parliament has hitherto been dominated by the centre-right and centre-left, with both political families agreed on the need to advance European unity, and relaxed about erosions of national sovereignty. But nationalist parties are gaining strength. Efforts to form a pan-European nationalist-populist front have been encouraged by Steve Bannon, who was once chief strategist in Mr Trump's White House. He has formed an alliance called The Movement grouping nationalist parties such as France's National Rally, Italy's Northern League and Belgium's People's Party.

Because the European elections are often used as an outlet for protest votes, there is the potential for Movement-affiliated parties to make big gains in May 2019. If that happens, the European Parliament could take on a new and unexpected role. For decades, the parliament has been the most integrationist body in the EU. But after May it is likely to become as well a platform for European nationalists campaigning against the "globalist" agenda of the other EU institutions.

Different continents, same confrontation

The nationalist-globalist divide will also make itself felt in elections in Africa and Asia. In South Africa, parliamentary elections will provide an opportunity for the Economic Freedom Fighters (EFF), whose central demand is the expropriation of land from whites without compensation. The EFF's ability to make a populist-nationalist case will be strengthened by the fact that the country's new president, Cyril Ramaphosa, is a businessman who has served on the boards of international companies. Mr Ramaphosa must calculate how far he can meet demands for land redistribution without alienating big business and foreign investors.

Elections in India and Indonesia will test Asian versions of the divide. India's prime minister, Narendra Modi, and his BJP party have combined Hindu nationalism with free-market rhetoric. But under economic pressure, his government has moved towards protectionism.

Indonesia will hold presidential and parliamentary elections in April. The current president, Joko Widodo, known as Jokowi, is a mild-mannered reformer who is under pressure from Islamists to adopt a more identity-based, nationalist style of politics. The fact that Jokowi has selected a conservative religious figure, Ma'Ruf Amin, as his running-mate will raise questions among investors about Indonesia's image as an outward-looking bastion of moderate Islam.

These elections are part of an emerging worldwide debate about the future of globalisation. For 30 years a consensus has reigned which led to the opening of markets. But the rise of nationalist-populist parties all over the world is threatening to change this. That struggle will be the big international political story of 2019. ■

2019 in brief

Golfers play by new rules from January. The new rules include dropping the ball from knee height rather than from the shoulder and removing the penalty for hitting the ball more than once in the course of a stroke. The sport's two governing bodies hope these will modernise and speed up play

Still endangered

Efforts to halt the illegal wildlife trade will have a higher profile

Simon Long international editor, *The Economist*

THE MULTI-BILLION-DOLLAR global trade in the products of endangered species is a big reason why the world's biodiversity is shrinking at such an alarming rate, and why even the most glamorous of "charismatic megafauna"—such as elephants, tigers, lions and rhinos—remain at risk. In 2019 the issue will receive plenty of attention. In May the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) will hold its triennial summit in Colombo, Sri Lanka. New promises will be made to punish the criminals and save the animals. But the criminals still have the upper hand.

Efforts to eliminate the trade provide an object lesson in the law of unintended consequences. Almost every success creates a new problem. One of the biggest breakthroughs in recent years, for example—China's ban on the trade in ivory and products made from it, which came into force in 2018—has cut the price of ivory, and is credited with lowering the numbers of elephants poached for their tusks in east Africa. But some ivory traders have moved into a new market: pangolins. These anteaters, prized for their meat and the alleged medicinal properties of their scales, are now the world's most traded en-



Pity the pangolin

dangered species. South-East Asian populations have already crashed. Poachers are moving to Africa.

Or take rhinos. Demand for rhino horn fell after China in 1993 banned its sale (and that of tiger bone). It was used in traditional Chinese medicine for fevers, rheumatism and gout. But demand picked up in Vietnam on equally nonsensical rumours it can cure cancer. Tiger-bone remedies are being replaced by lion- and leopard-bone ones. And so on. And China in 2018 eased the ban anyway.

So the Colombo meeting will not be quite the festival of self-congratulation many delegates must have hoped for after the previous summit in 2016. Then, in Johannesburg, CITES proclaimed a "game-changer" of an

Tales of the unexpected

Our predictions a year ago should have been bolder

Daniel Franklin editor, *The World in 2019*

OUR CRYSTAL ball a year ago foresaw lots of the trends and topics that have loomed large in 2018, such as a strongish world economy, a disruptive President Donald Trump, drama over North Korea's nukes, growing suspicion of China, Brexit brinkmanship and an intensifying backlash against tech giants. But we should have been bolder. For 2018 has turned out to be another year when what was once almost unthinkable has had a habit of happening.

Mr Trump, for example, has been even Trumpier than we expected. He has taken a wrecking ball to the world order, lambasting allies such as Germany and Canada, embracing Vladimir Putin and launching a full-scale trade war against China. We thought he would merely bad-mouth the Iran nuclear deal, but he ditched it. We reckoned that a "grand bargain" with North Korea's Kim Jong Un was not entirely inconceivable, but unlikely—and did not envisage that Mr Trump would hold a summit in Singapore with "Little Rocket Man". ("We fell in love," he now says.)



We warned that Brexit would be fraught and that Tory hardliners would fall back on the mantra that no deal is better than a bad deal. Yet if anything we underplayed quite how shambolic Britain's bargaining—with Europe and with itself—over the terms of its departure would be.

We forecast a strong year for America's economy, but not the turbo-charged financial markets that have (so far) defied our concerns about the risks to their bull run. We thought the price of oil would stay close to \$50 a barrel. At the end of September it hit a four-year high of over \$85.

As for people, we were right to predict that some prominent heads would roll: we pointed to Rex Tillerson in America and perhaps even Jacob Zuma in South Africa. But we wrongly thought that long-serving leaders such as Robert Mugabe in Zimbabwe (and Arsène Wenger at Arsenal) would hang on. We judged the chances of a populist coalition in Italy involving Matteo Salvini and Luigi Di Maio to be remote.

The lesson for 2019? Expect disruption. And watch out if you're Nicolás Maduro, Theresa May, Angela Merkel and, who knows, perhaps even Donald Trump.

I vow to thee on Monday

Why civil partnerships will become more common—among straight people

Joel Budd social affairs editor, *The Economist*

IN 2019 MORE heterosexual couples will dress up in fairly nice clothes, travel to reasonably attractive venues and make binding but not terribly solemn promises to each other. Then, instead of going on honeymoon, they will return to work. Civil partnerships are far less glitzy than weddings. But they represent a giant social change: the biggest alteration to Western marriage customs since the introduction of no-fault divorce.

When gay couples began clamouring for the right to marry, in the 1990s, many governments tried to fob them off with half-measures. Civil partnerships conferred marriage-like rights but kept the definition of marriage as a union between a man and a woman, thus suppressing conservative opposition. In some countries, civil partnerships were reserved for gays. But in others—France, the Netherlands, New Zealand, South Africa—they were open to straight people too.

At first few seemed interested. In 1998, the first year of civil partnerships in the Netherlands, just 1,616 heterosexual couples signed them, compared with 3,010 gay couples. But they caught on. In 2017 more than 17,000 opposite-sex couples were partnered in the Netherlands. One Dutch couple entered a civil partnership for every four who married. French couples are even more enthusiastic. In 2015 the number of new civil unions among straight people (182,000) was close to that of new marriages (223,000).

Now that many rich countries allow gays and lesbians to marry, civil partnerships have taken on a different hue. In England, the civil partnerships that were introduced in 2004 were intended only for gay couples. But because the government did not abol-

A semi-skimmed success



ish gay civil partnerships when gay marriage became legal, an imbalance has crept in. Gays can enter partnerships or marry, whereas straight couples can only do the second. In June 2018 the Supreme Court ruled that this is unfair, and the government will extend civil partnerships to all.

Why do straight people even want semi-skimmed marriage? Full-fat marriage has changed. It is no longer a deal that a couple makes before embarking on a shared life, but a public demonstration that two people who almost certainly live together (and may well have children) are deeply committed. That is why marriage ages are rising, divorce rates are falling, and weddings have become so lavish and gushing.

But the elevation of marriage has left a gap. People who want to express something short of utter commitment, or who cannot afford (or face) a wedding with all the trimmings, need an institution to confirm their devotion. They find it in the practical, unglamorous civil partnership. For many, the more humdrum the ceremony, the better. In the Netherlands, the most popular day to enter a civil partnership is Monday.

The elevation of marriage has left a gap

► agreement. Not only were more species added to CITES' appendices, listing those in which trade is regulated—all eight species of pangolin, for example, are now listed in Appendix 1, offering the highest level of protection—and resolutions adopted covering species such as helmeted hornbills, snakes and eels. Its 152 member governments also signed up to agreements on curbing cybercrime, corruption and demand. CITES boasted that wildlife was now "firmly embedded in the agendas of global enforcement, development and financing agencies".

As a measure of the peril, it is worth noting that about 5,800 animals and 30,000 species of plant are listed by CITES. The opportunity to see how well the world has been living up to its high-blown commitments makes the Colombo meeting even more important than its predecessor, in the view of Sabri Zain, director of policy at TRAFFIC, an NGO devoted to curbing the illegal trade. There has been progress, he says, noting how much harder it is for criminals to trade wildlife products on the

big internet platforms. It is also true that the trade has gained prominence as a policy issue, helped by a high-profile conference in London in October 2017, and that progress is being made in monitoring its infrastructure, both through haulage companies checking cargo and banks looking out for suspicious flows of money.

But in Colombo, complaints will be heard that enforcement in many countries is still woeful, and that when demand is suppressed in one place, it pops up in another—especially, given China's size, in its neighbours such as Vietnam and Laos. And the same old arguments will be heard again, between those who insist that only if local communities have an economic stake in conservation can diversity be sustained, and that hence some legal trade is essential; and those who point to the evidence that any legitimate trade both makes it easier to launder illegal products and stokes demand for the species-threatening products. That dispute, at least, is in no danger of dying out. ■

2019 in brief

Cities from Italy, Canada and Sweden submit their pitches to host the 2026 Winter Olympics

Blowing hot and cold

America's bipolar attitude to climate change will enable it to quit the Paris deal while meeting its pledges

Jan Piotrowski environment correspondent,
The Economist

DURING HIS presidential campaign Donald Trump denounced the Paris climate agreement of 2015 as one of many terrible deals struck by his predecessors. The compact entered into force on November 4th 2016, having been approved by 55 countries responsible for at least 55% of global greenhouse-gas emissions. Four days later Mr Trump was elected president, and in June the following year he announced that he would be pulling the world's second-biggest carbon emitter out of the agreement. Read the fine print, however, and signatories must wait three years before they can formally begin the year-long withdrawal procedure. Unless Mr Trump experiences a climatic conversion, which seems unlikely, he will set this process in motion in November 2019.

Until then, the United States remains in the agreement, which aims to keep global warming "well below" 2°C relative to pre-industrial levels, and ideally to no more than 1.5°C. As a party to the United Nations Framework Convention on Climate Change, the overarching international climate treaty which Mr Trump thankfully betrays no intention of quitting, America will keep sending delegations to UN talks like those in December 2018 in Poland, where rules for implementing the Paris deal are supposed to be finalised. American negotiators will also continue to disrupt these pow-wows, as they did in September in Thailand (declining even to discuss aid for developing countries' efforts to cut emissions and adapt to impacts of climate change), and a month later in South Korea, when they tried to water down the conclusions of an intergovernmental scientific report laying out how much more inhospitable Earth would become if it were 2°C hotter compared with 1.5°C.

America will be at once in the Paris deal and out of it in other ways, too, over the coming years. Although Mr Trump has said he would not honour his predecessor's pledge to reduce American carbon emissions by 26-28% below 2005 levels by 2025, the country is 60% of the way there thanks to actions by cities and states. Even as the Trump administration rolls back Barack Obama's limits on power-plant emissions and fuel-efficiency standards for cars, America's governors and mayors are pursuing ambitious decarbonisation plans of their own.

Locally does it

America's Pledge, a subnational response to Mr Trump's carbon-cuddling, calculates that local initiatives could help the country as a whole just about reach Mr Obama's non-binding target in the absence of federal commitments. California has enacted a law obliging it to derive all its electricity from clean sources by 2045; other Democrat-controlled states have adopted or are considering similar measures. Even places run by Mr Trump's fellow climate-sceptical Republicans, including Illinois, are mandating sharp rises in renewables capacity. Texas already generates a bigger share of electricity from wind

than any other state.

There are signs of climate-related confusion at the federal level, too. Congress has rejected the president's successive attempts to slash spending on climate research. And although concerns over climate change have vanished from the president's national-security strategy, the Pentagon still regards it as a grave threat, both to American military installations (vulnerable to rising sea levels or drought-provoked water shortages) and to stability in volatile regions, particularly the Middle East.

The climate-sceptic-in-chief, for his part, sounds keen on climate-friendly nuclear power and has backed tax breaks for companies to capture carbon they emit and store it underground. And for all Mr Trump's professed love of coalminers, his administration forecasts that consumption of the dirtiest fossil fuel will keep fall-

Global warning



ing, owing to cheap natural gas from shale and increasingly affordable solar and wind energy.

As in America, the outlook elsewhere looks somewhat bipolar. In China President Xi Jinping will cling to his pro-climate rhetoric, but not back it up with actions. Chinese authorities have, for instance, decided not to renew curbs on steelmaking over the coming winter; a year ago output was slashed to limit air pollution, which also reduced carbon emissions. Despite its green image, Germany has reportedly kept the EU from strengthening the bloc's climate pledges (in particular by opposing stricter emissions standards for cars). More financial firms are talking up climate-related risks to their portfolios—but these have yet to show up in share prices of exposed companies.

In a tacit acknowledgment of slow progress, António Guterres, the UN's secretary-general, plans to hold a summit of world leaders in September to call for more ambitious measures. Expect Mr Trump to skip it. ■

2019 in brief

Ny Anstalt, the world's newest humane prison, begins taking in Greenland's most dangerous criminals. Its architects say it is designed as a small village to encourage rehabilitation and the reintegration of prisoners into their communities

A picture of probabilities

The world has experienced a rollercoaster ride in recent years. That journey is a reminder, if any were needed, that the future is uncertain. How might 2019 pan out? James Fransham from our data team turned to the wisdom of crowds (including prediction markets, financial futures, expert panels) to gauge the likelihood of certain events. So take your pick: you can see the future as lying in the lap of the gods—or in our map of the odds.



Follow the trendlines



Deep trends suggest
more progress will come
in the years ahead,
predicts **Steven Pinker**,
Johnstone family
professor, Harvard
University

THE WORLD in 2019, as seen through the news, will be a depressing place. The headlines will tell us about terrorism, war, inequality, pollution. But journalism, even at its most accurate, is bound to paint a distorted picture of reality. News is about things that happen, such as wars and epidemics, not things that don't happen, such as peace and health. Adding to the gloom is the ethos of journalism, in which reporting failure is considered a professional duty, whereas reporting success is considered public relations. All this creates a market for entrepreneurs of mayhem, such as terrorists, rampage shooters, trolls and politicians, who leverage fear and outrage into saturation coverage.

The bugs in journalism fiendishly engage the bugs in our psychology. The human mind estimates risk by the anecdotes and images turned up by its internal search engine, which favours vividness and recency. People thus think tornadoes kill more victims than asthma attacks, which are in fact 80 times as lethal.

To get an accurate picture of the world, you have to *count*. The data confirm an observation by Franklin Pierce Adams: nothing is more responsible for the good old days than a bad memory. The world in earlier decades had more deaths from war, homicide, infectious disease and terrorism; more poverty, autocracies and nuclear weapons; more air and water pollution in rich countries and more cooking smoke and contaminated water in poor ones.

Beyond the headlines

Lest this seem incredible, recall that the 1970s and 1980s saw double-digit inflation and unemployment, gasoline lines, a nuclear stand-off between America and the Soviet Union, communist dictatorships in eastern Europe, fascist ones in Spain and Portugal, military ones across Latin America and East Asia, Marxist and secessionist terrorist brigades in Europe, civil wars throughout Africa and an Iran-Iraq war that killed more than half a million people.

The stealthy improvements in recent decades fall into a longer trend of progress. Since the 18th-century Enlightenment, life expectancy across the world has increased from 30 to 71 years, extreme poverty has fallen from 90% to 10%, literacy has risen from 12% to 83%, and the share of people living in democracies has leapt from 1% to two-

thirds. Since 1945, wars between states have become rare, battle deaths have declined more than tenfold and billions of lives have been enhanced by revolutions in the rights of racial minorities, women and gay people.

Past performance is no guarantee of future results. But neither is history cyclical, with gains predictably cancelled by losses. Unlikely to make a comeback are human sacrifice, slave auctions, eunuchs, heretic-burnings and male-only suffrage, and the same may be true of great-power war, unregulated emissions and male-only schooling. The forces that have propelled progress—knowledge, prosperity, connectivity—will probably not go into reverse, and they build on one another. A richer world can better afford to protect the environment, police its gangs, strengthen its social

To get an accurate picture of the world, you have to count

safety-nets, and teach and heal its citizens. A better-educated world cares more about the environment and human rights.

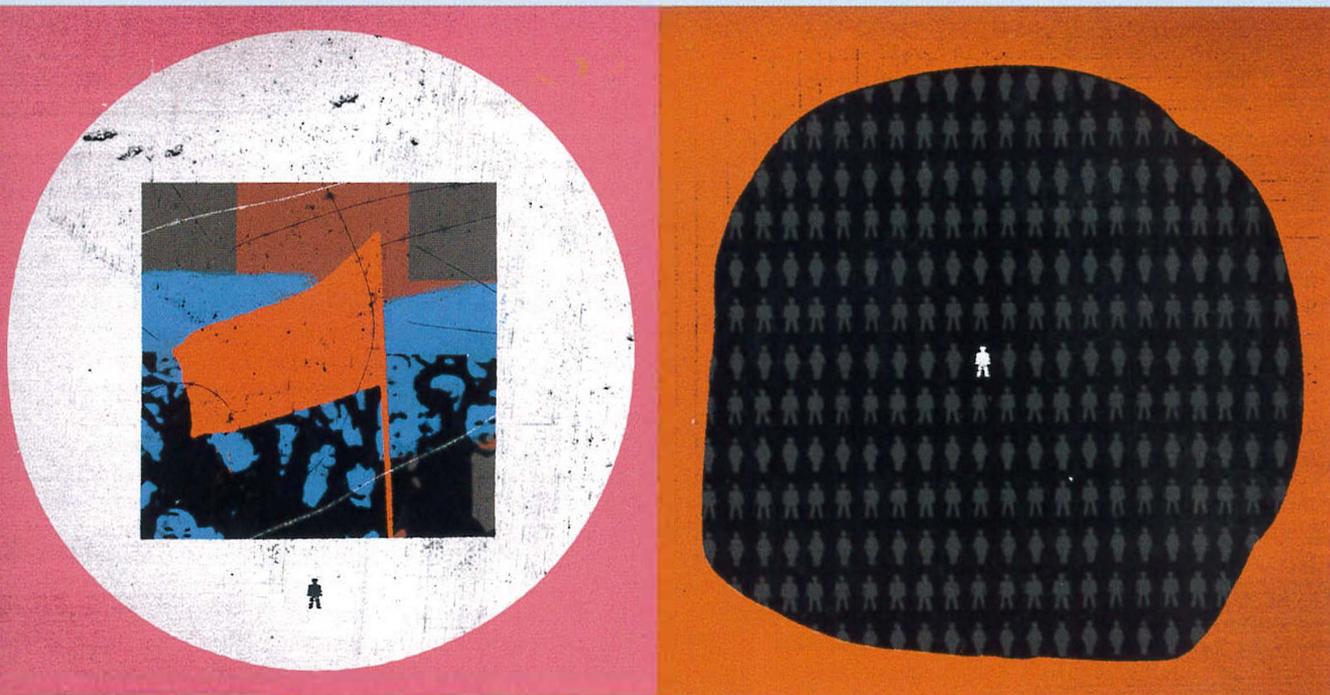
To be sure, not everything gets better for everyone everywhere all the time. Progress is the fruit of human ingenuity deployed to solve problems. Problems are inevitable, and solutions create new problems, which must be solved in their turn. Nor are solutions to the biggest problems, particularly climate change, guaranteed.

A major worry today is that the rise of authoritarian populism threatens progress. Yet here too the headlines made by tweeting populists may not be a weather vane for the prevailing winds. Today's ardent populists tend to be rural, less educated, religious, white and members of the early baby-boom generation. But demography will make tomorrow's electorate more urban, educated, secular, ethnically diverse and millennial. Also, isolationism and militant nationalism may be engulfed by the unstoppable tide of globalisation. The problems facing individual countries—migration, pandemics, terrorism, cybercrime, nuclear proliferation, rogue states, the environment—will increasingly require international solutions.

No one can predict whether the progress of recent decades and centuries will play out in the coming year. But to understand the world we should follow the trendlines, not the headlines.

open future

A global conversation



To coincide with its 175th anniversary in 2018, *The Economist* launched **Open Future**, a conversation about the role of markets, freedom and technology in the 21st century. This special section presents some highlights, focusing on themes that will resonate in 2019 and beyond

economist.com/openfuture

Moving beyond nationalism

Three global problems create a need for loyalty to humankind and to planet Earth

Yuval Noah Harari historian and author

FOR SEVERAL generations the world has been governed by what today we call “the global liberal order”. Behind these lofty words is the idea that all humans share some core experiences, values and interests, and that no human group is inherently superior to all others. Co-operation is therefore more sensible than conflict. All humans should work together to protect their common values and advance their common interests. And the best way to foster such co-operation is to ease the movement of ideas, goods, money and people across the globe.

Though the global liberal order has many faults and problems, it has proved superior to all alternatives. The liberal world of the early 21st century is more prosperous, healthy and peaceful than ever before. For the first time in human history, starvation kills fewer people than obesity; plagues kill

fewer people than old age; and violence kills fewer people than accidents. If you think we should go back to some pre-liberal golden age, please name the year in which humankind was in better shape than in the early 21st century. Was it 1918? 1718? 1218?

Nevertheless, people are losing faith in the liberal order. Governments throughout the world are increasingly restricting immigration, imposing high tariffs, censoring foreign ideas and turning their countries into walled fortresses. If this continues, the global liberal order will collapse. What might replace it? While nationalism has many good ideas about how to run a particular nation, unfortunately it has no viable plan for running the world as a whole.

Some nationalists hope the world will become a network of walled-but-friendly fortresses. Each national fortress will protect

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its unique identity and interests, but all the fortresses could nevertheless co-operate and trade peacefully. There will be no immigration, no multiculturalism, no global elites—but also no global war. The problem with this vision is that walled fortresses are seldom friendly. In the past, all attempts to divide the world into clear-cut nations have resulted in war. Without some universal values and global organisations, rival nations cannot agree on any common rules.

Other nationalists adopt an even more extreme position, saying that we don't need any global co-operation whatsoever. Each nation should care only about its own interests, and should have no obligations towards the rest of the world. The fortress should just raise its drawbridge and man its walls—and the rest of the world can then go to hell.

Balancing nationalism with globalism

This nihilistic position is nonsensical. No modern economy can survive without a global trade network. And, like it or not, humankind today faces three common problems that make a mockery of all national borders, and that can be solved only through global co-operation. These are nuclear war, climate change and technological disruption.

You cannot build a wall against nuclear winter or against global warming, and no nation can regulate artificial intelligence or bioengineering single-handedly. It won't be enough if only the European Union forbids producing killer robots or only the United States bans genetically engineering human babies. If even one country decides to pursue these high-risk high-gain paths, other countries will be forced to follow its dangerous lead for fear of being left behind. So whenever a politician says "My Country First", we should ask him or her: how can your country by itself prevent nuclear war, stop climate

Mass loyalties have appeared only in the past few thousand years

Yuval Noah Harari is the author of "Sapiens" (Harvill Secker), "Homo Deus" (Harvill Secker) and "21 Lessons for the 21st Century" (Jonathan Cape)

change and regulate disruptive technologies?

To successfully confront these three problems we need more, rather than less, global co-operation. We need to create a global identity and encourage people to be loyal to humankind and to planet Earth in addition to their particular nation. Nationalism need not prove an impossible barrier to creating such a global identity. Human identities are quite adaptable.

Today's nation-states are not an eternal part of human biology or psychology. There were no Italians, Russians or Turks 5,000 years ago. True, humans are social animals through and through, with group loyalty imprinted in our genes. However, for millions of years humans lived in small, intimate communities rather than in large nation-states. *Homo sapiens* eventually learned to use culture as a basis for large-scale co-operation, which is the key to our success as a species. But cultures are flexible. Unlike ants or chimpanzees, Sapiens can organise themselves in many different ways, none of which is "the natural way". City-states are not more natural than empires, and nation-states are not more natural than tribes. They are different options on the Sapiens menu, and the choice between them depends on changing circumstances.

Large nations appeared only in the past few thousand years—yesterday morning, on the timetable of evolution—and they developed in order to deal with large-scale problems that small tribes could not solve by themselves. In the 21st century we face global problems that even large nations cannot solve by themselves. Hence it makes sense to switch at least some of our loyalties to a global identity.

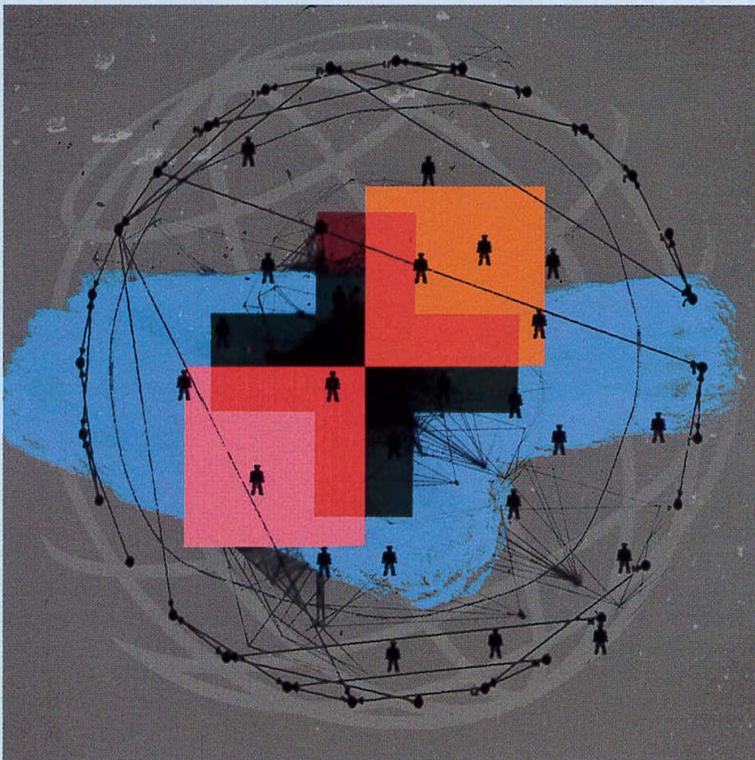
It does not mean establishing a global government or abolishing all cultural, religious and national differences. I can be loyal at one and the same time to several identities—to my family, my village, my profession, my country, and also to my planet and the whole human species. It is true that sometimes different loyalties might collide, and then it is not easy to decide what to do. But who said life was easy? Life is difficult. Deal with it. Sometimes we put work before family, sometimes family before work. Similarly, sometimes we need to put the national interest first, but there are occasions when we need to privilege the global interests of humankind.

Vote for visionaries

What does all that mean in practice? Well, when the next elections come along, and politicians want you to vote for them, ask these politicians four questions:

- If you are elected, what actions will you take to lessen the risks of nuclear war?
- What actions will you take to lessen the risks of climate change?
- What actions will you take to regulate disruptive technologies such as AI and bioengineering?
- And finally, how do you see the world of 2040? What is your worst-case scenario, and what is your vision for the best-case scenario?

If some politicians don't understand these questions, or if they constantly talk about the past without being able to formulate a meaningful vision for the future, don't vote for them. ■



How to alleviate the refugee crisis

THE NUMBER of refugees worldwide has climbed for six consecutive years. Some 68m people are now displaced by violence and persecution—equal to a fifth of the population of America, nearly half that of Russia and more than the entire population of Britain.

At the same time, humanitarian support is chronically underfunded. As of September 2018 the United Nations' refugee agency, the UN High Commissioner for Refugees (UNHCR), and its partners had received just 31% of the funds they needed to provide basic assistance to millions of Syrian refugees and displaced people. The same dire situation exists elsewhere too, with less than half the amount of humanitarian funds needed in the vast majority of conflict-affected countries. If nothing is done, this trend of growing numbers and scarce resources will continue, with severe consequences, in 2019.

This is not a sustainable situation. The answer does not lie in countries adopting harsh unilateral measures that target refugees and that run counter to humanitarian values and responsibilities. That will only inflame the problem.

Instead, we must reduce the number of displaced people worldwide by preventing and solving the conflicts that drive them from their homes. We must rally people and countries to act together based on common interests and universal aspirations for security, dignity and equality. This does not have to come at the expense of our safety and economic well-being at home, but is an essential requirement when facing problems of international dimensions.

Rights, funding, action

Let's look at the facts. First, 85% of all refugees live in low- and middle-income countries. Most people who are displaced by violence remain within the borders of their own countries. Those who are forced out tend to stay as close as they can to home, in neighbouring nations. Less than 1% of all refugees are resettled, including in Western countries. The world's poorer countries are bearing the brunt of the burden. We cannot assume that they will continue to do this irrespective of policies in wealthier nations. If the number of refugees grows, as it probably will in 2019, so too will the tension this imbalance causes unless we do a better job of sharing responsibility.

Second, for all the generosity of taxpayers

in the West and all the lives that are saved by this, the billions of dollars in humanitarian aid provided annually do not come close to meeting the needs of 68m forcibly displaced people, let alone if the numbers keep growing.

Third, as many as two-thirds of all the refugees under the UNHCR's mandate come from just five countries: Syria, Afghanistan, South Sudan, Myanmar and Somalia. Peace in any one of them would create the conditions for people to return home, and reduce the numbers of refugees worldwide by millions. In democracies we, as voters, should challenge our politicians to answer how their policies address the roots of the problem.

We've managed to bring the numbers down before. When I first started working with the UNHCR in 2001, the number of refugees worldwide was falling. One of my first missions was to accompany returning Cambodian refugees. I met some of the many people who returned to their homes after the end of the conflicts in the former Yugoslavia. Look further back in history, and after the second world war millions of refugees were resettled.

This strategy will take vision and persistence and strength. Not the parody of strength involved in tough talk against

We've managed to bring the numbers down before

refugees, but the resolve, will and diplomatic skill needed to negotiate peace settlements, stabilise insecure countries and uphold the rule of law.

A refugee is a man, woman or child at their most vulnerable: forced from their home, living without the protection of their state, and in many cases without the bare means of survival. It is the human condition that tests our belief that all human beings have equal rights and deserve protection.

We live in divisive times. However, history also shows our ability to unite, overcome a global crisis and renew our sense of purpose and community with other nations. That is the greatest strength of an open society.

In 2019 we should not leave the debate to those who would exploit public anxiety for political advantage. We are being tested today. Our response will be the measure of our humanity.



Our response to the plight of refugees in the coming year will be the measure of our humanity, writes Angelina Jolie, actor and special envoy of the UNHCR

Winning thoughts

Extracts from the winning essays on five themes in our competition for people aged between 16 and 25

Open Borders

Does immigration strengthen or undermine tolerance?

MOVING FROM Malaysia to New Zealand, our family has seen it all. We have learned (albeit reluctantly) to put Marmite on toast as well as in rice congee. They have learned (albeit reluctantly) to use peanuts and spices in satay sauce, instead of peanut butter and cream. We have also seen a darker underbelly, the seething resentment and implicit discrimination occasionally boiling over into outright racism. A tolerance of immigrants indicates, at best, an apathetic disregard for them, and at worst, an active hostility kept under wraps simply because they are perceived as necessary. We should look past just celebrating immigrants' bank balances and university degrees, to also see their unique cultures, perspectives and ways of life. We must no longer simply stand for "tolerance" of immigrants, but we must stand for accepting, respecting and understanding them too.

Denzel Chung, 19, from New Zealand, is an undergraduate student at the University of Otago

Open Ideas

What should a commitment to free speech on campus entail?

FOUR YEARS ago, I left my home country, a former communist state in eastern Europe, to attend a private university in "the land of the free". I was leaving a country where my grandparents used to be afraid to read the Bible or tell political jokes, in fear of being imprisoned or, worse, being sent to a labour camp. I was going to the most liberal part of America, carrying with me a love of freedom, born from the painful history of a country where censorship used to be a powerful tool for oppression. In my first week on campus, a classmate questioned affirmative action in tech. He did not receive an answer but a label: "bigot", "misogynist", "-phobe". Not only his "privilege" (white, straight, male) seemed to disqualify him from participating in such discussion, but the conversation itself was deemed inappropriate and offensive.

Katherine Krem, 23, from Bulgaria, is a recent graduate of Stanford

Open Markets

What is the best way to improve competition in modern capitalism?

THROUGH THE noise surrounding American politics, one of the most important antitrust rulings in recent years slipped past largely unnoticed. In *Ohio v American Express*, the court ruled in favour of American Express, allowing it to prevent merchants from "steering" consumers

away to cheaper payment methods such as cash, Visa or Mastercard. The case might seem anodyne but it touches on one of the biggest challenges facing competition-policy practitioners today: how to deal with firms serving two distinct groups of customers. As digital platforms become increasingly pervasive and powerful, ensuring that they act fairly is a crucial matter. The case illustrates the competition problem that major economies have. What is needed is a systematic framework for the nascent and mighty digital-platform businesses, building on *Ohio v American Express*, to change that.

Charlotte Grace, 23, from Britain, is a graduate student at Oxford

Open Progress

Do the benefits of artificial intelligence outweigh the risks?

THERE ARE many unknowns in the progress of AI, and concerns should be met with due caution. But a fear of the unknown should not stop the advance of responsible AI development. Rather than ignoring researchers' concerns until the technology is mature, as with nuclear weapons, governments should open dialogue with AI researchers to design regulations that balance practicality with security. AI is already making our lives easier, and its progress will continue to produce useful applications. With the right policies we can work towards a future where AI systems are friendly and military AI applications are out of the hands of malicious agents, while the underlying technology continues to be a driver of productivity and innovation.

Frank Ruta, 24, from America, is a graduate student at Columbia

Open Society

Has political correctness gone too far?

IN ITS MODERN iteration, the phrase "political correctness gone too far" pops up in a couple of different forms. First, there is the use of the word "snowflake" to criticise younger generations, who are perceived as thin-skinned and less resilient than their forebears. The second invocation of PC gone mad is "freedom of speech": specifically the idea that the use and enforcement of politically correct language will endanger it and by extension freedom of thought. Regardless of how it is labelled, its underlying idea is the same: that measures to increase "tolerance" threaten the liberal, Enlightenment values that have forged the West. But those who invoke "political correctness" often use it for more cynical means. It is a smoke screen for regressivism. It is an illiberal argument masquerading as the opposite.

Julia Symons, now 26, from Australia, is a graduate student at the LSE

The full essays, and an explanation of the contest and its themes, can be found at Economist.com/

Gathering of the grassroots

Amid cowardice, cruelty and suffering, there are heroes: what if they all got together?



Zeid Ra'ad Al Hussein former UN high commissioner for human rights

WINSTON CHURCHILL claimed that courage is the most esteemed of human qualities, because it guaranteed all others. He was right. At best, courage is self-sacrificing, nonviolent, modest and based on universal principles—and immensely powerful. Think Mahatma Gandhi or Martin Luther King. Regrettably, courage is also rare.

Some of today's politicians—such as Donald Trump in America, Viktor Orban in Hungary and Matteo Salvini in Italy—are keen to be viewed as virile leaders of their respective countries, and inflate their images at the expense of the most vulnerable in society. Leaders like this are bullies. If they are growing in number it is because many other politicians are mediocre. Too busy with themselves, or too afraid to stand up to the demagogues, they shelter in the safety of silence and shuffled papers. Too many summits are meaningless affairs full of jargon and clichés.

What is absent is a sincere will to work together. The systems for states to act collectively at higher levels in pursuit of solutions to the world's problems are decomposing. Politicians across the world are too self-serving or too spiteful to care for and protect the most vulnerable. This places at risk not only their own futures, but everyone else's as well.

But there is hope. Instead of the elected xenophobes and charlatans, we should look to grassroots activists for guidance. They are the leaders of communities and social movements who are willing to forfeit everything—including their lives—in defence of

human rights. Their valour is unalloyed and selfless.

True leadership looks like the work of Sima Samar in Afghanistan, who leads the country's independent human-rights commission fearlessly, even when threats to her personal safety abound. It looks like Angkhana Neelapaijit from Thailand, who has fought tirelessly against enforced disappearances ever since her husband disappeared in 2004. It is embodied in the work of Denis Mukwege, a Congolese gynaecologist, who specialises in the treatment of women who have been raped. These names are just a sample of the real store of moral courage and leadership that exists among us today. That Dr Mukwege shared the Nobel peace prize in 2018 with Nadia Murad, a Yazidi human-rights activist, shows grassroots leaders around the globe that the world is listening to them.

Yet though some activists speak from an individual vantage point, fighting specific battles on behalf of their local communities, others lead broader social movements. Worldwide, they are not co-ordinated.

Activists of the world, unite!

What if they were? What would happen if all the movements supported each other, openly and actively? What if 100m or more people around the world marched in protest at ineptitude, selfishness, cruelty and the other threats to our collective well-being? A co-ordinated, focused, human-rights movement would need the backing of business leaders, too. Funding and collaboration with big business might just be the shock therapy the dangerous or useless politicians who now threaten humanity need. In 2019 it is time to gather the troops and work as a united front for a common good. ■

open future in brief

I am writing a piece in which I suggest why Muhammad bin Salman needs a free press. I propose the Kuwaiti publication law as a model. [There] the media has more room to debate...but does not criticise the emir...I'm not an extremist...We don't need [a regime change] in Saudi Arabia...I just want a reformed system. I want the system to give me a voice to allow me to speak.

Jamal Khashoggi, journalist (interviewed before his murder in the Saudi embassy in Istanbul)

The Universal Declaration of Human Rights should explicitly include digital rights. If AI is to serve society, it must be held to the highest ethical standards...A fairer world won't emerge by accident. We need our institutions to guarantee ethical outcomes, and to preserve human dignity as societies and technologies evolve.

Mustafa Suleyman, co-founder, DeepMind

No institution...can help us if we lose our sense of shared humanity and if people everywhere see themselves as victims with a licence to trample the rights of others in search of revenge. We have learned from history that the confident and wise build systematically with brick, while the frightened and self-absorbed build hastily with straw.

Madeleine Albright, former US secretary of state

Towards a legacy of inclusion



Tackling income and gender inequality can have a huge economic impact, says Christine Lagarde, managing director of the International Monetary Fund

WHAT KIND of a legacy do we want to leave? It is a question we need to ask ourselves as we seek to solve the great challenges of the 21st century. The United Nations' Sustainable Development Goals (SDGs) embody the contours of the world we want and need: fairer, free of poverty and deprivation, a world that respects natural limits.

The SDGs overlap with the mandate of the International Monetary Fund to the extent that they affect sustainable and inclusive economic growth. They are the antidote to the loss of trust in institutions of all kinds, and the loss of faith in global co-operation. To achieve these goals by 2030, we must place emphasis on inclusion—both in terms of income inequality and gender equity. This should be a priority for 2019 and beyond.

Start with income inequality, which has become one of the global economy's greatest challenges. Some regions have seen remarkable progress in reducing poverty and expanding the middle class over the past few decades. But although inequality has been reduced among countries, this has not happened within countries.

Since 1980 those in the top 1% globally have seen twice as much of the gains from growth as the bottom 50%. Over that period, income inequality has been on the rise in most advanced economies. This is partly due to technology, partly to global integration and partly a result of policies that favour capital over labour.

The implications are alarming. In advanced economies, rising inequality is contributing to the withering away of entire communities and ways of life. It is leading to the unravelling of both social cohesion and a sense of a common destiny. And it is fuelling the growing tendency to replace deliberation with demonisation, partnership with parochialism.

Measuring up

Inequality undermines the idea of a meritocratic society, as a small minority gain access to the many tangible and intangible benefits needed to get ahead, whether it is education, cultural enrichment or well-placed connections. Such exclusion, whereby inequality of outcomes feeds through to inequality of opportunities, hurts productivity because it deprives the economy of the skills and talents of those who are excluded.

What about gender equity? The sad reality is that girls and women all over the world continue to face the daily indignities of discrimination, harassment and too often violence as well. About 90% of countries have some legal restriction on women's economic activity. In sub-Saharan Africa, IMF researchers estimate that reducing gender inequality by ten percentage points could boost growth by two percentage points over five years.

And the beauty is that men need not lose out. By bringing more women into the fold in 2019, the economy can benefit from their talents, skills, unique perspectives and ideas. Greater diversity should boost productivity and lead to higher wages for *all*.

How do we increase women's participation? In low-income countries, it means reducing gender gaps in health and education, supporting financial inclusion, investing in infrastructure and ensuring better access to clean water and sanitation. In advanced economies, policies such as parental leave and providing access to af-

Finance would benefit enormously from greater diversity

fordable and high-quality child care can make a big difference.

There is also the need to boost female leadership in the corporate world. Adding one more woman in senior management, or to a company's board, raises its return on assets by 8-13 basis points (hundredths of a percentage point), according to one study. Another study, from the IMF, shows that in the financial sector, a higher share of women on bank boards is associated with greater financial resilience. And the presence of more women on banking supervision boards is associated with greater financial stability.

Yet there is a long way to go. Across the world, less than a fifth of bank board members and only 2% of bank chief executives are women. Finance would benefit enormously from greater diversity. More diverse views in leadership mean there is less likelihood of sinking into the quagmire of groupthink and unconscious biases. This in turn leads to more prudent decision-making and a greater focus on longer-term sustainability.

We need to work on these goals in 2019. Realising them is for the future: for our children and their children's children.

The world in numbers

Countries

EUROPE

Austria	86
Belgium	86
Bulgaria	86
Croatia	86
Czech Republic	86
Denmark	86
Estonia	86
Finland	86
France	86
Germany	86
Greece	87
Hungary	87
Ireland	87
Italy	87
Latvia	87
Lithuania	87
Netherlands	87
Norway	87
Poland	87
Portugal	87
Romania	88
Russia	88
Slovakia	88
Slovenia	88
Spain	88

ASIA

Sweden	88
Switzerland	88
Turkey	88
Ukraine	88
United Kingdom	88
Australia	89
Bangladesh	89
Hong Kong	89
India	89
Indonesia	89
Japan	89
Kazakhstan	89
Malaysia	90
New Zealand	90
Pakistan	90
Philippines	90
Singapore	90
South Korea	90
Sri Lanka	90
Taiwan	90
Thailand	90
Uzbekistan	90
Vietnam	90

NORTH AMERICA

Canada	91
Mexico	91
United States	91
Argentina	91
Bolivia	91
Brazil	91
Chile	91
Colombia	91
Cuba	92
Ecuador	92

Paraguay	92
Peru	92
Uruguay	92
Venezuela	92

LATIN AMERICA

Argentina	91
Bolivia	91
Brazil	91
Chile	91
Colombia	91
Cuba	92
Ecuador	92

MIDDLE EAST & AFRICA

Algeria	92
Angola	92
Cameroon	92
Egypt	92
Ethiopia	92
Iran	92
Iraq	93

Israel	93
Jordan	93
Kenya	93
Lebanon	93
Libya	93
Morocco	93
Nigeria	93
Saudi Arabia	93
South Africa	93
Syria	93
Zimbabwe	93

GDP

% change on a year earlier



Syria will be the fastest-growing economy in 2019, rallying from the chaos of civil war, even as intermittent fighting persists on a more localised scale. Limited reconstruction will begin in government- and Kurdish-held areas, and funds from Syrian expatriates will start returning, boosting consumer spending. The coastal region will experience the fastest growth, and recaptured agricultural lands will allow for a pick-up in exports. Even oil and gas production will tick up.

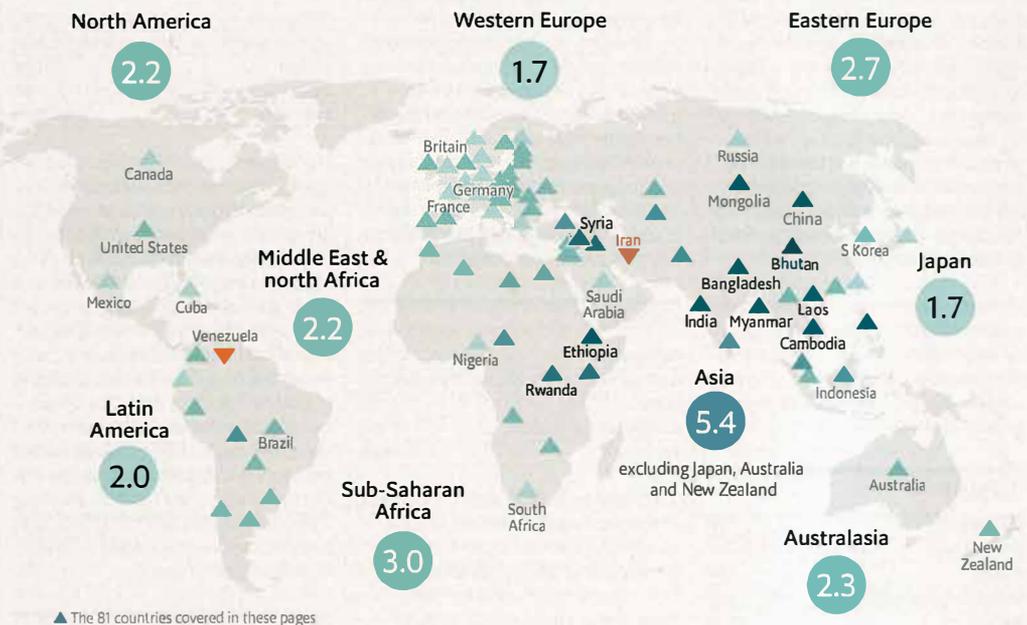
Most of the other top-ten countries are using a period of political stability and a mostly favourable global economic environment to engineer sustained catch-up growth. This is the case for the two African entrants, Ethiopia (whose sparkling pace of agriculture-led growth has slowed but is still enough to earn fifth place) and Rwanda, as well as for Bangladesh. Laos and Myanmar will benefit from big power-generation projects, as will Bhutan. Mongolia, which fell out of the ranking for 2018 as commodities markets slumped, returns for 2019 as mining activity picks up.

The only major economy in this group is India. It will grow by a robust 7% or more for the next several years, helped by free-spending consumers.

2019 forecasts unless otherwise indicated. Inflation: year-on-year annual average. Dollar GDPs calculated using 2019 forecasts for dollar exchange rates (GDP at PPP, or purchasing-power parity, shown in brackets). All figures simplified by rounding.

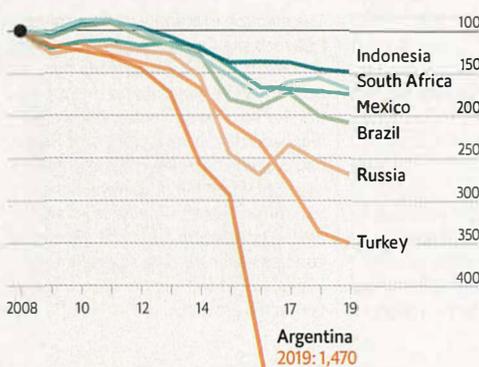
Top ten growers

Syria	▲ 9.9	Bangladesh	▲ 7.7	India	▲ 7.6	Bhutan	▲ 7.4	Ethiopia	▲ 7.3	Laos	▲ 7.3	Rwanda	▲ 7.3	Myanmar	▲ 7.2	Cambodia	▲ 6.8	Mongolia	▲ 6.8
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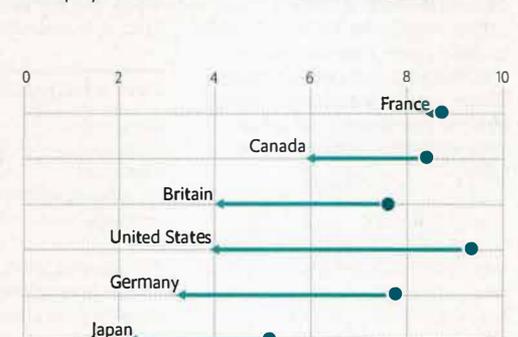
Sound as a dollar?

Exchange rates, selected emerging-market currencies per \$ 2008=100, inverted scale



A decade of jobs growth

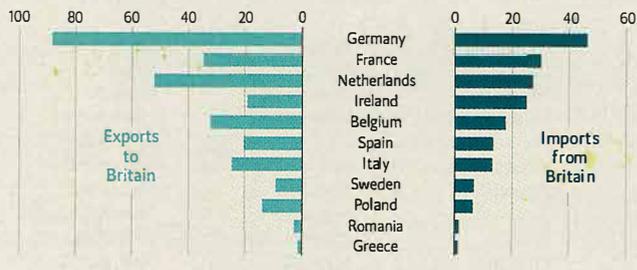
Unemployment rate, %



Europe

Brexit balance

Britain, trade with EU states, 2017, \$bn



Austria

GDP growth	1.9%
GDP per head	\$55,410 (PPP: \$58,210)
Inflation	1.9%
Budget balance (% GDP)	-0.2
Population	8.6m

Europe's youngest national leader, Chancellor Sebastian Kurz (33 in 2019), leads a coalition of the centre-right Austrian People's Party and the far-right Freedom Party, brought together by a common commitment to limiting immigration and curbing benefits for asylum-seekers. Gaps are wider on economic policy, but there will be progress on a modest programme of reforms designed to improve business conditions. The economy will settle to its trend growth rate.

TO WATCH: Gear change. Austria's open economy is particularly vulnerable to external headwinds, and an escalation of the tariff war between the EU and America, particularly in the automotive sector, would hurt.

Belgium

GDP growth	1.6%
GDP per head	\$47,830 (PPP: \$50,390)
Inflation	1.9%
Budget balance (% GDP)	-0.9
Population	11.6m

A coalition of four centre-right parties combining the Flemish and Francophone constituencies has set aside its divisions to deliver a broad reform programme, and is well placed to retain power after elections in May. Policies to promote job creation, tighter budget controls and a better business environment will deliver steady growth as European demand rallies.

TO WATCH: Breaking away. Vlaams Belang, a Flemish separatist party, has made gains since the New-Flemish Alliance, the Flemish leaders in government, shifted focus to liberalising reforms, and will present a challenge in the May elections.

Bulgaria

GDP growth	3.2%
GDP per head	\$9,740 (PPP: \$22,820)
Inflation	3.0%
Budget balance (% GDP)	-0.2
Population	7.0m

The government, led by the centre-right Citizens for European Development of Bulgaria and headed by the prime minister, Boyko Borisov, may be brought down early by internal rifts. Disagreements with ultra-nationalists over judicial reform, corruption and electoral changes that would weaken smaller parties threaten the government's slim parliamentary majority. The country will enter the European exchange-rate mechanism in July ahead of full euro adoption.

Croatia

GDP growth	2.7%
GDP per head	\$15,470 (PPP: \$28,380)
Inflation	1.5%
Budget balance (% GDP)	-0.6
Population	4.1m

The coalition formed after the collapse of the previous government in 2017, comprising the conservative Croatian Democratic Union (HDZ) and MPs from the liberal Croatian People's Party, is also vulnerable to an early demise. Andrej Plenkovic, the prime minister and HDZ leader, wants to move further towards the centre, but is opposed from both within and outside the party. Emigration and labour shortages are brakes on the economy.

Czech Republic

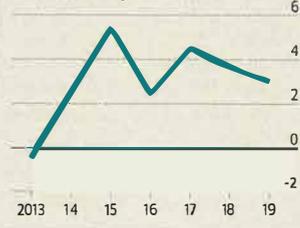
GDP growth	3.0%
GDP per head	\$24,940 (PPP: \$40,780)
Inflation	2.2%
Budget balance (% GDP)	0.7
Population	10.6m

The prime minister, Andrej Babis, and his centrist ANO movement lead a minority government in alliance with the Czech Social Democratic Party, and are reliant on the Communist Party of

Bohemia and Moravia to pass key legislation. Mr Babis, a former businessman, is willing to work with left or right when required. Given the opportunity, he will trigger early elections to secure a more stable majority for his pro-business platform, so a trip to the polls is possible. The economy will slow as it hits supply-side constraints including an overheated labour market—a cost of recent rapid expansion.

Cooling

Czech Republic, GDP, % increase on a year earlier



Denmark

GDP growth	2.0%
GDP per head	\$61,640 (PPP: \$55,190)
Inflation	1.3%
Budget balance (% GDP)	-0.9
Population	5.8m

The minority Liberal Party-led coalition will limp towards elections in June (though they may come earlier), dependent on the anti-immigrant Danish People's Party (DF) for a legislative majority. The DF stayed out of government despite getting most right-of-centre votes in 2015, but has recently allied itself with the centre-left Social Democrats, breaking traditional left-right lines. The Social Democrats will attempt to govern alone if, as seems likely, they do well in the elections. Migration will be the key election issue, with all parties adopting a tougher line. Rising employment and buoyant consumer spending will keep economic growth steady.

Estonia

GDP growth	3.3%
GDP per head	\$23,860 (PPP: \$35,190)
Inflation	3.3%
Budget balance (% GDP)	-0.4
Population	1.3m

The election in March will be a contest between the Centre Party (left-leaning despite its name), which leads the coalition government, and the opposition Reform Party. Neither has a clear lead, and the Social Democratic Party could play kingmaker. The next government, of whatever stripe, will have to confront issues ranging from an ageing population and rural poverty to concerns over Russian assertiveness. Rising wages will sustain spending and economic growth.

Finland

GDP growth	1.8%
GDP per head	\$50,770 (PPP: \$48,270)
Inflation	1.8%
Budget balance (% GDP)	-0.4
Population	5.6m

Having shed its far-right partner, the ruling coalition, headed by the Centre Party, will limp to the general election in April, the outcome of which is too close to call. Good economic performance has favoured those in government, but the opposition Social Democratic Party is polling strongly in the government's support. The business cycle is maturing, and global protectionism threatens further headwinds, so economic growth will slow.

TO WATCH: Marital support. The small town of Sonkajärvi will host the World Wife Carrying Championships in July. The winning partners receive the wife's weight in beer and a bag of "wife-carrying products".

France

GDP growth	1.6%
GDP per head	\$44,090 (PPP: \$47,090)
Inflation	1.5%
Budget balance (% GDP)	-2.3
Population	65.5m

The president, Emmanuel Macron, will use his support in the parliament to press ahead with an ambitious programme of business and government reforms in the face of flagging public approval and some pushback in his own party. He has already faced down the small but powerful union movement to reform the national rail company. Other sacred cows lined up for slaughter include a bloated legislature, a rigid benefits system and a complex pensions regime. Mr Macron will lead in foreign policy, too, energising European reforms and providing a counterweight to the unilateralist American president, Donald Trump.

Germany

GDP growth	1.8%
GDP per head	\$50,520 (PPP: \$54,650)
Inflation	1.9%
Budget balance (% GDP)	1.1
Population	82.8m

The grand coalition comprising the CDU and its sister party, the CSU, on the centre-right and the SPD on the centre-left is backing Angela Merkel, the chancellor, through her fourth term. The relationship will be more fractious than before; this is almost certainly Mrs Merkel's final stint, so all parties will have an eye on the succession. At the same time the SPD, bruised from previous coalition experiences, will seek to distinguish itself

The World in 2019

Countries

from its powerful partners. The government will spend more on infrastructure and child care, but faced by tariffs, Brexit fallout and a car-emissions scandal, the economy will slow.

Greece

GDP growth	2.0%
GDP per head	\$19,890 (PPP: \$28,750)
Inflation	1.3%
Budget balance (% GDP)	-0.6
Population	11.1m

The left-right coalition under the prime minister, Alexis Tsipras, will struggle to complete its term, and elections set for September may come early. The economy will pick up as it emerges from its third bail-out, with tourism receipts and retail sales offsetting the damage from fiscal restraint and choppy trade. On most measures the economy remains well below its pre-crisis levels, but the worst is over. A fragile banking system, the need for primary budget surpluses and sluggish jobs growth will keep any new government busy.

Hungary

GDP growth	2.9%
GDP per head	\$16,880 (PPP: \$31,960)
Inflation	3.3%
Budget balance (% GDP)	-2.1
Population	9.7m

The nationalist and populist government under the prime minister, Viktor Orbán, and his Fidesz party begins its third term facing sanctions from the EU over its illiberal policies, but with tailwinds from a big majority in the legislature, an opposition in disarray and a growing economy. A tight labour market, budget controls and slowing trade mean growth will be weaker, with the risk of American tariffs on the EU's automotive exports adding to the clouds on the horizon.

Ireland

GDP growth	3.6%
GDP per head	\$78,530* (PPP: \$83,750*)
Inflation	1.3%
Budget balance (% GDP)	-0.5
Population	4.8m

The minority Fine Gael-led coalition government, needing support from the opposition Fianna Fail on key votes, will fall before its official term ends, and elections could happen in 2019. The outcome will be another unstable minority government, with the dominant party needing the opposition for legislative success. The economy will settle onto a more sedate growth path.

TO WATCH: Brexistential crisis. Britain's departure from the EU, on whatever terms, will disrupt Ireland's relations with its biggest trading partner.

*Figures inflated by the impact of accounting practices of multinational companies

Italy

GDP growth	1.1%
GDP per head	\$36,210 (PPP: \$42,940)
Inflation	1.4%
Budget balance (% GDP)	-2.9
Population	59.2m

The odd-couple coalition of the anti-establishment Five Star Movement (M5S) and the anti-immigrant Northern League will pursue a contradictory policy mix, with both tax cuts and spending increases alongside a wobbly commitment to EU rules on budget discipline. With both parties jockeying for supremacy, early elections could happen as soon as May, when voting takes place for the European Parliament. The economy will be weak.

TO WATCH: Upper crust. Superstar pastry chefs from 16 countries will compete in the Pastry World Championship in Milan (not to be confused with France's World Pastry Cup).

Latvia

GDP growth	3.7%
GDP per head	\$18,860 (PPP: \$22,780)
Inflation	2.7%
Budget balance (% GDP)	-0.8
Population	1.9m

Elections in late 2018 saw increased political fragmentation, but post-election talks were likely to deliver another centre-right, pro-European government, the outcome of every election since independence. Two new parties, the populist Who Owns the State? and the New Conservative Party, won most votes among the centre right and will take first crack at forming a coalition. Consensus around fiscal probity and European co-operation means policy will remain unchanged, while targeting severe income inequality.

Lithuania

GDP growth	3.3%
GDP per head	\$19,700 (PPP: \$35,320)
Inflation	3.1%
Budget balance (% GDP)	-0.1
Population	2.9m

The coalition government of the Lithuanian Peasant and Greens Union and the Lithuanian Social Democratic

Working population

Lithuania, unemployment rate, %



2019 IN PERSON

On paper, Italy's **Matteo Salvini** of the right-wing Northern League party is on an equal footing with his fellow deputy prime minister, Luigi Di Maio of the equally populist but left-leaning M5S, and both serve under the prime minister, Giuseppe Conte. But nobody is fooled. Like the bruiser in the playpen, Mr Salvini dominates his colleagues, ruling airwaves, soapbox and social media with a strident message of closed borders, national pride and teary-eyed affection for the workers. The big question is when, not if, Mr Salvini will trigger an early vote to formalise his supremacy. The European Parliament elections in May are a hook, but he may prefer to draw more support from rivals on the right and launch more crowd-pleasing measures before making a move.



Party, the successor to an administration that collapsed in 2016, has a minority in parliament and may itself tumble before scheduled elections in 2020. Early elections will give rise to another centre-right coalition. Corruption remains endemic in business and politics, but the economy will still grow at a decent pace.

Netherlands

GDP growth	2.5%
GDP per head	\$55,260 (PPP: \$57,520)
Inflation	1.8%
Budget balance (% GDP)	1.0
Population	17.3m

The centre-right coalition government has single-seat majorities in both houses of parliament and will lose its senate majority in provincial elections early in the year, forcing it to negotiate with the opposition on key laws. Nevertheless, prime minister Mark Rutte's third government should manage the legislative process for this year at least. The Party for Freedom, a pioneer among nationalists in Europe, has lost some of its vim, but remains influential. Mr Rutte will push for tax cuts and more spending on education, the police and defence.

TO WATCH: Bridge too far. Two convoys of 600 vehicles will retrace the route of the second world war's ill-fated Operation Market Garden on its 75th anniversary in September.

Norway

GDP growth	1.8%
GDP per head	\$84,690 (PPP: \$64,920)
Inflation	2.2%
Budget balance (% GDP)	5.2
Population	5.4m

A weak centre-right minority government made up of the Conservatives, the Liberals and the Progress Party has been hit by scandals and public protests, but should last its term—not least because support for Labour, the main opposition party, is also fragile. Erna Solberg, the prime minister and leader of the Conservatives, will push the Christian Democrats, who withdrew from coalition talks and scuppered her

hopes for a centre-right alliance, to sign up and give her a majority. Policy will focus on diversifying the economy away from oil, even as rallying oil prices underpin growth.

TO WATCH: Sub-marinara sauce. Europe's first underwater restaurant will open off Norway's south coast early in 2019, combining food and marine research.

Poland

GDP growth	3.5%
GDP per head	\$16,420 (PPP: \$32,620)
Inflation	2.0%
Budget balance (% GDP)	-2.5
Population	38.3m

The ruling Law and Justice party has unnerved the EU by flouting its standards on the rule of law and dismissing threats of sanctions. The party's popularity at home promises a second term after elections expected late in 2019. The government, like its counterparts in the Czech Republic, Hungary and Slovakia, has a nationalist agenda at odds with EU principles. This defiance is a vote-winner, as is the growth the economy has enjoyed thanks to strong automotive exports and booming consumer demand.

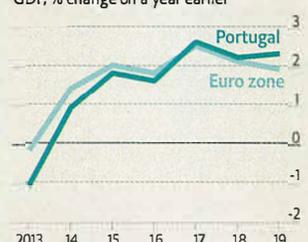
Portugal

GDP growth	2.3%
GDP per head	\$24,030 (PPP: \$34,520)
Inflation	1.8%
Budget balance (% GDP)	-1.1
Population	10.3m

The minority left-leaning government led by the Socialist prime minister, António Costa, has held together

Peaking

GDP, % change on a year earlier



despite inter-party tensions, but these may come to the fore as elections approach in October. The opposition centre-right Social Democratic Party, under new leadership following the resignation of the lacklustre Pedro Passos Coelho, will try to establish itself as a credible alternative, but the Socialist Party government is likely to stay in power, either in coalition or on its own with an outright majority. Growth will fade from its 2017 peak.

Romania

GDP growth	3.7%
GDP per head	\$12,840 (PPP: \$29,100)
Inflation	3.6%
Budget balance (% GDP)	-3.4
Population	19.5m

Tensions will persist between the president, Klaus Iohannis, who champions the rule of law, and the ruling Social Democratic Party, which has tried to undermine it. If Mr Iohannis is not returned in presidential elections in November or December, the tensions will ease, but Romania may backslide on the administrative improvements implemented under its EU membership. Expansionary fiscal policy will keep the economy growing.

TO WATCH: Cell-by date. Liviu Dragnea, president of the lower chamber of parliament, faces a prison term, pending appeal, and may be forced from office.

Russia

GDP growth	1.8%
GDP per head	\$11,150 (PPP: \$27,430)
Inflation	4.5%
Budget balance (% GDP)	0.4
Population	146.9m

Vladimir Putin's regime faces international sanctions, low domestic and foreign investment, structural weaknesses in the economy and an ageing population, but the president will exploit the nation's sense of grievance to maintain his hold on power. Where dissent does flower, it will be ruthlessly smothered. Policy will focus on government control of the economy, state institutions and social and political forums. Attention will eventually shift to the succession at the end of Mr Putin's term in 2024 (and whether he will seek to finesse term limits), but for now a defensive and conservative domestic stance will deliver political stasis and minimal economic growth.

TO WATCH: You're hired! Apprentices and trainees from more than 70 countries will be put through their paces at the WorldSkills competition, to be held in Kazan in August.

Slovakia

GDP growth	3.8%
GDP per head	\$20,790 (PPP: \$35,270)
Inflation	2.2%
Budget balance (% GDP)	-0.7
Population	5.5m

The government is suffering after a political scandal forced the resignation of the then prime minister, Robert Fico, in early 2018, and early elections are possible. Mr Fico's Direction-Social Democracy party, which heads the coalition, is bleeding support. It may emerge from elections still the largest single party but with a reduced share of seats, and building a new coalition will be difficult. Mr Fico's handpicked successor, Peter Pellegrini, will press on with infrastructure investment, health-care reform and addressing rural/urban inequality. More jobs and rising wages will keep the economy growing.

TO WATCH: Benefits boost. Social measures worth €500m-600m (\$575m-690m) will be launched, raising pensions and benefits for older people and children and cutting taxes on the goods they use.

Slovenia

GDP growth	3.7%
GDP per head	\$27,390 (PPP: \$39,000)
Inflation	2.3%
Budget balance (% GDP)	-0.3
Population	2.1m

Five centre-left parties agreed to form a minority coalition after inconclusive elections in mid-2018, selecting Marjan Sarec, a former comedian, to be prime minister. The anti-immigrant Slovenian Democratic Party won most seats but could not find a partner. The government will rely on support from The Left Party, which declined to join the coalition. Health-care reforms, NATO membership and a privatisation programme could be sticking points. The government will see out the year, but not its full term. The economy will lose steam as the working-age population shrinks.

Spain

GDP growth	2.3%
GDP per head	\$32,370 (PPP: \$41,560)
Inflation	2.1%
Budget balance (% GDP)	-1.9
Population	46.4m

The Spanish Socialist Workers' Party (PSOE) leads a minority government, after the ousting in a censure motion of the previous People's Party (PP) minority administration in mid-2018. With just 84 of 350 seats in the lower chamber of parliament, this is Spain's weakest-ever democratic government. Although it will try to serve out its term, early elections are possible. However, a four-way split between the

two long-established parties, the PSOE and PP, and two newcomers, Podemos and Ciudadanos, means there is little prospect of a clear majority emerging. The economy will maintain its post-crisis momentum, with improving employment, wages and spending supporting growth.

TO WATCH: Damage to Catalonia. The new government has reduced tensions with the separatist Catalans but is unlikely to settle matters.

Pay day

Spain, real-wage index, 2005=100



Sweden

GDP growth	2.1%
GDP per head	\$56,870 (PPP: \$54,900)
Inflation	2.2%
Budget balance (% GDP)	0.9
Population	10.1m

Sweden emerged from elections in late 2018 with a hung parliament and the far-right Sweden Democrats holding the balance of power. Post-election coalition negotiations will be protracted, but a centre-right administration is the most probable outcome. The new government, whatever its shape, will inherit a robust economy, fuelled by loose monetary policy, a housing boom and strong consumer demand. The pace of growth will slow slightly as the housing market cools.

Switzerland

GDP growth	1.9%
GDP per head	\$80,490 (PPP: \$68,830)
Inflation	1.3%
Budget balance (% GDP)	0.3
Population	8.6m

The four-party government reaches the end of its term in October, before which the Swiss People's Party, the most right-leaning of the quartet, may stage a new referendum calling for a rejection of EU rules on freedom of movement. A similar vote was passed in 2014 but implemented in a weakened form to avoid a rupture with Brussels; this renewed attempt would be harder to finesse. The government favours structural reforms to boost growth, but voters are reluctant to give up welfare benefits, so progress will be slow. Growth will slip a bit as American protectionism hits European trade.

Turkey

GDP growth	4.6%
GDP per head	\$10,660 (PPP: \$29,800)
Inflation	10.8%
Budget balance (% GDP)	-3.1
Population	83.0m

Armed with enhanced powers and facing a weak opposition, the president, Recep Tayyip Erdogan, can do whatever he wants. Yet his actions too often have startled the foreign investors needed to sustain Turkey's economy. Unwilling to take the measures necessary to rebuild confidence, Mr Erdogan risks turning the run on the lira in 2018 into a full-blown economic crisis that would put his authority at risk. If the economy stabilises, a dynamic private sector and sustained public investment will support growth.

Ukraine

GDP growth	2.8%
GDP per head	\$3,250 (PPP: \$9,650)
Inflation	8.1%
Budget balance (% GDP)	-2.5
Population	42.0m

The shady links between business groups and political factions that characterised Viktor Yanukovich's regime, toppled in 2014, are returning, and progress on reforms agreed with the IMF is slowing. Changes to land regulation, state-owned enterprises and the energy sector have been diluted. Conflict is simmering in the east, where Russian proxies are waging a separatist campaign. The president, Petro Poroshenko, may lose to Yulia Tymoshenko, a former prime minister, in an election in March, and her party is set to win a plurality in the parliament later in the year.

United Kingdom

GDP growth	1.5%
GDP per head	\$43,210 (PPP: \$45,700)
Inflation	1.9%
Budget balance (% GDP)	-1.6
Population	67.0m

The Conservative government under the prime minister, Theresa May, will steer the country towards exit from the EU in March, beginning a transition that will lead to a full departure under a new trade deal in 2021. It is unclear how a deeply divided nation will weather this process. If it cannot, Mrs May's government could collapse, to be replaced either by pro-Brexit Conservatives or the Labour Party led by left-winger Jeremy Corbyn.

TO WATCH: Current affairs. The 36th edition of the World Poohsticks Championships will be held in Witney, Oxfordshire, in June. The sport was popularised by Winnie the Pooh and friends in 1928.

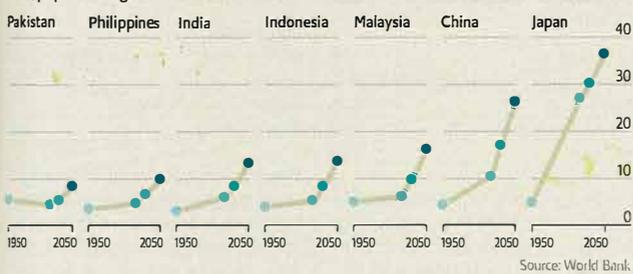
Countries

The World in 2019

Asia

Gerontonomics

Asia, population aged 65 and over, % of total



Source: World Bank.

Australia

GDP growth	2.3%
GDP per head	\$60,370 (PPP: \$53,180)
Inflation	2.4%
Budget balance (% GDP)	-0.8
Population	25.1m

The prime minister, Scott Robinson, who took charge of the centre-right government after a leadership challenge in 2018, has until November to consolidate his position before elections must be held. He is unlikely to succeed. A Labor government will probably inherit a bubbly housing market and a mining sector suffering from a post-boom hangover.

TO WATCH: Big issue. A Labor government may face a less obstructive Senate than its predecessor, with new rules likely to clear out some of the single-issue candidates that have gummed up proceedings.

Bangladesh

GDP growth	7.7%
GDP per head	\$1,810 (PPP: \$4,570)
Inflation	5.6%
Budget balance (% GDP)	-4.8
Population	168.1m

Investment in infrastructure will sustain the country's rise on the global manufacturing value chain and keep the economy humming. The Awami League, in power since 2009, was set to win another parliamentary majority in December 2018. The opposition Bangladesh Nationalist Party, which has boycotted parliament since 2014, will make its presence felt on the streets. Terror group Jamaat-ul-Mujahideen Bangladesh will stoke political risk.

TO WATCH: Rohingya against the tide. The repatriation to neighbouring Myanmar of Rohingya refugees, of whom around 1m live in Bangladeshi camps, will proceed in 2019, but slowly, leaving Bangladesh to deal with the economic and security consequences.

China

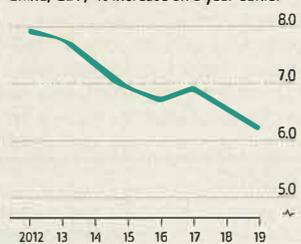
GDP growth	6.2%
GDP per head	\$9,807 (PPP: \$19,430)
Inflation	2.8%
Budget balance (% GDP)	-4.0
Population	1.39bn

China's take-no-prisoners president, Xi Jinping, shows no sign of slowing down, but his successful bid to remove constitutional checks on his time in office creates new risks—of weak and inconsistent policy as yes-men predominate, and of messy succession politics should his health waver. The economy will slow again, while policy leans against the triple challenges of endemic pollution, risk in shadow banking and rural poverty. Monetary policy will stay loose while the threat of a trade war with America persists.

TO WATCH: Big wing. The world's largest airport terminal will open in Daxing district south of Beijing.

Controlled descent

China, GDP, % increase on a year earlier



Hong Kong

GDP growth	2.7%
GDP per head	\$50,100 (PPP: \$66,980)
Inflation	2.3%
Budget balance (% GDP)	0.7
Population	7.5m

Carrie Lam, the chief executive, will try to co-opt opposition figures in the Legislative Council (the parliament) and undermine resistance to the mainland's strengthening grip, while pushing back against mainland-sponsored

anti-subversion legislation considered repressive by the territory's "localists". Press freedom, academic independence and political autonomy will be further eroded, along with judicial independence. The economy will slow again under the shadow of worsening America-China trade relations.

TO WATCH: Tell and show. The vast new M+ arts centre will open late in 2019, amid anxiety that censorship will curb its artistic vision.

India

GDP growth	7.6%
GDP per head	\$2,200 (PPP: \$8,290)
Inflation	4.9%
Budget balance (% GDP)	-3.2
Population	1.37bn

The ruling National Democratic Alliance will secure a second term in elections for the lower chamber of parliament, scheduled for April or May, though with a reduced majority. The prime minister, Narendra Modi, can look forward to even greater control as a strong showing for his Bharatiya Janata Party across state elections translates into a tighter grip on the upper chamber, where the states are represented. Policy will prioritise social welfare until the election but swing back to business issues afterwards. Economic growth will speed ahead.

TO WATCH: Sino summit. Mr Modi will hold an informal summit with China's president, Xi Jinping, for the second year running, easing friction in the bilateral relationship.

Indonesia

GDP growth	4.9%
GDP per head	\$4,300 (PPP: \$14,010)
Inflation	4.7%
Budget balance (% GDP)	-2.6
Population	265.3m

Joko Widodo will win another term in April's presidential contest and, although he has no party of his own, will see supporters retain the legislature. Promises of institutional reform will founder—not least the fight against corruption, with vested inter-

ests resisting legislation—though it will remain a top campaign pledge. A push to improve the business environment will keep the economy fizzing.

Japan

GDP growth	1.4%
GDP per head	\$41,750 (PPP: \$46,160)
Inflation	1.4%
Budget balance (% GDP)	-3.9
Population	126.9m

Shinzo Abe, the prime minister, will start the year buoyed by victory for a third time in leadership elections for his Liberal Democratic Party. He will use the endorsement to push ahead with plans to reform the pacifist constitution, which will be put to a referendum. Mr Abe can look forward to a year of relative political stability as he approaches a 2020 landmark that will make him Japan's longest-serving leader of modern times. "Abenomics", designed to lift the economy from decades of stagnation, will deliver only modest results.

Modest Abe

Japan, % change on a year earlier



Kazakhstan

GDP growth	3.4%
GDP per head	\$9,150 (PPP: \$28,280)
Inflation	6.0%
Budget balance (% GDP)	-1.2
Population	18.6m

Constitutional reforms in 2017 suggest that Nursultan Nazarbayev, in charge since the Soviet era, may be on the way out, though when and how this might happen remain, as ever, opaque. A leadership transition will bring little political change, with the new president using the same formula of

2019 IN PERSON

When Thailand's voters mark the restoration of democracy by going to the polls at mid-year, the scene will have been carefully set by the outgoing generals to ensure voters do not choose a candidate from the "Thaksinite" faction—supporters of a former president, Thaksin Shinawatra, who was ousted in 2006. Democracy was last restored in 2007, and Thaksinites won three subsequent elections, leading in 2014 to a putsch by the army. A new constitution allows the junta to stack the upper chamber, and the big parties will be stymied in the lower chamber. Parliament will pick a prime minister. Although the head of the junta, **Prayuth Chan-ocha**, says he is not in the running, there is presumably some reason why he is on the campaign trail amid a ban on political rallies.



heavily manufactured popular consent and sham elections. With economic progress harder to come by as early catch-up opportunities run out, public discontent will rise. The perennial goal of weaning the economy off oil will remain elusive.

Malaysia

GDP growth	5.4%
GDP per head	\$11,820 (PPP: \$33,220)
Inflation	1.5%
Budget balance (% GDP)	-3.5
Population	32.5m

The government of Mahathir Mohamad will prepare the ground for a planned change of leadership to Anwar Ibrahim, reinstated after a period of politically motivated incarceration, in 2020, amid slowing but still fast economic growth. The only threats to the hegemony of the Pakatan Harapan coalition will come from within, though ideological and power-sharing clashes among its members will be contained.

New Zealand

GDP growth	2.1%
GDP per head	\$40,430 (PPP: \$42,670)
Inflation	2.2%
Budget balance (% GDP)	0.8
Population	4.9m

The minority Labour-led government under the prime minister, Jacinda Ardern, needs support from the Greens to pass legislation and is vulnerable to rebellion over some of its populist-sounding policies. It also faces discontent from public-sector workers seeking higher wages. Nevertheless, it will press on with an agenda of housing reform and investment in the regions. Weaker world trade and tighter money will limit economic growth.

TO WATCH: Grassroots politics. A referendum may be held on legalising recreational use of cannabis, a condition for the Greens' support.

Pakistan

GDP growth	5.0%
GDP per head	\$1,490 (PPP: \$6,120)
Inflation	5.0%
Budget balance (% GDP)	-5.6
Population	204.6m

Born among protests and legal challenges, the coalition government led by a former cricketer, Imran Khan, will seek quickly to establish its authority. Privatisation will remain a priority, but vested interests will throw sand in the gears. Reform of labour laws and regulatory improvements will also face opposition. China's "belt and road" investments will start to deliver infrastructure improvements, but power provision will lag growing demand.

Philippines

GDP growth	6.1%
GDP per head	\$3,274 (PPP: \$9,500)
Inflation	4.1%
Budget balance (% GDP)	-2.6
Population	108.1m

The president, Rodrigo Duterte, has pulled Congress on-side through a mixture of patronage and unobtrusive persuasion, but this may change as mid-term elections scheduled for May offer opposition parties an opportunity. An ambitious constitutional-reform plan, the fourth under as many presidents, will fare no better than previous ones. Islamist and communist insurgencies will fester, and economic growth will slow as global conditions harden.

Headwinds

Philippines, personal disposable income
% increase on a year earlier



Singapore

GDP growth	2.9%
GDP per head	\$63,870 (PPP: \$99,050)
Inflation	1.0%
Budget balance (% GDP)	-0.5
Population	5.9m

Political management will focus on elections in 2021 and the succession to a new prime minister as Lee Hsien Loong stands aside. Three ministers in the running will seek to burnish their credentials. The decision will be made by Mr Lee and his inner circle.

TO WATCH: Raffles ticket. Singapore will commemorate the bicentennial of the arrival of Sir Stamford Raffles, the British colonial officer who established the modern-day territory.

South Korea

GDP growth	2.8%
GDP per head	\$35,430 (PPP: \$42,190)
Inflation	1.7%
Budget balance (% GDP)	0.8
Population	51.3m

The president, Moon Jae-in of the liberal Minjoo Party, riding a tide of popularity following his efforts at detente with North Korea, will shrug off a minority position in the legislature to pursue an agenda designed to boost demand through government spending and wealth redistribution. Maintaining public support will require

strong relations with America in the face of unpredictable grandstanding by its president, Donald Trump, and staying engaged with North Korea as it underdelivers on denuclearisation.

Sri Lanka

GDP growth	4.7%
GDP per head	\$4,630 (PPP: \$14,810)
Inflation	5.0%
Budget balance (% GDP)	-5.3
Population	21.0m

The coalition government shattered in October, and is likely to be replaced by a new government led by the current president, Maithripala Sirisena, and a former president newly named as prime minister, Mahinda Rajapaksa. A funding package from the IMF runs out in mid-year, but reforms enacted under the plan will keep the economy growing.

Taiwan

GDP growth	2.0%
GDP per head	\$25,670 (PPP: \$54,730)
Inflation	1.3%
Budget balance (% GDP)	-1.1
Population	23.6m

The Democratic Progressive Party, led by the president, Tsai Ing-wen, will keep control of the presidency and the parliament beyond the 2020 elections, but this has as much to do with weakness in the opposition Kuomintang as with its own record. The government will press on with policies to address intergenerational inequality and infrastructure investment. Along with employment reforms, these should improve business conditions. Maturing global demand for consumer electronics will restrain economic growth.

TO WATCH: Terminal velocity. Preparations will begin for building the Taoyuan Aerotropolis, a commercial development around Taipei's airport a decade in the planning.

Thailand

GDP growth	3.6%
GDP per head	\$7,290 (PPP: \$19,950)
Inflation	1.6%
Budget balance (% GDP)	-2.5
Population	69.3m

Elections, postponed following the death in 2016 of King Bhumibol Adulyadej, will be held by mid-year. Pheu Thai, the party of siblings Thaksin and Yingluck Shinawatra, both ousted by the generals, will do well, but not well enough to prevent an army-backed appointee retaining the prime minister's role. This could be Prayuth Chan-ocha, the head of the ruling junta. Curbs on civil freedoms imposed by the junta will be eased, but not by

enough to stop public protests. The government sees economic revival as its priority, and will push through big infrastructure and industrial projects.

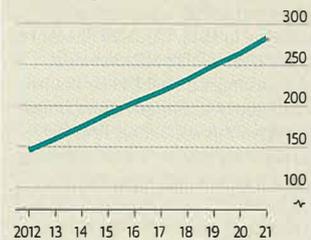
Uzbekistan

GDP growth	5.1%
GDP per head	\$1,300 (PPP: \$7,580)
Inflation	12.0%
Budget balance (% GDP)	0.5
Population	32.8m

The president, Shavkat Mirziyoyev, in charge since the death in 2016 of long-term autocrat Islam Karimov, is courting foreign investors and seeking to improve regional ties, but will shun wholesale democratic reform in favour of securing his own position. Economic liberalisation, kicked off with a 48% devaluation in 2017, will move ahead, but the government will be sure to keep the country's elite on-side. Expressions of political dissent will be snuffed out.

Slow rise

Uzbekistan, no nominal GDP, \$bn at PPP



TO WATCH: Power play. The country will begin a ten-year nuclear energy programme that will include construction of its first nuclear power plant.

Vietnam

GDP growth	6.5%
GDP per head	\$2,660 (PPP: \$7,850)
Inflation	4.1%
Budget balance (% GDP)	-6.1
Population	97.4m

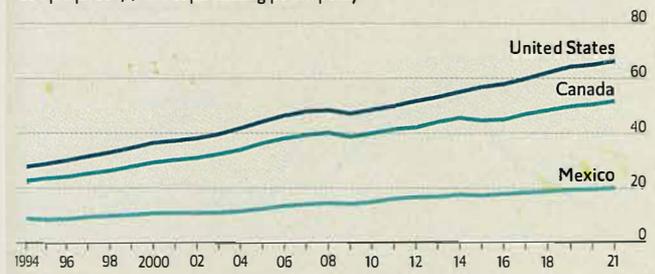
Competing policy approaches will play out within the Communist Party, but single-party rule will persist under the general secretary, Nguyen Phu Trong. The government's campaign against corruption has raised hackles but will move ahead, as graft is one of the few threats to the party. Prosecutions of prominent figures will ease discontent, but daily experience of petty corruption means the issue will simmer. Gradual pro-business reforms will support economic growth.

TO WATCH: Trading up. The government hopes to inaugurate a free-trade agreement with the EU in 2019, though concerns over the country's record on freedom of expression and association, religious freedom and labour rights threaten to delay approval in Brussels.

North America

All boats

GDP per person, \$ '000 at purchasing-power parity



Canada

GDP growth	1.8%
GDP per head	\$47,640 (PPP: \$49,660)
Inflation	2.0%
Budget balance (% GDP)	-2.4
Population	37.3m

The prime minister, Justin Trudeau, will seek a second term in October elections but will have a rougher ride this time. The main opposition parties, whose disarray helped him to a landslide in 2015, are regrouping under new leadership. His Liberal government will spend more on infrastructure and tighten environmental rules. The central bank is in a tightening cycle; growth will slow. Trade tensions will add to the headwinds.

TO WATCH: Property peril. As price growth slows and sales fall, the overheated housing market is cooling. But rising interest rates pose a risk to indebted households, and mortgage defaults would damage the economy.

Mexico

GDP growth	1.9%
GDP per head	\$9,460 (PPP: \$19,290)
Inflation	3.9%
Budget balance (% GDP)	-2.2
Population	132.3m

Andrés Manuel López Obrador (known as AMLO), a left-wing populist, won the kind of decisive victory in the 2018

election previously reserved for the hegemonic Institutional Revolutionary Party, and proclaims this to be Mexico's biggest moment since the 1910 revolution. Reality will be more modest. An announced anti-corruption crusade will proceed slowly, and keynote policies of the previous government, such as education reform and the opening of the oil sector, may be delayed or walked back. A weaker business environment and tougher trading conditions under NAFTA (now called the USMCA) will limit growth.

TO WATCH: St AMLO's fire. The title of Mr López Obrador's book, "Listen up, Trump", suggests the relationship with America could be fraught.

United States

GDP growth	2.2%
GDP per head	\$64,070 (PPP: \$64,068)
Inflation	2.4%
Budget balance (% GDP)	-5.8
Population	331.9m

Donald Trump's White House will become even more chaotic in 2019 amid impeachment talk and the deepening investigation into collusion with Russia. But that will mean little to the 40% of voters who will support him no matter what. The economy will slow after the adrenaline shot of tax cuts in 2018 and as the Federal Reserve raises interest rates. A recession beckons towards the end of 2019.



2019 IN PERSON

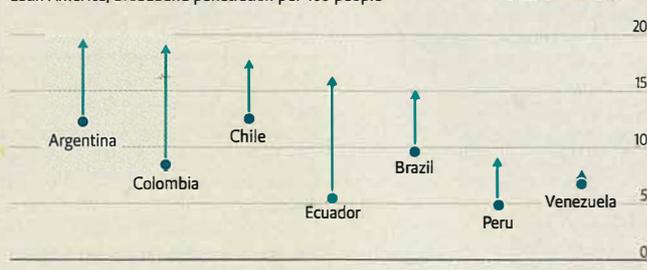
Even in an era of fluid political identities and dissolving party lines, El Salvador's **Nayib Bukele** stands out. In a country where just 27 years ago a military dictator was ousted by a communist insurgency, he is a left-winger endorsed from the right, a candidate from outside the traditional parties but leading in the polls. The symptoms of the country's political malaise are familiar: former presidents from both left and right in prison or under investigation; the incumbent president rarely appears in public; poverty is rising and the country has featured as the world's murder capital. Mr Bukele is a politician for our times. A businessman-of-the-people with a slick social-media operation and a message of renewal, he should romp to victory in the election in February.

Latin America

Better connected

Latin America, broadband penetration per 100 people

2012 ● 2019



Argentina

GDP growth	2.2%
GDP per head	\$11,450 (PPP: \$23,020)
Inflation	22.0%
Budget balance (% GDP)	-5.2
Population	45.1m

The president, Mauricio Macri, was forced to defend an attack on the peso in late 2018, tightening austerity and appealing to the IMF to accelerate loan payments. Already struggling to correct fiscal and monetary distortions introduced during the reign of his predecessor, Cristina Fernández de Kirchner, he has haemorrhaged support and will head to elections in October as the underdog. However, if the economy rallies, he may yet secure a second term.

Bolivia

GDP growth	4.2%
GDP per head	\$3,820 (PPP: \$8,300)
Inflation	3.8%
Budget balance (% GDP)	-7.2
Population	11.4m

The left-wing president, Evo Morales, will run for a fourth term in October, thanks to a ruling from the constitutional court striking down term limits. He will win, despite a succession of corruption scandals, as his popular support remains robust and the opposition is divided. Even so, his Movement to Socialism party will lose its supermajority in the National Assembly. Loose tax and spending policies will keep economic growth on trend.

Brazil

GDP growth	2.6%
GDP per head	\$9,240 (PPP: \$16,640)
Inflation	4.1%
Budget balance (% GDP)	-5.6
Population	210.7m

Jair Bolsonaro, a radical right-winger with an authoritarian bent, takes charge following a decisive election win in late 2018, but a pro-market

agenda will founder in a fragmented congress, where his Liberal Social Party holds less than 10% of the seats. Particularly pressing are comprehensive pension reform and other tax-and-spending measures, seen as vital to sustaining the public finances. Concerns will also centre on preserving Brazil's liberal democratic values under a leader with a record of dismissing them.

TO WATCH: Block vote. Though they no longer share fast growth, the BRICS economies still count. Brazil will host the 11th BRICS summit in October.

Chile

GDP growth	3.6%
GDP per head	\$17,220 (PPP: \$26,460)
Inflation	3.1%
Budget balance (% GDP)	-1.5
Population	18.3m

The president, Sebastián Piñera of the centre-right Let's Go Chile coalition, will pursue pro-growth policies in the face of a divided congress where the risk of gridlock remains high. The legislative agenda includes pension reform, a rethink on immigration as an influx of Haitian and Venezuelan migrants raises tensions, and measures to reduce inequality. Spending restraint will reduce the budget deficit, with rising copper revenues lending a hand.

TO WATCH: Ocean time. The Asia-Pacific Economic Co-operation summit, which Chile will host in November in Santiago, will focus on connectivity and women's role in economic growth.

Colombia

GDP growth	3.1%
GDP per head	\$6,990 (PPP: \$16,020)
Inflation	2.9%
Budget balance (% GDP)	-1.7
Population	49.9m

Iván Duque of the centre-right Democratic Centre party begins his term supported by a majority in congress and promising continuity in the

solid economic policies of his predecessor, Juan Manuel Santos. Mr Duque will stiffen the government line in the peace process with the former FARC guerrillas, postponing a long-awaited peace dividend, while fighting with dissidents and other armed groups persists. The economy will get a boost from recent pro-growth reforms.

Growth bump

Colombia, GDP, % increase on a year earlier



Cuba

GDP growth	1.5%
GDP per head	\$9,740 (PPP: \$13,870)
Inflation	5.4%
Budget balance (% GDP)	-6.7
Population	11.4m

Miguel Díaz-Canel in 2018 became the first non-Castro leader since the revolution, but Raúl Castro remains head of the Communist Party and holds the reins of the army. A constitutional reform, to be presented in a plebiscite in 2019, will weaken Mr Díaz-Canel's power further, reinstating the post of prime minister. The president does get to pick the prime minister, though, so the line of authority will be preserved. Economic reform will crawl on.

Ecuador

GDP growth	1.7%
GDP per head	\$6,150 (PPP: \$12,050)
Inflation	1.4%
Budget balance (% GDP)	-3.7
Population	17.3m

The left-wing president, Lenín Moreno, has taken a modestly market-friendly stance since losing his legislative majority in 2018. Efforts to boost mining, telecoms, electricity and transport are designed to wean the economy off oil. Mr Moreno is aiming for a balanced primary budget by 2021 to stabilise borrowing and keep the IMF away.

Paraguay

GDP growth	4.0%
GDP per head	\$6,580 (PPP: \$13,990)
Inflation	4.5%
Budget balance (% GDP)	-1.5
Population	7.0m

The right-wing Colorado Party begins another term in charge, though the baton passes to Mario Abdo as president from the modernising reformist

Horacio Cartes. Mr Abdo will reverse some of his predecessor's reforms, but policy will remain broadly pro-market. Much will depend on the make-up of the legislature, where the government will not have a majority. A 2018 spending splurge will be reined in.

Peru

GDP growth	4.0%
GDP per head	\$7,540 (PPP: \$13,250)
Inflation	2.9%
Budget balance (% GDP)	-2.7
Population	32.6m

The president, Martín Vizcarra of the centre-right Peruvians for Change party, had power thrust upon him when Pedro Pablo Kuczynski resigned amid conflict-of-interest charges in 2018. He is at the mercy of a hostile congress, where his party controls just 18 of 130 seats. But given the bright performance of the economy and the abysmal reputation of congress, obstructionism won't entirely ruin Mr Vizcarra's agenda.

TO WATCH: Keep Dakar running. The Dakar Rally, the world's toughest driving event, will return to Peru for its 41st edition after the country hosted its opening stages in 2018.

Uruguay

GDP growth	3.1%
GDP per head	\$18,610 (PPP: \$25,020)
Inflation	7.0%
Budget balance (% GDP)	-3.3
Population	3.5m

The Broad Front (FA) party should win a fourth term in elections in 2019, though the president, Tabaré Vázquez, is term-limited. He will use his last year to seek a balanced budget by cutting spending and raising taxes, even though austerity may hurt the party's chances. While FA factions grumble, the two main opposition parties will snipe at each other. Public spending will keep the economy simmering.

Venezuela

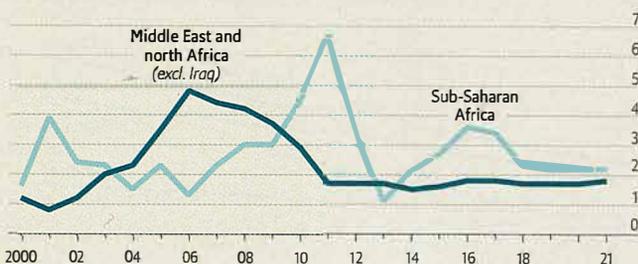
GDP growth	-5.9%
GDP per head	\$2,280 (PPP: \$10,090)
Inflation	2,022%
Budget balance (% GDP)	-6.0
Population	32.2m

The president, Nicolás Maduro, retains power through an oil-fuelled patronage network, but dwindling production and a collapsing economy mean his time is running out. A pragmatic faction within the ruling Venezuelan United Socialist Party will select a new leader and seek international financial assistance in return for orthodox reforms. The shift should stem the economic collapse, but the decline will be slowed rather than reversed.

Middle East and Africa

Fading flows

Middle East and Africa, foreign direct investment, % of GDP



Algeria

GDP growth	2.8%
GDP per head	\$4,720 (PPP: \$16,070)
Inflation	6.9%
Budget balance (% GDP)	-5.2
Population	42.9m

Abdelaziz Bouteflika will seek and win a fifth consecutive term as president in elections in April, retaining power over a country where the median age is 28. Old and in poor health, Mr Bouteflika remains an effective conduit for the interests of the civilian and military elite. A poorly managed economy means a pattern of public protest and repression will persist. Oil output and prices will be robust.

Angola

GDP growth	2.5%
GDP per head	\$3,640 (PPP: \$6,520)
Inflation	24.7%
Budget balance (% GDP)	-4.0
Population	31.8m

The president, João Lourenço, will substitute the influence networks of his long-serving predecessor, José Eduardo dos Santos, with his own. He has already replaced leaders in the army and police and cancelled state-owned media contracts, but will proceed with caution as interest groups bristle. The economy's reliance on oil will persist, and higher prices will boost growth.

Cameroon

GDP growth	4.6%
GDP per head	\$1,610 (PPP: \$3,970)
Inflation	1.3%
Budget balance (% GDP)	-3.6
Population	25.3m

Paul Biya will start a seventh presidential term after an election victory in late 2018, and his Cameroon People's Democratic Movement will secure another majority in legislative elections in 2019. The status quo ensures under-representation of the English-speaking community in the west,

guaranteeing secessionist unrest there, while Islamist extremists in the north will further threaten stability. IMF-backed policies will help growth.

Egypt

GDP growth	5.6%
GDP per head	\$2,700 (PPP: \$13,120)
Inflation	13.6%
Budget balance (% GDP)	-8.9
Population	99.5m

Abdel Fattah al-Sisi, who begins a second term as president after a decisive victory in the 2018 election, will press on with reforms that promise to boost growth. With the flames of social discontent dying down thanks to an improving economy and iron-fisted repression, protests will be less prevalent, while the government will further squeeze jihadist groups.

Ethiopia

GDP growth	7.3%
GDP per head	\$620 (PPP: \$2,170)
Inflation	8.0%
Budget balance (% GDP)	-3.4
Population	110.1m

The reformist prime minister, Abiy Ahmed, will pursue an ambitious modernising agenda in the face of resistance from conservatives within his ruling party. The peace deal with neighbouring Eritrea, one of his first policy moves, will deliver an economic dividend and the recent burst of catch-up growth will be sustained.

Iran

GDP growth	-3.4%
GDP per head	\$4,070 (PPP: \$21,610)
Inflation	16.5%
Budget balance (% GDP)	-3.0
Population	82.8m

Hassan Rouhani, the president, faces rising opposition from political hardliners as renewed American sanctions bite. At best, his slate of social and economic reforms will run into the

sand, but public protests and political resistance could force him out of office. Sanctions will slash oil exports and shake business confidence, pushing the economy into recession.

Iraq

GDP growth	5.3%
GDP per head	\$5,790 (PPP: \$17,330)
Inflation	2.0%
Budget balance (% GDP)	3.8
Population	40.4m

Muqtada al-Sadr, a populist Shia cleric, and his supporters won a plurality in elections in 2018, but he delayed coalition talks in solidarity with protests about poor governance. When talks conclude, the non-sectarian prime minister, Haider al-Abadi, will stay. Kurds in the north still bridle after their independence bid in 2017 was quashed. The economy will enjoy higher oil output and better business conditions with Islamic State now defeated.

Israel

GDP growth	3.3%
GDP per head	\$42,300 (PPP: \$41,200)
Inflation	1.8%
Budget balance (% GDP)	-2.8
Population	9.0m

The right-wing prime minister, Binyamin Netanyahu, is facing a slew of corruption allegations even as his governing coalition turns towards legislative elections in 2019. Centre-left parties are gaining ground, but Mr Netanyahu is still favourite to head a fifth government. Leaders of whatever stripe will follow pro-market lines, with a Netanyahu government prioritising populist spending over balancing the budget.

Jordan

GDP growth	2.8%
GDP per head	\$4,290 (PPP: \$9,210)
Inflation	3.1%
Budget balance (% GDP)	-5.0
Population	10.6m

King Abdullah II, backed by his army, will pursue a modernising agenda, improving the business environment. Economic management, supported by the IMF, will aim gradually to narrow the budget gap, with one eye on the potential for popular protest should austerity bite too deeply.

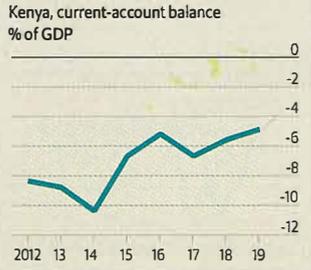
Kenya

GDP growth	5.8%
GDP per head	\$1,730 (PPP: \$3,630)
Inflation	6.2%
Budget balance (% GDP)	-6.2
Population	52.2m

The president, Uhuru Kenyatta, and the main opposition leader, Raila Odinga, have settled their differences

after a fiercely contested election in 2017 threatened to upend the democratic order. Efforts to broaden the tax base and control spending will strengthen the budget balance, while the current-account gap will also narrow as the country prepares to become an oil exporter.

Narrowing the gap



Lebanon

GDP growth	2.6%
GDP per head	\$10,140 (PPP: \$15,500)
Inflation	4.5%
Budget balance (% GDP)	-7.1
Population	6.2m

Riven by sectarian and personal rivalries, the country's Sunni backers will struggle with the growing influence of Hizbullah, an Iranian-backed Shia group that performed well in elections in 2018. Talks on a new government could bring Hizbullah into an uncomfortable coalition with the Sunni Future Movement of the prime minister, Saad Hariri. Tensions will distract ministers from confronting red tape and graft.

Libya

GDP growth	4.0%
GDP per head	\$8,540 (PPP: \$19,210)
Inflation	19.6%
Budget balance (% GDP)	-3.7
Population	6.3m

The country is rallying after the chaotic post-Qaddafi period, and should hold elections in 2019 to unify rival power bases in the west, where the UN-backed regime presides, and the east, where the most powerful military leader, Khalifa Haftar, holds sway. The political process depends on whether General Haftar opts to grab power by force or win it by constitutional means.

Morocco

GDP growth	3.3%
GDP per head	\$3,360 (PPP: \$9,090)
Inflation	1.4%
Budget balance (% GDP)	-3.7
Population	36.6m

Public protests will swell, but without shaking the grip on power of King Mohammed VI, who will respond with largesse and modest reforms. A fragmented coalition government will

2019 IN PERSON

Muhammad bin Salman, grandson of the first of Saudi Arabia's ten kings under the House of Saud, had been progressing steadily towards the throne, and might have attained it as soon as 2019. Not so fast. The brutal killing in Turkey of Jamal Khashoggi, a Saudi journalist, by operatives linked to the crown prince has turned him from cuddly reformer—he allowed women to drive and muzzled the morality police—into the toxic leader of a vicious regime. But even as many foreign leaders and investors shun him, he is unlikely to lose the nearly supreme power he already wields. Still, he will be forced to navigate carefully as the world looks for further signs of the repression that has always been near the surface.



plod on. Policy will focus on maintaining a sound budget while retaining the means to buy off protests. Growth in services and industry will be robust.

Nigeria

GDP growth	1.9%
GDP per head	\$2,410 (PPP: \$6,020)
Inflation	13.6%
Budget balance (% GDP)	-2.0
Population	201.0m

The president, Muhammadu Buhari, will win re-election in February, as a new opposition coalition may collapse before the vote. Given the outlook for continuing political weakness, there is little prospect of progress in the fight against the Islamist insurgency in the north, nationalism in the oil-producing Delta and secessionism in the Biafra region. Market-based reforms will languish, holding back growth yet again.

Saudi Arabia

GDP growth	2.0%
GDP per head	\$22,580 (PPP: \$54,750)
Inflation	2.3%
Budget balance (% GDP)	-2.2
Population	34.6m

After the scandal over the murder of Jamal Khashoggi (see box), the hand-over from King Salman bin Abdel-Aziz Al Saud to his son, Muhammad bin Salman, will have to wait. Beyond populist reforms, including the first phase of an anti-corruption drive, the crown prince will aim to move the economy away from oil, using state assets to fund alternative investments.

TO WATCH: City limit. Municipal elections, in which women can vote, are due in December. Most won't bother.

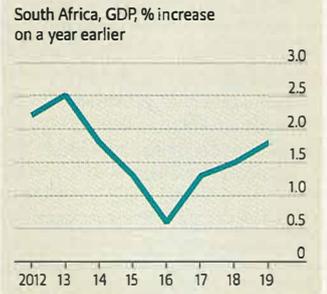
South Africa

GDP growth	1.8%
GDP per head	\$6,750 (PPP: \$14,140)
Inflation	5.7%
Budget balance (% GDP)	-3.4
Population	58.1m

Replacing the shady Jacob Zuma as president with Cyril Ramaphosa, a conciliatory pragmatist, has strengthened the position of the African National

Congress ahead of legislative elections, to be held no later than August. Mr Ramaphosa will move with caution against vested interests and corruption while re-energising pro-market reforms paralysed by Mr Zuma.

Zuma and out



Syria

GDP growth	9.9%
GDP per head	\$1,800 (PPP: \$4,540)
Inflation	19.6%
Budget balance (% GDP)	-8.4
Population	18.6m

Bashar al-Assad has reasserted control over most of the country, the beneficiary of a proxy war between major powers that has gone the way of Russia and Iran. But Western-backed rebels have created enclaves in the Kurdish-majority east, while Turkish proxies are defending territory in the north, so partition beckons. After years of war, a semblance of stability will create a short-lived economic bounce.

Zimbabwe

GDP growth	2.2%
GDP per head	\$1,200 (PPP: \$2,230)
Inflation	8.1%
Budget balance (% GDP)	-8.7
Population	17.3m

The president, Emmerson Mnangagwa, has only a slim mandate to start reversing the rot after decades of capricious rule by Robert Mugabe. Much will depend on the reaction of a population thirsting for political freedom and economic recovery—neither of which is in prospect. The armed forces could take a political role if their benefits are withdrawn quickly.

The world in numbers

Industries

Automotive 94
Defence and aerospace 94
Energy 95
Entertainment 95
Financial services 95

Food and farming 95
Health care 96
Infrastructure 96
IT 96
Media 96

Property 97
Raw materials and mining 97
Retailing 97
Telecoms 97
Travel and tourism 97

Ten business trends for 2019

01 The Basel 3 banking rules take effect, as America tightens **monetary policy** and keeps unwinding QE. Stockmarkets could gyrate if it miscues.

Federal-funds rate
%, end year



02 Protectionism hurts American industry and world trade, keeping **global economic growth** below 4% at purchasing-power parity.

05 Retailers sell 3% more stuff overall, but **e-commerce** spending shoots up by 21%. More brick-and-mortar players crumble.

03 OPEC and Russia open the spigots and records fall in America's shale patch. **Oil prices** slip to average \$73 a barrel.

06 **Web access** spreads across the developing world and 5G starts to arrive in advanced markets. Outlays on IT and communications climb by 5%.

04 **Infrastructure** draws \$20trn in investment, half of it in Asia.



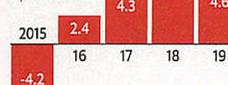
07 **Brexit** roils markets from property to finance. Britain's banks face new barriers to doing business but the City remains Europe's financial hub.

08 Worldwide **tourist arrivals** hit 1.5bn, generating \$1.5trn in revenues. France is the top destination, China the biggest source of travellers.

09 **Green energy** gains ground. America can officially start pulling out of the Paris climate deal, but new rules in China spur uptake of electric cars.

Total tech purchases

% change on a year earlier



10 Emerging markets from Nigeria to Oman cast the net of health cover wider. As a result, **Global health-care spending** per person passes \$1,500.

Sources: The Economist Intelligence Unit, Forrester; Statista; UNWTO

Business environment

World GDP and trade

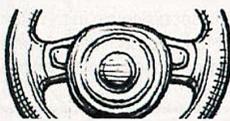
% change on a year earlier



The trade feud between America and China will hurt world economic growth, and the threat of an all-out trade war is the biggest risk businesses face. Beyond that, the world economy will mirror conditions in America and China: mostly healthy, at least at the start of the year, but vulnerable to turbulence that could curb growth later on. Chinese firms and consumers will have their spirits dulled by tighter monetary policy and a crackdown on shadow financing. America will raise interest rates—as Japan, too, weans itself off bond-buying—pulling capital out of emerging markets. Donald Trump's protectionist policies will prompt countries to form new trading ties, but world trade will still slow.

2019 forecasts unless otherwise indicated. World totals based on 60 countries accounting for over 95% of world GDP. london@eiu.com

Automotive



RAIN — FAIR — SUNNY

Trade tariffs on metals, components and vehicles will trouble carmakers in 2019, forcing them to rethink supply routes and production plans. The new NAFTA deal (now called USMCA) will push up prices of Mexican parts. Problems will come from Brexit and American sanctions on Iran. Vehicle prices will rise. But impetus from emerging markets will boost sales of new cars and commercial vehicles by 5%, to nearly 105m. Firms will expand output, with Nissan starting assembly in Kenya and PSA in Nigeria. SAIC will be China's first carmaker to build an Indian factory.

Asia will make and buy half of all vehicles as production moves closer to customers to avoid tariffs. Still, fresh challenges await in China, the biggest market. New rules for electric vehicles will push China's sales of "new energy vehicles" to 1.4m. The catch for carmakers is that they must earn NEV credits worth 10% of their Chinese sales. VW and GM will fall short and face penalties if they fail to buy enough credits from Chinese rivals.

Globally, tightening emission rules and new launches will propel sales of electric vehicles above 2m. Volvo will stop developing new fossil-fuel models

altogether and many cities will opt for EV car-sharing services like Renault's in Paris. But smaller, greener cars will not have it all their own way. America will be locked in a legal battle over emissions rules, with California defying federal efforts to abandon targets. Sport-utility vehicles will stay popular: Tata Motors will launch a compact SUV but its tiny Nano, once the herald of a cheap-car revolution, may not survive the year.

to watch: Delivering the goods?

Carmakers are pushing self-driving technology to the point where drivers, in most conditions, need pay no attention to the road. Waymo will expand its robotaxi service in Arizona, while GM will launch its Cruise AV—with no steering wheel. The stage is nearly set regulation-wise, too, though America's Senate has yet to finalise legislation. A bigger obstacle for self-driving cars is consumers' nervousness about safety. In 2019, it could fall to autonomous trucks to drive development.

Defence and aerospace



RAIN — FAIR — SUNNY

Crowded airports will mean long queues and delayed flights for passengers in 2019, but for aircraft-makers they herald even more planes in the sky. The forecast is sunny, with

Moody's, a ratings agency, predicting deliveries of large aircraft to rise by 8%. Oil prices have risen again, so airlines will prefer fuel-efficient, narrow-body jets. Europe's Airbus will pump out A320 jets at a rate of 63 a month by the end of 2019. Its American rival, Boeing, which has been winning orders faster in 2018, will produce 57 narrow-frame 737 planes a month.

Airlines in India, China and Dubai will be keen customers. The competitive salaries on offer in emerging markets, and cheap flights, have opened up the aerospace industry. More local airlines are flying abroad. India's biggest airline, IndiGo, one of Airbus's largest customers, could start flying to Rome, Milan and Zurich in 2019. Emirates has made Dubai a hub for visitors to Africa. Aviation-conscious emerging markets could start becoming manufacturing bases for the defence and aerospace industry, says EY, an accounting firm.

After years of cuts, defence contractors will cheer an increase in global defence spending in 2019. Donald Trump is raising America's defence bill to \$716bn, with nearly \$8bn going towards the world's most expensive fighter-jet programme, Lockheed Martin's F-35 stealth fighters. Lockheed could lose a customer in Turkey if the country buys Russia's S-400 missile system: Russia is expected to start delivering the system in 2019. In addition to unrest in the Middle East and North Korea's store of nuclear weapons, global spending will also be driven by a gathering threat: cyber-security.

TO WATCH: Nimble weapons. A crop of new-age tech firms like SpaceX in America are challenging incumbent defence contractors. Using robotics and AI, they can produce weapons sooner and more cheaply than traditional arms-makers. With countries in Asia spending more on agile defence tech, contractors in the West will have to follow suit or risk losing the battle.

Energy



Oil prices will descend a bit to average \$73 for a barrel of Brent crude, a key benchmark, but the path could be bumpy. Prompting the fall will be a slow unwinding of OPEC's pact with Russia to crimp global supplies and support prices. Saudi Arabia is best placed to ramp up output. Production records will fall in shale-rich America. China's appetite for the black stuff will cool, along with its economy, while China-US trade frictions will turn more investors negative on oil.

Geopolitical ructions will prevent prices from plummeting, however. Threats include the chance of more US sanctions on Russia, Saudi Arabia's competition with Iran, and disruption in Nigeria, Libya and Iraq. Stocks of oil are tighter, too. The main worry for 2019 is therefore volatile oil prices. For now, the supermajors (BP, Chevron, Exxon, Shell and Total) are poised to raise capital spending by 5% in 2019, projects Moody's.

TO WATCH: Orange alert. Green energy will enjoy another (mostly) fine year, even in America. The horizon is clouded by the approach, in November, of the moment when Donald Trump can officially start pulling America out of the Paris climate deal. Yet the US Department of Energy thinks wind will beat hydropower to be the biggest source of renewable power, at nearly 7% of electricity generated, as more turbines sprout up.

Entertainment



Spending on entertainment and media will comfortably surpass \$2trn in 2019, according to PwC, driven by digital. Pay-TV's performance will be overshadowed by internet video, poised for another year of strong growth. America will remain its largest market at over \$24bn, but China is a dark horse. With home-grown stalwarts fending off global players, JPMorgan Chase predicts China's online video industry could get out of the red in 2019. The picture will brighten further as more Chinese viewers subscribe to content behind paywalls. In India, pay-TV makes up over 95% of total telly revenue, but internet video is catching on fast as rules are loosened and mobile coverage improves.

The biggest name in online video, Netflix, will feel the heat from the launch of Disney's own streaming service in 2019, losing the Marvel movies and Disney classics such as "Moana" and "Beauty and the Beast". Disney Play will lure audiences with such offerings as "Toy Story 4" and Episode IX of "Star Wars". In cinema, Asia will enjoy a 9% rise in box-office take, and account for more than 40% of global spending. China will finally become the world's largest film market. Even so, Hollywood will struggle to capture Chinese audiences given domestic, Japanese and Indian competition.

Video-gaming revenue will grow to \$89bn, according to Statista, an online market-research portal, aided by cheaper VR headsets, new content and augmented reality as firms compete to deliver the next Pokémon GO.

TO WATCH: China's Netflix. It has brought wildly popular shows like "Black Mirror" and "Stranger Things" to Chinese audiences. In 2019 iQiyi, China's biggest online-streaming service, will invest more in original content, following foreign rivals. But it will seek to overtake them by harnessing artificial intelligence to offer video games and more. Bulls think annual revenue could double to nearly \$6bn.

What if

President Donald Trump believes tax cuts, deregulation and higher trade barriers will rev up America's car industry. But for Ford, General Motors and Chrysler, there could be unintended consequences; even, just possibly, prompting the government to pump yet more money into Detroit's Big Three carmakers. Researchers warn that tariffs on vehicles and parts could threaten 715,000 jobs. General Motors says that could "lead to a smaller GM", while Ford reckons tariffs on steel and aluminium will cost it \$1.6bn. Troubles in China (where Ford is losing money) will add to the strain. Deregulation is welcome, but problematic. Take the Environmental Protection Agency's legal battle with California over emissions targets. Tax cuts are not a big enough boon to outweigh the impact of tariffs. Automakers have downgraded their forecasts. If their troubles deepen, would Mr Trump bail them out, or back down? The US Chamber of Commerce estimates the automotive industry may need \$7.6bn in state support. That is peanuts next to the \$80bn shelled out in 2009-13. Yet it would be a humiliating reversal for Mr Trump—and may be harder to sell than a clapped-out Chevy.

Financial services



Central bankers will be in cautious mode in 2019, even by their own prudent standards. After an unsettled 2018, they must weigh the effects of worsening trade conflicts and geopolitical risks. Even so, America will raise interest rates three times, luring investors from riskier bets in emerging markets. Globally, bank deposits will rise faster than loans, but Asia will buck the trend, with monetary loosening still holding sway in China.

Total banking assets will rise by 6%, to \$150trn. America's banks will cautiously expand, buoyed by higher margins and lower taxes. So will ambitious Asian banks, leaving their cash-strapped European rivals behind: Deutsche Bank and Commerzbank will come under pressure to bolster their finances through a merger. For lenders, regulatory tightening will take a break after Basel 3 standards take full effect in January. All banks will jostle and partner with fintech companies: India's payments market will attract particular attention. Open-banking models, encouraging consumers to own and use their financial data, will spread from Europe to Asia. Yet fintech regulation will tighten in most places. Virtual

currencies, restricted by more regulation, will become less of a bonanza.

Insurance premiums will outpace GDP growth, sped by online sales in developing markets and demand for life insurance in China. In capital markets, algorithmic trading, robo-advisers and blockchain will trim costs but threaten jobs. Giant new listings will include those of Airbnb (last valued at \$31bn) and Uber (\$120bn). Total financial assets will grow to over 900% of global GDP. China's ratio will soar close to this but lag far behind the nearly 3,000% of finance-dependent Hong Kong.

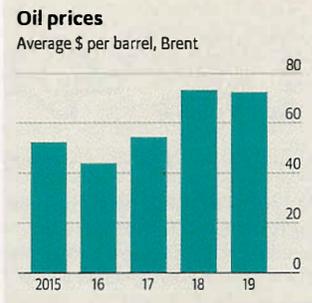
TO WATCH: China's giant Ant. The world's biggest fintech company, an affiliate of Alibaba, already has 870m global users, mostly for its Alipay services. In 2018 Ant raised \$14bn for an expansion that includes America and India. One threat: a regulatory backlash against its dominance in China.

Food and farming



After a growth spurt in 2018, farm prices will rise by just 0.5% in 2019. Bumper harvests have swelled food stocks, which won't be drawn down much. The weather again looks propitious for farmers, though a strong dollar will dampen the emerging world's appetite for food imports.

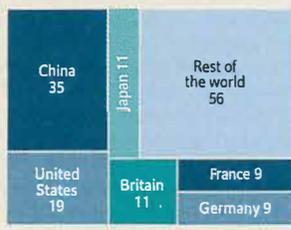
The risks are mainly man-made: enter Donald Trump. Trade tensions could upend markets for crops that America supplies in vast quantities to China. Take soybeans: China is easily the biggest importer, relying heavily on America, but is finding other providers—like Brazil, which will pip America to be the top producer in 2018-19, churning out 120m tonnes. American exporters will have to find other customers, not least in Europe, trade rela-



Natural gas is an increasingly attractive investment. Gas's rise has often come at coal's expense. That is also the case in America, where government efforts to boost coal will fail. Japan is an exception: as policymakers there back coal, gas demand will fall by just over 3%. But emerging markets crave LNG. Chinese gas imports will surpass Japan's, perhaps before 2019 is out. Only the EU consumes more—and supplies will rise by up to 55bn cubic metres a year after Gazprom's Nord Stream 2 pipeline from Russia is finished in 2019.

Bank assets

2019, \$trn



tions there allowing.

Consumers' support for green products will stunt the growth of some foods: environmental damage will depress demand for palm oil used in margarine and other products. Pity Malaysia and Indonesia, which produce about 70% of the stuff. Health-consciousness is also growing, yet sugar stands out as a rare commodity set for a big gain in value (of 8%) in 2019, after even bigger falls in recent years.

TO WATCH: Agri-algos. Commodities trading-houses have long been laggards on the technology front. Algorithms fuel four-fifths of foreign-exchange trades in advanced markets but barely half among agricultural commodities. Finally, traders of grains, livestock and the like are catching on: in 2019 they will pour money into building the systems needed to crunch big data and trade algorithmically.

Health care



RAIN — FAIR — SUNNY

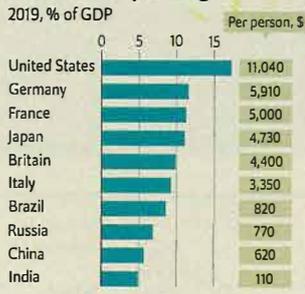
The global trend towards universal health care will stutter in 2019. Mandatory coverage for all Americans, the cornerstone of Barack Obama's health reforms, will end, thanks to Donald Trump. Employers can instead offer narrower, cheaper coverage, but greater choice will encourage uptake, argue Republicans. The Congressional Budget Office projects 3m fewer Americans will enroll for coverage. Heading in the opposite direction are emerging markets like South Africa and Oman. They hope to pass laws compelling citizens to buy health insurance in 2019, as Egypt implements its own act. Nigeria will roll out its delayed basic health package—and aim to eradicate polio (its last case was in 2016). Success would make Afghanistan and Pakistan the last places afflicted.

As global health spending increases in 2019 by \$63 a person, to \$1,553, countries will monitor costs. Improving lifestyles is the cheapest option: cue more sugar taxes and anti-smoking laws. Globally, the hunt for cheap medical staff will heat up. Drug companies, whose wares will fetch \$1.3trn, will offer more price freezes to fend off legislation, but rising trade barriers will hamper competition. Immediate crises loom in Iran and Britain. Iran's drug imports are mostly exempt from tariffs and sanctions, but financing shipments will be difficult. In Britain, a no-deal Brexit could trigger stockpiling of drugs. Whatever happens, the European Medicines Agency will leave London for Amsterdam.

Progress will come from innova-

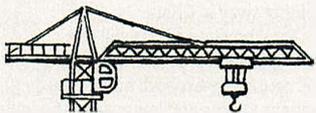
tion in robotics, artificial intelligence, nano-technology, stem cells, gene therapies and even old-fashioned drug discovery. Research and development spending will reach \$177bn, projects EvaluatePharma, a research firm, helped by America's tax reforms in 2017. Research into Alzheimer's disease will recover from setbacks as the focus shifts to identifying early biomarkers of the disease.

Health-care spending



TO WATCH: Gene editing. In 2019 America will begin human trials of treatments using the powerful CRISPR technique for altering the human genome. Trials elsewhere should report early results on blood disorders. Research on animals has already shown that CRISPR can treat muscular dystrophy in dogs—and even create super-horses. Potential applications in humans are mind-boggling.

Infrastructure



RAIN — FAIR — SUNNY

The rivalry between America and China will threaten trade in 2019 but spur investment in infrastructure. China, keen to diversify its export markets, will step up spending on its Belt and Road Initiative, which aims to pump \$8trn into 68 countries. Most beneficiaries, led by ASEAN countries, will welcome the money, but some will jib at China's expansion in the South and East China Seas. Others, including Pakistan, will quail at their runaway debts. America will counter via a new infrastructure deal with Australia and Japan. Undeterred, China will issue more local-government infrastructure bonds to boost regional development.

As a result, Asia's gross fixed investment will rise by 1.6% to \$9.5trn in 2019, nearly half the global total of \$20.5trn. North America and western Europe will each account for 20%. In Europe, the collapse of an Italian bridge in August 2018 will spur some belated investment in roads. To commuters' relief, the central-London section of the delayed Crossrail line

What if

The ascent of American stockmarkets has been breathtaking, for which Donald Trump has eagerly taken credit. Inevitably, America's president will not be so minded when gravity reasserts itself. Handily for him, another culprit is on hand for him to blame. The Federal Reserve must tread carefully as it raises interest rates (three or four times in 2019, say most forecasters) and keeps unwinding quantitative easing (QE), its recession-spurred bond-buying programme, at a faster rate. QE has pumped up company valuations by an unguessable amount; its scale will become clearer as, from 2019, America's central bank sheds up to \$600bn in securities from its balance-sheet each year. If the Fed's about-face is sharper than markets expect, America-listed corporations' valuations could plunge. The ripples could rock stock exchanges and economies around the world. In fact, The Economist Intelligence Unit ranks an **over-tightening of US monetary policy** as second only to a deepening of the China-US trade conflict as the top risk to the global economy. Should that come to pass, Mr Trump would have no place to hide.

will open at last. Billed as Europe's biggest infrastructure project, the east-west link will connect the suburbs to the centre, expanding rail capacity downtown by 10%. In America, Donald Trump will struggle to keep promises to generate \$1.5trn in infrastructure spending, despite new incentives and \$200bn in federal funding.

In the Middle East, efforts to power up the non-oil economy will resume, with ports, transport, technology hubs and health care gaining ground. Saudi Arabia will seek up to \$7.5bn in investment in 14 infrastructure projects, helped by a new public-private-partnership law. A construction revival in the UAE will be driven by the need to get ready for World Expo 2020: not a moment too soon.

IT



RAIN — FAIR — SUNNY

Artificial intelligence's capabilities are growing: it will be used for everything from predicting obesity rates to improving computer games. Still, the AI hype will exceed the reality in 2019 as it claims a paltry share of IT spending. The greatest IT outlays will go on software, for which industry revenues will grow by 7.5% to \$700bn, according to Forrester, a research firm. Global spending on IT and communications will rise by 5%, supported by 6% growth in America, the biggest market. Motoring along even faster will be India (10%), backed by rapid economic growth, and China (8%), where the government wants the country's cloud-computing sector to double in size by 2019 from 2015.

In 2019 the cloud will account for a third of all IT and communications spending, with software as a service (SaaS) speeding growth; the market for SaaS business apps will leap by more than a fifth to pass the \$100bn

mark. A survey of chief information officers at big companies, published in July 2018 by Goldman Sachs, found they expected over a third of their companies' IT workloads to be hosted on public clouds within 2019, a tidy jump. The report contained good news for Microsoft, which is harrying the biggest cloud player, Amazon Web Services: CIOs were equally likely to think their companies would be using Microsoft's Azure as AWS by 2021.

Hardware will again be less of a money-spinner than software, with computer- and communications-equipment revenue growing by 3-4% in 2019, Forrester projects. Still, this is a healthier expansion than hardware firms are accustomed to. They are gaining from the advance of Windows 10 devices and newer tablets. Eventually the spread of cloud services will blot the outlook for them, but for now it has a silver lining, Forrester reckons.

Media



RAIN — FAIR — SUNNY

After a stellar 2018, growth in advertising revenue will slow to 4% in 2019, forecasts Magna Global, a consultancy. Mobile's share is rising rapidly and will surpass 60% of all digital ad spending. Almost every new ad dollar will go on digital, according to GroupM, a media-investment company, as consumers turn to the internet for everything from hailing a taxi to renting a house. Given the reach of Facebook, YouTube and Instagram, "influencer marketing" will be in vogue among ad folk, although measuring the impact of celebrity endorsements is hard. Overall display advertising on mobiles will hit \$93bn in 2019, PwC reckons.

Although America will remain the biggest ad market in 2019, China will grow faster, at 6.6% (versus 2.2% for America), says GroupM. Both have

voracious appetites for paid searches and video advertisements, with high rates of mobile-internet penetration. Still, PwC expects emerging markets like India (20%) and Indonesia (26%) to be among the fastest growers in internet advertising, as consumers snap up connected devices.

In the new digital world order, TV and print ads will lose further lustre. Newspapers will draw less than 10% of ad spending in 2019, predicts Zenith Media. While telly ads are faring slightly better, their share will shrink to under a third of spending.

Property



RAIN FAIR SUNNY

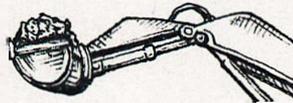
A decade after the housing crash, America is not building homes fast enough to stop prices from rising—as they will by 3.5% in 2019, according to the National Association of Realtors, a trade group. Houses are in short supply and getting less affordable, and rising interest rates in 2019 won't help. For many Americans, staying put is the only option. That will feed through into a desire to improve their homes, buoying furniture-makers and DIY firms.

In Europe monetary policy will stay loose—good news for property investors there. But in Britain, Brexit will make property investment more of a gamble. Many buyers will be in wait-and-see mode until B-day at the end of March. Pundits think prices will creep up by 2% in 2019, but uncertainty is rife. Two things are clear: the market in London, home to many EU citizens, will fade; and the harder the Brexit, the harder the fall.

China's desire to take air out of its economy will mean further efforts to deter property speculation. As growth there slows and the US dollar strengthens, predictions of a slump in Hong Kong's stratospheric real-estate market, where a 190-square-foot apartment can cost \$380,000, will finally come to pass. Prices will dip in 2019, falling by up to 15% from 2017 levels.

TO WATCH: Proptech. For the most part, buildings seem impervious to tech disruption, but change is coming. Virtual-reality viewings will proliferate among property agents. Stores will let punters shop virtually by decking out 3D rooms with images of furniture. Whizzy AI sensors will help make some buildings—which pump out two-fifths of all carbon emissions—more energy efficient. One such, Intel's new offices in Petah Tikva in Israel, will take shape in 2019 and stake a claim to be the world's smartest building.

Raw materials and mining



RAIN FAIR SUNNY

Prices for hard commodities have been volatile. To blame are Donald Trump's tariffs on metals like aluminium (set at 10%) and steel (25%), and ripostes from Canada, Mexico, the EU and China. The EU will keep up the pressure in 2019, but Mexico and Canada could soften their tactics. One of the main effects of Mr Trump's policies will be to raise the price paid by American industry for key metals as supply dwindles. Elsewhere, prices will fall as firms gorge on supplies diverted away from America and possibly on an influx of steel from China, where metals consumption is slowing.

Overall, aluminium and steel prices will fall by 3% and 17% respectively. Prices in the EU's global metals index will barely rise as demand eases.

One metal that will buck the trend is copper. Unless investment ramps up, a shortage will develop by the mid-2020s. Prices will climb by 3% in 2019 and even more in coming years, owing partly to demand from electric-vehicle makers. Risks of industrial action at big mines in South America and Indonesia will stoke copper prices. So too will China's hunger for the metal.

TO WATCH: Golden streak. China's Zijin Mining has collected assets stretching from Australia to Africa. It will now push to develop its \$1.4bn purchase of a Canadian miner, Nevsun Resources. The jewel in Nevsun's crown is the Timok copper-and-gold mine in Serbia, where feasibility studies should finish by mid-2019. Zijin wants to bring it to production rapidly.

Retailing



RAIN FAIR SUNNY

World retail-sales growth will hold steady at 3% in 2019. Whereas e-commerce companies like Amazon will thrive, brick-and-mortar retailers will bleed. The situation is particularly life-threatening in America, where 2018 was dubbed the "year of retail bankruptcies". One famous brand to shut up shop was Toys "R" Us.

Walmart, too, is being forced to adopt new tactics. In January 2019 the giant retailer will start selling over-the-counter drugs. It will also try to gain a sizeable share of India's burgeoning online retail market via its investment

Retail sales

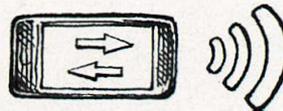


of \$16bn in Flipkart. It is a promising move: India's retail e-commerce market will grow by 24% in 2019, reckons Statista, a research firm.

India and China will lead the expansion of retail in developing countries. Vietnam, Indonesia, Malaysia and the Philippines will also gain prominence as sales in Asia and Australasia rise by 5% in 2019—twice as fast as in North America. Western Europe's mature market will all but stagnate and Brexit-hit Britain's weakened currency will make things pricier there.

Sales in Russia and its neighbours will grow by 4% in 2019 after expanding by 6% in 2018 on pent-up demand and rising oil prices. Latin America will recover slightly from the effects of low commodity prices, which weakened currencies and fuelled inflation.

Telecoms



RAIN FAIR SUNNY

The squeeze on operators' profits will tighten. Consumers' appetite for calls, data and messaging is voracious, and they are turning to free providers like WeChat and WhatsApp to satisfy it. Conventional telecoms firms need new sources of revenue. With mobile data traffic outstripping voice, they will focus on buying spectrum for 5G networks. For mobile operators, the developing world is the key. As the internet reaches more consumers there, demand for data will spur investment. For fixed-line providers the outlook is grim: there will be just 17 telephone main lines per 100 people in 2019, against 117 for mobile subscriptions.

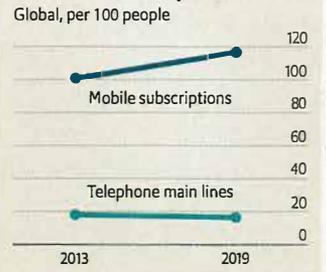
Emerging markets—think India, Indonesia, Brazil—will be big targets for smartphone-makers. Samsung and Apple will meet keen competition from low-cost providers like Xiaomi, Vivo and Oppo. Yet everyone will have to contend with the increasing difficulty of persuading consumers to replace their devices: sales have flattened out.

The picture for dealmaking is mixed. Mergers and acquisitions will be worth \$394bn in 2019 after hitting

a whopping \$468bn in 2018, predicts Baker McKenzie, a law firm. But America's current crop of light-touch regulators could give more deals the nod. Among the most keenly watched for 2019 is TPG Telecom's merger with Vodafone Hutchison Australia.

TO WATCH: Smart moves. Apple, Samsung, Huawei, LG and others will vie to bring the first 5G smartphones to market in 2019. Rumours swirl about models that could allow movies to be downloaded in seconds and make augmented reality and holographic displays the order of the day.

Telecoms subscriptions



Travel and tourism



RAIN FAIR SUNNY

Soaring demand and the recovery in oil prices will force tourists to dig deeper in 2019. The cost of air travel will increase by 3%, predicts Carlson Wagonlit, and hotel rooms will be 5% dearer. Hotels will face more competition from online rivals—Airbnb will set its sights on corporate clients—but the room-sharing market will slow as regulations tighten. Tourist arrivals will nonetheless hit another record, at nearly 1.5bn, pushing receipts above \$1.5trn. Over one-third of that sum will go to Europe, with France still the top destination. China will be the world's biggest source of tourists.

Less accessible places will gain as airlines spread their wings in 2019. Kenya's tourism ministry hopes to lure easyjet or Ryanair to sub-Saharan Africa, as Kenya Airways adds to its own routes. Rwanda will also bank on new routes and a new airport.

Terrorism and natural disasters pose risks. Indonesia, whose president has plans for ten new Balis, wants to attract 20m tourists in 2019, up from 11.5m in 2017. Other destinations, such as Egypt, will remain vulnerable to terrorist attacks. Environmental impacts will remain a long-term worry: the industry accounts for 8% of global greenhouse-gas emissions. France's planned cap on Mont Blanc climbers will barely make an impression.

Business

As good as it gets

American bosses should prepare for life to get harder

Patrick Foulis Schumpeter columnist, *The Economist*

FOR THE people running America's big firms, the first eight years after the financial crash of 2008 felt like a slog. Yes, profit margins were high, but sales were sluggish. There were no chats in the Oval Office, public appearances often involved displays of contrition, and banks and shareholders demanded that bosses keep a lid on investments, unless their name was Jeff Bezos. In 2016 things began to change as the economy built up steam under President Barack Obama. Then came President Donald Trump, whose formula of tax cuts and deregulation at home, and beating up China abroad, has delighted boardrooms, even as it appalled plenty of voters. In 2018 USA Inc let rip after years of restraint. In 2019 it is hard to see how the climate can improve and easy to see how it could worsen.

The boom in 2018 was a dream come true. As of October, 90% of firms in the S&P 500 index enjoyed growing sales, compared with a ten-year average of 69%, and a low of 36% in 2009. Some 52% of firms experienced rising margins. Overall, S&P 500 profits grew by 25% compared with the prior year, or 16% if you strip out the tax cut. The bullish mood spurred firms to bet more on investment. Including capital spending and research and development, it increased by 18%. Silicon Valley boomed, but so did housebuilders—which saw their highest profits since 2006—railways and human-resources companies.

From this giddy high, how might things ascend further still? The Republicans will struggle to pass another big-bang reform on a par with the tax cuts of December 2017. The stockmarket is expensive. And in the unlikely event that China capitulates in the trade war and agrees to spend hundreds of billions of dollars more on American goods, it would boost USA Inc's earnings only by a few percent. Meanwhile, three threats loom.

First, bloated profit margins will be squeezed by the maturing economic cycle. A recession would be painful, but even a continued tightening of the labour market will push up wage bills. Firms with lots of workers, such as restaurants and parcel-delivery operators, have already squealed, but for all firms the headwind will gather strength. For every 5% rise in wages, all else being equal, American profits drop by 19%.

The second danger is trade. Businesspeople suspect that economists are being alarmist when they yell about tariffs. The impact on the bottom line so far has been tiny. But that could change if the dispute with China escalates and hurts lucrative supply chains, such as

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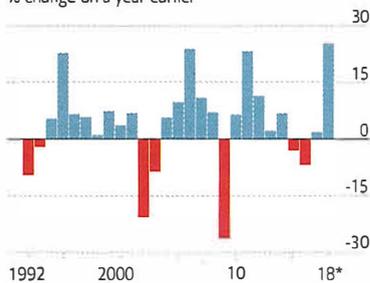
that for smartphones. And in any case firms will have to start rethinking their production networks. For the past 30 years American companies have benefited from globalisation. That is one reason why 30 of the world's 50 most valuable listed firms fly the stars and stripes. Now a fresh generation of bosses will have to make supply chains resilient enough for a new world of trade tensions. The cost could be significant. Between July and mid-October 2018, 44% of S&P 500 firms discussed tariffs on their calls with investors—a sure sign that this

topic is top of mind, even if it has yet to hit their profit-and-loss accounts.

The final threat is the relationship between business and society, which remains queasily unstable, ten years after Lehman Brothers failed. In some ways America's polarised public discourse and culture have provided a helpful distraction for big companies. Far more scary would be a turn in the public debate towards USA Inc's contribution to middle-class stagnation. Radical ideas for change continue to bubble away. For example, a bill backed

Bubbly

S&P 500, capital investment per share
% change on a year earlier



Source: Bloomberg

*Estimate

Time to woke up

Companies will need to develop a heightened political awareness

Philip Coggan Bartleby columnist, *The Economist*

WHEN NIKE, a sportswear manufacturer, wanted a face for its marketing campaign in autumn 2018, it could have opted for a safe choice. Instead it chose one of the most controversial athletes in America, Colin Kaepernick, a quarterback who had knelt during the national anthem to protest against racism and police brutality. He had been condemned by President Donald Trump and shunned by the National Football League.

The blowback to the company's decision was



instant, with some Trump supporters burning their Nike shoes and posting the footage on social media. But within weeks, online sales soared and Nike's share price reached a high for the year. The controversy generated lots of free publicity for the brand. Two-thirds of its customers are under 35 years old, and young consumers (at whom the ads were aimed) were much more positive about the link with Mr Kaepernick.

Nike's decision was an example of what has been dubbed "woke capitalism"—the desire for companies to associate themselves with liberal causes. It is a trend that will deepen in 2019. In the past, many companies preferred to keep a low political profile for fear of offending some consumers; in the words attributed to Michael Jordan, a celebrated basketball player, "Republicans buy sneakers too".

But these days companies find it impossible to keep

out of politics altogether. Mr Trump frequently attacks them for making products abroad or for not supporting his agenda. Parliaments haul tech executives in front of committees and lambast them for failing to stop hate speech, terrorist cells or child abuse. In the social-media era, major controversies can flare up within hours.

Big issues, requiring companies to respond, will keep emerging. In 2018 the school shooting in Parkland, Florida, was followed by Delta and United Airlines stopping their discounts for National Rifle Association members. As with the Nike episode, there was a reaction from those on the right, but the airlines held firm. A plan to take away Delta's tax breaks in Georgia, where the company has its headquarters, was quietly dropped.

Woke capitalism represents a fine line for companies to walk. They have to be sure that their customers are in the right demographic—and they also have to be confident that they can face down political opposition. Individual American states are easy to defy but the federal government or the European Union are another matter. North Carolina dropped a ban on transgender bathrooms after a corporate boycott, but Target lost sales after it publicly supported transgender facilities.

As trade disputes escalate between America and the rest of the world, and as Brexit reaches its next stage, companies will be dragged into political controversy in 2019. Global supply chains mean that multinationals shift components across borders many times. They will face higher costs if they have to localise production and will be tempted to speak out. Few firms will be happy if forced to choose sides between America, the world's biggest economy, and China, a key part of their supply chain.

And the recent successes of populist parties in Europe mean that cultural controversies will intensify. Potential shortages of workers will cause many companies to campaign for more open migration, at the risk of offending nativist politicians. The prospect of a more conservative United States Supreme Court may drag issues such as abortion and the rights of same-sex couples back onto the agenda.

A corporate campaign that works well in one country might bomb in another. CEOs will need to be as well-briefed on politics as a presidential candidate preparing for a live debate.

**Big issues,
requiring
companies to
respond, will
keep emerging**

▶ by Elizabeth Warren, a Democratic senator from Massachusetts, envisages workers being given at least 40% of all board seats. A populist swing to the left could see the tax cuts reversed or the adoption of an aggressive anti-trust policy.

If history is a guide, at this point in the cycle many bosses will award themselves lavish pay packages and pursue takeovers. Sensible leaders should have a plan B

ready for 2019. The best protection against turbulence is to have a fortress-like balance-sheet. Sadly, however, a quarter of firms in the S&P 500 have net debt of more than three times their gross operating profits, a yardstick of excessive borrowing. This group of companies includes giants such as Kraft Foods and Hilton. When you are on top of the world, the biggest mistake is to assume you will be there for ever. ■

MeToo, part two

Progress towards workplace equality will be uneven

Sacha Nauta public-policy editor, *The Economist*

ONLY A HERMIT could have missed that 2018 was—on the surface—the year of the woman. In America the #MeToo and #TimesUp movements shone a stark light on unequal treatment of women; not just their harassment and assault but also their restricted access to power. In Britain companies had to report gender pay gaps for the first time, triggering similar conversations about workplace inequities, their causes and consequences, and pushing executives to explain themselves and say what action they would take in response.

Given all this, it is tempting to assume that 2019 will bring nothing but progress for women in work. Alas, it will not. Yes, over the longer term the direction of travel seems clear. But as with any change, progress will not be in a straight line. In the world of work, two things to watch out for in 2019 are a #MeToo backlash and the “pink-washing” of gender data.

Early signs of a backlash have already begun to show (see chart). “Has #MeToo gone too far?” became a common question in 2018, referring to the fear of false accusations, the inability of the accused to defend themselves and the conflation of rapists with juvenile “man-boys”. In the aftermath of the Brett Kavanaugh hearings, the backlash assumed human form in the person of Lindsey Graham, a Republican senator, who said: “I’m a single white male from South Carolina, and I’m told I should just shut up, but I will not shut up.” The hashtag #HimToo trended, with tweets warning that “mothers of sons should be scared” and that “no man is safe”.

But the real backlash will be more subtle than Mr Graham’s furious tirade, and far more damaging for women. The worries for 2019 are threefold. First, that senior men will avoid female colleagues, out of fear of being falsely accused of harassment or having their chivalry misinterpreted. A survey in early 2018 by Lean In, an advocacy organisation for women in the workplace, showed a significant uptick in men saying they were more worried about working alone with a woman, travelling or dining with her (the “Pence rule”) or mentoring her than before #MeToo. As firms seek to limit their exposure to harassment claims, such attitudes are likely to spread. But by locking women out of opportunities, this will hamper efforts to close gender gaps, particularly when it comes to promotion. It will also open up firms to gender-discrimination claims of a different sort.

Second, some well-intended moves, such as investing in training or adopting “zero tolerance” policies, will turn out to be counterproductive. Workplace training in 2018 became a favoured corporate response to #MeToo, yet evidence shows that bad training (eg, depicting cartoonish behaviour) can actually increase workplace discrimination and bias rather than reduce it. And zero-tolerance statements may sound tough, but they can deter people from reporting inappropriate behaviour.

Third, it is all but inevitable that 2019 will bring some

#MeToo/gender fatigue. Particularly once the media’s gaze has moved on, some firms will be tempted to reassure themselves (and their shareholders and employees) that they have done enough. In an early sign of this, an analysis by Scout, a recruitment platform, found that after an initial 41% jump in hirings of female executives immediately after #MeToo, numbers have now returned to pre-#MeToo levels.

Finally, the year will also bring yet more gender indices, rankings and targets as firms seek to demonstrate their gender credentials and as others—governments, the media and analysts—name and shame the best and worst in each class. California recently passed a law requiring publicly traded corporations to include at least one woman on their boards by the end of 2019 and more by 2021. Iceland, which in 2018 became the first country to oblige large companies to demonstrate they were providing equal pay for equal work, will extend this to medium-sized companies in 2019. British firms will publish their pay gaps for the second time (and perhaps prepare to publish ethnicity pay gaps too).

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It’s complicated

Undoubtedly the British press will seize upon firms where overall gaps have widened, citing this as evidence of regression. That would be a mistake. Companies in male-dominated fields may in fact see their overall pay gaps (temporarily) widen if they are doing the right thing, namely hiring more female graduates at entry level. And firms trying to increase the number of women in senior positions may well see the pay gap among top-quartile earners (again, temporarily) widen as relatively junior women are promoted into the top ranks.

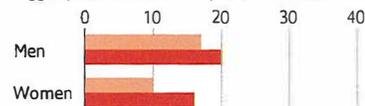
Hence 2019 will be a year for corporate heads to watch out for “#MeToo fear” among male leaders causing unintended discrimination on the office floor. Investors and activists aiming to hold firms accountable should look beyond top-line data and simplistic counting. ■

#Backlash

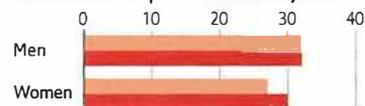
United States, % of adults agreeing

■ Nov 2017 ■ Sep 2018

False accusations of sexual assault are a bigger problem than unreported assaults



Women who complain about sexual harassment cause more problems than they solve



Source: YouGov

2019 in brief

The streaming wars intensify as both Disney and WarnerMedia launch direct-to-consumer services at around the same time

Will impatience pay?



Peak Valley

Silicon Valley will lose some of its lustre

Alexandra Suich Bass US technology editor,
The Economist SAN FRANCISCO

THE COMING year will mark the 80th anniversary of Silicon Valley's original startup. In 1939 Bill Hewlett and David Packard founded their fledgling company, Hewlett-Packard, in a garage near Stanford University. Their success would inspire a generation of entrepreneurs to pursue invention and creation against all odds. Today that garage is designated one of California's historic landmarks. But what it represents—a cheap place to tinker and launch a company in Silicon Valley—is also becoming a thing of history.

The San Francisco Bay Area, in which Silicon Val-

ley sits, is still the world's leading technology hub. In 2017 venture capitalists invested \$24.3bn in companies based in the region—one-third of the total they invested across all America. The area boasts a potent combination of talented entrepreneurs and engineers, proximity to top-notch research universities, a large pool of venture capital and a culture of risk-taking. It is the birthplace of many leading technology firms, including Apple, Alphabet (Google's parent company), Facebook, Netflix and Tesla. As an ecosystem, it has repeatedly spawned and embraced disruption, rebounding from every bust and defying critics who have predicted its demise.

Yet despite its many clear advantages, Silicon Valley will experience a "techsodus" in 2019, as it becomes a less attractive place for startups to launch and grow. There are three reasons for this shift. First, Silicon Valley has produced tools that make it possible to run a company from anywhere—or everywhere. Through a combination of messaging apps, video-conferencing, productivity software, goal-setting tools and more, start-

The giants everyone loves to hate

Big tech firms should brace themselves for more criticism

Alexandra Suich Bass

BASHING WALL STREET IS SO 2009. Today politicians are redirecting their anger towards America's most successful technology firms. Alphabet (Google's parent company), Amazon, Apple and Facebook are the new "BAADD" boys. Critics say they are big, anti-competitive, addictive and destructive to democracy.

Big tech has been unpopular in Europe for years, but more Americans will join the chorus of criticism in 2019. Democrats and Republicans may not have many views in common, but they agree that large tech firms pose a problem for society. President Donald Trump has already made jabs at Google and Amazon while Democrats Elizabeth Warren and Bernie Sanders, both of whom will try to run for

Dissing the West's most powerful corporations will be popular

president in 2020, have blamed tech for a variety of ills. Meanwhile, Facebook has been unfriended by both parties. Expect even more aggressive tactics in the coming year.

These punches will not do much harm to tech firms, however. The most acute threat to big tech is that of antitrust action, along the lines of the American government's attempt to break up Microsoft in the late 1990s. Yet such cases take years to build and litigate, and there will be no political will to see one through until after America's elections in 2020.

In the meantime, watch out for a different form of governmental pushback. During 2019 American and European regulators will block deals by large tech firms if they try to snap up more young startups that could grow into competitors. To date regulators have waved through such deals (notably Facebook's purchase of two would-be rivals, Instagram and WhatsApp), but they will no longer be so accommodating. American legislators may also try to pass new consumer-friendly privacy rules, in line with those already adopted in Europe.

Any such laws will hardly harm the giants' lucrative businesses. Internet firms spent record sums of money on lobbying in 2018. In 2019 they will splash out even more on campaigns in Washington, DC, and Brussels in an effort to win allies. But politicians will try to keep their rhetorical distance, especially Americans with an eye on the presidency; dissing the West's most powerful corporations will be a popular strategy.

In China 2019 will be celebrated as the year of the pig. In the West it will be the year politicians portray tech firms as badly behaved dogs, which they want to kick and leash.



ups are becoming "distributed" entities, with employees sprinkled around the world. That means more startups will be able to capitalise on Silicon Valley's expertise and talent base without needing to be there.

Second, Silicon Valley is becoming less attractive because it is no longer possible to innovate there on a shoestring budget. The cost of living in San Francisco is now the highest in America; a family living on less than \$120,000 is considered "low income" by the Department of Housing and Urban Development. These high costs mean fewer people can afford to risk going to work for an unproven startup, and more people will go elsewhere. In 2017 several counties in the Bay Area saw their largest combined domestic outward migrations in around a decade. Some 21% of San Francisco-based users of Redfin, a property firm, say they are looking to move away.

According to CBRE, a commercial-property firm, it costs \$62.4m a year to run a 500-person company with 7,000 square metres (75,350 square feet) of office in San Francisco—around 50% more than in Portland and Atlanta, and double what it costs in Vancouver and Toronto. In 2019 more entrepreneurs will favour other cities to launch their firms, or will quickly open a second office elsewhere in order to scale up outside the Bay Area.

A final reason why Silicon Valley is losing some of its dynamism is the looming presence of the tech giants. Today's leading technology firms are more powerful, nimble and expansive in their ambitions than any generation of company before them, which leaves less space for startups to flourish. "It was never quite this dominated. You always had bigger companies, but you never had anything quite like this," says Peter Thiel, a venture capitalist and board member of Facebook. He is leaving the Bay Area for Los Angeles, and predicts that the Bay Area's power relative to other tech hubs is on the wane.

Valley of dreams

The stifling impact of the tech giants affects the marketplace for ideas everywhere, and especially the market for talent in the Bay Area. Because the giants are so successful, they can afford to throw huge sums in cash and stock at employees, even middle managers, making it extremely challenging for startups to hire. Engineers with graduate degrees in artificial intelligence are now paid like professional athletes, fetching compensation of \$5m-10m a year. Cities that are farther away from the tech giants' tentacles can help startups hire affordably and reduce the risk of their employees being poached.

Silicon Valley has become a victim of its own success. There is no single place that will replace it as the world's leading tech hub, but many other places will benefit, including Los Angeles, Portland, Dallas, Toronto, London, Berlin, Beijing and Shenzhen. If this shift causes innovation to become more geographically diverse and inclusive, that would be a welcome development.

But if Silicon Valley becomes like Wall Street, dominated by a few too-big-to-fail firms, with a culture oriented only towards money, that would be a pity. Silicon Valley has created so many world-changing inventions because of its density of startups, casual networks, willingness to embrace risk and belief that it was possible for upstarts to dislodge incumbents. The coming year will test whether Silicon Valley can maintain its edge as innovators are tempted to set up shop elsewhere. ■

2019 in brief

An Indian budget airline, **IndiGo**, launches a direct flight from India to London. Passengers may arrive before those on **Hawaiian Airlines'** new non-stop service from Boston to Honolulu, which, at a flying time of just under 12 hours, will be the longest domestic flight in the United States



AI in vogue

The fashion industry is about to smarten up

Anne McElvoy senior editor, *The Economist*

FASHION IS an innovative but inefficient business. Online clothes-shoppers return more than 50% of the garments they order because they do not fit, costing the global apparel business around \$62bn a year. Brands over-stock because they fail to predict customer preferences correctly and then have to slash prices, damaging their margins.

So watch for a new trend to sweep the industry in 2019: applying artificial intelligence (AI) to these problems will be all the rage. Like other retailers, fashion chains have mountains of data on customers' habits. Analysing them using machine learning will enable more accurate sales predictions, ensuring that stock is moved to the right place at the right time, says Achim Berg of McKinsey, a consultancy.

But the real opportunity lies in analysing online behaviour to predict next year's trends. Edited, an analytics firm, helps firms track trends on social media and aggregates recommendations by popular bloggers to predict whether pistachio green will be the hot colour next summer, or gold hot pants will be an investment piece outside Florida. Choosy, an online retailer based in New York, uses AI to track which images its millennial customers are looking at, so it can place orders for similar items from its suppliers in real time.

AI can also help online shoppers assess fit and shape more accurately, making returns less likely. It can do "a pretty good job of recreating reliable body geometry," says William O'Farrell, formerly of Body Labs, a 3D-scanning firm acquired by Amazon. Its technology analyses uploaded photos of shoppers to create a lifelike model that can try on clothes virtually and be viewed from different angles. It could allow for cheap custom tailoring, even for mass-market brands. Beauty is in the AI of the beholder.

Into the fast lane

Three big trends in personal transport will become increasingly entwined

Simon Wright deputy briefings editor, *The Economist*

2019 in brief

Naspers, one of South Africa's biggest companies, launches a \$100m fund to invest in the country's technology start-ups, as well as a \$200m investment over three years in South Africa's existing technology businesses

GETTING AROUND once involved a choice between walking, taking public transport or else buying a car and filling it with fuel, sitting behind the wheel and slamming a foot on the throttle. But changes are coming, courtesy of carmakers and tech giants, as three trends intertwine. Electric vehicles (EVs) will supersede those powered by fossil fuels. Mobility services such as car-sharing and ride-hailing are blurring the lines between private and public transport, displacing buses and trains as well as car ownership. And autonomous vehicles promise to make driving skills redundant.

Big advances in all three of these areas are on the road map for 2019. EVs, with their smooth and silent acceleration, will move further into the mainstream. Tesla, which has led the top end of the market, will face more competition. The new Jaguar I-Pace and the first of the Audi e-tron range will be joined by the Mercedes-Benz EQ family, the Porsche Taycan and the Volvo XC40 EV.

A host of Chinese "Teslas", along with models from BMW and from Volvo's Polestar sub-brand that are due in 2020, will pack the premium market with options. Motorists looking for cheaper electric motoring will also have greater choice. EVs from VW, Ford, Skoda, Mini and many others will go on sale in the next year or so and



will start to compete on total ownership costs with cars powered by internal-combustion engines.

The longer distances these vehicles can travel without topping up, and the gathering pace of the roll-out of charging infrastructure, will help allay the fear (aside from cost) that prevents people from switching: range anxiety. Electrify America, a subsidiary of VW, plans to install 2,000 charging points across America by June 2019, including fast chargers that can replenish a battery in a matter of minutes at 100 Walmart stores.

European carmakers also have plans to marry EV

Air war

Two new airports could prompt another protectionist backlash in aviation

Charles Read online business and finance editor, *The Economist*

MODERN AIRPORTS are rather like medieval cathedrals: they are huge and take decades to build. For all Germany's teutonic efficiency, Berlin's new airport, which was meant to have opened in 2011, has yet to do so, hampered by over 65,000 errors in its construction. The most delayed project of all is a third runway at London's Heathrow airport. First approved by the British cabinet in 1946, it remains un-built more than 70 years later because of arguments about noise and pollution.

However, in a remarkably short time—less than five years—small armies of Turkish and Chinese builders have turned swathes of countryside outside Istanbul and Beijing into the world's two largest airports for international passengers. They will compete to become the next global megahubs, taking on the likes of Dubai.

The first of these, Istanbul's new airport, is scheduled to open in December 2018. Its three runways will

They will compete to become the next global megahubs

handle 3,000 flights a day, carrying 90m flyers a year; by 2028 there will be six runways carrying more than 200m passengers annually. Daxing airport in Beijing is due to open in autumn 2019. It too will vie for the title of the world's biggest airport, with eight runways and room for more than 100m passengers a year initially. The new facilities are needed to serve a fast-growing appetite for air travel in China. IATA, a trade group, predicts that the country will overtake America as the world's biggest aviation market by 2022, and will go on to hit a total of 1.5bn passengers a year by 2036.

Yet it is not the size of these airports that ruffles feathers in the aviation business. The worry is about the growing market share of the airlines they host, particularly for passengers on connecting flights to and from other places. Over the past decade the Gulf carriers—Emirates of Dubai, Etihad of Abu Dhabi, and Qatar Airways—have cornered this market, taking market share from traditional flag carriers in Europe and Asia, which blamed their Gulf rivals' success on state subsidies. American carriers have campaigned for their government to rip up open-skies deals with the Gulf

technology with mobility services that carmakers hope will generate profits as younger customers opt for short-term hiring or ride-hailing as an alternative to the expense of car ownership. Using EVs makes sense. As well as the total cost of buying and running an EV soon matching that of cars with internal-combustion engines, with far fewer moving parts, these cars will be easier to maintain and also satisfy the demands of an increasing roster of cities for zero-emission vehicles.

VW, Renault and PSA all have EV car-sharing schemes that will be launched, or are due to expand, during 2019. VW will start in Germany before going international in 2020. The two French firms will serve Paris before spreading farther afield.

The boldest leap will be the coming marriage of mobility and electricity with autonomy. Though several firms (led by Waymo, Google's autonomous-car unit) are testing self-driving robotaxis, these are based on combustion-engine vehicles. General Motors hopes to overtake them by launching large-scale electric robotaxi services in several American cities in 2019, probably starting in San Francisco—right on the doorstep of the techies who are seeking to disrupt the car industry.

The choice of ways to move around big cities will grow as robotaxis and other sharing services become part of urban transport systems, and electric scooters and bicycles are added to the mix in more places. But the question for the firms involved is how to make money. Carmakers face a tricky transition from selling cars to selling services as well. Tech firms need the incumbents to provide vehicles, if they are to realise their ambitions in mobility. Expect more tie-ups between the two camps in 2019 as they try to find roadworthy business models. ■

states to limit how much flying their airlines can do into the United States. In Europe, Air France-KLM and Lufthansa have been lobbying for a revised Regulation 868, which would allow the EU to impose sanctions on foreign airlines that get state subsidies.

Yet even without any of those measures, passenger numbers on the Gulf carriers have stalled, because of slower economic growth in the region and bad business decisions (in an effort to boost traffic, for example, Etihad took minority stakes in other airlines that eventually went bankrupt). Reports in September 2018 suggested that Emirates and Etihad were seeking a merger to help prop each other up. And now along come the new giant hubs in Beijing and Istanbul, adding to the turbulence.

American and European airlines will step up their anti-subsidy campaigns in 2019—to little avail. Cheap connecting flights from, say, Europe to Australia via Beijing are less the result of state subsidies than of efforts to sell spare seats on already profitable flights, notes Will Horton of CAPA, an aviation consultancy. Turkish Airlines gets few subsidies: in 2017 it received handouts of just \$60m against revenues of nearly \$11bn. The cheap Turkish lira will help it grab international market share as the dollar cost of hiring local cabin crew and the like falls. Prepare for competitive pressures to take off.

2019 in brief

Google expands its network of private undersea cables when three come online: the Curie cable links the west coast of America with Chile; HK-G, a joint venture with regional partners, connects Hong Kong to Guam; and another joint venture, the 4,500-mile (7,200km) Havfrue cable, links America and northern Europe

Away run

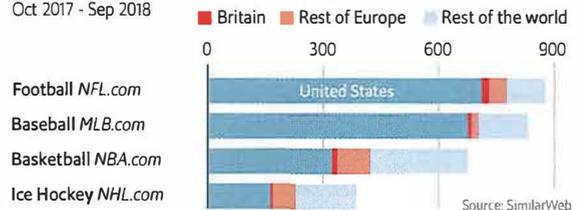
MLB reaches first base in Britain

Dan Rosenheck data editor, *The Economist*

EUROPEANS DON'T know much about baseball. One of the few things the continent's sports fans do know about the game is that Major League Baseball (MLB) has the gall to call its championship contest the "World Series"—a seemingly presumptuous claim for a circuit that contains one Canadian club and 29 American ones. Baseball is in fact far less parochial than most Eu-

World serious?

North American sports, web traffic by region, m
Oct 2017 - Sep 2018



ropeans might suspect: it is the most popular team sport in the Spanish-speaking Caribbean and in Japan, South Korea and Taiwan. And MLB has held regular-season games in countries near (Mexico, starting in 1996) and far (Australia, since 2014) in the hopes of extending its reach. The 2019 season will open in Tokyo. Even so, the league has always considered football-mad Europe to be a territory too hostile to merit investment.

That will change next June, when MLB will dispatch both halves of its most bitter rivalry—the New York Yankees and the Boston Red Sox—to play a two-game series in London. In theory, England should offer fertile ground. It shares a language with America and is the birthplace of cricket, baseball's closest cousin. Other American professional sports have enjoyed success there: the National Football League (NFL) sells out three or four games a year at Wembley Stadium, and the National Basketball Association stages one match at the O2 arena for which tickets often cost hundreds of pounds.

Baseball, however, may prove a harder lift. MLB plays ten times as many games in its regular season as the NFL does, making each individual contest far less consequential. It also attracts much less interest than American football does from bettors, the subset of British fans who tend to be best acquainted with foreign sports. With a leisurely pace and an emphasis on hand-eye co-ordination and pinpoint movements, it delivers far fewer feats of transparently remarkable athleticism than basketball does. And it has never developed a global celebrity like Michael Jordan to raise its profile internationally.

With just two games scheduled, there will probably be enough curious locals and homesick American expatriates to draw a healthy crowd to London Stadium, the venue built for the summer Olympics of 2012. But even if the experiment is successful, America's "national pastime" will remain a primarily domestic affair. ■

How to save entrepreneurship



Barriers to starting businesses need to come down, argues Tobias Lütke, founder and CEO, Shopify

WHAT IF YOU woke up tomorrow and all the music was gone? Imagine the richness stripped from the planet. Would it be the end of the world? No. But it's not the world I signed up for. Now substitute music with entrepreneurship. What if you woke up one day and entrepreneurship was dead?

Despite startup culture gaining visibility from hoodie-wearing CEOs, entrepreneurship has been declining for decades. The number of new businesses in America has fallen by nearly half since 1978, according to the Brookings Institution. Almost all industrialised countries have seen similar declines. The Fraser Institute compared 2001-07 with 2008-14 and found that startup creation dropped by 18.6% in America, 20.3% in Australia, 8.5% in Canada and 7.5% in Britain.

Entrepreneurship won't die in 2019, but it is endangered. The baby boom has passed, and millennials are half as likely to start a business as those over 50, according to Gallup. In many countries, population growth has slowed sharply. These demographic shifts play a part, but I have another theory.

Not so long ago, there were small-business opportunities in every town. Each neighbourhood needed a butcher, a baker, a candlestick-maker. Then along came the big-box store, and everything changed. There's less space for traditional entrepreneurship when big retailers dominate the physical and digital worlds.

There are other obstacles too. Many categories of entrepreneurship require licensing. In America, Mark Zuckerberg can start Facebook without asking, but can't cut hair without government permission.

Liberty and the pursuit of happiness

I know how hard it is to start a business. It's lonely. It's fundamentally irrational. To paraphrase Brad Sugars, you work 100 hours a week to avoid working 40 hours a week for someone else. But that's the beautiful thing about entrepreneurs. They don't necessarily want to take over the world, just to carve out their corner of it. They're reaching for independence.

The number-one reason Shopify merchants love running their business is the freedom to make their own decisions. How many of us would want that kind of independence if it wasn't so hard? Think about those who flocked to San Francisco in 1849.

Was the Gold Rush really about gold? No, it was about the availability of opportunity. All you needed was a pick axe, and you were golden.

To preserve entrepreneurship, we need to make it easier. To retain vibrant cities and boost employment, every player—governments, banks, technology providers—needs to reduce friction for entrepreneurs.

We also need to expand our entrepreneurship definition beyond Silicon Valley stereotypes. Entrepreneurs include immigrants making ends meet for their families. When I came to Canada from Germany, I started an online snowboard store called

To preserve entrepreneurship, we need to make it easier

Snowdevil because I couldn't get a work visa. The software I built for this store eventually became Shopify. Despite declining entrepreneurship rates, immigrant-owned businesses in America have increased, from 14% in 2007 to 16% in 2016, according to the United States Census Bureau. Fully 43% of *Fortune* 500 companies were founded by immigrants or their children.

Entrepreneurs also include new mothers who want more time at home. In our annual survey, 75% more females than males reported working from home as their primary motivation for starting a business. People who identified as a non-binary gender were four times as likely to become entrepreneurs because they couldn't find employment anywhere else. Entrepreneurship isn't always a passion. Sometimes it's a requirement.

So much of the last few centuries' progress was driven by entrepreneurs. They're the ones we read books about, from Andrew Carnegie to Phil Knight of Nike. Entrepreneurship is an age-old profession. We can't let it fade away. We need more people in the garage, in the kitchen, in the evenings, making the world better for others and themselves.

The good news? We're on the right track. Technology like augmented reality opens new entrepreneurship categories; starting a business is more accessible with new tech platforms; and the human desire for creative pursuits will grow as more jobs become automated. For the first time in decades, entrepreneurship will soon be on the rise—if we work together to help it thrive.

Putin it in the pipeline



From Russia with Amur

New energy ties to China pose a geopolitical challenge to the West

Henry Tricks deputy business-affairs editor,
The Economist

SINCE THE end of the cold war, Russia's natural-gas exports have been as much about promoting the Kremlin's strategic interests as the country's economic ones. So the potential completion by Gazprom, the state behemoth, of three pipeline mega-projects in 2019—one to China, another to Germany and a third to Turkey—will send geopolitical ripples around the world.

Deliveries of gas along the 3,000km (1,900-mile) "Power of Siberia" pipeline, running from the Chayandinskoye and (eventually) the Kovyktinskoye gasfields in eastern Siberia across the Amur river into China, are promised to start as early as 2019, eventually reaching 38bn cubic metres (bcm) a year. Built despite Western sanctions on parts of the Russian oil-and-gas industry, the pipeline will help meet surging gas demand in China, which recently imposed 10% tariffs on American liquefied natural gas (LNG) as part of its trade war with the United States. In energy, as with other aspects of big-power politics, Russia and China are moving closer together.

The \$55bn pipeline deal with China that secured President Vladimir Putin's "pivot to Asia" was struck in 2014 when Gazprom's European clients were up in arms over the Kremlin's role in the annexation of Crimea, and threatened to find alternative gas supplies. Yet since then, Russia's natural-gas exports to Europe have reached record highs. That puts Gazprom in a stronger position to advance its other two big projects: the Nord Stream 2 pipeline to Germany, and the one to Turkey, known as TurkStream.

Both of these also have important strategic ramifications because they would enable Gazprom to vastly reduce its need for transit routes via its nemesis, Ukraine,

through which most Russian gas to Europe currently flows. Despite opposition in Brussels and from many European countries, which are sensitive to Ukraine's plight, construction has started on Nord Stream 2. It will double the natural-gas-carrying capacity from Russia directly to Germany to 55bcm, and is being built by a consortium that includes Gazprom and five big European backers.

American officials have held out the possibility that anti-Kremlin sanctions could be imposed on the project's financiers, including Uniper and Wintershall of Germany, OMV of Austria, France's Engie and Royal Dutch Shell, the Anglo-Dutch supermajor. That could halt Nord Stream 2 in its tracks. President Donald Trump has publicly scolded Germany for running the risk of becoming "totally dependent" on Russian energy unless it changes course—though cynics suspect that his main aim in stopping Nord Stream 2 would be to sell more American LNG in Europe.

The 15.75bcm Turkstream pipeline, meanwhile, comprises two routes. One runs from Russia to Turkey across the Black Sea, and the other runs from Turkey to Europe. Much of the first is completed, and the second is due to be finished by the end of 2019.

Profits are a pipedream

Despite these advances, not all will go Russia's way. Because of EU anti-monopoly laws, Gazprom is prohibited from operating the Turkstream pipelines into Europe, forcing it to find European partners. All three mega-projects are likely to lose Gazprom money for years to come. And its customers will increasingly have alternative options, such as LNG imported by ship and renewable energy, which will enable them to drive harder deals with Gazprom. Mr Putin's pipelines may be bets that, in the long run, do not pay off. ■

What if

Snap, the company behind the Snapchat photo-messaging app, saw its share price drop below \$10 in 2018, as it faced growing competition from Facebook's Instagram app. **What if Snap's shares slip further?** Possible buyers include Google, a laggard in social media, and Disney, which may covet Snapchat's youthful audience. But the smart money is now on Amazon, after the e-commerce giant struck a deal with Snap in 2018 to allow Snapchat users to identify and buy items that appear in their photos

Going high

As attitudes towards cannabis mellow in North America, consumer spending will soar

Natasha Loder health-care correspondent,
The Economist

2019 in brief

IKEA opens its first store in the Ukrainian capital, Kiev, after 13 years of negotiations

KEITH VILLA is a man held in high esteem in America. He invented Blue Moon Belgian White Ale, today a bestselling beer brand. But after 32 years at MillerCoors, a brewing giant, he decided to leave to create the next big thing in inebriation: cannabis-infused beer. Mr Villa is riding the crest of an exciting new wave in the world of pot. More than 75m adults in North America can now legally buy cannabis, and sales growth of 40% is forecast in 2019 by Arcview Market Research & BDS Analytics. Opportunity beckons.

Canada and California both legalised recreational use of cannabis in 2018, and sales are expected to accelerate dramatically in 2019 as new stores are built. Many cities and counties in California did not at first allow such shops to open. But given that cannabis can be legally delivered anywhere in the state, via online sales, opposition to retail outlets will crumble in 2019, predicts Tom Adams, managing director of BDS Analytics.

Globally, sales of legal, recreational pot, rather than medical use, will be a key driver in what Arcview predicts will be a tripling of spending by 2022 to \$32bn. Uruguay and Switzerland already permit sales, but North America will be the main source of growth. The newly legal industry needs only to tempt people away from the illicit market to grow. But it will also seek out first-time consumers.

Britain, like many other countries, has recently opted to allow the medicinal use of cannabis. Lawmakers insist its move was not the first step to broader legalisation. This flies in the face of a trend for medical use to precede a softening of public attitudes towards the drug—followed by further liberalisation.

Since 1961, due to a UN convention on narcotic drugs, most countries have followed America's lead in treating cannabis as though it was in the same category of potential harm as opioids, but also as having no medicinal use. Both assertions have always been illogical.

The international insistence that cannabis had no medical use looked even more ridiculous when a British drugs company, Gw Pharmaceuticals, developed a pipeline of drugs based on cannabis.

As public attitudes towards legal pot have softened in America, some people even wonder whether the federal government might allow it to be recategorised as less harmful. There is growing pressure for legislation to make it clear that each state may regulate pot as it sees fit, without fear of legal action against individuals and firms from the federal government. This would unlock enormous amounts of investment into the cannabis industry and "supercharge growth", says Mr Adams.

A trip to the bank

Existing legalisation has already prompted much innovation in pot-based consumer products. The non-psychoactive ingredient cannabidiol is starting to appear in soft drinks, thanks to its reputation as being good for anxiety and chronic pain. Even Coca-Cola, the giant of soft drinks, has admitted to being interested. Others, such as Mr Villa, want to put the trippy part of cannabis, tetrahydrocannabinol (THC), into drinks or edible products. Many large drinks firms are eyeing this market, and Rebel Coast Winery, in Redondo Beach, California, already sells a sauvignon blanc infused with THC.

Young people's reluctance to smoke cannabis for health reasons has prompted a flowering of innovation in other delivery methods, including sensual lubricants, gummy bears, vape fluid and under-the-tongue sprays. These new products have required the reformulating of cannabis as an ingredient to make it tasteless and capable of triggering an almost immediate "inebriation event", as Mr Adams puts it. Being able to feel the effects of cannabis right after ingestion allows for social consumption—like alcohol. It also avoids the problem of people consuming too much because they think it isn't working. Historians of the future will consider 2019 to be an important year in the story of how global attitudes towards cannabis started to chill. ■



Decentralise, digitise, decarbonise



The damaging legacy of carbon fuels can be reversed, argues Isabelle Kocher, CEO, Engie

AT THE END of a flight from Stockholm to Vancouver I looked down at a landscape eerily similar to the one I had left: the air was grey and dense with smoke from wildfires. These two cities typically boast some of the best air quality, but last summer they presented a major health hazard. Breathing such air is said to be as damaging as smoking seven cigarettes in a day. Changes in climate have led to hot, dry conditions that increase the risk of fires; 17 of the Earth's 18 warmest years have occurred since 2001.

Years ago, and ahead of the market, my company decided to begin divesting from such sources of electricity as coal. We felt compelled to take responsibility for reimagining the future of energy.

Today, although fires, droughts, hurricanes and floods have increased year over year, there is some good news: the economics of energy are quietly changing. The price of solar electricity has fallen below that of most conventional sources. In 2018 we signed an agreement that put the price of solar in Senegal at €0.038 (\$0.043) per kwh, one-fifth of the price of coal. The cost of solar has decreased by 73% between 2010 and 2017.

In August 2018 California, also deeply affected by wildfires, passed a bill requiring that 100% of its electricity be produced from carbon-free sources by 2045—reflecting the political pressure for more responsible approaches to energy production. Other American states have done the same. Embracing this new reality is becoming the only way to stay competitive in a world affected by climate change. The technologies that will enable this new era are decentralised, digital and decarbonised.

The future in 3D

Just below our corporate headquarters in Paris you can see driverless electric vehicles (EVs). EVs are on the rise: there were 1m of them on the road in 2015, and 3m in 2017. In offices and factories automation is rapidly expanding. The number of "internet of things" connected devices—sensors, displays, personal computing—is estimated to have reached around 11 per person in Europe and America, all powered by rechargeable batteries. In aggregate they represent an enormous distributed network of energy consumption and storage.

Energy production is also becoming

more decentralised. Light-footprint power plants will deliver affordable electricity to remote areas in Africa and Asia, putting an end to lack of energy access. Sharing will further cut costs and increase reliability in the system. If my neighbour needs extra energy tonight while I am travelling, she will be able to use my excess capacity.

A digital network is beginning to connect these distributed systems. They will be able to learn, optimise and rebalance to

The rate of innovation in energy will accelerate

adapt to our needs: dimming lighting or guiding our paths in the dark, optimising the speed of our vehicles, the flow of traffic and the efficiency of factories.

Energy underpins the information economy. Digital companies will drive some of the largest demands for energy. The safety of the grid and the safety of data flows are already inextricably bound. This link will only become more critical to the security of companies and nations. And as people grow more and more concerned about clean air, cool temperatures and safe livelihoods, and as the cost of new sources of energy begins to undermine conventional generation techniques, companies will feel the pressure to seek a new, energy-driven, competitive edge.

The energy company of tomorrow will be increasingly concerned with the sources and quality of the services it provides, and with innovation. The industry will not only see a proliferation of solar and wind, but continuing innovation across a variety of sectors. The limited supply of lithium in the world will push the boundaries of energy storage as we continue to seek next-generation technologies.

We will develop systems that will help us thrive and, over time, even reverse the damaging legacy of fossil fuels. Resisting these changes is not simply unethical, it is economically irresponsible: the rate of innovation in energy will accelerate, with new technologies displacing old ones. The three Ds of new energy—decentralisation, digitisation and decarbonisation—are at the heart of an energy revolution. It will produce a rapid and global transformation in the pursuit of environmental and economic goals. This is the vision of the future we urgently need to espouse.

Finance

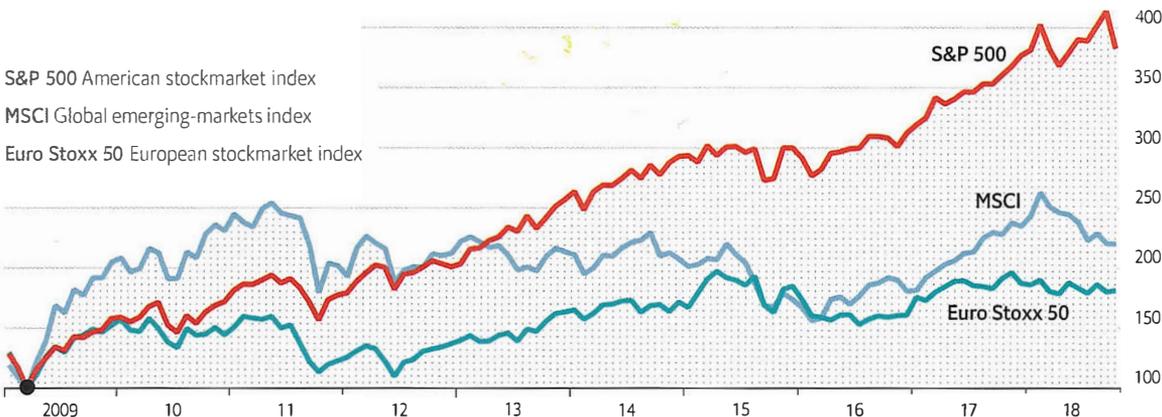
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Your pace or mine?

Share prices, March 1st 2009=100



Convergence theory

Why it makes sense to bet on stocks in Europe and in emerging markets catching up with America's

John O'Sullivan Buttonwood columnist, *The Economist*

HERBERT STEIN, a well-known economist, was sceptical about the dismal science. What economists know, he said, amounts to not much more than a list of things that cannot go on for ever. But if something cannot go on for ever, it will stop.

Investors surveying the outlook for 2019 will have in mind a few things that cannot last. At the top of most lists would be the bull market in America. The S&P 500 list of leading shares has quadrupled in value since 2009. The leading American stocks have done much better than emerging-market or European stocks (see chart). That in large part reflects the strength of America's economy. To say that this outperformance cannot go on for ever, as Mr Stein might have noted, is not saying a whole lot. The questions for investors are: how soon will it stop? And just as important, exactly how?

Broadly there are two views. The first, cautious view says, in essence, that America and the rest of the world will converge by America falling back. America's stockmarket is pricey. Its economy has enjoyed a long expansion. GDP growth will slow as the stimulus from the tax cuts of 2018 fades. There is a growing risk that the Federal Reserve, which has been steadily increasing interest rates, will tip the economy into recession. The rest of the world looks even more vulnerable. Emerging markets are in a funk. The euro zone remains accident-prone and still lacks a shared mechanism for supporting its economy through fiscal policy. China's economy has

lost momentum. And President Donald Trump's trade wars are an ever-present threat.

A second, optimistic view is that convergence will occur through the rest of the world catching up. It says America will avoid recession because the Fed's governors are conscious of the risk of tightening monetary policy too much. This view acknowledges that emerging markets are out of favour, but judges that only a handful are plagued by the old evils of inflation and balance-of-payments problems. It believes the chance of progress on fiscal risk-sharing in the euro zone is much higher than is generally appreciated. And it sees an upside to the threat of a trade war, because it means Chinese authorities will be forced to stimulate the economy. Already monetary policy has been relaxed and tax cuts are in the pipeline.

Take your pick

By and large, investors seem to subscribe to the first view, or something like it. A closely watched survey by Bank of America Merrill Lynch finds that fund managers have the gloomiest view of the world economy since November 2008. Almost half think that America's economy will be dragged down to the level of other economies, compared with less than a quarter who think that Europe and Asia will improve to close the gap. An old saying contends that bull markets tend to narrow as they age. There is a natural inclination to turn away from assets that have done badly and to double down on assets that have done well. The Merrill Lynch survey suggests this is what investors are doing. They say they are inclined to stick with American stocks and steer clear of emerging markets. ▶

2019 in brief

New €100 and €200 notes are introduced that are smaller, stronger and more secure. They are the last in the Europa series, which features the mythological character in two of the security features on the notes

▶ Yet investors are likely to be better served by betting on a catch-up by lagging markets. After a series of rolling crises—first in America, then in the euro zone, followed by trouble in emerging markets—it is understandable that they are cautious. But it also means they are prone to being wrong-footed by any good news on the world economy. Indeed, convergence is likelier simply because investors are positioned for it not to happen. If most investors have already loaded up on American stocks, there will be fewer marginal buyers in future to drive the prices of those assets up further. In contrast a bit of good news in, say, emerging markets can lift prices dramatically. Put another way, there is a case for buying non-American shares precisely because their defects have become all too apparent. There is now more upside than downside.

Non-American assets also have valuation in their favour. Compared with those in the United States, stocks in the euro zone and in emerging markets look cheap—that is, investors pay a lower price for a stream of company earnings. There is no law that says cheap assets cannot become cheaper. Patience may be required. But over time the chances are good that a punt on non-US equities has a higher pay-off.

Eventually, of course, the economy will hit the buffers. It cannot keep growing without pause. So it won't. But, to paraphrase Stein, if we only bet on things that last for ever, we will never bet on very much. Investors are constantly surprised by shifts in economies and in asset markets. It is plausible that the big surprise of 2019 will be that places that have been lagging start to catch up. ■

Binning the bumf

A huge economic stimulus could come from replacing paperwork with computers in logistics

Charles Read online business and finance editor, *The Economist*

FOR MANY shoppers, home delivery has never been so cheap or quick. Amazon, an e-commerce giant, now delivers orders within an hour or two in 50 cities. More than 90% of deliveries by JD, an up-and-coming Chinese rival, are now made within a day. But getting larger loads delivered remains painfully slow and expensive. It still takes most firms two or three days to get a quote to move a pallet or container by air or sea. The speed of delivery is unreliable: it can take between 30 and 90 days to move a container between China and Europe by ship. And air freight is shockingly expensive. Sending a 70kg parcel from Shanghai to London with DHL Express, a delivery firm, takes three times longer, and costs four times as much, as buying an airline ticket for a human of the same weight.

Much of the problem relates to dealing with all the legal documents, customs clearances, insurance contracts and other paperwork relating to trade. Maersk, the world's biggest container-shipping line, found that a single shipment of avocados from India to the Netherlands in 2014 required 200 communications involving 30 parties to straighten out all the bumf.

Freight forwarders make pots of cash from organising all this. According to BCG, a consultancy, they account for nearly a quarter of the entire logistics industry's output in 2014, or some \$895bn a year. And they are among the world's most technophobic businesses. Many still communicate mainly by fax or telephone. In sea shipping, most bills of lading—the documents that confer legal ownership of a shipment—are still physical sheets of paper that would be recognisable to the merchants who invented the concept in medieval Italy.

But this paperwork is starting to be digitised. Banks, insurers and governments, helped by technology companies, are combining forces to launch digi-



tal trade-finance platforms where computers do the hard work. IBM, a tech giant, and UBS, a bank, have already launched a platform to do this, called Batavia. Other European banks have backed separate projects called Marco Polo and We.Trade. But most exciting of all is the Global Trade Connectivity Network, due to be launched in 2019 by the governments of Hong Kong and Singapore. This will digitise bilateral trade between the two countries. As the project is supported by several Chinese banks, it is hoped that the mainland, which produces a seventh of the world's exports, will eventually join the system too.

The impact of all this could be big. Ditching paper will reduce transport costs, which should stimulate trade and economic growth. The UN reckons that the full digitisation of trade paperwork in Asia could boost the region's exports by as much as \$257bn a year, slashing transport times by 44% and costs by 31%. Some economists think the potential gains are greater than those from getting rid of all the region's remaining tariffs. More protectionism from America will surely weigh down global growth in the years to come. By digitising trade, governments and companies can offset some of the damage.

Potential gains are greater than those from getting rid of all of Asia's tariffs

America first

If America's economy slows in 2019, it will take the world with it

Henry Curr economics editor, *The Economist*

LOOK AT the news from 2018 and you might not think it was a good year for the world economy. President Donald Trump levied tariffs on America's allies and started a tit-for-tat trade war with China. As the Federal Reserve raised interest rates, Argentina and Turkey faced economic crises; other emerging markets with dollar-denominated debts wobbled. Monetary tightening flattened the yield curve, the difference between the returns on long-term and short-term bonds, which so often turns negative before recessions. Growth in both China and Europe slowed. Britain prepared for a potentially damaging Brexit. Geopolitical tensions and extreme weather helped send the oil price above \$80 a barrel.

Yet the world economy pressed ahead. It probably grew by just under 4% in 2018. For that, thank America, where demand has been unshakably strong. Mr Trump's tax cuts at the start of the year, combined with a spend-thrift budget, delivered a fiscal stimulus of over 1% of GDP. That has kept America's economy running hot even as the Fed has raised rates. Consumers and firms are flush with cash and many seem unworried by the multitude of risks in the air.

Whereas not long ago the world economy was in a synchronised upswing, its good health now depends on American largesse. Slowing growth in the euro zone is making the ECB's decision to wind down its quantitative-easing programme look premature. Italy's populist government has resurrected doubts over the sustainability of the country's debt. Japan's central bank has shown few signs of hawkishness, but growth there is slowing, too. China is struggling to balance the safety of its financial system with ensuring that it meets its economic targets. Its growth in 2019 will probably be closer to 6% than the 7% that was normal in recent years. Investors everywhere are nervous.

Take a walk on the downside

Will America's boom continue to flatter the global picture? On the upside, its budgetary spigots will remain open for now. Tax cuts will reach their maximum impact in 2019. The Fed seems committed to raising rates only gradually—too gradually to stop the party. Yet many forecasters predict an American recession by 2020. Despite its gradualism, the Fed remains a source of risk because the central bank faces immense uncertainty about when to bring rate rises to an end. If it tightens through a yield-curve inversion, as it did after the late-1990s boom, then expect trouble to follow.

It is also possible that problems could emerge in the financial sector. In the current expansion, assets have become expensive across the board, meaning there is no obvious pocket of excess, like dotcom stocks in the late 1990s or houses in the late 2000s. But if forced to pick one, most analysts will mention exuberant corporations which may have borrowed too much. In the bond

2019 in brief

A bank's minimum total capital must reach 8% of its risk-weighted assets by January 1st 2019 if it is to comply with **Basel 3 rules**

market, credit quality has deteriorated. The fraction of investment-grade corporate bonds rated BBB—the lowest investment-grade rating—has grown from less than 30% in 2009 to almost 45% now, according to Goldman Sachs, a bank. These issuers are one downgrade away from junk status, and an associated sell-off. Even firms with A-rated debt have increased their net leverage sharply since 2014. Some investors worry about the leveraged-loan market, in which interest rates float. A hawkish Fed could create trouble for borrowers with floating-rate debt. This is more likely if wage growth, the result of ever-lower unemployment, continues to rise, further compressing profits.

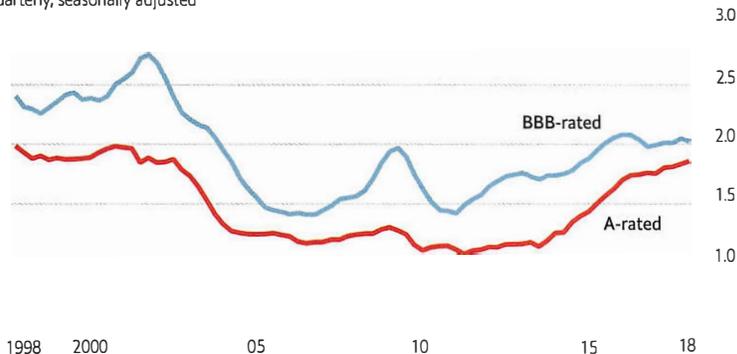
Any financial wobble is likely to prompt a flight to safety. That would exacerbate the dollar's strength, which has already lifted the greenback by almost 10%, on a trade-weighted basis, since early 2018. Emerging markets saw their currencies and stockmarkets plunge as it rose. Thankfully, among major emerging markets only Argentina and Turkey have so far faced dire straits, because both inflation and current-account deficits are relatively contained elsewhere. But others are not immune to a strong greenback; turn the screw tight enough and they will feel the pain from their dollar-denominated debts.

Finally, there is the continuing risk posed by trade disputes. The problems Mr Trump is causing for global supply chains are another thing to have been obscured by his fiscal stimulus. Admittedly, America's economy is large enough not to depend too much on trade in the short term (a luxury that must provoke envy in Brexit Britain). Yet the uncertainty and disruption caused by the prospect of ever higher tariffs is harming animal spirits. Falling confidence risks bringing forward the long-term damage a larger trade conflagration would inflict, even on America.

What, then, to expect? As ever, predicting an imminent downturn is a risky business. But the global economy is no longer in a synchronised upswing; conditions have diverged. And with so many risks on the horizon, it is not hard to see how things might turn nasty. ■

Leveraged up

Median net-debt-to-EBITDA* ratios for issuers rated BBB and A
Quarterly, seasonally adjusted



Sources: Bloomberg; FactSet; Goldman Sachs Global Investment Research

* Earnings before interest, taxes, depreciation and amortisation

Conscious uncoupling

A memo on the City of London after Brexit

Lionel Barber
editor,
Financial Times

Dear Prime Minister

1. The City of London is a story of constant reinvention, from the establishment of the East India Company (1600) to Big Bang deregulation under Margaret Thatcher. This memo sets out a strategy for the post-Brexit era. It advocates neither a return to the "light touch" regulation of the Blair-Brown years, nor the "clean break" from the EU promoted (naively) by some cabinet colleagues. It proposes a sensible middle course.
2. The City remains one of the world's two great financial centres, alongside New York. Our capital markets are deep, open and growing. **We cannot be shackled by continental counterparts** who have neither the appetite nor the capacity to manage cross-border financial risk. The UK has 37% of the world's forex trading (France and Germany have 3% and 2% respectively) and 95% of the global market in interest-rate swaps. Around half of the debt and equity issued by EU companies is underwritten by banks based in Britain.
3. Brexiteers boast that the EU needs the City more than the City needs the EU. This misses the point. What matters is how the City and the EU respond to the clear and present threat from President Donald Trump's America. The one-time champion of globalisation is dismantling the post-war liberal order, imposing industrial tariffs on allies, using the dollar as a sanctions weapon and targeting Germany as a free-rider.
4. We should gently remind our friends in Paris and Berlin that they would be unwise to damage London in favour of a newly perfidious America. Frankfurt and Paris are pygmy financial centres compared with New York. **The City is a safe hedge.** This is realpolitik worthy of Bismarck and Richelieu.
5. Yet we must not tether the City too tightly to Europe. The cultural differences are profound and go to the heart of managing risk in capital markets. **The continentals are harmonisers.** EU regulators want to ring-fence capital, keeping it at home in case of crisis. The Bank of England is far more relaxed about financial ebbs and flows.
6. UK-based financial institutions will not enjoy friction-free access to the single market. But the City cannot simply be a rule-taker. Our best shot is to start with equivalent rulebooks, agree on common principles and move gradually towards withdrawal with clear timelines and notice periods. **You might call this "conscious uncoupling".**
7. Britain must continue to champion liberal, market-friendly principles in global forums. **We cannot be open for business and closed to foreigners.** Mark Carney, our Canadian import as governor of the Bank of England, has been an effective chair of the Financial Stability Board. Outside the EU, we will have to fight harder for big international jobs.
8. The UK should also look beyond its traditional strengths such as insurance (ripe for AI disruption) and asset management (vulnerable to poaching from Paris and Luxembourg). We should focus on **future opportunities such as sustainable finance and cross-border renminbi trading** out of China.
9. And we must turn a cold eye to our regulatory system. This is not the time to dismantle George Osborne's post-crash arrangements (however tempting, prime minister). But City institutions are right to complain about overlap, duplication and fragmentation. **Banks are spending up to three-quarters of their IT budgets on post-crash regulation.**
10. Finally, a word on "fintech". It is the best bet for modernising our financial infrastructure, to help banks deal with the coming competition from Big Tech.
11. In conclusion, the City is a vital national and global asset. It has a glorious past and an uncertain present. With a little imagination, it will have a great future.

L.B.

Job half done

Efforts to crack down on corporate corruption will disappoint

Matthew Valencia special assignments editor,
The Economist

THE WAR on corporate and financial malfeasance intensified over the past decade. One spur was the global financial crisis, which sparked public anger over what many saw as plutocratic banditry. Another was data leaks such as the Panama Papers and Paradise Papers, which exposed schemes designed to dodge tax and move the proceeds of corruption and other ill-gotten gains beyond law-enforcers' reach, often into offshore "secrecy jurisdictions". But momentum is slowing: 2019 will be a disheartening year for corruption-fighters.

There is still much to cheer. Bribery is being hunted down more assiduously than before: examples include the FIFA scandal, which has led to the conviction of several officials from football's world governing body, and Brazil's Lava Jato (Car Wash) probe, targeting kickbacks at Petrobras, the country's oil giant. International co-operation has borne fruit in complex, border-crossing corruption cases, such as the mega-scandal surrounding 1MDB, a Malaysian investment fund. Europe is taking a tougher line on banks with poor money-laundering controls. The €775m (\$898m) penalty that Dutch prosecutors imposed on ING in September, for instance, would have been unthinkable a few years ago.

Campaigners, however, fret that this could be a high-water mark for crime-fighting. They fear that from now on the effort will be less of a priority for governments on both sides of the Atlantic as competitive pressures bite.

The United States has long led the charge to stop financial shenanigans and fine or jail those behind them (a case in point being its dogged pursuit of FIFA's nest-featherers when Europe was unwilling to act). Under Donald Trump, however, the emphasis has shifted not-so-subtly. The president views anti-bribery laws such as the Foreign Corrupt Practices Act (FCPA) as unfairly hobbling American firms by making it harder for them to compete abroad. He has called the FCPA "horrible". The number of white-collar-crime cases brought by federal prosecutors has fallen to its lowest in more than 20 years, according to data from Syracuse University, though the decline began during Barack Obama's presidency.

The biggest impact of Mr Trump's pushback against corruption-related regulation has been in oil, gas and mining—industries notorious for dodgy dealing. He has yanked America out of the Extractive Industries Trans-

parency Initiative, a global standard for good governance. That was a victory for American firms which had long complained that transparency requirements put them at a disadvantage in bidding for contracts against competitors from Russia and China, whose governments are less troubled by bribe-paying abroad.

In Europe the picture will be mixed, with progress in some areas and backsliding in others. The biggest worry for anti-corruption campaigners is Britain, home to the continent's largest financial centre. The government has been talking tough with Russia over a nerve-agent attack and other provocations, threatening a crackdown on oligarchs' money in London. But it is also under pressure to show that Brexit will not damage business. That suggests a softer line on bribery and money-laundering may be in the offing, whatever the rhetoric.

Some also point to the rising popularity in Britain of American-style deferred-prosecution agreements—

deals in which firms found guilty of corruption can get away with fines and the corporate equivalent of a suspended sentence—as evidence of a slackening of regulatory spine. Furthermore, Britain and other European countries lack the enforcement resources to match the strong anti-corruption laws on their books.

Perhaps the biggest disappointment will be a lack of further progress on prising open ownership of shell companies, the most popular vehicles for financial criminals—including in the United States, home to some of the world's most impenetrable firms. Pro-transparency lawmakers in Congress will almost certainly have an-

other go at dismantling corporate secrecy, but 2019 will not be their year. For Mr Trump, whose property business has profited handsomely from selling luxury apartments to secretive companies owned by rich foreigners, the issue is not a priority.

Not by transparency alone

Where there has been progress on corporate transparency, a backlash is possible. Anti-corruption activists cheered in 2016 when Britain became the first country to launch a public register of company ownership. But some worry that the register is fast becoming a case study of a good idea poorly executed. The government has devoted scant resources to verifying the information submitted. In 2018 some entries were exposed as false by whistleblowers. More of the same, and the shine will come off the showcase reform. The sobering message of 2019 will be that transparency alone is no panacea. ■



2019 in brief

Hong Kong's Securities and Futures Commission launches legal action, the largest in its 30-year history, against 60 companies and individuals for corporate fraud

Lonely lenders

A couple of big European banks will tie the knot

Patrick Lane banking editor, *The Economist*

2019 in brief

Citigroup sets up a new British bank, with headquarters in London, to manage its UK consumer business after Brexit—subject to approval from regulators

YOU DON'T have to listen to European Union officials for long before hearing the words "single market". Yet one of the union's most fundamental activities—finance—remains fragmented along national lines. To be sure, plenty of European banks (Nordea, Santander and more) are already familiar on high streets outside their homelands. But according to the European Central Bank (ECB), the share of euro-area bank loans going to borrowers from lenders' home countries is around 86%, much the same as on the eve of the

financial crisis of 2007–08.

More integration is long overdue, and the most obvious route to it is for European banks to combine. Expect at least one starry-eyed couple to announce wedding plans in 2019. Numerous combinations have long been bandied about. Gossip has linked each of France's biggest three banks—BNP Paribas, Crédit Agricole and Société Générale—to Germany's second-biggest, Commerzbank. Or Commerzbank could shack up with UniCredit, Italy's largest lender, which already owns one German bank, HypoVereinsbank, as well as businesses in central Europe. To complete *la ronde*, UniCredit and Société Générale are putative partners too, and perhaps the likeliest (frisson: UniCredit's French boss, Jean-Pierre Mustier, used to run SocGen's investment bank).

Plenty of powerful people—at the European Commission, at the ECB and in the banks themselves—would like such deals to happen. By global standards, even big European banks are also-rans. Only Britain's HSBC ranks in

The Chinese are coming

You will recognise them by their QR codes

Simon Long international editor, *The Economist*

IN SOME BACKWATERS, metal discs and rectangular pieces of paper (known as "cash", apparently) are still in vogue as a way to pay for things. Remarkably, some people still fill out slips of paper, sign and date them and consign them to the post ("cheques"). But three other ways to pay are gaining ground: by internet transfer; by plastic card, signed, authenticated by a code number ("chip and PIN") or "contactlessly" wafted in the vicinity of a vendor's terminal; and by mobile phone. In 2019 this last technique will advance further, and Chinese methods of payment will spread remorselessly round the world.

Two Chinese systems are expanding abroad. One is Alipay, a smartphone-based system devised for Taobao, an online platform run by Alibaba, a Chinese e-commerce behemoth. Now under Alibaba's affiliate, Ant Financial (an institution that in 2018 raised funds on terms suggesting its market value was about \$150bn, more than Goldman Sachs's), it claims some 870m users. Its rival is WeChat Pay, a product of Tencent, a social-media giant. Most Chinese use both.

And both are expanding overseas. By one account a third of Alipay's users are abroad. In the summer of 2018 it processed 2.6 times as many foreign transactions as in the same period a year earlier. Like WeChat Pay, it set off abroad in pursuit of the growing numbers of Chinese tourists. Outlets in more than 40 countries accept it. Besides expanding under its own name, Alipay is buying stakes in local payments companies across Asia—including Paytm in India, ePaisa in Pakistan and Dana in Indonesia. WeChat Pay is also expanding into South-East Asia.

The payment systems they are introducing are so

ubiquitous in China that even beggars use them. They are based on Quick Response (QR) codes, the square, black-and-white dot matrices first introduced in Japan's car industry in the 1990s. These will take market share at the expense of other payment systems for two main reasons. One is the size of the Chinese market and the continued growth of the Chinese economy. The other is that they are easy to use—and cheap, requiring only a smartphone.

To see how they might take hold, consider Finland. A Finnish payments firm, ePassi, grew out of a software company under pressure from its staff in 2007 to give them tax-free benefits in kind, such as gym memberships and massages (Finland is a nice place). Balking, out of digital *amour propre*, at doing this with paper vouchers, it devised a virtual substitute—first in the form of text messages and then as a smartphone app, where users would select the payee from a list or map.

Then it tied up with Alipay, keen to serve the 300,000–400,000 Chinese tourists who visit Father Christmas and other

attractions each year. It realised that QR codes would work for its own product as well. Alexander Yin of ePassi says he would travel with a selection of QR-code print-outs and two smartphones. Merchants he approached would at first be apprehensive, but soon see the system's attractions. In 2018 ePassi announced a tie-up with Nordea, the biggest bank in the Nordic countries, to offer a QR-code-based mobile-payment system more widely.

Some people may resist the QR revolution. But China is coming for them, too, in the shape of China UnionPay, a state-controlled firm that dominates China's payment-card market. Already its cards are accepted by more than 41m merchants and 2m ATMs in 170 countries. And it is planning a big overseas push.



Cuddly QR

Chinese methods of payment will spread round the world

the world's top ten by stockmarket value—and it makes most of its money in Asia. Since the crisis, America's resurgent giants and the new Chinese behemoths have left the Europeans trailing. Wall Street dominates the continent's investment-banking league tables. According to Dealogic, a research firm, no euro-zone bank—not even once-swaggering Deutsche Bank—made the top five in the first nine months of 2018 (see table). Extra scale could do more than just bolster European pride. By cutting fixed costs, mergers could mean cheaper finance for companies and households.

Granted, the way to the altar is strewn with impediments. Cost savings are harder to find in cross-border mergers than in domestic ones, especially in retail banking. Branch networks do not overlap and differences in accounting standards and languages cannot be wished away. And the same officials who want mega-mergers have not finished preparing the regulatory ground. Europe's banking union—a single set of rules for a single market—is incomplete. It still lacks a common scheme for insuring deposits, which would in effect allow, say, German savings to finance Italian loans, and it is unlikely to get one soon: Germany's opposition to guaranteeing what it regards as feckless southerners is too strong. Although the euro zone has common systems for supervising banks and "resolving" failed lenders, lots of national variations (eg, in rules for large exposures to single borrowers or in bankruptcy laws) persist.

Nevertheless, single-market logic points towards cross-border banking. Banks can get footholds without buying their way in—BNP Paribas claims to have been quietly pinching business from Germany's two biggest banks—but small steps take you only so far. And modest mergers can lead to bigger things. The Netherlands' ING has become the third-biggest retail bank in Germany without opening a single branch, having bought an online bank in stages between 1998 and 2003.

There is ample room still for national consolidation. Germany has 1,600 banks, split between the three pillars of private, public-sector and co-operative lenders. Deutsche, the largest, is also a possible partner for Commerzbank—although neither may want to share the other's troubles. In Italy and Spain, weak smaller banks still need tidying up, either by joining forces or by being swallowed by larger ones. But big, cross-border deals are surely on the way too. Eventually European banks will have to bunk up to bulk up. ■

Americans on top

Investment-banking revenue in Europe, Jan-Sep 2018

	Rank	Bank	\$m
US	1	J.P. Morgan	1,168
US	2	Goldman Sachs	978
US	3	Citigroup	747
US	4	Morgan Stanley	729
UK	5	Barclays	711
Germany	6	Deutsche Bank	654
Switzerland	7	Credit Suisse	651
US	8	Bank of America Merrill Lynch	609
UK	9	HSBC	569
France	10	BNP Paribas	562

Source: Dealogic

The age of anxiety

Get ready for a volatile oil market

Charlotte Howard energy and commodities editor,
The Economist NEW YORK

THE PRICE of oil is obsessively observed, and rightly so. Its rise and fall can shift the global balance of power and tip economies towards recession. In 2018 the price of crude oil soared to its highest since the lofty days of 2014, only to drop on fears of ebbing demand. President Donald Trump commanded, by tweet, that the Organisation of the Petroleum Exporting Countries (OPEC) raise production. But even if OPEC's members

want to constrain prices in 2019, it is unclear they will be able to do so.

The biggest jolt to the oil market came in November. America enforced sanctions against Iran, the world's fourth-largest producer of crude in 2017. Mr Trump wants Iranian exports to shrink to zero. Yet China will probably continue to import Iranian crude and the Trump administration may grant some waivers to its sanctions. Iran's shipments

abroad will nonetheless plummet in 2019. Other producers may not fill the gap.

That task falls disproportionately to Saudi Arabia, which has acted as a central banker for the oil market. The kingdom has a powerful new partner in Russia—as American oil production has jumped, Russia and Saudi Arabia have worked to co-ordinate output. But Saudi Arabia is especially keen to stabilise prices and appease allies after uproar over the killing of Jamal Khashoggi, a Saudi journalist, in Turkey. Three factors will make the job harder.

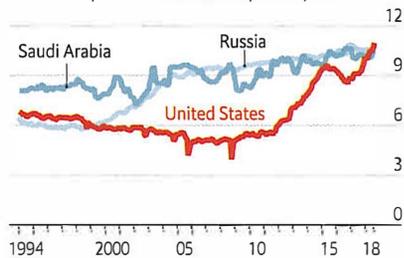
First, Saudi exports are already very high, so some traders question whether the kingdom has enough capacity to meet demand quickly. Second, other big oil producers look volatile. Venezuela is in crisis; its output will plunge further. Nigeria and Libya have seen production rise, but political instability can easily reverse this. Iraq's production now surpasses that of China or Canada. However, the oil industry is far from secure.

The third factor is uncertainty over American output. In 2019, the International Energy Agency predicts, America's oil boom will represent the biggest surge in production anywhere in the world since the agency started keeping track. But shale fields in Texas are producing so much oil that they cannot transport it to buyers quickly enough. New pipelines are supposed to fill with oil in 2019, but those projects may be delayed.

Beyond 2019, where might new supply appear? Most big oil companies have cut investment: from 2014 to 2017, capital spending fell by nearly half. Money is increasingly going to American shale, where wells are faster to produce oil but also faster to be depleted. Firms have lost the stomach for costly, long-term projects. Prices in 2019 may rise high enough to whet their appetite. ■

Shaling up

Crude-oil production, barrels per day, m



Source: EIA

What if

Uber is expected to make its stockmarket debut in 2019. Will it be the biggest initial public offering ever? The record is held by Alibaba, which was valued at \$25bn when it made its debut on the New York Stock Exchange in 2014. Uber has been valued at around \$76bn in recent investment rounds, but investment banks hoping to underwrite the ride-hailing firm's IPO are reported to have put its value at \$120bn—more than GM, Ford and Fiat Chrysler combined. Uber's rival Lyft is also expected to go public, at a valuation of around \$15bn.

Matters of currency

Economists will focus on urgent but understudied topics in 2019

Ryan Avent Free exchange columnist, *The Economist*
WASHINGTON, DC

ECONOMISTS HAVE their hands full trying to keep up with the world. The profession is grappling with the implications of phenomena like cryptocurrencies and machine learning, even as it continues to tackle knotty questions about growth, inequality and the causes and consequences of financial crises. But in 2019 three previously understudied subject areas—the impact of trade in an age of globalisation, the consequences of rising market concentration, and gender bias within economics itself—will loom large in seminar rooms and on conference agendas.

Trade may be one of the oldest obsessions of economists, but it preoccupies them now in a way it has not done for decades. Political developments are to blame. President Donald Trump's war against the global trading system will rage on in 2019; Brexit looms as well. Economists will study the backlash against globalisation and the link between rapid growth and trade on the one hand, and support among disaffected workers for populist politicians on the other. Trade conflicts are hardly new, but today's battles unfold in a hyperglobalised world. Growth in global supply chains has led to an unprecedented level of trade across borders and to complex economic interdependencies. Economists must work out what happens when politicians throw a spanner into the works.

Forthcoming research will examine how protectionist trade and currency policies affect the global economy when interest rates are low. At such times, governments often struggle to keep their economies from falling into slumps; central banks, for instance, have less scope to stimulate growth by cutting interest rates. Beggar-thy-neighbour policies therefore look more attractive (remember the 1930s) as a politically convenient way to try to perk up growth, even as the targets of such policies have fewer macroeconomic tools available to offset tariffs, devaluations or other blows from abroad. Other economists will assess whether trade wars in the modern context might lead to far larger declines in income and welfare than past analyses suggested should be the case. Then there are important long-run questions, such as the extent to which trade wars could lead to a dissolution of supply-chain connections, reshoring of economic activity to America and a more permanent shift in patterns of trade—and perhaps in the balance of geopolitical power.

Economists will also tackle tricky new questions related to industrial concentration and the market power wielded by large firms. Recent work has established that many sectors of the American economy are increasingly dominated by a small number of big companies with a much greater ability to dictate prices and wages to the market than in the past. Economists have exchanged volleys of papers over the past year as they debate how widespread and serious the problem is. In 2019 new work will

Forecasting winner

Congratulations to Joe Gillis, of the Federal Transit Administration in New York, who has won *The World in 2018* forecasting challenge, organised in collaboration with *Good Judgment (GJ)*. The challenge, which runs from November to October, asks participants to make forecasts on economic, political and business events. Mr Gillis has been a *GJ "Superforecaster"* for four years
gjoin.com/economist

examine the extent to which concentration depresses wages, investment and innovation. Some scholars will also begin tackling the hardest of questions: what exactly ought to be done about the giants? As governments in Europe and America slowly but surely prepare to craft policies to deal with mammoth tech firms, economists' work might well have a big impact on policy—and on people's lives.

Closer to home, economists are grappling with the issue of gender discrimination, both within economics itself and the labour market as a whole. Over the past two years an overdue discussion has taken place within the profession concerning the unequal nature of opportunities in the field. Recent papers analysed economic publications, and found that women were held to a higher standard than men, that female economists are underrepresented in textbooks and that when female economists and graduate students are discussed in online economics forums they are far more likely than men to be described in crude, sexualised terms.

Field curve

This has led to soul-searching among economists, but also to fascinating new research. Some new work delves deeper into publication patterns, and notes that an increase in the share of economists who are women (from 8% in the 1970s to 29% now) has not led to a correspondingly large shift in women's share of published economics papers. A particularly eyebrow-raising piece of forthcoming research suggests that economics teaching itself may increase the incidence of gender bias among male students. These findings join a body of other work on questions related to gender bias which will better inform the understanding of lingering inequities.

The issues are hard and, perhaps unsurprisingly, a bit dismal. Yet they also reflect a turn among economists towards urgent topics with undeniable real-world stakes. For economics, it should be a fascinating year. ■

Economics 101



A land where unicorns can roam



When companies go public, everyone benefits, argues Stacey Cunningham, president, New York Stock Exchange Group

IN AUGUST 1995, just a year after I began my career on the floor of the New York Stock Exchange (NYSE), Marc Andreessen, an entrepreneur and software engineer, took his internet startup public. Netscape's shares shot up from an offering price of \$28 to \$74.75 at midday. When the market closed that day, Netscape was worth nearly \$3bn. The dotcom boom had begun.

It was a heady time to be working on a trading floor. American equity valuations rose exponentially as investments in internet-based companies flooded the market. At the NYSE, every day was an adrenaline rush on the floor as brokers ran between trading posts to participate in what was to be a five-year bull run.

The market was further spurred by the evolution of NYSE rules governing a company's eligibility to go public. These changes enabled new-age tech startups, which were unlike the companies that had come to market in the previous two centuries, to go public for the first time. Although the boom turned sour in the early 2000s, the survivors turned into tech behemoths that are the bedrock of blue-chip indexes today.

Nearly a quarter of a century after I arrived on the NYSE floor as an intern, I now lead the exchange. There are fewer publicly listed companies than there used to be, but they are worth, as a whole, much more. The combined market capitalisation of stocks listed here has tripled in the decade since the financial crisis, from \$10trn to \$30trn.

A market for Main Street

Have retail investors reaped the rewards of this phenomenal rise in value? Not as much as they could have. Companies now wait far longer to access public money. By the time the shares of high-flyers can be bought in the public markets, their share prices reflect increased market valuations.

We're living in another bull market as tech companies drive a new wave of innovation. "Unicorns" such as Airbnb, Uber and WeWork are boldly disrupting business models to satisfy consumers and businesses seeking more flexible, on-demand services. These unicorns want to operate in the same manner that they offer their services: on their terms.

In many cases, this leads an inspired startup on the path of least resistance. With cash from private equity in abundance, they are funded with fewer regulatory obli-

gations and less scrutiny. The result: retail investors have to wait.

To ensure that capital markets thrive in the future as they have in the past, exchanges would do well to channel the entrepreneurial spirit of today's innovative companies. How can we do it better? In 2019 we should explore ways to reduce the barriers that deter companies from going public, while also avoiding the pitfalls of the dotcom bubble.

Take Spotify, for example. The streaming-music platform listed on the NYSE in April 2018 as a well-known, well-capitalised brand with a global presence. It did not necessarily need to raise capital, but it wanted the other benefits of being a public company, including a way to provide liquidity for shareholders who took early stakes in the dream of Daniel Ek, the CEO.

A traditional IPO was simply not in their playbook. Inspired by and working with Spotify's CFO, Barry McCarthy, our team sought regulatory approval to modernise the listing rules that might have tied the company's hands. During a 12-month effort,

Have retail investors reaped the rewards of this phenomenal rise?

we put forward new proposals to the Securities and Exchange Commission to update the rules that govern how a company can go public on the NYSE. The process was complex, but worth the wait.

Spotify became the first company to benefit from these changes, bypassing a traditional IPO roadshow for a democratised effort to share its vision transparently. Then, using what we call an NYSE Direct Floor Listing, Spotify offered equal access to buyers and sellers. The stock opened smoothly. Though the path Spotify paved might not be for everyone, other companies may choose to follow in its footsteps.

In the year ahead we should also see accelerated work on reforming the regulatory regime governing public companies. Strict standards of accountability were put in place with the Dodd-Frank Act. Such a response was necessary after the financial meltdown ten years ago. But let's now apply what we've learned since then. The focus in the future should be on helping more privately held companies open their shares to Main Street investors through smarter, right-sized regulation.



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Science & technology

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Make way for the Moonrush

Fifty years after Apollo 11, the world is getting ready to return to the Moon

Oliver Morton briefings editor, *The Economist*

WHEN, IN 1969, Neil Armstrong planted the first footprint on the surface of the Moon it seemed to some as if anything was now possible. Anything, that was, except what actually happened next. After a few trips to the Moon America, proud to have shown it could do what no other country could, but with other calls on its resources, quit while it was ahead. And no one else took up the challenge. Today, as in 1969, only white American men have ever had the experience of seeing the whole Earth, bright and beautiful, shining down from an alien sky, and only four of those men are still alive. But young women and men from various countries may soon be following them.

In part, this is because the empty airless Moon looks more attractive than it did in the days of Apollo. Over the past 20 years ice and other volatile compounds have been discovered at its poles, which should make setting up Moonbases and perhaps fuelling Moon shuttles a lot easier, should people wish to do so. But more space know-how in more countries, more private-sector interest and new government approaches are just as important to the Moon's improving prospects as its natural resources are, and quite possibly more so.

By the end of 2018 three spacecraft should be making their way to the Moon for landings early in 2019. The most ambitious is China's *Chang'e 4*, the country's second such lander and the first from any country to

attempt to land on the side of the Moon that is always turned away from Earth. Without formally saying so, China has given strong indications that it intends to send people to the Moon too, perhaps in the 2030s.

India's lander, *Chandrayaan-2*, will be its second Moon mission, and its first attempt at a powered landing. The other Moon-bound spacecraft, though, will mark a more significant first: not just the first Israeli mission, but the first Moon mission run by something other than a government. Although the lander, nicknamed "Sparrow", has funding from the Israeli space agency, much has come from philanthropy, and the mission is being run by SpaceIL, a non-profit.

SpaceIL was formed to compete in the Google Lunar XPRIZE, set up in 2007, which offered \$20m to the first team to land a rover on the Moon and send back high-definition video. It was never won, and Google withdrew the prize money on offer in early 2018. But some of the teams it inspired are still plugging away. As well as SpaceIL there is ispace, in Japan, which has plans to launch in 2020. And in America there are Moon Express and Astrobotics, both of which hope to secure new funding from NASA, America's space agency, in 2019.

NASA plans to do for the Moon in the 2020s what it did for low Earth orbit in the 2010s: stimulate the creation of new private-sector capabilities for getting stuff there. Technology-development grants and contracts for taking cargo up to the International Space Station were crucial for the development of SpaceX, the rocket company founded by Elon Musk that has come to dominate

2019 in brief

Preparations intensify for the latest huge telescope to survey the sky. The Large Synoptic Survey Telescope will, when ready, continuously photograph and survey an area of the sky 49 times the apparent size of the full Moon

Unto Ultima Thule

An encounter looms in one of the remotest corners of the solar system

Tim Cross science correspondent, *The Economist*

SLOWLY BUT surely, the solar system is being explored. Humans themselves have, so far, ventured only to the Moon. But their robot emissaries have gone farther afield. They have visited every planet in the solar system at least once. Many planets have had several visits. Mars is lousy with orbiting probes and rovers on its surface. Spacecraft have landed on comets and ferried dust from asteroids to scientists waiting on Earth.

The final frontier is now the solar system's outer edges. In 2015 a space probe called *New Horizons* whizzed past Pluto, the most distant object ever to be visited. (At the time of *New Horizons*' launch in 2006, Pluto was still considered a planet. It was demoted by the International Astronomical Union later that year.) In 2019, on New Year's Day, *New Horizons* will make its second rendezvous, with a piece of itinerant space rock called 2014 MU69, better known by its crowd-sourced name of Ultima Thule. Located more than 40 times farther from the sun than Earth, and 1.6bn kilometres beyond Pluto itself, it will be, by far, the most distant body ever visited by a spacecraft.

The encounter will be a good example of scientists making a virtue out of necessity. In order to reach Pluto in a reasonable time, *New Horizons* was moving so quickly that there was no way for it to stop once it got there. The probe is equipped to operate in the deep void (rather than relying on solar panels for electricity, for instance, it uses heat generated by the

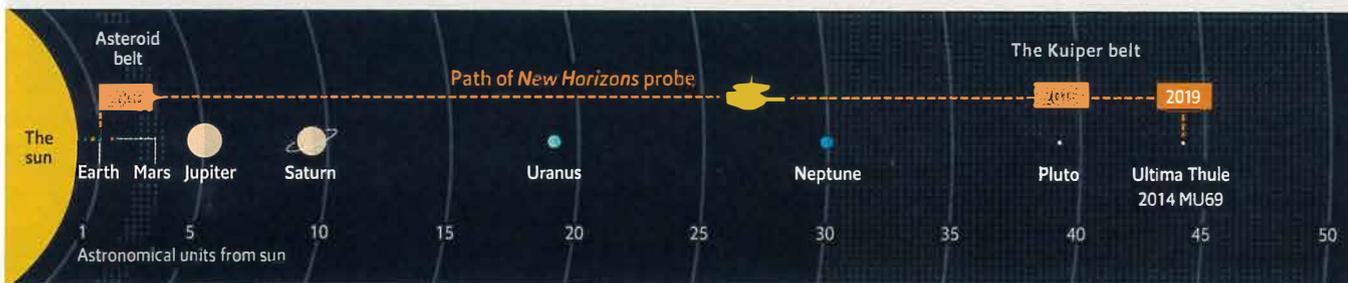
slow decay of a lump of plutonium). And, precisely because it is moving so fast, the probe's controllers were able to point it at a new target.

Little is known about Ultima Thule, which—as its full name suggests—was discovered only in 2014, as part of an effort to look for new destinations for *New Horizons*. It is, like Pluto itself, a "Kuiper belt object", part of a thick disc of cosmic rubble left over from the formation of the solar system which extends far beyond the orbit of Neptune. It is loosely analogous to the asteroid belt, only far larger and containing far more material.

Scientists hope that Ultima Thule's remoteness—and the resulting frigid temperatures—will have made it into a time capsule, preserving a record of the chemical composition of the solar nebula, the vast cloud of dust and gas that condensed to form the solar system more than 4.6bn years ago. At the same time, *New Horizons*' unique vantage point will enable it to take rudimentary measurements of other nearby objects in the Kuiper belt. That should give scientists a better understanding of what sorts of objects lie within it.

But those eager scientists will have a while to wait. At *New Horizons*' vast distance from Earth, radio signals are weak and data transmission is unavoidably slow. Around 50 gigabits of data will be gathered at Ultima Thule, about as much as a couple of high-definition movies. Back on Earth, that could be downloaded over a modest internet connection in under an hour. From the Kuiper belt, it will take until September 2020.

Scientists hope that Ultima Thule's remoteness will have made it into a time capsule



▶ the space-launch business. Companies like Astrobotics and Moon Express are now competing for grants to improve their lunar-lander technology, and soon will do so for contracts to deliver scientific payloads to the Moon's surface. They both hope to fly such missions in 2020. NASA is also looking for private-sector bids to provide the first module for a new space station, known as Gateway, that will hang in orbit between the Earth and Moon, allowing astronauts to remotely control rovers and to go down to the surface themselves.

Underlining that the new capabilities appeal not just to governments, Yusaku Maezawa, a Japanese retailing billionaire, has contracted with SpaceX to take a flight

around the Moon with a crew of eight artists, perhaps as soon as 2023, in one of the spacecraft the company is currently developing for missions to Mars. Others may choose to follow—or indeed to take such spacecraft down to the Moon's surface, something they should easily be capable of, if they live up to Mr Musk's ambitions.

In his speech at the dawn of the Apollo programme, President John F. Kennedy said America took on challenges like that of going to the Moon "not because they are easy, but because they are hard". They still are. But with today's broader-based and more capable space industry, this particular thing is easier than it was. That, yoked to personal passion, may now be enough to get it done again. ■

Walking barcodes

The face is becoming machine-readable

Hal Hodson technology correspondent, *The Economist*

CLOSED-CIRCUIT television (CCTV) is a familiar feature of urban life. Public squares, street corners and transit systems are adorned with cameras in the name of fighting crime. Large cities contain thousands of them, producing gargantuan volumes of footage. Most of it is grainy, uneventful and unwatched.

The latest advances in machine learning have created software that can determine the unique pattern of a person's face from imagery or video to a far higher degree of accuracy than older technology. This makes it possible to track large numbers of people automatically as they move through public space, something that would be impossibly expensive if done with human labour. Recognition software turns faces into barcodes. Cameras become scanners, automatically cataloguing the people who walk past their lenses.

Police forces are not using the latest technologies widely yet, and their facial-recognition systems are notoriously inaccurate. Big Brother Watch, a privacy group, has observed the South Wales Police in Britain using facial recognition at public events over the past two years. The group recorded an inaccuracy rate of 91%, meaning that only nine out of every hundred people tagged by the system were actually who the system supposed them to be.

This state of affairs will not last long. The world's CCTV and police cameras are one upgrade cycle away from capturing higher-definition imagery, which will help facial-recognition algorithms work better. Camera systems can be designed with facial recognition specifically in mind, using two or more cameras to capture faces from multiple angles, making them easier to identify. Silicon Valley's approach to facial recognition, using powerful computers and large datasets of faces to train highly accurate software, is only beginning to percolate into the security market. That will speed up in 2019.

No hiding place

The implications are worrying. States have the greatest potential to abuse accurate facial recognition, as they tend to control the infrastructure by which imagery of faces can be recorded in public. Authorities might, for example, capture the faceprints of a group of protesters, arresting any that can be matched with a criminal record, while simply filing the rest away as a list of suspicious faces. Facial recognition is open to abuse by private companies, too. Shops would be able to create shared databases of customers and the products they looked at, just as online tracking does now, breaching privacy.

Facial recognition also has the potential to merge the tracking that happens in the digital and physical realms. It turns the face into an address that links behaviour in the real world with online profiles, and vice versa. The combination of web tracking and physical biometrics like facial recognition will mean that the spaces in which human beings are not tracked will shrink in 2019.



Camera-ready

In America, for example, Major League Baseball will start allowing fans to validate their tickets and enter stadiums via a scan of their face, rather than a paper stub. Singapore's newest megamall will use the technology to track shoppers and recommend deals to them. Tokyo will spend the year installing facial-recognition systems in preparation for the Olympics in 2020, when it will use the technology to make sure that only authorised persons enter secure areas. Airports from Atlanta to Bengaluru will use it to track passengers through security and immigration. Research from SITA, a technology vendor, suggests that three-quarters of all airports and airlines are investing in the technology or carrying out research on the topic. Samsung, one of Apple's main rivals in the smartphone market, will introduce 3D facial recognition on its models in 2019, aping the iPhone's Face ID.

Imagining the specific harms that new technologies create can be hard. Few would have thought, in the early days of online advertising, that it would lead to a web that is designed with such a thirst for human attention that the most hyperbolic accounts of events travel farther and have greater impact than those with nuance and accuracy. So it is worth worrying about facial recognition for the principles it offends, and the damage it threatens.

Humans need spaces where their movements are not tracked, where they are free to assemble with whomever they please. A world with ubiquitous facial recognition means one in which no coffee meeting, no midnight walk, no trip to the shop can occur without being assigned to a specific face and identity. Strong laws that protect individual rights are the best hope for limiting such tracking. The Pandora's box of facial recognition is open, but it is still possible to influence its impacts. ■

2019 in brief

Le Grand K (otherwise known as the International Prototype of the kilogram), the lump of metal that is the standard by which the kilogram is measured, is retired from its French vault in May. It is replaced by a more precise definition

Power play

Russia switches on a floating nuclear-energy plant

Benjamin Sutherland freelance correspondent

WASHINGTON, DC

2019 in brief
The Weddell Sea Expedition sets sail across the Antarctic to survey the Larsen C Ice Shelf, study the Weddell Sea ecosystem and search for the wreckage of the explorer Ernest Shackleton's ship *Endurance*, lost in the ice there in 1915

SOMETIME AFTER winter recedes in 2019, a unique barge, the *Akademik Lomonosov*, will be towed through Arctic waters and moored off remote eastern Siberia at Pevek, Russia's northernmost town. Before the year is out, if all goes well, two nuclear reactors on the barge will be fired up to produce electricity for the area's grid. The extra juice will be needed. In 2019 decommissioning work will begin at ageing power plants nearby, including a nuclear one, even as big new mining and oil-and-gas operations are planned for the area. But Rosatom, the Russian state giant behind the barge, has its eye on more than just powering the Pevek area.

Russia also wants to demonstrate, in a harsh environment, the safety and benefits of a "unique proposal" for the global energy market—floating, and therefore movable, nuclear plants—says Vitaly Trutnev, head of the project at Rosatom in Moscow. Design work on a second (and exportable) generation of floating nuclear plants has already begun, he says. This "optimised" design will generate more power than the *Akademik Lomonosov*'s 70 megawatts, enough for about 40,000 homes.

Greenpeace, an environmental group, regards the *Akademik Lomonosov* as a "floating Chernobyl" and a "nuclear Titanic" that could also increase nuclear prolif-

eration, says Rashid Alimov, who runs the group's energy campaigns in Russia from offices in St Petersburg, where the barge was completed. Those claims amount to scaremongering, says Bulat Nigmatulin, who was Russia's deputy minister for nuclear energy when the *Akademik Lomonosov* was approved at the turn of the millennium. The barge, he notes, uses versions of reactors and other equipment proven in Russia's robust nuclear-powered icebreakers and submarines. And it will be moored behind a tsunami-resistant breakwater.

The scheme's weakness, in Mr Nigmatulin's view, is not technological but economic. The barge's construction cost rose so dramatically he even withdrew, for a time, his support for it. Rosatom says the barge's final cost is "our commercial secret", but observers put it at around \$500m. Potential buyers have come forward including Chile, Indonesia, the Philippines and some countries in the Middle East, where desalination plants need lots of energy. But no orders have yet been placed, partly, no doubt, because it is hard to tell what the cost of electricity from this novel source will end up being.

The *Akademik Lomonosov*'s debut in 2019 will therefore be watched closely, says Sergei Kondratyev of the Institute of Energy and Finance, a Moscow think-tank. Electricity from coal-and-gas power stations may prove cheaper, he says, but a nuclear barge has an advantage, especially in the Arctic. It does not have to be continually resupplied from great distances, often via frozen sea lanes, with bulky and spillable fossil fuel.

Though the prospect of foreign sales remains uncertain, the construction of more nuclear barges for Russian use seems likely, and not just because future users of the first barge cannot be left in the cold during lengthy re-

Answers come to he who Thwaites

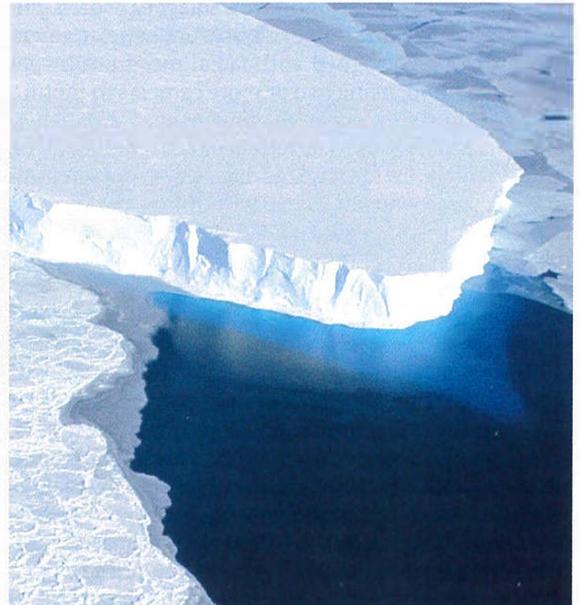
A vital mission sets off to predict the rate of sea-level rise

Alun Anderson science journalist and author

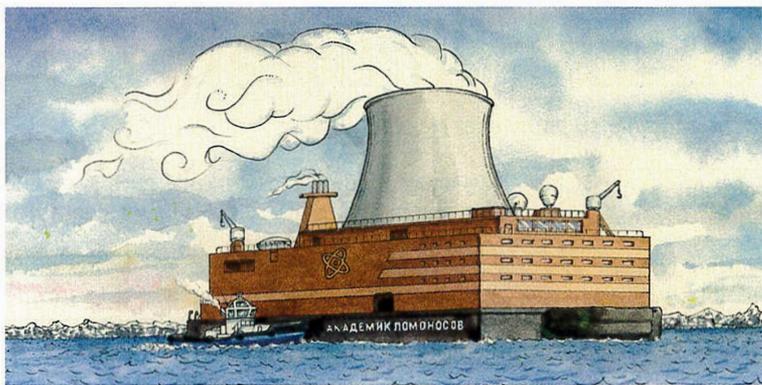
EARLY IN 2019, as the sea ice melts in the Antarctic summer, the *Nathaniel B. Palmer*, an American research ship, will sail across the Amundsen Sea and onwards to the 120km (75 miles)-long face of the vast Thwaites Glacier. On board will be the first of a contingent of around 100 scientists who will be voyaging south to answer a crucial question: has the glacier become dangerously unstable? If so, they need to work out how quickly it might slide into the ocean, realising the long-standing fear that melting ice from Antarctica could push sea levels up by over three metres, threatening coastal cities and river deltas.

More scientists will fly in from Britain's Rothera Research Station and America's McMurdo Station, landing on the glacier's surface in small planes equipped with skis. Yet more will arrive in November 2019 as summer returns. All are part of the five-year, \$50m British-American International Thwaites Glacier Collaboration.

A hot topic



Thwaites is the wild card in the calculation of how much sea levels might rise as the climate changes. Not only is it a huge area of ice—182,000 square kilometres, roughly the size of Florida—but it keeps bottled up behind it the rest of the West Antarctic ice sheet. Satel-



► fuelling after a few years. As the Arctic's ice shrinks, the region's value for shipping, hydrocarbon extraction, and military bases and operations will grow. Russia sees nuclear barges as "chess pieces" that, cleverly deployed, will further its strategic aims in the Arctic, believes Oyvind Osterud of the University of Oslo. It is significant, he says, that the first nuclear barge shares the name of the Arctic's disputed Lomonosov Ridge, which Russia claims as a submerged extension of its continental shelf. Were this to prevail over rival claims, Russia would greatly increase its control over maritime resources.

China appears to see similar benefits in floating nuclear power. Three state-owned firms plan to produce around 20 nuclear barges, to help tighten China's grip on disputed parts of the South China Sea. But Xuhong He of Lloyd's Register, which defines technical standards, says his firm is still advising the Chinese on possible safety specifications—which means Russia is years ahead. ■

lites have shown that Thwaites is speeding up and losing ice fast. Scientists now need urgently to look beneath the ice, where the cause of that change lies. Warming ocean water is being pushed by changing winds up under the glacier's snout. As the ice melts from below, it is freed from the "grounding zone" and begins to slide and collapse, allowing warmer water to penetrate ever farther.

Autonomous submersibles will look at the melt zone close up, while scientists above will drill down through the ice. Ground-penetrating radar and seismometers will scan the bedrock for anything that might hold the glacier in place. Other researchers will search seabed sediments for signs that a collapse has happened before.

There is a wide range of predictions of future sea-level rise, some very alarming, mostly because this Antarctic ice melt is so poorly understood and potentially so enormous. Rises of a metre or so per century for several centuries look plausible and would present huge challenges. But there are scarier possibilities: one is that as warm water bites deeper into Thwaites it undermines the taller parts of the glacier and massive cliffs of ice begin to fall away. Then change could come much faster. With help from the Thwaites scientists, some firmer predictions should be available by 2025.



2019 in brief

Welcome to the **International Year of the Periodic Table of Chemical Elements**, which aims to "promote and celebrate" the periodic table 150 years after the system was devised by Dmitri Mendeleev

Healing glasses

Surgery and psychiatry deploy augmented reality

Geoffrey Carr science and technology editor,
The Economist

AUGMENTED REALITY (AR), the superimposition of elements of a virtual world upon the real one, has yet to find its "killer app". The armed forces are interested. So are factory owners and games companies. But 2019 may prove that its killer app is, semantically speaking, the opposite: a life-saving app. For one field that the technology is starting to shake up is medicine.

Suitably tweaked, AR makes the invisible—or, at least, the hard to see—easily distinguishable. One example that should soon be ready for deployment is called 3D Augmented Reality In Lymph-node Extirpation (ARILE), developed at the Fraunhofer Institute's campus in Darmstadt, Germany. This is directed against malignant melanoma, the most deadly type of skin cancer.

Melanoma's initial tumours are easily visible skin lesions. But the cancer spreads rapidly to other parts of the body via the lymphatic system, starting with so-called sentinel lymph nodes. Unfortunately, the limits of these nodes are hard for the human eye to discern unaided. 3D ARILE works by injecting a dye into the nodes. This fluoresces when exposed to infra-red light. An array of cameras picks up the fluorescence and a three-dimensional image of each node's structure is then superimposed, from the surgeon's point of view, onto the actual node, by a special pair of spectacles. This enables every piece of a node to be removed, and any tumour cells therein alongside it, before they can escape to other parts of the body.

The principle behind 3D ARILE is now being deployed in other areas of surgery. Rather than creating a bespoke set of spectacles, as the Fraunhofer has, several groups are employing an off-the-shelf system, Microsoft's HoloLens. Using this, an image of relevant parts of a patient's body (assembled by various scanning techniques) is overlaid on the real body, making it much easier for surgeons to see what they are doing while operating.

Researchers at Duke University in North Carolina, and at InfoSupport, a Dutch software firm, are both employing the HoloLens approach to develop systems that assist neurosurgery. At Imperial College London, blood vessels are the target. And at Stanford University, the plan is to use a similar system for breast surgery.

AR is also about to be rolled out as a therapy for children with autism, a condition characterised by an inability to read the emotions of others. Brain Power, a firm in Massachusetts, is adapting Google Glass to try to help overcome this "emotion blindness". The device's small camera transmits what a child wearing it is seeing to the cloud, for analysis by artificially intelligent algorithms. The glasses can also project information into a user's visual field. That allows therapeutic games (eg, "spot the emotion" and "what is the appropriate reaction?") to be played based on what a child is looking at.

This approach is now undergoing trials. Because it is based on methods that have proved effective when presented on computer screens, success seems likely. ■

Sequences with consequences

A new genetic-screening technique marks a toddler step towards "designer babies"

Ananyo Bhattacharya science correspondent,
The Economist

SOON TWO biotechnology firms will begin to offer couples undergoing in vitro fertilisation (IVF) the chance to screen embryos before they are implanted in the mother's womb. This kind of preimplantation genetic diagnosis has, for nearly 30 years, been widely used to test for chromosomal abnormalities or specific genetic disorders that affect only a single gene, such as cystic fibrosis. MyOme, based in Menlo Park, California, and launching in 2019, and Genomic Prediction, based in North Brunswick, New Jersey, have something more revolutionary in mind.

two of MyOme's founders, and their colleagues. (Genomic Prediction says its approach is related but not identical to that being used by MyOme.)

The second development has been the greater speed and lower cost of DNA sequencing, which has made an increasing amount of human genetic information available. By analysing the resulting data with machine-learning algorithms, researchers are producing risk profiles for heart disease, diabetes, breast cancer, autoimmune diseases and other common illnesses. The upshot is that, based on a person's DNA sequence, a "polygenic risk score" for a disease can be calculated by adding contributions from hundreds or even millions of common genetic variants, each individually conferring only a small risk but which may, in sum, greatly increase the chances of contracting a specific disease.

Unnatural selection

For example, a conventional breast-cancer test may look for harmful mutations in two genes, *BRCA1* and *BRCA2*. Such mutations occur in about 1 in 500 women (in America) but carrying one of them increases the chances of developing the disease by a factor of five or six. A polygenic risk score, calculated by considering some 5,000 genetic variants, can identify the 1.5% of women who are three times more likely than average to develop the disease, but who may not have any mutations in either *BRCA1* or *BRCA2*.

By selecting between different embryos, a couple undergoing IVF (1-2% of all American births today) can optimise the health of their future progeny in a way that those who conceive naturally cannot. When the technique becomes widely available, as it no doubt will, those wealthy enough to do so may opt to undergo IVF even if they are able to conceive naturally. And although both firms say that, for ethical reasons, they will screen embryos only for disease risk, there is no reason why other traits such as height, or most controversially intelligence, might not be selected in the same way.

The technique has limitations. The most accurate polygenic risk scores can be calculated only for those of European ancestry, because fewer people from other populations have been sequenced so far. And although polygenic scores may hint that particular genetic variants increase IQ, they provide almost no information on how they do so. The causal connection between genes and traits remains murky.

All this means that to truly tailor a baby's genome will require further advances in gene editing, and much more painstaking work. In 2019, however, those with the cash to do so will have an opportunity to give their offspring a greater chance of living a long and healthy life. ■



The two companies hope to reconstruct the whole sequence of an embryo's genome using just a few cells from a biopsy and genetic sequences of both parents. With the genome in hand, the firms can then, in theory, calculate the risk of the embryo developing a wide range of different diseases in later life. Crucially, the ailments in question may be extraordinarily complicated, involving thousands of genetic variants (common mutations) in different parts of the genome.

Two advances underlie this feat. The first is in the method used to produce an accurate picture of the embryo's genome. Genetic data gleaned by sequencing the tiny quantities of DNA available from the embryo are invariably noisy. The parents' sequences, however, can be determined precisely. The companies take advantage of the second fact to overcome the difficulties associated with the first, by using powerful computer algorithms to find and stitch together the segments of each parent's chromosomes that most closely match those of the embryo (and are therefore likely to have been inherited). The resulting near-complete genome sequence of the embryo is more than 99% accurate, according to research published by Akash Kumar and Matthew Rabinowitz,

What if

Modern artificial-intelligence (AI) systems based on "deep learning" need thousands or millions of examples for training. That favours the data-rich internet giants—and China. **What if AI was less data-hungry?** Researchers around the world are pursuing alternative approaches that can learn from far fewer examples. A breakthrough could level the playing field for smaller firms, and would allow AI to be applied in new areas where training data are less abundant

The usefulness of useless knowledge



Fundamental science will help solve the world's problems, explains Fabiola Gianotti, director-general, CERN

THE YEAR 2019 marks the 500th anniversary of the death of one of the greatest minds in history. On May 2nd 1519 Leonardo da Vinci died, bequeathing an artistic and scientific legacy that resonates to this day. But whereas his art has been admired for centuries, the value of his scientific work took much longer to be recognised. Science is often thus: ideas can take a long time to reach maturity, and they often do so through the coming together of people from around the globe.

Science is universal and unifying. Universal because it is based on facts, not opinions: an apple falls in the same way anywhere on Earth at any time in history, whatever you may think. Unifying because the passion for learning is shared by all. Scientific knowledge has no passport, gender, race or party. So science can play a vital role in connecting people in a fractured world.

The place where I work is a case in point. We operate powerful machines, particle accelerators, to study the fundamental constituents of the matter that makes up the universe. CERN brings together more than 17,000 scientists from all over the world. Some come from countries in conflict, yet they all work enthusiastically together, in pursuit of common goals.

Inspired by CERN, SESAME is a laboratory for fundamental and applied research in the Middle East. Located in Jordan, its members come from across the region: Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine and Turkey. The scientists work in harmony, sharing their experience around the same tables.

Places like CERN and SESAME cannot directly solve geopolitical challenges. But they can break down barriers. They are examples of what humanity can achieve when we focus on the common good.

Face the facts

Today, society faces many challenges: climate change, energy supply, food security and public health, to name a few. Collaborative science is an inescapable part of the solution to all of them. Science should also be an essential part of the decision-making process, because whatever decisions we take, they must be based on objective facts and scientific evidence.

Without the innovative ideas that come from scientific research, progress sooner or later stagnates. And history shows that

major breakthroughs often come from fundamental research—eventually. This brings me to another anniversary.

In 1919 Albert Einstein's theory of general relativity was vindicated by a British scientist, Arthur Eddington. Relativity, like quantum mechanics, is a landmark of 20th-century physics. Together, they underpin much of our understanding of how the universe works. Yet when they were developed, they were considered esoteric, abstract and without any practical use.

One hundred years later, we know that they are far from useless. Without quantum

Collaborative science is an inescapable part of the solution

mechanics, modern transistor-based electronics would not exist, and without relativity, the satellite-based global positioning system (GPS) could not work. Einstein and the founders of quantum mechanics, however, were not trying to invent new kinds of electronics or navigational tools; they just wanted to understand how the universe works.

The lead times from discovery to application are often long. The time it took to turn some of Leonardo's remarkable sketches into reality may be an outlier in this respect, but the timescale of decades from Einstein to GPS is common.

My own field of particle physics has a well-known example, perhaps just at the beginning of that road: the Higgs boson. Predicted in 1964, it was not discovered until 2012, and if it will ever be put to practical use, I certainly can't tell you what that might be and when it might happen.

Yet the Higgs boson already enriches our culture through the insights it brings, and the tools deployed to discover it are finding applications elsewhere, from medical imaging to cancer treatment, solar panels and the analysis of historical relics.

I cannot emphasise enough the importance for humanity of the pursuit of "useless knowledge", as so brilliantly laid out by Abraham Flexner, a founder of Princeton's Institute for Advanced Studies, in his article, published in 1939, "The usefulness of useless knowledge". It is up to governments to ensure that fundamental science can flourish for the benefit of future generations—and that we don't miss the next Einstein or Leonardo.

Culture

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A Shed-load of arts

New York's ambitious new palace of culture opens its doors

Fiammetta Rocco culture correspondent,
The Economist and 1843 NEW YORK

IN THE EARLY 2000S New York was planning a bid to host the Olympics in 2012. A new stadium would be built on an old railway site called Hudson Yards. As part of the project, a small area of land behind what would become the High Line was to be re-zoned as a cultural space. After the Olympics, the stadium would be made over as a home for the New York Jets, who play football across the Hudson river in New Jersey. In the end, New York did not get the Olympics (London won) and the Jets never got their stadium. But the project known as the Cultural Shed, later just The Shed, took root.

Culture has become big business. As many as 107 major new arts facilities—museums, performing-arts venues, cultural districts—opened around the world in 2017, according to the latest annual study by AEA Consulting. Some will become white elephants. But flexible venues with innovative programming will draw in visitors who may never have seen a live performance. The Shed, which opens in spring 2019, will show the way.

In New York tickets for Broadway musicals cost an average of \$126 in 2017-18, putting them beyond the reach of many. Whether in the pricing of its seats (a third of all tickets will be free or under \$5), the design of the building or the commissioning of new works, The Shed set out to do things differently. Michael Bloomberg, New York's billionaire former mayor, was sufficiently impressed that, starting in 2012, he quietly gave \$75m to the project's \$500m capital campaign.

Running the show is 51-year-old Alex Poots, a trum-

pet prodigy who was born in Edinburgh to a French mother and an Irish father. Mr Poots started getting noticed when he ran the Manchester International Festival, a biennial series of live performances of dance, opera and theatre. He saw how much of the cultural world operates in silos: opera in opera houses, symphonic music in concert halls. New York has umpteen such institutions. "What it doesn't have", says Elizabeth Diller of Diller, Scofidio & Renfro, The Shed's architects, "is an 'unsiloed' entity that could bring all the arts under one roof." To make a difference, The Shed had to be flexible: "To be a place that can constantly be reinvented by what's inside it," says its designer, David Rockwell.

As inspiration, Mr Poots had at the back of his mind "The Fun Palace", a multi-disciplinary arts project designed for London in 1964. "The Fun Palace" was never built, but it influenced many architects, including Richard Rogers and Renzo Piano when they were designing the Pompidou Centre in Paris in the 1970s. For The Shed this meant building spaces that could be adapted to different kinds of arts and to a variety of audiences, spaces that could be shrunk or increased at the push of a button, that could be darkened, lit up or opened to the elements.

"What will art look like in 20 years' time? Or 40 years' time?" Ms Diller asks. "We don't know. How do you make a building for the unknown?" For one thing, it had to be scalable. "It had to have enormous loading capacity, enormous electrical capacity and to have a character that would be adaptable at will," she says.

Mr Poots's approach to what will be put on at The Shed is as ambitious as the building itself. Two ideas, in particular, have driven new commissions. One is that The Shed needs to be embedded in the community. Its emissaries have gone out into the five boroughs to see what artists were doing. One encounter was with FlexNYC, a dance-activism programme developed by a pioneering choreographer, Reggie "Regg Roc" Gray. The Shed also set up a project to help 50 artists every six months with production money, rehearsal space and test audiences.

The other big idea involves bringing artists together to create new work. In 2019 The Shed will unveil several highly original productions. One is a collaboration between a German painter and photographer, Gerhard Richter, and two composers, Steve Reich, an American, and Arvo Pärt, an Estonian. The aim is to produce a live performance for "ears, eyes and heart"—in which the audience will look at Mr Richter's work while also listening to music composed in response to it.

Another new production is built on the research of Maureen Mahon, a cultural anthropologist. Steve McQueen, best known as the director of "12 Years a Slave", is working on "Soundtrack of America", a family tree of African-American music and musicians that traces their connections, trajectories and styles going back to the civil war. "This is music that has travelled around the world," says Ms Mahon. Back in New York, The Shed will be the place to go to discover art anew. ■



2019 in brief

The Prado museum in Madrid celebrates its 200th birthday with a year-long series of events including travelling shows across Spain

J'accuse

Time to relax on cultural appropriation

Andrew Miller culture editor, *The Economist*

A NOVEL ABOUT slavery, or a play about refugees, or a film about homosexuality: a work of art that deals with a minority group and a sensitive theme will be a cultural flashpoint in 2019. Less because of the subject than the identity of the artists—a white author perhaps, or a straight director. The long tussle over cultural appropriation will come to a head.

One of the biggest literary events of 2018 was the publication of the last volume of "My Struggle", Karl Ove Knausgaard's gargantuan autobiographical novel. In writing about his own life, Mr Knausgaard incurred risks: accusations that he exploited his family, threats of litigation from irate relatives. But he also avoided one: the charge that he was appropriating the histories of people unlike him.

These days writers who prefer a broader palate run the gauntlet of rejection by nervy publishers and negative reviews. Authors, said Lionel Shriver in a speech that caused a rumpus in 2016, are necessarily "voyeuristic, kleptomaniacal and presumptuous". She hoped the neurosis over cultural appropriation would prove a "passing fad". It has not.

The point of art and literature, to open up other lives and perspectives, is nullified

Nor is the controversy confined to books. A white American poet using African-American vernacular; a show in Montreal in which white performers sang songs of slavery; a white English chef marketing Jamaican-themed food; even a high-school student wearing a Chinese-style dress to her prom in Utah: in 2018 all of these provoked Twitterstorms over cultural appropriation. Within such complaints lie legitimate concerns, such as the need for artists to be diligent in their research and avoid lazy stereotypes.

Yet the notion that depicting foreign places or different people is a kind of intellectual colonialism is daft. A ban on men ventriloquising women means no "Madame Bovary" and no "Anna Karenina". Where should the line be drawn? The final instalment of Hilary Mantel's trilogy about Thomas Cromwell, a Tudor courtier, is imminent (the previous two books both won the Man Booker prize). Nobody has yet accused Ms Mantel of appropriating Cromwell's life and grim fate, but it may be only a matter of time.

Follow this dogma to the end, and Mr Knausgaard's subject (himself) becomes the only one available. The point of art and literature, to open up other lives and perspectives, is nullified. Beneath this counsel of artistic despair is a deeper despair about human nature: a conviction that disparate people are too dissimilar to understand and convey each other's experiences.

Enough. There will be more fights in 2019. But complaints about cultural appropriation will begin to lose their sting.

Hanging on every word

Efforts to revitalise indigenous languages get a boost

Melissa Heikkilä editorial assistant, *The World in 2019*

WHEN A LANGUAGE dies, so does a unique way of seeing the world. Time is running out for many tongues. Experts estimate that of the 6,700 or so languages spoken around the world, 40% could disappear by the end of the century. The UN has designated 2019 the International Year of Indigenous Languages to draw attention to the peril. Slowly, countries are devoting more resources to the issue.

Canada aims to pass an Indigenous Languages Act before its elections in October 2019. The act would give more than 65 languages spoken by First Nation, Inuit and Métis peoples national recognition and teaching resources. In government-funded boarding schools, which operated from the 1880s to 1996, indigenous children faced beatings or electric shocks if they were caught using their native tongues. "We want to put the same amount of effort to revitalise indigenous languages as Canada put to wipe them out," says Perry Belle-

garde, national chief of the Assembly of First Nations.

Legal recognition for a language is the first step in bringing a native culture back from the brink. Maori is one of the success stories. When it became one of New Zealand's official languages in 1987, less than 20% of the Maori population spoke it well enough to be regarded as native speakers. Today it is off the endangered list.

The second step is to teach a new generation of native speakers. Technology is a big help. Duolingo, a popular language-learning app, recently added Hawaiian and Navajo to its courses. BASAbali, a wiki documenting Balinese, uses Facebook to reach speakers in rural areas. "Say it in Saami" is an online dictionary that translates modern lingo ("Your place or mine?") into languages spoken by the Sami people in northern Europe ("Din vai min geahčai?").

Saving rare languages needs people to champion them. Bali now asks officials to use Balinese on Thursdays. The UN year will kick-start projects that could save thousands of tongues. The challenge in 2019 will be to get others to listen—and start talking. ■



The circle of live action

There will be more to see than has ever been seen

Rachel Lloyd editor, Prospero blog, *The Economist*

IN "BEAUTY AND THE BEAST" (1991) Belle, the learned heroine, goes to the village bookshop to pick out something to read. No new titles have come in since her last visit, so she selects a volume bound in blue. "But you've read it twice!" the shopkeeper says incredulously. "Well, it's my favourite," she replies, citing the appeal of the tale of magic and a prince in disguise.

The line is almost self-referential. The Walt Disney Company has long been enchanting viewers with such stories. Fans are, like Belle, happy to hear them time and again. Hence the astonishing success of live-action remakes in recent years, which have retold the original animated fairy tales using actors and computer-generated imagery. "Beauty and the Beast", released in 2017 with a cast including Emma Watson, Ewan McGregor and Emma Thompson, took \$1.3bn at the global box office and was the second-highest-grossing film that year. "The Jungle Book", released the year before and based on a production from 1967, took \$967m to rank fifth. They

2019 in brief

In July, the Rijksmuseum in Amsterdam begins a restoration of Rembrandt's masterpiece, *The Night Watch*. Museum visitors will be able to see conservators at work, and anyone will be able to watch a live stream of the multi-year project

also drew critical acclaim: 95% of reviews for "The Jungle Book" were positive, according to Rotten Tomatoes, a review-aggregator site.

Unsurprisingly, Disney is planning more of the same. In 2019 it will release a trio of live-action films: "Dumbo" in March, "Aladdin" in May and "The Lion King" in July. Like their predecessors, they boast stellar creative teams (Tim Burton is directing "Dumbo", Guy Ritchie is at the helm of "Aladdin") as well as starry casts (the main characters in "The Lion King" will be voiced by Donald Glover and Beyoncé). Other titles in production include "Mulan", "Tinker Bell", "Snow White and the Seven Dwarfs", "Rose Red" and "Peter Pan".

These new versions aim to be more than mere rehashes. They bring a modern sensibility and new techniques. Ms Watson asked for changes to the character of Belle to give her more agency and make her "the kind of woman I would want to embody as a role model". When directing "The Jungle Book", Jon Favreau pioneered new photorealistic visual effects, which he will bring to bear on the new "Lion King". The tales may be old, but in the right hands they can feel like a whole new world. ■

Portraits and paintresses

Women artists from the Renaissance and the Baroque will be in the limelight

Imogen White editorial assistant, books and arts, *The Economist*

IT IS HARD to stop staring at her. Crisp light fills the studio where Larry Keith, the lead conservator at the National Gallery in London, restores a self-portrait by Artemisia Gentileschi, the first woman to enter the Accademia delle Arti del Disegno, in 17th-century Florence. On the canvas, she cast herself as Catherine, patron saint of unmarried girls, who was tortured on a spiked wheel. Gentileschi was tortured too. During a seven-month trial in Rome, thumb-screws were tightened over her fingers while she testified that Agostino Tassi, her teacher, had raped her when she was 17.

Fierce yet somehow serene, her gaze is so direct that Mr Keith may even feel as though the artist herself is staring him down, willing him not to ruin her 400-year-old creation. Acquired for £3.6m (\$4.7m) in July, "Self Portrait as Saint Catherine of Alexandria" is only the 21st painting by a woman to enter the gallery's 2,300-piece collection. Once restored, by early 2019 it will be on display

The art of Artemisia



alongside paintings by Caravaggio.

Other women who made art in the Renaissance will also be in the limelight in 2019. In October, at the Santa Maria Novella museum in Florence, a restored "Last Supper" will go on display by Plautilla Nelli, a Dominican nun who sold so many pictures to patrons that Giorgio Vasari, a 16th-century art historian, said, "It would be tedious to attempt to speak of them all." And that same month the Prado in Madrid will exhibit works by Sofonisba Anguissola (who lived

into her 90s, was King Philip II's court painter and was mentored by Michelangelo) and Lavinia Fontana (who endured 11 pregnancies, was championed by two popes, Gregory XIII and Clement VIII, and was one of the first women to paint female nudes).

In an age when women were expected to make babies, not art, these painters "made comments upon their own status as women through their work," says Jill Burke, an art-history lecturer at the University of Edinburgh. Nelli, in a radical act for the time, signed her name on her work above the maxim, "Pray for the Paintress". Many admirers will in 2019.

Leonardo da Vinci visits 2019

A newly discovered volume of Leonardo's journal, written a few months before his death on May 2nd 1519, records his visit to the year 2019, as the guest of a mysterious time-traveller

Leonardo da Vinci Renaissance man NEW YORK, PALO ALTO, PARIS AND SHANGHAI

IN RIVERS, THE water you touch is the last of what has passed, and the first of that which comes: so with time present. But today a strange visitor appeared suddenly in my studio, as from a large bubble in the air. Inhabiting another time, he finds amusement in conveying people to eras distant from their own, but in secret because this is forbidden by his own people. He offered to transport me 500 years into the future, provided I preserve his secret. The natural desire of good men being knowledge, I agreed to his proposal.

At my host's suggestion I must wear simple clothing. He will give out that I am a philosopher who, living in seclusion for many years, prefers not to speak. He has given me a rectangle of black glass, and a kind of brooch worn on the ear that will render the speech of those around me into my own tongue. If I clutch this glass rectangle closely at all times, I am told, my appearance will not seem unusual.

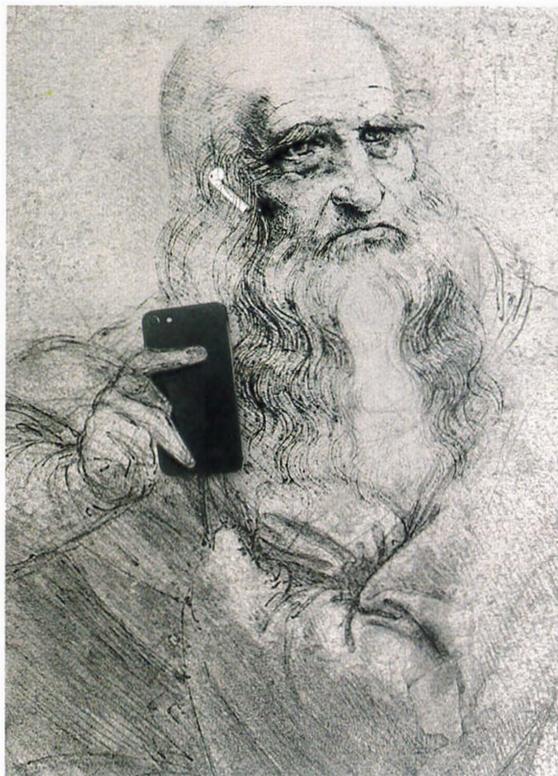
By strange means that carry men instantaneously to various parts of the world, without motion, my host has taken me to Shanghai, a city far to the east, in Cathay, and to New York, a city far to the west, in the lands named after Amerigo Vespucci. There are buildings of enormous height, made of glass seemingly unsupported by stone or brick. Some are adorned with moving coloured lights that create the illusion of a window to another place.

Far above these buildings soar many flying machines, conveying people and goods. Unlike the ones I have seen in my dreams, their wings do not move like those of a bird or a butterfly, but are fixed. The motive power is derived from a kind of fluid, similar to naphtha. The machines must be fed with this fluid, as a lamp is fed with oil, when they return to the ground.

In the roads between the buildings of these great cities are armoured carriages in countless numbers that propel themselves without the use of horses. These carriages too must be fed with the naphtha fluid. The parts that are not armoured in metal plate are made of a strange material that is light and flexible, yet strong, and may be formed in any desired shape or colour, and is also used to make many other objects.

The lights adorning the buildings, and many other things besides, are fed not by the naphtha fluid, but by a second fluid, invisible to the eye, that can be conducted along metal wires, coated in the strange material. By means of this fluid ovens can be heated without the need for wood or other fuel, and stairways and metal boxes can be made to move, to convey people within buildings. This fluid can also cause the sound of a lute, or another instrument, to be greatly increased, so that its music can be heard even by a great multitude gathered together.

But most mysterious to me is a third fluid that flows invisibly through the air and conveys writing and sounds and pictures between the glass rectangles, allowing



A selfie

them to act as windows to other places, and to capture the sight of things more faithfully than any painting. So wondrous is this power that people gaze constantly at their glass rectangles, and at the images therein. Painting is no longer the sole imitator of all the visible works of nature, and just as the mirror is the master of painting, so too is this kind of mirror, which fixes images in place.

We visit the land of California, to observe the flight of a machine that lifts objects into the sky on a pillar of fire, and then returns to the ground; and those objects it carries are thrown around the Earth so that they stay aloft and circle its globe, as the Moon does. The inventor of these machines has also created self-propelling carriages capable of moving without human supervision. I wish to meet this man but my host fears he would recognise me. For it seems my name and appearance are known, even in this time, and my works are preserved.

It pleases me that many of my ideas have been brought to completion using materials and methods unknown in my time, including a flying machine held aloft by rotating wings, and an apparatus by which a man can breathe underwater. It pleases me also that my paintings afford much satisfaction to mankind. Before returning me to my own time, my host takes me to Paris, to see my portrait of La Gioconda hanging in a place of honour. That reminds me: I really must finish it. ■

As transcribed and translated by Tom Standage, deputy editor, *The Economist*

2019 in brief

France rolls out **le pass Culture**, an app that gives 18-year-olds €500 (\$580) credit to spend on cultural events and items such as books, films, CDs and concerts



Simplicity itself

The immortal chic of Bauhaus at 100

Barbara Beck special-reports editor, *The Economist*

“**F**ORM FOLLOWS function.” The phrase has become inseparably linked to the Bauhaus, a German art and design school founded in April 1919 by a visionary architect, Walter Gropius. In his manifesto for the new school, Gropius called for architects, sculptors and painters to “return to craftsmanship” and for every discipline to unite to “create the new building of the future”.

The Bauhaus’s 100th birthday is being celebrated with a blitz of festivals, exhibitions and events not just in Germany but in countries around the world, including China, Japan and Brazil. Three new museums are being built in the three German cities where the school was successively based. The aim is to show that the school’s revolutionary design ideas are as relevant as ever.

The school itself lasted for just 14 years and remained quite small, with only about 150 students. Having started life in the German city of Weimar, it moved to Dessau in 1925 and to Berlin in 1932, each time in response to political pressure as the authorities increasingly objected to its radical ideas. Gropius was succeeded as head by two other architects, Hannes Meyer and later Ludwig Mies van der Rohe. In 1933, threatened with closure by the Nazis, the school voluntarily shut up shop.

Bauhaus means “house of building,” and Gropius’s manifesto proclaimed that “the ultimate goal of all art is the building.” But during its short life the school attracted a glittering array not only of architects, but also of artists and designers working in fields from graphics to furniture to theatre, including Paul Klee, Josef Albers, Wassily Kandinsky, Laszlo Moholy-Nagy, Lyonel Feininger, Oskar Schlemmer and Marcel Breuer.

What they all had in common was a determination to innovate, experiment and rethink the world. Architecture and design were simplified down to the bare essentials, with an emphasis on rationality and functionality

and a disdain for ornamentation. Craftsmanship was important but mass production also played a big part in making good-quality, built-to-last products more widely accessible. With their emphasis on sustainability, Bauhäuslers were ahead of their time. Art, craft and technology became one.

The school’s influence was immense, both while it was still going and after its demise. It always had a strong contingent of foreign students and faculty who brought their own new and unconventional ideas, then went home with more. After it shut down, some of its staff and students were compelled to leave Germany because they were Jewish, or because their work was dismissed as *entartete Kunst* (degenerate art).

Many of them settled in America and found teaching jobs at prestigious universities such as Harvard, Yale and Columbia, where they inspired a younger generation. Others moved to Israel, where German Jewish architects in the 1930s built the White City of Tel Aviv, with more than 4,000 buildings in the Bauhaus style, the largest collection anywhere in the world (and now a UNESCO World Cultural Heritage site). A few stayed on in Germany and carried on working in the school’s tradition after the second world war.

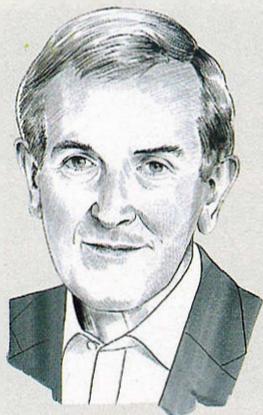
The Bauhaus buildings that remain standing look timelessly modern. The same is true of one of the school’s biggest and most lasting successes, the design of furniture and everyday objects. Breuer’s Wassily chair and Mies van der Rohe’s Barcelona chair adorn corporate offices the world over. And Josef Hartwig’s minimalist chess set from 1923-24 is still being produced for the top end of the market.

Critics now say that the Bauhaus was all about form and style but showed little interest in the people for whom the objects were designed. And it is true that those pared-down glass-fronted houses, though exquisite to look at, were not exactly cosy. But the Bauhäuslers were not trying to create user-friendly designs. They were out to change the world—and they did. ■

2019 in brief

San Miguel de Allende, a historic Mexican city, is the American Capital of Culture. The award brings with it \$2m of advertising across 45 countries. This is likely to bring even more tourists to a place that has also been named the world’s best small city

Berlin's blast from the past



The founding director of the Humboldt Forum, Neil MacGregor, predicts that Germany's grand new museum will provoke intense civic debate

ON SEPTEMBER 14th 2019 the centre of Berlin will ring with festive music. Luminaries will gather to celebrate the 250th birthday of Alexander von Humboldt, the father of modern ecology. They will inaugurate in style the huge building which carries his name: the Humboldt Forum. It will be a museum complex, showing collections belonging to the Humboldt University and the city of Berlin, but above all displaying objects from Asia, Africa and America held in the (ex-Prussian) State Museums. It will also be a centre for exhibitions, performances and—perhaps its key purpose—civic debates.

Whereas the Grand Louvre asserted France's cultural ambitions, the Humboldt Forum will raise questions (some of them uncomfortable) about Germany's global role. And Germany's politicians will not shy away from answering them. That is what this new building is for.

The Humboldt Forum will celebrate one of Europe's greatest scientists. It will also mark a painful expansion of Germany's *Erinnerungskultur* (culture of remembering), the continuous public discussion of the darkest chapters of the past. The Germans do this well. The murderous tyranny of Nazism, and the brutalities of the GDR, have been so openly examined that their warnings are deeply embedded in German political discourse. Now there is a demand that a third era of German state inhumanity should be similarly debated: the colonial empire in Africa under the Kaiser. The Forum will force that debate centre-stage.

The weight of history

Few buildings carry so much symbolic freight. The Forum stands at the ancient heart of the capital. Its exterior is a meticulous reconstruction: three façades replicate the royal palace of the kings of Prussia and the Kaisers of Germany. As visitors in September 2019 drive down Unter den Linden, they will have no way of knowing that the building ahead of them is not the palace which the first king built around 1710 and which Kaiser Wilhelm II left in the chaos of November 1918.

But the communists who saw in that palace the symbol of Prussian militarism razed it to the ground in 1952. In its place they erected a steel-and-glass Palace of the Republic. Until 1989 this was the seat of the GDR's puppet parliament, and a centre

where East Berliners enjoyed concerts, discos and a bowling alley. After unification, it too was demolished.

The federal government's decision to rebuild the baroque façades of the old royal palace will deliver in September a building that once again makes sense of Berlin's historic urban plan. It will delight tourists. Architectural critics will dismiss it as pastiche. Politically, it will reignite the resentment of many from the East who feel that their GDR has been written—or built—out of history by a triumphalist West.

But the contents will cause even more trouble. In this facsimile of the Kaiser's palace will be shown many objects acquired in the Kaiser's colonies. Like all European colonial powers, Germany expropriated, killed and exploited its African subjects. In Tanganyika the Maji Maji revolt of 1905–07 was suppressed with a scorched-earth policy that left nearly a quarter of a million dead. In Namibia German troops methodically drove the Nama and Herero peoples into the desert to die of starvation. Today

The Humboldt Forum will confront the future with the past

that is widely seen as the first genocide of the 20th century and a step on Germany's journey to its wars of aggression and the Holocaust. Now there is a groundswell of demand that Germany's colonial crimes, deemed by some to be comparable to the Nazis', be publicly acknowledged and researched with equivalent commitment.

Exhibiting objects acquired in the context of those atrocities in a replica of the building where Kaiser Wilhelm proclaimed the first world war will be judged by some a gratuitous provocation. It will raise the temperature of debate. At issue will be not only the sombre history, but what it means for Germany's approach to the inequities of Europe's relationship with Africa today. Should Germany make reparation for past wrongs? Should objects be returned? And what should this mean for immigration?

The Humboldt Forum will confront the future with the past. The resulting arguments will again show that modern Germany, unlike France with its history in Algeria or Britain in Ireland, is willing to address its past with unflinching honesty—and, in consequence, to behave differently.

Neil MacGregor was director of the Humboldt Forum from 2015 to June 2018 and is now chair of its international advisory council. He was director of the British Museum from 2002 to 2015. Mr MacGregor is the author of "Living with the Gods: On Beliefs and Peoples" (Allen Lane, 2018)

The common sea

Mourning a certain idea of Europe

Ann Wroe obituaries editor, *The Economist*

ON JUNE 24th 2016, a Friday, the sun rose over the Sussex coast in a hard blue sky. As the shocking news came through, the Channel—at that point, 60 miles of sea between Britain and continental Europe—seemed suddenly 600 miles wide.

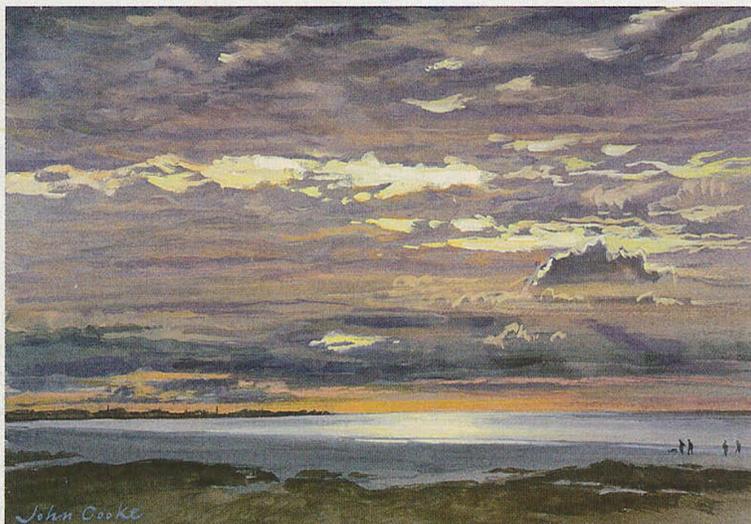
Treaties are rescinded, alliances break, but what began to fade that day, and set to vanish in 2019, is harder to define. It was not hope, for those who voted to leave the European Union had great expectations of the future. Nor was it *l'esprit communautaire*, that spirit of a common enterprise tending to greater union, like some well-organised street party which everyone must attend. Britain always stayed warily, sometimes huffily, in its own corner.

It seems that what died on Referendum Day was something much more elemental: a sense of shared space. The loss was sharpest where Britain and Europe draw closest, on the Channel coasts. Those rugged cliffs of chalk or sandstone, long icons of defensiveness, were only part of the shoreline and the story. Much of the rest spreads out in creeks, havens, marshlands and shingle slopes where any chancing foreigner might land, and many did: Normans at Pevensey, Plantagenets in Normandy. For centuries they beached their boats, stole or borrowed what was useful, and burrowed in. On both sides the blend of deterrence and opportunity, rebuff and welcome, persisted for so long that it had settled by the mid-20th century into quiet propinquity.

That long scrapping history was not forgotten: all sacked or scorched churches in Sussex were still blamed on the French, as many rocks and gullies in the French south-west would always be named after English raiders. On the English coast Martello towers, thrown up against Napoleon, still trained their guns on France—but also happily served tea and cake to daytrippers from “over there”. Just over there, no distance at all. Travellers on Eurostar trains became used to slipping under the ever-narrower sea, accepting the broadening landscape of the Pas de Calais as naturally as, going the other way, they broached the ridges of the Chilterns.

So near, so far

Closeness was a fact of life. The sea, far from being impassible, could not be fortified, walled off, set with guards, but lay vulnerable and open. Eighteenth-century smugglers of lace and brandy past the English Excise proved the point on any calm night, as migrant-smugglers did later. Coastguard patrols were always notional. The water's very names underlined that familiarity: “the Channel”, as if both sides had combined to excavate it, and, even more, “la Manche”, like the sleeve of a seamless coat. High



Each side was a reflection of the other

on England's white cliffs, at Beachy Head, the old Belle Tout lighthouse was assumed by most locals to be French for “all's beautiful”. Shared space naturally transmitted shared thoughts and words.

The light, too, was shared, and in a way that was fascinating rather than competitive. The opposite aspects of the French and English shores meant that each side was a reflection of the other. In the many paintings by Monet and his contemporaries of the French Channel coast, the shadows, to English eyes, fell the wrong way, across the sea; to French eyes, the coast of southern England was unusually forward-lit. But the essential colour and quality of the light (that slight greyness and mistiness, even in sunshine, of shared latitude) was the same, as was the scene: the stunted wind-blown trees of each coast, the grey-stone boarding houses, the promenaders warmly clad. The sea, too, had that recognisable close, homely Channel look, its small choppy waves reflecting the small, puffy, border-ignoring clouds.

The relationship of England, later Britain, with Europe, typified by France, was always a play of mirrors, or a dance to and fro. What could not occur was indifference or distance. The rival tribes constantly regrouped and readjusted, ever aware that, on a fine day, they could be seen with the naked eye from the nearest points on each other's coasts. What changed on Referendum Day was that one side willingly, even enthusiastically, decided to cut itself off: even though it sailed the same water and breathed the same air.

In 2018 a giant wind farm, 116 turbines, was built eight miles off the Sussex coast. At night its red lights blink on the horizon. By day, if the sun strikes just so, it looks like a metal barrier. What is harder to see, but even more strongly there, is a new wall that is just as real. From March 29th 2019, assuming all goes to the appointed plan, it will mark a death.