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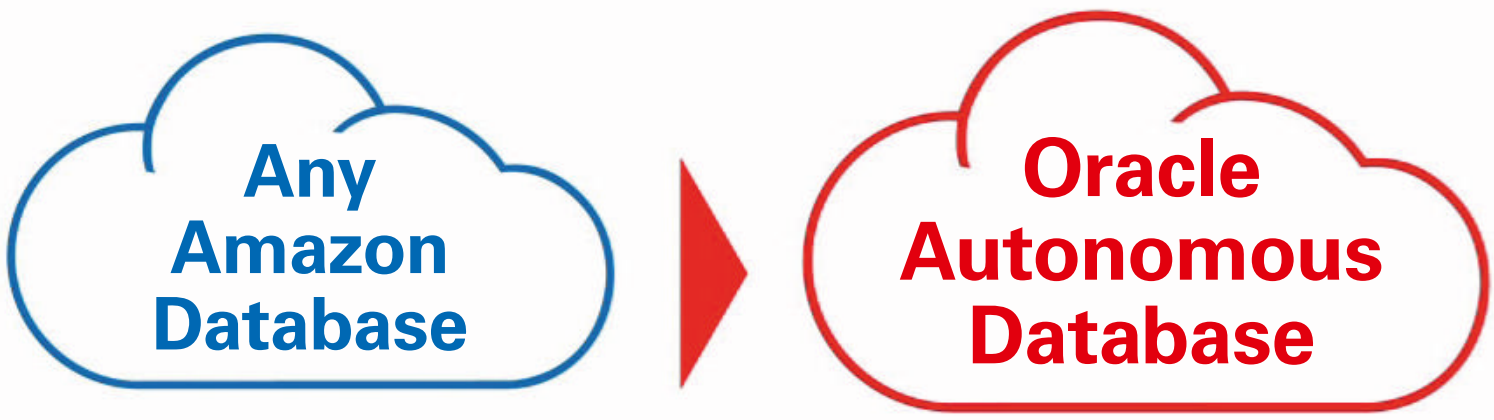

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MARCH 16TH–22ND 2019

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MANUFACTURE DE HAUTE HORLOGERIE

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to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

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The British government's draft **Brexit** deal was again roundly defeated in Parliament. The prime minister, Theresa May, had won assurances from Brussels that the "backstop", which would keep Britain in the EU's customs union to avoid a hard border in Ireland, was temporary, but this failed to satisfy Brexiteers. MPs also voted against a no-deal Brexit.

Two **German** journalists were forced to leave **Turkey** after President Recep Tayyip Erdogan's government refused to renew their accreditation. Mr Erdogan has successfully tamed Turkey's media. He has now trained his sights on the foreign press.

Estonia's prime minister, Juri Ratas, invited the anti-immigrant EKRE party to coalition talks, reversing a promise not to deal with the group.

Finland's government resigned ahead of a general election next month.

Debilitating democracy

Protests continued in **Algeria**, where the ailing president, Abdelaziz Bouteflika, dropped his bid for a fifth term and postponed an election scheduled for April 18th. A conference tasked with sorting out Algeria's political future is expected to be led by Lakhdar Brahimi, a veteran diplomat. Most Algerians believe Mr Bouteflika, who can hardly speak or walk, is a figurehead for a ruling cabal of generals and businessmen.

The UN said that at least 535 and as many as 900 people were killed in fighting between two communities in the **Democratic Republic of Congo** in December. Investigators found that village chiefs helped plan the killings and that regional officials had not done enough to prevent the violence, despite warnings.

The ruling party in **Nigeria**, the All Progressives Congress, took an early lead in state elections, strengthening the hand of Muhammadu Buhari, who won re-election as president in February. International observers said the poll was marred by violence.

Power vacuum

A malfunction at a hydroelectric dam in eastern **Venezuela** plunged most of the country into darkness for days, paralysing hospitals and destroying food stocks. Nicolás Maduro, the socialist dictator, blamed a Yanqui imperialist "electromagnetic attack". Others blamed the government's incompetence and corruption. America, one of many democracies that recognises Mr Maduro's rival, Juan Guaidó, as the interim president, withdrew its remaining diplomatic staff. It also revoked the visas of 77 officials connected to Mr Maduro.

Two former police officers were arrested in **Brazil** for the murder last March of Marielle Franco, a councilwoman in Rio de Janeiro. One of the suspects used to live in the same building as President Jair Bolsonaro and his daughter dated one of Mr Bolsonaro's sons. The other appears in a photo with Mr Bolsonaro taken before he was president. The detective in charge of the investigation said that these facts were "not significant at this time". Mr Bolsonaro said he had posed with thousands of policemen.

Five pupils and two teachers were shot dead by two former students at a school on the outskirts of **São Paulo**. One shooter then killed the other and turned the gun on himself.

On the campaign trail

India's Election Commission announced that voting for a new parliament will take place in seven phases in April and May. There will be 1m polling stations for the country's 900m-odd eligible voters. Narendra Modi's Bharatiya Janata Party is seeking a second five-year term in government. The results will be announced on May 23rd.

A court in **Australia** sentenced George Pell, a cardinal and former senior Vatican official, to six years in prison for molesting two altar boys in 1996, when he was Archbishop of Melbourne. Mr Pell is the most senior member of the Catholic hierarchy to have been found guilty of sexual abuse.

Police in **Kazakhstan** arrested Serikzhan Bilash, a Chinese-born activist trying to raise awareness of the internment of perhaps 1m ethnic Uighurs in Xinjiang province in China. The authorities said Mr Bilash had been "inciting ethnic hatred". His supporters contend the government arrested him to maintain good relations with China.

Separately, an official in **Xinjiang** said the mass detention camps there may be phased out. "Trainees in the centres will be fewer and fewer and, one day, the centres will disappear when society no longer needs them," he said.

America's secretary of state, Mike Pompeo, accused China of using "coercive means" to block access to energy reserves in the **South China Sea** worth $2.5trn. China's foreign ministry called his remarks "irresponsible".

Snakes and ladders

Donald Trump presented a $4.75trn **budget** to Congress, which calls for a 5% increase in defence spending and cuts to a wide range of social programmes. It also seeks $8.6bn for his border wall. Democrats said it was dead on arrival, though that has been the case with presidential budgets for many years now.

California's governor, Gavin Newsom, issued a moratorium on executions in the state, beefing up a court-ordered moratorium that has been in place since 2006.

Paul Manafort received an additional sentence of 43 months for conspiring to sway witnesses. That comes on top of the 47 months Mr Trump's former campaign chief recently received for tax and bank fraud. After his sentencing, New York state filed separate charges against Mr Manafort.

Milwaukee, a city renowned for its beer, beat Houston and Miami to host the Democratic convention next year. Meanwhile, **Beto O'Rourke** threw his hat into the ring to be the party's presidential candidate; he came a close second in the Senate race in Texas last year.

Nancy Pelosi, the Democratic Speaker of the House, said that she would not support an effort to impeach Donald Trump. She said: "He's just not worth it."

The crash of an Ethiopian Airlines jet, killing all 157 people on board, raised safety questions about **Boeing's 737 MAX 8 aircraft**. It was the second time a MAX 8 has crashed within five months, with what appear to be similar problems on take-off. As a precaution the EU stopped the plane from flying, as did many countries, including Australia, China and, eventually, America. Amid reports that the aircraft's software may be at fault, Boeing was forced to ground the entire global fleet of 737 MAX 8s.

Turkey's economy fell into recession at the end of 2018. For the whole of 2018 the economy grew by 2.6%, the weakest pace in a decade and far below the 7.4% recorded in 2017 in the wake of the government's construction-led stimulus. The economy took a hit last year from a run on the lira, caused in part by uncertainty about the political independence of the central bank.

China's exports declined by almost 21% in February compared with the same month last year, a much worse showing than most economists had forecast. Imports fell by 5.2%. The Chinese new-year celebrations may have had a distorting effect. China's overall trade surplus for the month narrowed sharply, to $4.1bn.

Another big monthly drop in German industrial production led to more concern about the euro zone's economy. The **European Central Bank** recently slashed its forecast for growth this year to 1.1% from a previous projection of 1.7% and pushed back any rise in interest rates until at least the end of the year. It also announced a new programme of cheap loans for banks.

Statistical outliers?

In a grim week for economic news, American employers added just 20,000 **jobs** to the payrolls in February, far below the 311,000 that were created in January. Still, February marked the 101st consecutive month of job growth, a record streak.

Ned Sharpless, the director of America's National Cancer Institute, was appointed the acting commissioner of the **Food and Drug Administration**, following the surprise announcement by Scott Gottlieb that he is standing down for personal reasons. In one of his final acts Mr Gottlieb this week issued regulations that in effect will stop convenience stores and petrol stations from selling a wide range of flavoured e-cigarettes.

In a deal that highlights its shift away from making high-end chips for the video-game industry, **Nvidia** agreed to buy **Mellanox**, which provides technologies for artificial intelligence, machine learning and data analytics, for $6.9bn. Mellanox was founded in Israel, where companies that produce AI-related technology are flourishing.

Volkswagen ramped up its plans for electric cars, announcing that it intends to launch almost 70 new models over the next decade, instead of the 50 it had planned. It now expects battery-powered vehicles to account for 40% of its sales by 2030, making it the largest car firm that is committed to electrification by some distance. The switch to electric cars, which need fewer workers to make than the gas-guzzling sort, threatens jobs. This is likely to provoke a confrontation with the firm's powerful unions.

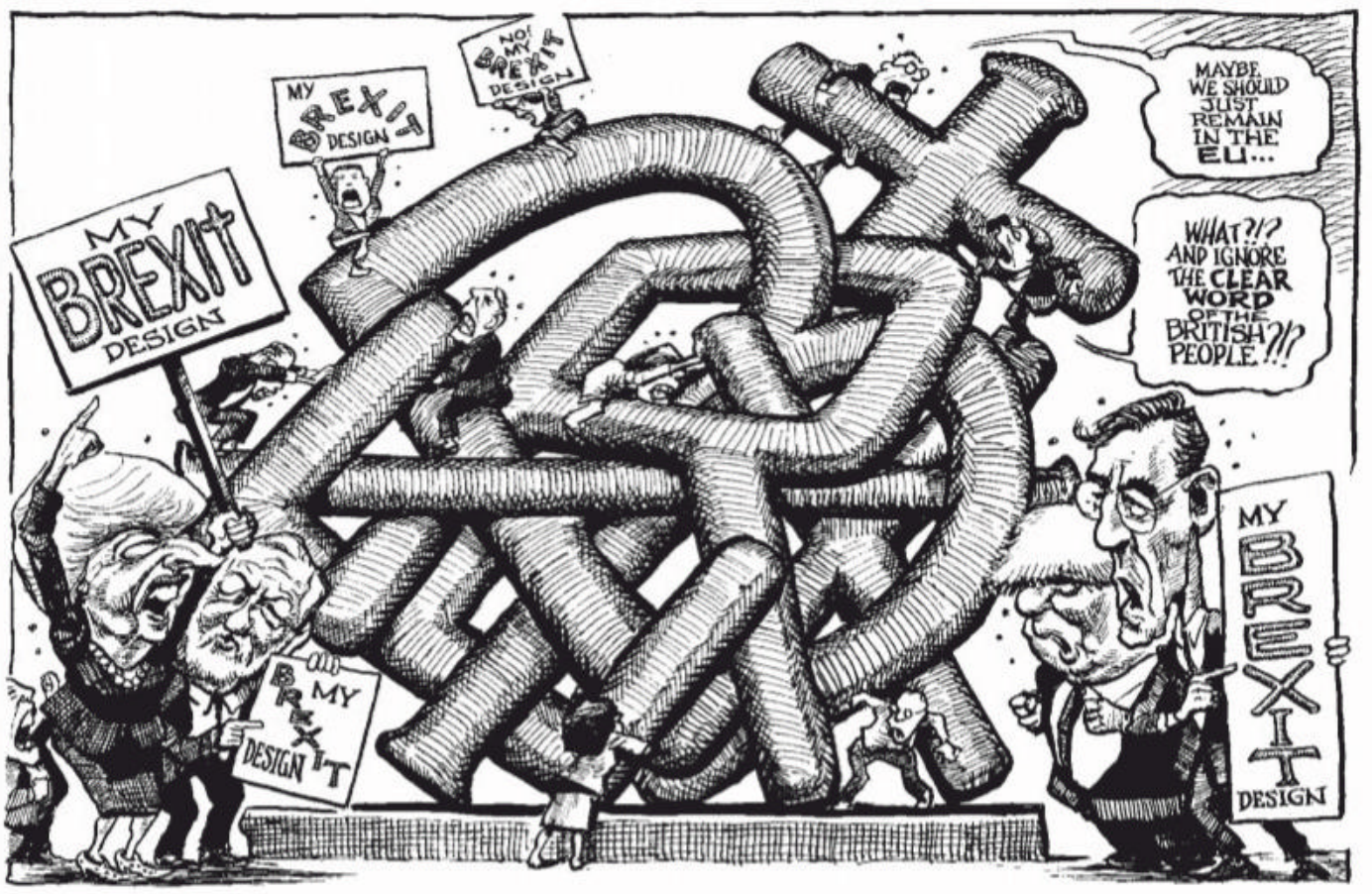
Renault, **Nissan** and **Mitsubishi Motors** created a new "consensus based" structure for their alliance, as they try to move on from the arrest of Carlos Ghosn for alleged financial wrongdoing (Mr Ghosn denies the charges). The new board replaces an arrangement where Mr Ghosn sat at the pinnacle of the alliance. It is chaired by Jean-Dominique Senard, Renault's new chairman. The CEOs of the three carmakers are the board's other members. Mr Senard will not, however, also become Nissan's chairman, settling instead for vice-chairman. The cross-company stakes that each carmaker holds stay the same.

Barrick Gold dropped its $18bn hostile bid for **Newmont Mining**, ending a short but fierce takeover battle in which each side criticised the other's management strategy. The pair are instead to create the world's largest goldmining site in a joint venture in Nevada.

The latest twist

Levi Strauss filed for an IPO on the New York Stock Exchange, which could see the inventor of blue jeans valued at up to $6.2bn. The 165-year-old clothier was taken private in 1985 after 14 years as a public company on the stockmarket.

As **Tesla** prepared to launch its newest vehicle, the Model Y, Elon Musk's lawyers filed a defence against the Securities and Exchange Commission's claim that he was in contempt of court for tweeting misleading company information, which would contravene last year's settlement with the regulator. The filing accuses the SEC of trampling on Mr Musk's right to free speech. Tesla, meanwhile, made a sharp U-turn and said it would not close most of its showrooms after all.



The Economist

Whatever next?

Britain's crisis has plumbed new depths. Parliament must seize the initiative to lift the country out of chaos

When historians come to write the tale of Britain's attempts to leave the European Union, this week may be seen as the moment the country finally grasped the mess it was in. In the campaign, Leavers had promised voters that Brexit would be easy because Britain "holds all the cards". This week Parliament was so scornful of the exit deal that Theresa May had spent two years negotiating and renegotiating in Brussels that MPs threw it out for a second time, by 149 votes—the fourth-biggest government defeat in modern parliamentary history. The next day MPs rejected what had once been her back-up plan of simply walking out without a deal. The prime minister has lost control. On Wednesday four cabinet ministers failed to back her in a crucial vote. Both main parties, long divided over Brexit, are seeing their factions splintering into ever-angrier sub-factions. And all this just two weeks before exit day.

Even by the chaotic standards of the three years since the referendum, the country is lost (see Britain section). Mrs May boasted this week of "send[ing] a message to the whole world about the sort of country the United Kingdom will be". She is not wrong: it is a laughing-stock. An unflappable place supposedly built on compromise and a stiff upper lip is consumed by accusations of treachery and betrayal. Yet the demolition of her plan offers Britain a chance to rethink its misguided approach to leaving the EU. Mrs May has made the worst of a bad job. This week's chaos gives the country a shot at coming up with something better.

The immediate consequence of the rebellion in Westminster is that Brexit must be delayed. As we went to press, Parliament was to vote for an extension of the March 29th deadline. For its own sake the EU should agree. A no-deal Brexit would hurt Britain grievously, but it would also hurt the EU—and Ireland as grievously as Britain.

Mrs May's plan is to hold yet another vote on her deal and to cudgel Brexiteers into supporting it by threatening them with a long extension that she says risks the cancellation of Brexit altogether. At the same time she will twist the arms of moderates by pointing out that a no-deal Brexit could still happen, because avoiding it depends on the agreement of the EU, which is losing patience. It is a desperate tactic from a prime minister who has lost her authority. It forces MPs to choose between options they find wretched when they are convinced that better alternatives are available. Even if it succeeds, it would deprive Britain of the stable, truly consenting majority that would serve as the foundation for the daunting series of votes needed to enact Brexit and for the even harder talks on the future relationship with the EU.

To overcome the impasse created by today's divisions, Britain needs a long extension. The question is how to use it to forge that stable, consenting majority in Parliament and the country.

An increasingly popular answer is: get rid of Mrs May. The prime minister's deal has flopped and her authority is shot. A growing number of Tories believe that a new leader with a new mandate could break the logjam (see Bagehot). Yet there is a high risk that Conservative Party members would install a replacement who takes the country towards an ultra-hard Brexit. What's more, replacing Mrs May would do little to solve the riddle of how to put together a deal. The parties are fundamentally split. To believe that a new tenant in Downing Street could put them back together again and engineer a majority is to believe the Brexiteers' fantasy that theirs is a brilliant project that is merely being badly executed.

Calls for a general election are equally misguided. The country is as divided as the parties. Britain could go through its fourth poll in as many years only to end up where it started. Tory MPs might fall into line if they had been elected on a manifesto promising to enact the deal. But would the Conservatives really go into an election based on Mrs May's scheme, which has twice been given a drubbing by MPs and was described this week even by one supportive Tory MP as "the best turd that we have"? It does not have the ring of a successful campaign.

To break the logjam, Mrs May needs to do two things. The first is to consult Parliament, in a series of indicative votes that will reveal what form of Brexit can command a majority. The second is to call a referendum to make that choice legitimate. Today every faction sticks to its red lines, claiming to be speaking for the people. Only this combination can put those arguments to rest.

Take these steps in turn. Despite the gridlock, the outlines of a parliamentary compromise are visible. Labour wants permanent membership of the EU's customs union, which is a bit closer to the EU than Mrs May's deal. Alternatively, MPs may favour a Norway-style set-up—which this newspaper has argued for and would keep Britain in the single market. The EU is open to both. Only if Mrs May cannot establish a consensus should she return to her own much-criticised plan.

Getting votes for these or any other approach would require thinking beyond party lines. That does not come naturally in Britain's adversarial, majoritarian policies. But the whipping system is breaking down. Party structures are fraying. Breakaway groups and parties-within-parties are forming on both sides of the Commons, and across it. Offering MPs free votes could foster cross-party support for a new approach.

The second step is a confirmatory referendum. Brexit requires Britain to trade off going its own way with maintaining profitable ties with the EU. Any new Brexit plan that Parliament concocts will inevitably demand compromises that disappoint many, perhaps most, voters. Mrs May and other critics argue that holding another referendum would be undemocratic (never mind that Mrs May is prepared to ask MPs to vote on her deal a third or even fourth time). But the original referendum campaign utterly failed to capture the complexities of Brexit. The truly undemocratic course would be to deny voters the chance to vouch that, yes, they are content with how it has turned out.

And so any deal that Parliament approves must be put to the public for a final say. It will be decried by hardline Brexiteers as treasonous and by hardline Remainers as an act of self-harm. Forget them. It is for the public to decide whether they are in favour of the new relationship with the EU—or whether, on reflection, they would rather stick with the one they already have. ■

The transatlantic relationship

Worth fighting for

How Europe and America must set about preventing a great unravelling

THE ATLANTIC OCEAN is starting to look awfully wide. To Europeans the United States appears ever more remote, under a puzzling president who delights in bullying them, questions the future of the transatlantic alliance and sometimes shows more warmth towards dictators than democrats. Americans see an ageing continent that, though fine for tourists, is coming apart at the seams politically and falling behind economically—as feeble in growth as it is excessive in regulation. To Atlanticists, including this newspaper, such fatalism about the divisions between Europe and America is worrying. It is also misplaced.

True, some gaps are glaring. America has abandoned the Paris climate accord and the nuclear deal with Iran, whereas Europe remains committed to both. Other disagreements threaten. President Donald Trump has called the European Union a "foe" on trade and is weighing up punitive tariffs on European cars. Trust has plummeted. Only one in ten Germans has confidence that Mr Trump will do the right thing in world affairs, down from nearly nine out of ten who trusted Barack Obama in 2016. Twenty years ago NATO celebrated its 50th anniversary with a three-day leaders' summit. Fear of another bust-up with Mr Trump has relegated plans for the alliance's 70th birthday party on April 4th to a one-day meeting of foreign ministers.

Past intimacies are not enough to keep warm feelings going today. Europe inevitably counts for less in American eyes than it once did. The generation that formed bonds fighting side-by-side in the second world war is passing away and even the cold war is becoming a distant memory. Meanwhile, America is becoming less European. A century ago more than 80% of its foreign-born population came from Europe; now the figure is only 10%. Surging economies in Asia are tugging America's attention away.

Yet, through its many ups and downs, the relationship has proved resilient. Trade flows between the EU and the United States remain the world's biggest, worth more than $3bn a day. Shared democratic values, though wobbly in places, are a force for freedom. And, underpinning everything, the alliance provides stability in the face of a variety of threats, from terrorism to an aggressive Russia, that have given the alliance a new salience.

At the heart of this security partnership is NATO. By reaching its 70th birthday the alliance stands out as a survivor—in the past five centuries the average lifespan for collective-defence alliances is just 15 years. Even as European leaders wonder how long they can rely on America, the relationship on the ground is thriving. As our special report this week explains, this is thanks to NATO's ability to change. No one imagined that the alliance's Article 5 mutual-defence pledge would be invoked for the first, and so far only, time in response to a terrorist attack on America, in September 2001, or that Estonians, Latvians and Poles would be among NATO members to suffer casualties in Afghanistan. Since 2014 the allies have responded vigorously to Russia's annexation of Ukraine. They have increased defence spending, moved multinational battlegroups into the Baltic states and Poland, set ambitious targets for military readiness and conducted their biggest exercises since the cold war.

In America polls suggest that public opinion towards NATO has actually grown more positive since Mr Trump became president. In Congress, too, backing for the alliance is rock-solid, reflected in supportive votes and the presence at the Munich Security Conference last month of a record number of American lawmakers. Nancy Pelosi, the Democratic leader of the House of Representatives, has extended a bipartisan invitation to NATO's secretary-general, Jens Stoltenberg, to address a joint session of Congress on the eve of the 70th anniversary.

NATO's success holds lessons for the transatlantic relationship as a whole. To flourish in the future, it must not just survive Mr Trump, but change every bit as boldly as it has in the past.

First, this means building on its strengths, not undermining them: removing trade barriers rather than lapsing into tariff wars, for example. Mr Trump is right to badger his allies to live up to their defence-spending promises. But he is quite wrong to think of charging them cost-plus-50% for hosting American bases, as he is said to be contemplating. Such matters should not be treated like a "New York real-estate deal", a former vice-president, Dick Cheney, told the current one, Mike Pence, last week. Those European bases help America project power across the world (see Books & arts section).

Second, realism should replace nostalgia. Europeans should not fool themselves that America's next president will simply turn the clock back. Instead, to make themselves useful to America, Europeans need to become less dependent on it. For instance, in defence, they have taken only baby steps towards plugging big gaps in their capabilities and avoiding wasteful duplication. Their efforts should extend beyond the EU, whose members after Brexit will account for only 20% of NATO countries' defence spending.

A more capable Europe would help with the third and biggest change: adjusting to China's rise. America's focus will increasingly be on the rival superpower. Already China's influence is making itself felt on the alliance, from the nuclear balance to the security implications of, say, Germany buying 5G kit from Huawei or Italy getting involved in the infrastructure projects of the Belt and Road Initiative. Yet the allies have barely begun to think seriously about all this. A new paper from the European Commission that sees China as a "systemic rival" is at least a start.

Unfettered in deliberation

If the allies worked hard on how best to pursue their shared interests in dealing with China, they could start to forge a new transatlantic partnership, with a division of labour designed to accommodate the pull of the Pacific. This would involve Europeans taking on more of the security burden in their own backyard in exchange for continued American protection, and co-ordination on the economic and technological challenge from China. Today the leadership to do this is lacking. But Europeans and Americans once before summoned the vision that brought decades of peace and prosperity. They need to do so again. ■

The aircraft industry

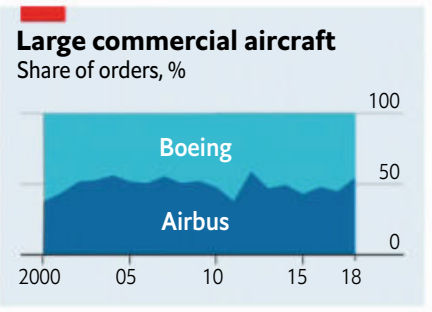
Plane truths

The crash of Ethiopian Airlines flight ET302 shows why a golden age for the world's aircraft duopoly may be over

When a Boeing 737 MAX 8 crashed near Addis Ababa after take-off on March 10th, 157 people lost their lives. It did not take long for the human tragedy to raise questions about what went wrong. That has fed a crisis of trust in Boeing and in the FAA, the American regulator which, even as its counterparts grounded the MAX 8, left it flying for three days before President Donald Trump stepped in, suspending all MAX planes.

Mr Trump noted that Boeing was "an incredible company". In fact the crash is a warning. After a 20-year boom, one of the West's most sophisticated industries faces a difficult future.

The MAX 8 is one of Boeing's most advanced models. Until this week it has been a commercial triumph, with 370 in operation and 4,700 more on order. The 737 series makes up a third of Boeing's profits and most of its order book. That performance caps an extraordinary two decades for the Boeing and Airbus duopoly, as a growing global middle class has taken to the air. Over 21,000 aircraft are in use; a new plane is delivered every five hours. Boeing has slimmed down its supply chain and Airbus has asserted its independence from European governments. That has led to a shareholder bonanza. Their combined market value of $310bn is six times bigger than in 2000. And their overall safety record has been good, with one fatal accident per 2.5m flights last year.



This week's crash foreshadows the end of that golden age. Another MAX 8 crashed in October in Indonesia in similar circumstances. Although investigators have yet to determine the cause of the Ethiopian Airlines accident, regulators suspect that the MAX 8 has a design flaw.

This plays into the worry that a new technological phase is under way. Aircraft are becoming autonomous, as computers take charge. This promises safer, more efficient flying, but the interaction between human pilots and machines is still unpredictable and experimental (see Business section). In the Indonesian crash the pilots fought a losing battle against anti-stalling software that forced the plane's nose down at least 20 times.

The industry's technical complexity is amplified by its organisational complexity. In the 1990s a few Western airlines dominated and a handful of regulators had global clout. Now there are hundreds of airlines and 290,000 pilots worldwide. In 2018, for the first time, less than half of the global fleet was based in the West. Maintaining common standards on training and procedures is harder. China and other countries want a bigger say. The credibility of American regulators has slipped because they have let domestic competition decline. This suggests they are cosy with industry.

Then comes geopolitics. With their hubs in Seattle and Toulouse, Boeing and Airbus are among the West's largest exporters and a rare example of an industry in which China cannot compete. It would be depressing, but not impossible, if safety decisions were influenced by trade tensions. Over time, China and India may insist that the duopoly make more aircraft within their borders, to capture more jobs and intellectual property. That could require a restructuring of how both firms manufacture. Rows over aircraft emissions will further complicate the debate.

Neither Boeing nor Airbus is about to go bust. Any flaw in the MAX 8 will probably be resolved, as battery problems in the 787 Dreamliner were in 2013. Boeing has $12.7bn of cash and bank lines to cushion it from the reputational crisis. Both firms are ultimately backed by governments. In any case, demand for planes will grow. But ahead lie environmental and technological uncertainty, organisational complexity and geopolitical tension. The years of bumper margins may be over. ■

China's balance of payments

The big flip

China is switching from being a net lender to the world to being a net borrower. The implications will be profound

That China sells more to the world than it buys from it can seem like an immutable feature of the economic landscape. Every year for a quarter of a century China has run a current-account surplus (roughly speaking, the sum of its trade balance and net income from foreign investments). This surplus has been blamed for various evils including the decline of Western manufacturing and the flooding of America's bond market with the excess savings that fuelled the subprime housing bubble.

Yet the surplus may soon disappear. In 2019 China could well run its first annual current-account deficit since 1993. The shift from lender to borrower will create a knock-on effect, gradually forcing it to attract more foreign capital and liberalise its financial system. China's government is only slowly waking up to this fact. America's trade negotiators, meanwhile, seem not to have noticed it at all. Instead of focusing on urging China to free its financial system, they are more concerned that China keep the yuan from falling. The result of this myopia is a missed opportunity for both sides.

China's decades of surpluses reflected the fact that for years it saved more than it invested. Thrifty households hoarded cash. The rise of great coastal manufacturing clusters meant exporters earned more revenues than even China could reinvest. But now that has begun to change. Consumers are splashing out on cars, smartphones and designer clothes. Chinese tourists are spending immense sums overseas (see Finance section). As the population grows older the national savings rate will fall further, be- ▸▸

cause more people in retirement will draw down their savings.

Whether or not China actually slips into deficit this year will be determined mostly by commodities prices. But the trend in saving and investment is clear: the country will soon need to adjust to a new reality in which deficits are the norm. That in turn means that China will need to attract net capital inflows—the mirror image of a current-account deficit. To some extent this is happening. China has eased quotas for foreigners buying bonds and shares directly, and made it simpler for them to invest in mainland securities via schemes run by the Hong Kong Stock Exchange. Pension funds and mutual funds all over the world are considering increasing their exposure to China.

But the reforms remain limited. Ordinary Chinese citizens face restrictions on how much money they can take out. If many foreign investors tried to pull their money out of China at once it is not clear that they would be able to do so, an uncertainty that in turn may make them nervous about putting large sums in. China is terrified of financial instability. A botched currency reform in 2015 caused widespread volatility. But the system the country is moving to, which treats locals and foreigners differently, promises to be leaky, corrupt and unstable.

Eventually, then, capital will need to flow freely in both directions across China's borders. That is to be welcomed. People outside and inside China will benefit from being able to invest in more places. The need for freer capital flows will have the welcome side-effect of forcing China to reform its state-dominated financial system, not least so that it commands confidence among international investors. This in turn will mean that market forces play a bigger role in allocating capital in China.

You might expect America's trade negotiators to welcome all of this, and urge China to free its financial system. Unfortunately they seem stuck in the past. Obsessed with the idea that China might depress its currency to boost exports, they are reportedly insisting it commit itself to a stable yuan. That is wrong-headed and self-defeating. Rather than fighting yesterday's currency wars, America should urge China to prepare for the future. ■

Mental health

Shrinks, expanded

There are not enough psychiatrists. Trained laypeople can often help

In any given year one person in six is afflicted by a mental illness. Most cases involve mild-to-moderate depression or anxiety. Some sufferers recover on their own. For many, however, the condition is left untreated and may become chronic or severe. In the past social stigma meant that people kept their pain to themselves. The stigma is now melting away. Yet in rich Western countries two-thirds of people with a mental-health problem do not receive any treatment for it. In poor countries hardly any do. And almost everywhere, psychiatrists and clinical psychologists are scarce. Often they are the only people whom states or insurers will pay to treat mental illness, so those who seek help must wait months for it. The cost in human misery is huge. Mental-health care needs to change.

In particular, the psychiatric profession's over-tight grip should be challenged. Talk therapy, which the World Health Organisation recommends as a first line of treatment for mild-to-moderate depression and anxiety, can be delegated to non-specialists—a concept known as "task-shifting" (see International section).

The experiences of two very different places—England and Zimbabwe—demonstrate that this approach can work on a national scale anywhere. England blazed a trail by training a new cadre of talk-therapy practitioners using a one-year boot camp. Graduates of the scheme typically provide cognitive-behavioural therapy (CBT).

This involves teaching people to spot the real-world situations that set off their negative thoughts, fears and anxieties, such as awkward social gatherings or meeting the boss. It then offers concrete steps for dealing with them, such as going on a walk with a friend or reminding yourself that you got a bonus so the boss probably doesn't think you are useless. Half of those who complete two or more therapy sessions for depression or anxiety recover (though some would have anyway). Zimbabwe has been training elderly women to provide something like CBT on "friendship benches" set up in courtyards.

Both programmes are inspiring imitators. Scotland, whose health service is run independently from England's, has a similar scheme. Canada, Norway and New Zealand are also using ideas from England. Zimbabwe's approach has been imitated not only in other African countries but even in New York.

The benefits can be enormous. Even mild forms of distress affect work, child-rearing and physical health. Social anxiety may keep someone at home. A depressed mother may struggle to care for and play with her child in the early months so crucial for brain development. In Britain about 11% of workers' sick days are because of mental-health problems. Those who struggle into work despite such problems are, on average, less productive. Add in disability payments to those who drop out completely, and the annual cost in Europe is nearly 3% of GDP, by one estimate.

Yet too little use is made of cheap talk-therapy. Critics complain that standardised sessions can never fit the unique circumstances of each person's distress. But the alternative is usually no care at all, or advice from charity helplines. Psychiatrists, as eager as any other guild to protect their turf, often warn that therapists who have not studied psychiatry may provide poor-quality care. In fact, plenty of evidence shows that, with proper supervision, trained amateurs do a good job. The old notion that doctors must do everything is not only impractical; it is also disproved by experience. In many places, nurses do tasks once reserved for doctors, including anaesthesia, endoscopy and emergency care. Community health workers in poor countries (sometimes known as "barefoot doctors") treat malaria and diagnose pneumonia.

The same kind of approach can work for mental health. Indeed, with so many more sufferers than can plausibly see a specialist, cheap talk with trained laypeople is the only practical way to bring relief—and turn millions of lives around. ■

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Thailand's bogus election

General decline

The vote does not mark a return to democracy, but a new phase in military misrule

IT SHOULD BE a triumphant return. On March 24th Thai voters will elect a new parliament, putting an end to five years of direct military rule (see Asia section). But the MPs they pick will have nowhere to meet. King Vajiralongkorn has appropriated the old parliament building, which stands on royal property, for some unspecified purpose that, under the country's harsh *lèse-majesté* laws, no one dares question. The military junta has yet to finish building a new parliament house.

Old-school Thais

That the newly chosen representatives of the Thai people will be homeless stands as a symbol for how hollow the election will be, and how contemptuous the generals are of democracy, even as they claim to be restoring it. They have spent the past five years methodically rigging the system to ensure that the will of voters is thwarted, or at least fiercely circumscribed. In particular, they want to foil Thaksin Shinawatra, a former prime minister, now in exile, whose supporters have won every election since 2001. The result will be a travesty of democracy in a country that was once an inspiration for South-East Asia. It is bad news not only for the 69m Thais but also for the entire region.

Since ousting a government loyal to Mr Thaksin in a coup in 2014, the generals have imposed an interim constitution that grants them broad powers to quash "any act which undermines public peace and order or national security, the monarchy, national economics or administration of state affairs". They have carted off critical journalists and awkward politicians to re-education camps. Simply sharing or "liking" commentary that the regime deems subversive has landed hapless netizens in prison. Even the most veiled criticism of the monarchy—posting a BBC profile of the king, say, or making a snide remark about a mythical medieval princess—is considered a crime. And until December, all political gatherings involving more than five people were banned.

The junta's main weapon, however, is the new constitution, which it pushed through in a referendum in 2016 after banning critics from campaigning against it. Even so, the generals could persuade only a third of eligible voters to endorse the document (barely half of them turned out to cast their ballot). The constitution gives the junta the power to appoint all 250 members of the upper house. And it strengthens the proportional element of the voting system for the lower house, at the expense of Mr Thaksin's main political vehicle, the Pheu Thai party. It also says the prime minister does not have to be an MP, paving the way for Prayuth Chan-ocha, the junta leader who does not belong to any party, to remain in power. And it allows the general to impose a "20-year plan" to which all future governments will have to stick.

The manipulation has continued throughout the campaign. Politicians and parties at odds with the junta have found themselves in trouble with the courts or the Election Commission. Another party loyal to Mr Thaksin, Thai Raksa Chart, was banned outright. The army chief has issued a writ for libel against the head of another party who, after being followed by soldiers wherever he went, complained of the shameful waste of taxpayers' money. Campaigning on social media is restricted to anodyne posts about the parties' policies and candidates' biographies. Politicians fear that minor infringements of such rules will be used as an excuse for further disqualifications.

But all these strictures do not seem to bind Mr Prayuth and his allies. Before political gatherings were allowed again, he paraded around the country addressing huge crowds in sports stadiums. (These were not political gatherings—perish the thought—but "mobile cabinet meetings".) The Election Commission has ruled that he can campaign for a pro-military party, which has named him as its candidate for prime minister, even though government officials like him are supposed to be neutral in the election.

All this is intended to ensure that Mr Prayuth remains prime minister, despite his inertia and ineptitude. Under him, economic growth has slowed. Household debt has risen. According to Credit Suisse, a bank, Thailand has become the world's most unequal country. The richest 1% of its people own more than two-thirds of the country's wealth. Corruption thrives. The deputy prime minister explained away a big collection of luxury watches last year, saying they were on loan from a conveniently deceased friend.

Worse is to come. The working-age population is shrinking as Thailand ages. Manufacturers are caught between low-wage countries, such as Vietnam, and China, with its vast industrial base. China also poses a problem diplomatically, in its attempts to enforce its territorial claims in the South China Sea, and more broadly to impose its will on its smaller, weaker neighbours.

Thailand's civilian politicians have lots of ideas about how to tackle these problems. Future Forward, a new party which appeals to younger Thais, wants to end business monopolies, decentralise government and extend the welfare state. Mr Thaksin's allies have made endless pledges to help the rural poor. It is Mr Prayuth who, despite wielding almost unfettered power, seems lost for inspiration. The junta has promised to revive the economy by improving infrastructure, but few of its plans have come to fruition. The only thing the generals have to show for five years in office is a heavy-handed scheme to retain power.

That is a shame not just for Thailand, but also for the region, which has lost a role model. Thailand was the only country in South-East Asia to avoid being colonised, and the first to become a democracy, in 1932. It has been a staunch ally of America since the second world war. It industrialised faster than the other big countries in the region, too. Many of its development schemes, such as a health-care programme for the poor introduced by Mr Thaksin almost 20 years ago, have been widely imitated.

Much of South-East Asia is plagued by the same problems as Thailand: slowing growth, ageing populations, wobbly democracies, inadequate social safety-nets, endemic corruption and the ever-present shadow of China. Thailand now offers a cautionary tale of how not to grapple with such challenges. Thais deserve much better—starting with a genuine election. ■

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Muslim schools

Your special report on Islam in the West (February 16th) reported that in Denmark government subsidies to Muslim schools, but not Christian or Jewish ones, have been cut, and some have closed down. That is correct, but the reasons for cutting subsidies were entirely objective and not based on the religious ideology of the schools in question. To receive subsidies, independent and free schools must fulfil certain minimum requirements regarding their curriculum and quality of teaching.

The schools that lost their subsidies did so after several warnings from the Ministry of Education because they did not live up to these requirements by a wide margin. Furthermore, in some cases it was documented that they had promoted extreme Islamist views and materials.

You also claimed that Hizb ut-Tahrir acquired a mass following in Britain and Denmark with its call to restore a global caliphate. As far as Denmark is concerned, the movement never attracted more than 500 members and the same number of sympathisers at most. Presently, the Danish part of the organisation is more or less split in three, with a total membership of fewer than 100 out of the 300,000 people in Denmark with a Muslim background.

JENS ADSER SORENSEN
Former director of the Parliamentary Department
Danish Parliament
Charlottenlund, Denmark

Regarding the history of Islam in Europe, there was, in fact, a short-lived but important moment when a large number of Muslims lived under Christian rule. That was in Sicily after its conquest by the Normans. King Roger II (1095-1154) employed Muslim archers and was patron to a Muslim geographer, Muhammad al-Idrisi, who produced the Kitab Ruyar (Book of Roger), a description of the world accompanied by maps. One of al-Idrisi's many achievements was the calculation of the Earth's circumference within an error of less than 4%.

ELIZABETH LAPINA
Associate professor
Department of History
University of Wisconsin, Madison

China's economic system

What you present as a series of reforms of the Chinese economy would actually involve China abandoning its chosen system of political economy and adopting the Western model ("Can pandas fly?", February 23rd). That is not going to happen. The rules of the World Trade Organisation were designed by the West. They assume the Western model of political economy and are simply incapable of handling the Chinese model. Even if China were to agree to abide by the letter of rules it has had no hand in crafting, the realities on the ground would remain quite different. That leaves the West with only three realistic choices. Close its eyes to persistent asymmetries in the interests of trumpeting trade deals with China and continue to trade, albeit at a constant disadvantage. Rewrite the WTO rule book to recognise the fact that it is not capable of accommodating China's system of political economy. Or embark on a prolonged war of attrition in the belief that China's system is unsustainable and that pandas cannot, in fact, fly.

These are the stark choices available. It is time we faced them and stopped pretending that piecemeal reforms and sticking-plaster solutions will lead to a lasting, harmonious accommodation.

JOE ZAMMIT-LUCIA
Co-founder
Radix
London

Let priests marry

If the Catholic church is serious about reducing sexual abuse committed by its clergy ("Praying about preying", February 23rd), the Vatican should reverse the decrees of the Lateran Councils of 1123 and 1139 and permit priests, nuns and even monks, to marry and raise families. Although not completely eliminating sexual abuses, it would significantly reduce them and save parishioners from the harm such assaults do to them and their families.

WILLIAM VAN HUSEN
Wakefield, New Hampshire

Sorted

You attributed the invention of medical triage to Allied field hospitals in the first world war ("Eco-nomics", February 9th). In fact, the term and the practice were invented during the Napoleonic wars by Dominique Jean Larrey, a French army doctor who pioneered many innovations in surgical practice and introduced the "flying ambulance" to transport the injured from the battlefield.

CLIVE RAINBOW
Speen, Buckinghamshire

Containing America's rivals

"Bringing out the big guns" (March 2nd) correctly reported that "great power competition" has become the basis for American defence policy. The objectives of the new strategy are "to deter and if war comes defeat" a number of adversaries led by China and Russia. The rub is that the current strategy does not define what it takes to deter, or if war comes, defeat, China or Russia, a deficiency underscored in the report of the Commission on the National Defence Strategy published this year—and that applied to the classified version as well. Without a good idea of what it takes to deter or defeat countries armed with nuclear weapons, it is very difficult to evaluate if the right stuff is being bought to accomplish those missions.

A more relevant, effective and affordable strategic foundation for America and its allies is containment, a concept that succeeded in ending the cold war peacefully and can prevent a future conflict that could escalate into global war. And containment need not cost the $750bn a year that has been appropriated for defence.

HARLAN ULLMAN
Senior adviser
Atlantic Council
Washington, DC

Charting the elements

In an otherwise excellent article, you gave the impression that there is only one standard periodic table, the outcome of a long evolution ("The heart of the matter", March 2nd). In fact there have been hundreds of tables, some of them still in use and none of them definitive. Many were represented as flat spirals or three-dimensional helices. These have the advantage of showing the continuity of the sequence of elements, and some of them have an aesthetic appeal missing from a table.

PHILIP STEWART
Department of Plant Sciences
University of Oxford

You made reference to a French chemist's "grizzly end" at the guillotine. Presumably you meant to refer to the poor fellow's "grisly end". However, if you see fit to publish any articles in the future about ursine hindquarters, "A grizzly end" would make a fine title.

ULYSSES LATEINER
Somerville, Massachusetts

The worst film ever?

The Oscars may no longer be a good measure of a film's influence (Graphic detail, March 2nd), but this is nothing new. Classic films such as "Batman", "Fantastic Voyage" and "Who's Afraid of Virginia Woolf?" were released in 1966. Yet your most culturally influential film that year was "Manos: The Hands of Fate". Have you actually seen that fiasco?

SANDEEP BHANGOO
Mason City, Iowa

Letters are welcome and should be addressed to the Editor at
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IISS The International Institute for Strategic Studies

Senior Fellow for Japanese Security Studies

IISS, London

The International Institute for Strategic Studies (IISS) intends to hire a full-time Senior Fellow for Japanese Security Studies, also to be styled the 'Japan Chair', based at its headquarters in London. The selected candidate will report to the Deputy Director-General and will lead the management of the Japanese Security Studies research programme.

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Candidates should be eligible to work in the United Kingdom, however, the IISS will provide visa sponsorship for this position if required.

Due to the expected volume of applications, only those applicants selected for interview will receive a reply following the acknowledgement email. The IISS is an equal opportunities employer.

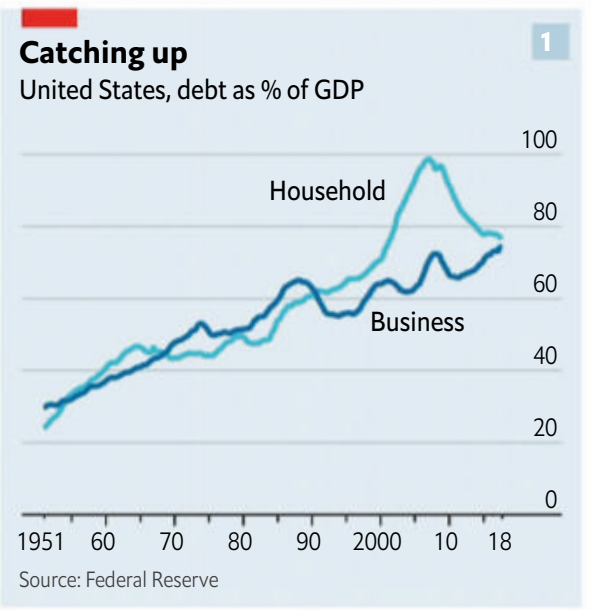
Carry that weight

Overloaded balance-sheets will not bring about America's next recession. But they may make it worse

American household debt set off the global financial crisis in 2007. But for much of the subsequent recovery America has looked like a paragon of creditworthiness. Its households have rebuilt their balance-sheets; its firms have made bumper profits; and its government goes on providing the world's favourite safe assets. If people wanted to look for dodgy debt over the past decade they had to look elsewhere: to Europe, where the sovereign debt crisis dragged on; to China, where local governments and state-owned firms have gorged themselves on credit; and to emerging markets, where dollar-denominated debts are a perennial source of vulnerability.

Should they now look again at America? Household debt has been shrinking relative to the economy ever since it scuppered the financial system. But since 2012 corporate debt has been doing the opposite. According to the Federal Reserve the ratio of non-financial business debt to GDP has grown by eight percentage points in the past seven years, about the same amount as household debt has shrunk. It is now at a record high (see chart 1).

This is not bad in itself. The 2010s have been a rosier time for firms than for households; they can afford more debt, and a world of low interest rates makes doing so attractive. Moreover the firms are not borrowing the money for risky investments, as they did when a craze for railway investments brought about America's worst ever corporate-debt crisis in the 1870s. In aggregate they have just given money back to shareholders. Through a combination of buy-backs and takeovers non-financial corporations have retired a net $2.9trn of equity since 2012—roughly the same amount as they have raised in new debt.



For all that, a heavy load of debt does leave companies fragile, and that can make markets jittery. In 2018 concerns about over-indebtedness began to show up in financial markets. The average junk-bond investor ended the year with less money than they had at the start of it (see chart 2 on next page)—only the second time this had happened since the financial crisis. In February Jerome Powell, the chair of the Fed, told Congress some corporate debt represented "a macroeconomic risk...particularly in the event of the economic downturn." Might American firms have overdone it?

Thanks to low interest rates and high profits, American companies are on average well able to service their debts. *The Economist* has analysed the balance sheets of publicly traded American non-financial firms, which currently account for two-thirds of America's $9.6trn gross corporate non-financial debt. Their combined earnings before interest and tax are big enough to pay the interest on this mountain of debt nearly six times over. This is despite the fact that the ratio of their debt, minus their cash holdings, to their earnings before interest, tax, depreciation and amortisation (EBITDA) has almost doubled since 2012.

But life is not lived on average. About $1trn of this debt is accounted for by firms ▸▸

with debts greater than four times EBITDA and interest bills that eat up at least half their pre-tax earnings. This pool of more risky debt has grown faster than the rest, roughly trebling in size since 2012. All told such debts are now roughly the same size as subprime mortgage debt was in 2007, both in absolute terms and as a share of the broader market in which it sits.

That a trillion dollars might be at risk is not in itself all that worrying. The S&P 500 can lose well over that in a bad month; it did so twice in 2018. The problem with that $1trn of subprime debt was not its mere size; it was the way in which it was financed. Mortgages of households about which little was known were chopped up and combined into securities few understood. Those securities were owned through obscure chains by highly leveraged banks. When ignoring the state of the underlying mortgages became impossible, credit markets froze up because lenders did not know where the losses would show up. Big publicly traded companies are much less inscrutable. They have to provide audited financial statements. Their bonds are traded in public markets. Their debt does not look remotely as worrying, even if some firms are overextended.

Give me your funny paper

But there is a second way to cut a subprime-sized chunk of worry out of the corporate-debt mountain. This is to focus on the market for so-called "leveraged loans", borrowing which is usually arranged by a group of banks and then sold on to investors who trade them in a secondary marketplace. Borrowers in this market range from small unlisted firms to big public companies like American Airlines. The stock of these loans has grown sharply in America over recent years (see chart 3 on next page). They now rival junk bonds for market size, and seem to have prospered partly at their expense. Unlike bonds, which offer a fixed return, interest rates on leveraged loans typically float. They thus appeal to investors as a hedge against rising interest rates.

Europe has a leveraged-loan market, too, but at $1.2trn, according to the most commonly used estimate, America's is about six times bigger. It is hard to judge the overlap between these leveraged loans and the debts of fragile public companies. But it exists.

The rapid growth of leveraged loans is what most worries people about the growth in corporate debt. The list of policymakers to have issued warnings about them, as Mr Powell has done, include: Janet Yellen, his predecessor at the Fed; Lael Brainard, another Fed policymaker; the IMF; the Bank of England; and the Bank for International Settlements, the banker for central banks. On March 7th the *Financial Times* reported that the Financial Stability Board, an international group of regulators, would investigate the market.

These worries are mostly based on three characteristics the growth in leveraged loans is held to share with the subprime-mortgage boom: securitisation, deteriorating quality of credit and insufficient regulatory oversight.

The 2000s saw an explosion in the bundling up of securitised mortgages into collateralised debt obligations (CDOs) which went on to play an infamous role in the credit crunch. In this context the collateralised loan obligations (CLOs) found in the leveraged-loan market immediately sound suspicious. The people who create these instruments typically combine loans in pools of 100 to 250 while issuing their own debt to banks, insurers and other investors. These debts are divided into tranches which face varying risks from default. According to the Bank of England, nearly $800bn of the leveraged loans outstanding around the world have been bundled into CLOs; the instruments soak up more than half of the issuance of leveraged loans in America, according to LCD, the leveraged-loan unit of S&P Global Market Intelligence.

For evidence of a deterioration in the quality of credit, the worriers point to the growing proportion of leveraged loans issued without "covenants"—agreements which require firms to keep their overall level of debt under control. So-called "covenant-light" loans have grown hand in hand with CLOs; today they make up around 85% of new issuance in America.

There are also worries about borrowers increasingly flattering their earnings using so-called "add-backs". For instance, a firm issuing debt as part of a merger might include the projected efficiency gains in its earnings before those gains materialise. When Covenant Review, a credit research firm, looked at the 12 largest leveraged buy-outs of 2018 it found that when such adjustments were stripped out of the calculations the deals' average leverage rose from 6.1 times EBITDA to 8.7.

Regulatory slippage completes the pessimistic picture. In 2013 American regulators issued guidance that banks should avoid making loans that would see companies' debts exceed six times EBITDA. But this was thrown into legal limbo in 2017 when a review determined that the guidance was in fact a full-blown regulation, and therefore subject to congressional oversight. The guidance is now routinely ignored. The six-times earnings limit was breached in 30% of leveraged loans issued in 2018, according to LCD.

In 2014 regulators drew up a "skin in the game" rule for CLOs—a type of regulation created by the Dodd-Frank financial reform of 2010 that requires people passing on risk to bear at least some of it themselves. But a year ago the skin-in-the-game rule for CLOs was struck down by the DC Circuit Court of Appeals. The court held that, since CLOs raise money first and only then buy up loans on behalf of the investors, they never really take on credit risk themselves. Their skin is safe before the game begins.

In the middle of negotiations

Despite these three points of comparison, though, the leveraged-loan market does not really look like the subprime markets of the mid 2000s. CLOs have more in common with actively managed investment funds than with the vehicles that hoovered up mortgage debt indiscriminately during the mid-2000s. Those securities typically contained thousands of mortgages; those selling them on had little interest in scrutinising the details of their wares. The CLOs pool fewer debts, their issuers know more about the debtors and their analysts monitor the debts after they are bought. They need to protect their reputations.

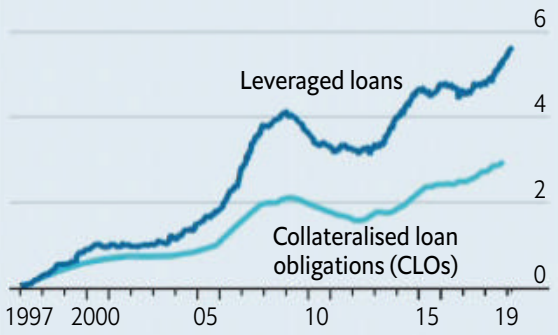
Unlike the racy instruments of the housing boom, which included securitisations-of-securitisations, CLOs have long been the asset of choice for investors wanting exposure to leveraged loans. And they have a pretty solid record. According to Goldman Sachs, a bank, in 2009 10% of leveraged loans defaulted, but top-rated CLO securities suffered no losses. The securitisation protected senior investors from the underlying losses, as it is meant to.

And the rise in covenant-light lending "is not the same thing as credit quality deteriorating," says Ruth Yang of LCD. It may just reflect the sort of investors now interested in the market. Leveraged loans are increasingly used as an alternative to junk bonds, and junk-bond investors think analysing credit risks for themselves beats getting a promise from the debtor. Ms Yang points out that loans that lack covenants almost always come with an agency credit rating, providing at least some degree of guaranteed oversight—if not, perhaps, enough for those badly burned by the failure of such ratings in the financial crisis.

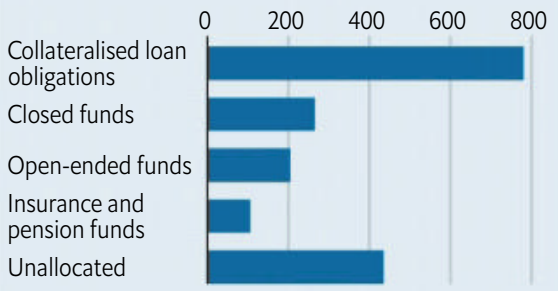
Even if these points of difference

Pulling the levers 3

United States, outstanding value
As % of GDP



Holdings of leveraged loans by global investors*
November 2018 estimate, $bn



Sources: Goldman Sachs; Bank of England *Non-bank

amount to nothing more than whistling in the dark, the prognosis would still not be too bad. America's banks are not disturbingly exposed to leveraged loans. The Bank of England estimates that they provide only about 20% of CLO funds, with American insurers providing another 14%. It also notes that the banks' exposures are typically limited to the highest-quality securities. The junior tranches of CLO debt—those that would suffer losses should defaults rise—are mostly held by hedge funds, credit investors and the CLO managers themselves. Even if a lot of them went bust all at once access to credit for the economy at large would be unperturbed.

That said, defaults on loans are not the only way for corporate debt to upset the financial system. Take investment-grade corporate bonds. In 2012 about 40% of them, by value, were just one notch above junk status. Now around 50% are. Should these bonds be downgraded to junk—thus becoming "fallen angels", in the parlance of debt markets—some investors, such as insurance firms, would be required by their mandates to dump them. One study from 2011 found that downgraded bonds which undergo such fire sales suffer median abnormal losses of almost 9% over the subsequent five weeks.

Another possible source of instability comes from retail investors, who have piled into corporate debt in the decade since the crisis. Mutual funds have more than doubled the amount they have invested in corporate debt in that time, according to the Fed. The $2trn of corporate debt which they own is thought to include around 10% of outstanding corporate bonds; the IMF estimates that they own about a fifth of all leveraged loans. Exchange-traded funds (ETFs), which are similar in some respects to mutual funds but traded on stock exchanges, own a small but rapidly growing share of the high-yield bond market.

In both sorts of fund investors are promised quick access to their money. And although investments in mutual funds are backed by assets, investors who know that the funds often pay departing investors out of their cash holdings have a destabilising incentive to be the first out of the door in a downturn. Some regulators fear that if ructions in the corporate-debt market spooked retail investors into sudden flight from these funds, the widespread need to sell off assets in relatively illiquid markets would force down prices, further tightening credit conditions. There is also a worry among some experts that the way in which middlemen, mostly banks, seek to profit from small differences in prices between ETFs and the securities underlying them could go haywire in a crisis.

Neither a widespread plummeting of angels nor a rush to the exit by investors would come out of nowhere. The system would only be tested if it began to look as if more corporate debt was likely to turn sour. There are two obvious threats which might bring that about: falling profit margins and rising interest rates.

Wipe that tear away

Until recently, interest rates looked like the bigger worry. One of the reasons markets sagged in late 2018 was that the Fed was expected to continue increasing rates steadily in 2019. Credit spreads—the difference between what corporations and the government must pay to borrow—rose to their highest since late 2016. Leveraged loans saw their largest quarterly drop in value since 2011 and a lot of money was pulled out of mutual funds which had invested in them. By December new issuance had ground to a halt.

But in January Mr Powell signalled that the central bank would put further rate rises on hold, and worries about indebtedness faded. Stocks recovered; credit spreads began falling, leveraged loans rallied strongly. In February CLO issuance exceeded its 12-month average, according to LCD. It no longer looks as if high interest rates will choke the supply of corporate credit in the near future.

The more significant threat is now falling profit margins. Corporate-tax cuts helped the earnings per share of S&P 500 firms grow by a bumper 22% in 2018. But this year profits are threatened by a combination of wages that are growing more quickly and a world economy that is growing more slowly. Profit forecasts have tumbled throughout the first quarter; many investors worry that margins have peaked. Should the world economy continue to deteriorate, the picture will get still worse as America's fiscal stimulus wears off. The most indebted businesses will begin to run into trouble.

If the same growth in wages that squeezes profits leads the Fed to finally raise rates while the market is falling, the resulting economic squeeze would compress profit margins just as the cost of servicing debt rose. A wave of downgrades to junk status would spark a corporate-bond sell-off. The junior tranches of CLO debt would run into trouble; retail investors would yank their money from funds exposed to leveraged loans and corporate bonds. Bankruptcies would rise. Investment would drop, and so would the number of new jobs.

That worst-case scenario remains mild compared with the havoc wrought by CDOs a little over a decade ago. But it illustrates the fragilities that have been created by the credit boom, and that America could soon once again face a debt-driven turn in the business cycle that is home grown.

After all, though the current rise in corporate debt is not in itself a likely cause for a coming crash, the past suggests that it is an indicator both that a recession is on its way and of the damage it may do. Credit spreads have in general been shrinking, a quiet before the storm which tends to presage recession, though the link is far from certain. And recessions that come after borrowing rates have shot up tend to be worsened by that fact, perhaps because when people are lending a lot more they are, more or less by definition, being less choosy. In 2017 economists at the Bank of England studied 130 downturns in 26 advanced economies since the 1970s, and found that those immediately preceded by rapid private credit growth were both deeper and longer. That does not prove that the growth in purely corporate debt will be as damaging. But it is worth thinking on. ■

The techlash gathers pace

Move fast and break things

SAN FRANCISCO AND DALLAS

Tech giants face threats from new federal laws, existing regulators and state attorneys-general

ANNIVERSARIES ARE often happy occasions, but not this one. March 17th will mark a year since the *New York Times* and the *Observer* published exposés about how Facebook enabled the personal data of tens of millions of Facebook-users to leak to an outside political firm, Cambridge Analytica. The resulting scandal has plagued the social-networking firm and provoked scepticism among politicians and consumers that big tech firms can be trusted to police themselves. Many Republicans and Democrats, who share little in common ideologically, agree that the tech giants need to be reined in. Software may be eating the world, as the technology investor Marc Andreessen famously said, "but the world is starting to bite back," says Bruce Mehlman, a lobbyist in Washington.

Elizabeth Warren, a senator vying to become the Democratic nominee for president, recently suggested breaking up big tech companies, including Facebook, Google and Amazon, and unwinding some of their previously allowed mergers, such as Facebook's purchases of the apps Instagram and WhatsApp. She has declared that big tech firms have "too much power over our economy, our society and our democracy." As if to underscore her concern, Facebook temporarily blocked some of Ms Warren's anti-tech advertisements from appearing on the social network, reportedly because of trademark issues with Facebook's logo, before they were restored. Nor is this animus confined to Democrats. Ted Cruz, a Republican senator from Texas, says Ms Warren is right that big tech has too much power to silence free speech and is "a serious threat to our democracy." Mr Cruz added that this was the first time he had agreed with Ms Warren about anything.

Much as Wall Street animated the 2008 presidential election, antitrust will feature prominently in the 2020 campaign. Amy Klobuchar, another senator and presidential hopeful, has sponsored bills that would toughen America's antitrust laws, for example by requiring merging firms to prove their deals would not harm competition. Ms Warren's views on tech will oblige other Democratic candidates to clarify where they stand and may drag other candidates towards more extreme positions, as her stance on wealth taxes did.

It does not require a sophisticated algorithm to detect a growing unease with big tech firms. This month at South by Southwest, a conference in Austin that attracts many techies, Margrethe Vestager, the European commissioner for competition who has led the way on punishing tech firms for anti-competitive behaviour, asked whether there should be more government intervention against them. Most of the several hundred people in the room raised their hands.

How best to take on tech is a conundrum facing many governments. A new report by a panel of experts led by the Harvard economist Jason Furman, which was published on March 13th, looks at how Britain can encourage digital competition. It recommends a series of things, including developing a code of conduct for tech firms, tweaking merger rules, making it easier for ▸▸

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customers to move their data to rival firms and creating a new competition unit with technology expertise. But Britain's ability to tame tech firms is limited. Far more responsibility falls on America, the homeland of big tech.

Democrats and Republicans may both poke at tech, but they often have different worries. Democrats are more interested in issues of market power and privacy. Republicans share their concerns about privacy, but focus less on antitrust and more on the supposed political bias of firms like Google and Facebook, which they believe suppress conservative views. However, in the year since the Cambridge Analytica scandal, neither party can claim much has been done yet to constrain big tech firms. Could that be changing?

The Federal Trade Commission (FTC), a consumer watchdog, is believed to be nearing completion of its investigation into whether the Cambridge Analytica fiasco is evidence that Facebook violated a 2011 agreement not to share data without consumers' express consent. Some think a massive fine, perhaps as high as $5bn, could be forthcoming. The "effectiveness" of the FTC is "is going to be weighed to a large degree by their actions on Facebook," says Barry Lynn of the Open Markets Institute, a think-tank that argues for more forceful use of antitrust laws.

The FTC has also launched a task-force focused specifically on tech firms, which could play a role in unwinding past tech mergers. Separately, federal prosecutors are reported to be considering a criminal investigation into Facebook's sharing of data with other firms.

Another place to watch for signs of tech firms falling under tighter control is federal privacy legislation, which is currently being drafted in Washington, DC. Senators are weighing how best to write a national bill, which would give consumers greater control over how their data are collected and used online. California forced the federal government's hand by drafting and passing its own privacy law, which goes into effect in January 2020.

Most businesses "don't want a patchwork of state laws that are hard to implement and make no sense," says Jon Leibowitz, former chairman of the FTC, who is now a lawyer at Davis Polk. A new federal privacy bill seems unlikely in the short term, but never before has there been so much consensus about the need for privacy legislation, says Mr Leibowitz.

The other principal worry is that big tech firms suppress competition. That can be addressed by enforcing antitrust law. America has not brought a big antitrust case against a tech giant for 20 years, since it went after Microsoft for anti-competitive behaviour. Those in favour of the "big case" tradition of antitrust, as Ms Warren is, believe that break-up attempts, even if they are not ultimately successful, put tech firms on guard and can allow innovative upstarts to thrive while the giant is distracted by court cases. Proponents of this school of thought point out that new firms arose after government actions against AT&T, IBM and Microsoft. But not everyone agrees that it is a good idea to try to break up tech firms. It is better to prevent mergers happening in the first place than attempt to untangle them after the fact.

A big move against a tech giant seems unlikely until after 2020. But even if the elected president does not have Ms Warren's enthusiasm for breaking up these companies, there could be pressure to do so. State attorneys-general are increasingly agitating to take action against big tech firms over privacy infringements and anti-competitive behaviour. There are rumours that some have singled out Facebook. If they band together, attorneys-general could hurt tech firms and provoke action by the federal government—just as they did, launching investigations and going on to pressure the government, in the cases against big tobacco and Microsoft that started in the 1990s.

In the coming year antitrust policy and tech regulation will be debated fiercely. But 2020 will not be the first election in which antitrust policy will play a role. The issue famously featured in 1912, when the contenders talked about the powerful companies of their day, called "trusts", and whether they should be dismembered. Woodrow Wilson, who believed there needed to be new legislation to strengthen antitrust enforcement, beat the more cautious Theodore Roosevelt to the presidency. Today's contenders may want to take note. ■

College admissions

Bribe styles of the rich and famous

WASHINGTON, DC

Prosecutors charge actresses and executives with buying their children places at prestigious universities

THE FBI called it Operation Varsity Blues. It was an investigation centred on William Singer, an enterprising college counsellor, who earned $25m from all manner of powerful people by fraudulently securing spots for their children at highly selective universities like Stanford and Yale. Among his clients charged with crimes were Felicity Huffman and Lori Loughlin, two well-known actresses; Gordon Caplan, the co-chairman of an international law firm; and William McGlashan, a Silicon Valley private-equity executive who champions ethical investing.

To grease the lucrative scheme, Mr Singer bribed proctors of admissions exams to fake scores and bribed athletics officials to accept wealthy children with concocted sports résumés, according to court documents unveiled by federal prosecutors on March 12th. The lurid details have provoked embarrassment for universities and *Schadenfreude* for the public.

There is also an entirely legal way to corrupt the elite admissions system, which for some reason generates less outrage. Mr

Singer grasped this dynamic: There is a front door "which means you get in on your own" and a "back door" secured by multi-million-dollar donations to universities, he explained in a recorded call to a client. What Mr Singer did—for 761 buyers, he claimed—is create a "side door" by bribing university officials and faking test scores that would achieve the same result at one-tenth of the cost. In effect, his scheme granted mere multimillionaires access to the billionaires' entrance.

Getting in through the side door was a sordid undertaking. According to prosecutors, Mr Singer bribed Rudy Meredith, then a women's soccer coach at Yale, to accept a student who did not play competitive soccer. The relatives paid $1.2m for the slot. Ms Laughlin, one of the actresses, and her husband paid $500,000 to get their daughters, both Instagram influencers and minor celebrities in their own right, designated as crew-team recruits for the University of Southern California—despite the fact that neither one rowed. Mr Caplan, the international lawyer, allegedly faked a learning-disability diagnosis for his daughter and paid $75,000 for a boosted admissions score. The prosecutors, who flipped Mr Singer, enumerate several other jaw-dropping tales, backed up with wiretaps of the various notables admitting the finer details of the schemes.

Rich children are already unfairly advantaged in the game of elite university admissions. They start out with stabler families, better schools and helpful networks. Elite American colleges then operate a large, entirely legal affirmative-action programme for the rich. Most highly selective American universities indulge in "legacy preferences"—positive discrimination for relatives of alumni—that disproportionately benefit the already rich. Such universities also have lax standards for recruited athletes, which helps rich children. Opportunities to row, fence or play golf do not abound in the ghetto.

Funding a new building just as a mediocre child applies to college, in the hope of boosting their admission chances, remains perfectly legal so long as there is no established quid pro quo. The strategy seems common and successful. Emails recently revealed by a lawsuit show one Harvard dean "simply thrilled" about admissions decisions because one unnamed person had "already committed to building and building" and two others "committed major money for fellowships."

The result is that, for all the paeans sung to racial diversity, socioeconomic diversity in the hallowed ivy quadrangles remains woeful. A survey conducted by Yale's student newspaper found that twice as many students come from families in the top 5% of the income distribution as from the entire bottom half. ■

Central American migration

A tale of two borders

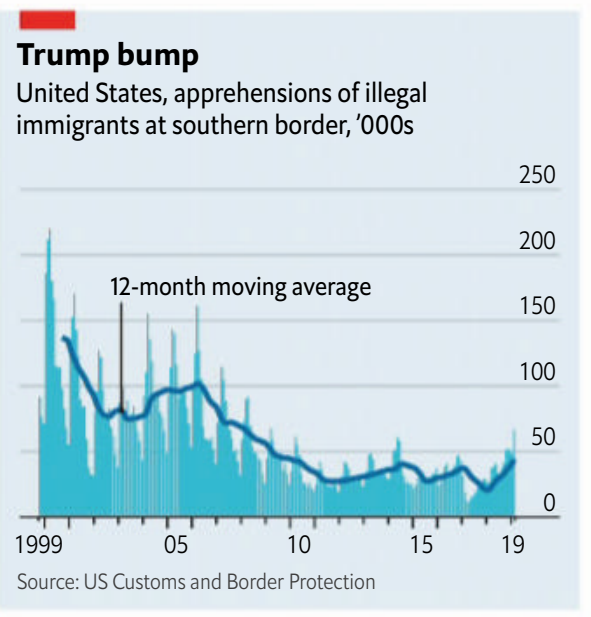
TAPACHULA, MEXICO

Why more undocumented migrants are reaching America

DONALD TRUMP promised to resort to untested measures to keep Mexican migrants from crossing America's southern border. The promise contained at least two nagging flaws. The first is an outdated view. Migration of Mexicans is down by 90% from its peak in 2000; now most border-hoppers come from the "Northern Triangle" of Guatemala, Honduras and El Salvador. The second error was to rile Mexico with insults and threats when America relies on its goodwill to police its own southern border, which migrants must first cross before continuing on to America.

In February the number of migrants stopped while trying to enter America from Mexico—a proxy for overall illegal migration levels—rose to 76,000. That is the highest number for any month in a decade. The increase consisted almost entirely of Central Americans, not Mexicans. Meanwhile, Mexican authorities have been deporting less than half as many Central Americans as usual since Andrés Manuel López Obrador, a left-winger, took office in December. Mexico deported one migrant for every four that were apprehended in America in the year before he took office. Now the ratio closer to one to ten.

That is no coincidence. Mr López Obrador's team vows to depart from the "mass deportations" of migrants that Mexico has carried out since 2014 at America's behest. In January, confronted with a "caravan" of migrants from Honduras, Mexico handed out 13,000 wristbands, which doubled as a humanitarian visa, allowing migrants to stroll across into Mexico from Guatemala without fuss. Mexico plans to roll out a plan later this year allowing Central Americans to obtain humanitarian visas from Mexican consulates in their home countries. That will allow safer journeys.



Mexico is not doing this purely to upset Mr Trump. It wants to reduce the $2.5bn that Mexican organised crime reaps from trafficking migrants each year. Olga Sánchez Cordero, Mexico's secretary of the interior, recently told diplomats that "by history, tradition and conviction, Mexicans are a people in solidarity with those who arrive in our country." Mr López Obrador believes that money is better spent tackling the causes of migration than on border security, and wants America to spend more to create jobs and strengthen the rule of law.

For a while, Mr Trump's harsh rhetoric seemed to deter migrants. Border apprehensions dropped after his victory in November 2016, before any policies were implemented. For 18 months, many chose to delay the journey north. But that has not lasted. Mr Trump has little to show for his efforts to build a wall (let alone make Mexico pay for it), or to cut aid to Central American countries that fail to stop their citizens emigrating. Even his most hard-hearted policies, like caging children or removing gang and domestic violence as grounds for asylum, have not worked.

For a sense of why this is so, look at Tapachula, a tropical town near Mexico's border with Guatemala. Tales of gang threats and dead relatives abound. A farmer from Honduras complains of plunging coffee prices, reduced rainfall and insect plagues destroying his crops. Many migrants wait in the hot sun to apply for asylum. Mexico received nearly 8,000 requests in January and February, more than all the requests in 2013, 2014 and 2015 combined.

Many migrants first enter Mexico via the nearby town of Ciudad Hidalgo. Just 200m away from a Mexican immigration office is a bustling river border. Guatemalans come and go on small rafts, for 7 quetzals ($0.90) a trip. Others use them to ferry loo paper and Coca-Cola across. Children bathe in the stream. Migrants tend to cross to Mexico at dawn, but they do not need to: law-enforcement officers are a rare sight.

Even as Mexico applies a softer touch on its southern border, it is co-operating with America in its north. It is abiding by a new programme that requires migrants seeking asylum in America to wait in Mexico while their court date approaches. But diplomatic goodwill may fade if Central Americans keep streaming through Mexico "like water", as Mr Trump tweeted last year. That seems likely, especially now that regular caravans offer migrants the chance to travel in the safety of a large group.

Oddly, though, that may not drive Mr Trump to despair. Failing to reduce Central American migration may ultimately be more useful to him politically than succeeding ever could. ■

New York apartments

Islands in the sky

NEW YORK

Proposals to tax pieds-à-terre in the city are gaining ground

NUMBER 220 Central Park South is one of New York City's swankier addresses. Its amenities include a golf simulation room and a saltwater swimming pool. In January Ken Griffin, the founder of Citadel, a hedge fund, bought a penthouse in the building for $238m, setting a record for the priciest home in America. Mr Griffin, who has homes in Chicago, Florida and London, reportedly will not make this his primary residence, thus reigniting an old proposal to tax New York City's many pieds-à-terre.

Pieds-à-terre are part-time second homes occupied for less than half the year. Many are simply convenient places to park money and are vacant most of the time. Because their owners have their primary residences out of state, they are not subject to state or local income taxes. Nor do they generate much in local sales-tax revenues. After the Griffin deal closed, Corey Johnson, the city council's Speaker, announced that it was "time for a pied-à-terre tax".

Legislation which had been languishing in Albany for five years is gathering support. It would impose a yearly tax of between 0.5% and 4% on the assessed value of apartments worth $5m or more. Scott Stringer, the city's comptroller, estimates the tax would generate a minimum of $650m a year. Robert Mujica, the state budget director, said taxing the absentee owners of expensive non-primary residences would help pay to restore the crumbling subway (though a few hundred million would not go far in those long tunnels). Andrew Cuomo, New York's governor, supports the idea too.

Over the past few years New York has seen a lot of high-end property development, as new skinny towers have changed the city skyline. The most recent Housing and Vacancy Survey found that the number of non-primary residences increased from 55,000 in 2014 to 75,000 in 2017.

Estate agents fret that the tax will hit their profits. Manhattan has 8,600 unsold newly built units. At the current rate of sale, it would take 6.4 years to sell them all. According to Grant Long, an economist with StreetEasy, a listing site, only 21% of units priced at $5m and higher found buyers. Units that sold closed below the asking price. "It's insanity," says Doug Russell of Brown Harris Stevens, a brokerage that primarily serves the wealthy. "It will kill New York real estate." Mr Russell foresees prices will stay under $5m to avoid the tax. He also predicts developers will go bankrupt.

Some buyers have been put off by a change in federal tax law which caps state and local tax deductions, including property taxes, at $10,000. Owners already pay a mansion tax, a one-time 1% sales tax. More tax, says Harry Nassar, a broker at Sotheby's, will cause people to shun New York. Some advocates of new taxes might consider that to be a benefit.

If New York implements the tax, it would join Vancouver, which has an empty-home tax, and London, which has a surcharge on purchases of second homes. Some blame increased "stamp duty" a tax on home purchases, for a softening in the London market. But it did not dissuade Mr Griffin from spending £95m ($122m) in January on a London town house. That purchase would have incurred a one-off tax of $18.5m. By contrast, if New York's laws change, he could face $8.9m a year in pied-à-terre taxes for his Manhattan base. ■

National security

No happy ending

WASHINGTON, DC

The Trump administration collects chancers, influence peddlers—maybe worse

EVER SINCE diners at Mar-a-Lago snapped pictures of President Donald Trump plotting America's response to a North Korean missile test with his Japanese counterpart, there have been national-security concerns about the president's "Winter White House". Yet reports about a Mar-a-Lago frequenter called Li Yang, who also goes by Cindy Yang, suggest they underestimated the risks of Mr Trump's freewheeling style. Bearing all the hallmarks of a Trump scandal, the revelations from the *Miami Herald, Mother Jones* and others are salacious, worrying and bizarre.

Ms Yang, a 45-year-old entrepreneur and immigrant from China, and her family have founded massage parlours across Florida. Robert Kraft, the owner of the New England Patriots, was charged last month with soliciting oral sex in one of them, Orchids of Asia, which the Yang family no longer owned. Mr Kraft is a longtime Trump pal; coincidentally, Ms Yang recently launched a business peddling access to the president and other Republican politicians to Chinese investors. Indeed, she was snapped alongside Mr Trump at a Super Bowl party in Mar-a-Lago, at which the president was supporting Mr Kraft's team.

Mr Kraft's arrest caused a media storm. It followed a months-long police operation against massage parlours in Florida, which were alleged to be involved in trafficking sex workers. Yet on the evidence gathered from hidden police cameras, over 100 customers including Mr Kraft were arrested for soliciting, and a dozen employees on charges related to prostitution. No one has been charged with trafficking—or anything more serious than involvement in turning occasional tricks at a low-end massage joint. Ms Yang's recent business ventures, which have been much less covered, appear far more troubling.

According to the *Herald*, she had no involvement in politics before the 2016 election; she had not voted for a decade. Yet she suddenly became a fixture at high-level Republican events. Her Facebook page is filled with photos of Ms Yang alongside the president, his two sons, Florida's governor, Ron DeSantis, and other senior Republicans. She and her relatives donated $58,000 to the president's campaign and a related political action committee. And her efforts appear to have secured some of the influence her company, GY US Investments, claims to have. Last year she was invited by the White House to take part in an event organised by Mr Trump's Asian-American and Pacific-Islander Initiative. The *Herald* also reports that she arranged for Chinese businessmen to attend an exclusive Trump fund-raiser in Manhattan. It is not clear whether this amounts to an embarrassing mess or a serious security breach. Either way, it stinks.

Labour markets

Okun's razor

AUSTIN

The benefits of America's hot economy have been unevenly spread

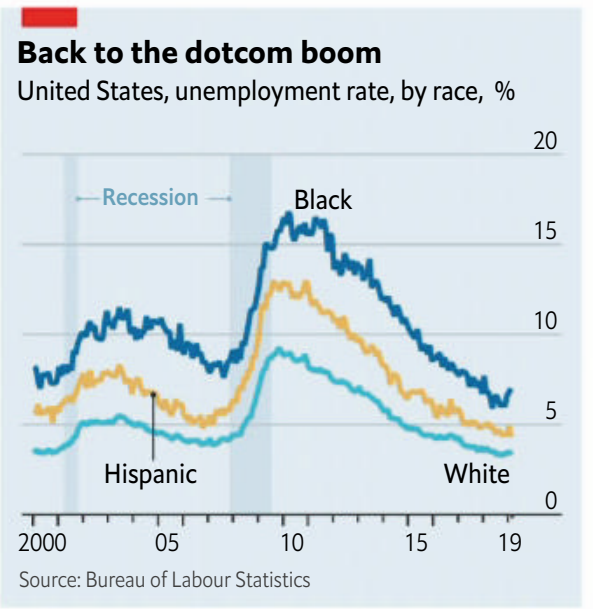
"Our economy's on fire," says Tamara Atkinson, head of Austin's workforce development board. Workers there are being fought over with signing bonuses, paid internships and help with tuition fees. Ms Atkinson sees formerly incarcerated workers being given second chances, with employers asking how severe their crime really was. She even worries that wages for flipping burgers are now so high that they are pulling people away from education.

As Ms Atkinson heard the economy humming, unemployment statistics revealed a blip. January's figures, published by the Texas Workforce Commission on March 8th, revealed that Austin's unemployment rate had ticked up, from 2.7% in December to 3.1% in January. On the same day, the Bureau of Labour Statistics generated some sharp intakes of breath when it revealed that in February the whole economy generated just 20,000 new jobs, far below January's bumper haul of 311,000.

Both figures are probably statistical anomalies. Austin's figure was not seasonally adjusted, and average jobs growth for the country as a whole over the past three months has been a healthy 186,000. "I wouldn't interpret this as the labour market softening," says Betsey Stevenson of the University of Michigan, the former chief economist at the Department of Labour. Rather than causing panic, these new numbers should be a reminder of both the extraordinary benefits of the recovery so far and the human cost if it falters.

The particular benefits provided by a hot economy were laid out by an economist called Arthur Okun in 1973. He argued that lowering unemployment would generate benefits far beyond just creating jobs, reckoning that it would raise a submerged iceberg, pulling people off the sidelines and into work, pushing part-timers into full-time engagements and boosting productivity. Such would be the power of a vibrant economy that it would draw people and resources towards where they could be most useful.

The experience of the past decade has confirmed much of Mr Okun's thesis. The nature of employment has shifted towards full-time jobs, and fewer people are working fewer hours than they would like. Young women have rejoined the workforce with much more enthusiasm than men. After America's disability rolls swelled during the recession, many feared that those leaving the labour force would never return. "Those fears were clearly misguided," says Ernie Tedeschi, an economist at Evercore ISI, an investment bank. The share of people aged 26-55 saying that they are out of work because of illness or disability was lower in 2018 than it was back in 2008. The change has accounted for almost half of the increase in labour-force participation over the past year.



A new study, presented at the Brookings Institution almost 50 years later, tests Mr Okun's thesis with data from the most recent recovery. It finds that the higher the unemployment rate is for any particular group, the more sensitive that group will be to the ups and downs of the economy. African-Americans, for example, tend to have higher unemployment rates than whites, and they suffered a disproportionate share of the job losses during the recession (see chart). Notwithstanding a recent wobble, they have since enjoyed a disproportionate share of the gains.

Groups with lower levels of education find themselves in a similar situation, as they too suffered a harder blow than most during the recession, and more recently have enjoyed a faster fall in their unemployment rate. For the likes of Ms Atkinson, who worries about the people flipping burgers to pay their rent, these basic measures of success are not good enough. If a hot economy pulls people into dead-end jobs, then they will fall right back out of them when the next recession strikes.

The evidence on this from Austin is mixed. According to Indeed.com, an online jobs platform, local searches for jobs such as shop assistant, warehouse worker and waitress rose by more than 300% between the end of 2017 and the end of 2018. But searches for "learning and development" opportunities rose even more quickly. Nationwide, Mr Tedeschi is not worried, pointing out that the share of people who say that they are out of work because they are in education is higher than it was in 2008, and has persistently been so.

It is possible that, as wage growth puts pressure on companies' profit margins, they will respond by investing in productivity-boosting measures, in line with Mr Okun's third prediction. Nicole Trimble of Talent Rewire, a consultant for companies trying to expand employment among disadvantaged groups, is doing a roaring trade for companies including Tyson Foods, a meat processor, and McDonald's, a fast-food chain. Companies are finding they have to offer help that they used to think of as the preserve of government, such as helping workers claim tax credits or with financial literacy. Some firms are retraining existing workers when they automate, rather than firing them and hiring a new batch. Ms Trimble doubts they would be doing all this in a cooler labour market.

For all this good news, growth in Americans' labour productivity is still slow. And past experience delivers a gloomy message about the economy's capacity to redress structural inequalities. Another study, by Julie Hotchkiss of the Federal Reserve Bank of Atlanta and Robert Moore of Georgia State University, found that the benefits to disadvantaged groups from hot economies have tended to be smaller than their penalties in colder times. "It's not a matter of if there's going to be another recession," warns Ms Atkinson; "it's a matter of when." If February's jobs numbers turn out to be more than a hiccup, then those who have risen farthest will have farthest to fall. ■

You're hired

Lexington | The Irish conquest of America

This St Patrick's Day, Irish-Americans can celebrate the blarneyfication of their democracy

When John Hearne, Ireland's ambassador to Washington, sent Harry Truman a box of shamrocks on St Patrick's Day in 1952, he could not have imagined he was launching the greatest exercise in soft power. Yet it is hard to think of a rival to the annual shamrock ceremony and its attendant rituals. On March 14th, Leo Varadkar, the sixth consecutive Irish Taoiseach to conduct them, will celebrate St Patrick's Day by breakfasting with Vice-President Mike Pence. He will be feted at a lunch on Capitol Hill attended by Donald Trump. He will proceed with the president, wearing a green tie, possibly on the long side, to the White House for the plant handover. They will meanwhile hold the only annually scheduled "substantive" talks America affords any foreign leader.

This is great for Ireland. For the inconvenience of having to buy lots of green ties (the current ambassador has around 40), its representatives enjoy unrivalled access to the superpower. The notion that America might favour Britain over Ireland in any post-Brexit wrangle—a fear Mr Varadkar is expected to raise—is untenable. Yet Ireland's soft-power triumph is mainly testament to the continued enthusiasm of 32m Irish-Americans for their roots, and to their equally remarkable dominance of American politics.

Besides Mr Pence—two of whose grandparents were born in Ireland—the Republican House leader, Kevin McCarthy, is Irish-American, as was his predecessor, Paul Ryan, and their Senate counterpart, Mitch McConnell. Among the many other Irish-Americans who have served Mr Trump are his sometime advisers Steve Bannon and Kellyanne Conway, and his current and former chiefs of staff, Mick Mulvaney and John Kelly. Mr Mulvaney, whose daughter is studying in Dublin, helped organise a tree-planting on Capitol Hill to commemorate the centenary of the Easter Rising.

This is, in a sense, par for the course. Barack Obama's administration was also full of Irish-Americans—including Joe Biden, his Yeats-quoting deputy, who is expected to announce a presidential run shortly. Mr O'Bama (geddit?) also promoted his own Irish ancestry—as did his five immediate predecessors. There are a few reasons for this Celtic pre-eminence. They include the role of the Catholic church, the English language and the relatively even gender-balance of the 2m Irish who came to America between 1820 and 1860. They helped keep Irish-American communities intact. The fact that many were, and are, in political hotspots such as Ohio and Pennsylvania also boosted their political relevance and activity. So does a propensity to talk. "We do communications, politics; Italians cook," joshes Niall O'Dowd of *Irish America* magazine. Yet the most significant factor, because it says a lot about the broader state of politics, is a strong Irish-American political culture, rooted in anti-elitism, outsiderism and grievance. Generations after most Irish-Americans lost touch with the old country, it is still evident—indeed especially evident—on the right and left today.

To understand this, consider that the 19th-century hordes were not quite the naive starvelings they are often described as. They left a country already mobilised by nationalists such as Daniel O'Connell, whose "monster meetings" drew hundreds of thousands. And the heavy use Irish nationalists made of America, as a rear-base and source of funds, through to the late 20th century, nurtured that awakening. The Easter Rising was part-organised in America; a lecture by Yeats drew 4,000 New Yorkers in 1904. The discrimination Irish-Americans faced at home, as the "last whites to become white", it is sometimes said, politicised them further.

Yet it is notable that Irish-American politicians harped on the feeling this inspired, of struggle and two fingers to the bloody establishment, long after Ireland was free and most Irish-Americans comfortably middle class. "Ireland's chief export has been neither potatoes nor linen, but exiles and immigrants who have fought with sword and pen for freedom," enthused Bobby Kennedy. And that mutinous sentiment is as effective today—for example to display the common touch of politicos such as Mr Biden—as it was in launching the Fenian movement or hiding the excesses of Tammany Hall. Mr Biden, who has spent half a century in front-line politics, expresses it by quoting his mother, Jean Finnegan. "Show me the guy that says something about you, Joey," she reportedly said.

Ever since John F. Kennedy drew the votes of 80% of Irish-Americans, they have been peeling off to the right: about half vote Republican now. Growing prosperity, the demise of organised labour and the union of conservative Catholics and the religious right explain this. Yet despite switching parties and objectives, their politicians retain the same old spirit and tropes. William F. Buckley, one of the founders of modern conservatism, griped about the greedy liberal elite like a dispossessed peasant-intellectual. Mr Bannon, a former investment banker who dresses like a scruffy boyo, rails against globalisation with the same resentful fury. So does the billionaire Mr Trump—whom Mr Bannon calls the "third Irish president", despite his Scotch-German roots.

A crock of gold

The style and themes of Irish-American politics now dominate American politics. Rival Irish-Americans even sometimes express their political differences in a parallel row over authentic Irishness. The Catholic overseers of the St Patrick's Day parade in New York barred gay Irish-Americans until recently. Progressive Irish-Americans hammer restrictionists like Mr Bannon for betraying their migrant history. This might be considered the final stage of the Irish triumph in America: the blarneyfication of its democracy.

And as that phrase suggests, it should be viewed cautiously, because politicians like Mr Biden and Mr Bannon are not only resorting to a proud political tradition to describe new problems. They have also identified in Irish-American political methods a time-worn means of self-promotion. As a rule of thumb, the more Irish a multi-generation Irish-American politician sounds, the more scepticism he or she warrants. ■

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Brazil

The digital bully pulpit

SÃO PAULO

Jair Bolsonaro is a master of social media. But to what end?

POLITICIANS START working only when Carnival ends, Brazilians joke. This year explosive tweets from the president, Jair Bolsonaro, delayed the serious business of reforming pensions and cleaning up crime and corruption. On March 5th the president posted a video of one Carnival reveller urinating on another in an act of performance art. "This is what many Carnival street parties have become," he lamented. Some Brazilians cringed, but the tweet got 87,000 likes.

Then on March 10th Mr Bolsonaro excoriated a journalist from *Estado de S. Paulo* who is investigating his son, Flávio, a senator from Rio de Janeiro. EstadãoMentiu ("EstadoLied") became the top trending topic on Twitter in Brazil. The bar association criticised the president. But he has not taken down either tweet.

Mr Bolsonaro relies on social media even more than does Donald Trump, some of whose views of the world he shares. They are due to meet in Washington on March 19th. Unlike the American president he does not hold raucous rallies. In contrast to Luiz Inácio Lula da Silva, a left-wing former Brazilian president who is now serving a prison sentence for corruption, he does not relish physical contact with his supporters. He largely avoids appearances on the main television stations. Instead, Mr Bolsonaro reaches most Brazilians in miniature, via their smartphones.

His success may owe something to Brazilians' sizzling passion for social media. More Brazilians were on Orkut, a social network owned by Google, than citizens of any other country. As late as 2011 Orkut had 33m Brazilian users. After the network's demise in 2014, Brazilians became the third-largest nationality on Facebook, after Indians and Americans.

Social media were Mr Bolsonaro's only outlets when he launched his long-shot presidential campaign from the backbenches of Brazil's congress. His tiny electoral coalition gave him little entitlement to free television and radio time.

Angered by violence, scandals and a deep recession, voters were ready for Mr Bolsonaro's chest-thumping messages on crime, corruption and family values. His early supporters distrust mainstream media, says Esther Solano of the Federal University of São Paulo, who has interviewed dozens of them. "They assume that social media is more sincere, because it's filled with friends and family."

As president, Mr Bolsonaro still posts often to his 10.7m Facebook followers and the 3.7m people who follow him on Twitter. (Another of his sons, Carlos, a city councillor in Rio de Janeiro, is thought to manage the accounts and write many of his epigrams.) On March 7th the president gave a 20-minute talk on Facebook Live, the first of what he said would be a weekly series.

The question is whether he can or will use such events to promote his government's most important programmes. Unlike Mr Trump, he makes no pretence of being an expert in most policy areas. He has outsourced pension reform, which is vital to stabilising the government's finances, to Paulo Guedes, the liberal economy minister, and law enforcement to Sérgio Moro, the justice minister.

Mr Bolsonaro uses social media to gratify his supporters more than to enlighten them. An analysis by *Estado* of his first 515 tweets as president, sent between January 1st and March 5th, found that 95 of them congratulated friends and allies, 51 were ideological, 31 criticised the press, 30 rebutted criticism and just five mentioned pension reform. When he does broach reforms, his supporters push back. "If I'd known he would send Paulo Guedes's rigid proposal (Trojan Horse) to congress, I never would have voted for him," one woman wrote on Facebook.

But Mr Bolsonaro will have to risk that sort of backlash. Unlike past presidents, he does not have a big coalition held together by patronage and pork-barrel spending (though the government did recently offer ▸▸

1bn reais, or $260m, for congressmen's pet projects). To advance his agenda, he needs to rally ordinary citizens more than his predecessors did. Hamilton Mourão, the vice-president, says Mr Bolsonaro should use social networks "in language that people understand, to convince them that the current [pension] system has been drained and the country will be ungovernable if we continue like this".

Mr Bolsonaro may be heeding him. In his first Facebook fireside chat he spent 90 seconds talking up "*nova previdência*" ("new pensions") before returning to more congenial subjects. He lambasted the government for distributing pamphlets on sexual health to adolescents and promised to phase out speed cameras. Perhaps that is the way to sell pension reform. Brazilians must hope so. ■

Venezuela

Lights out, but not curtains

CARACAS

Will a catastrophic blackout dislodge the regime?

The scene by the polluted Guaire river that flows through central Caracas was dystopian. Residents from the nearby San Agustín slum had heard that a drainage pipe was leaking into the stream. They scrambled down its concrete banks with plastic containers to catch the water before it mixed with the sewage.

On March 11th Caracas's 2m people had been without water for four days. That was an effect of the longest power cut ever to hit Venezuela, which affected all 23 states. At least 40 people died, many in the decrepit hospitals. They included several premature babies, whom nurses had tried to save by hand-pumping ventilators for hours on end. Power eventually returned to Caracas, but as *The Economist* went to press the blackout continued in parts of the country.

Nicolás Maduro, Venezuela's dictator, blamed it on sabotage by "imperialists" seeking to topple his government. In a televised address on March 12th he claimed that the "demonic" government of the United States had used electromagnetic waves from mobile devices to disable the power system. The chief prosecutor has called for the supreme court to investigate whether Juan Guaidó, recognised by most Western and Latin American democracies as Venezuela's interim president, had a hand in sabotaging the power grid.

The United States is leading an international campaign to remove Mr Maduro, who has demolished democracy and wrecked the economy. It wants Mr Guaidó to succeed him. (Mr Maduro's re-election last year was rigged. The constitution says that, in the absence of a legitimate president, the job goes to the leader of the national assembly, ie, Mr Guaidó, pending an election.)

But there is no evidence that the United States turned out Venezuela's lights. Incompetence and corruption probably caused the blackout. It is thought to have started with a bush fire close to a transmission line from the Guri hydroelectric plant, which supplies 80% of Venezuela's electricity. That shut down the line, overloading the other two that deliver power from the plant, causing it to crash, too. The complex process of restarting the system was botched, probably by inexperienced workers. Almost half the skilled employees of the state-run electricity monopoly Corpolec, whose salaries are worth just a few dollars a month, have emigrated, said Alí Briceño, executive secretary of Venezuela's electrical industry union.

Brilliant Venezuelan hackers and the armed forces repelled the supposed saboteurs, Mr Maduro said. He promised that running water and power would soon return, but advised people nonetheless to buy torches and water tanks.

That is good advice. Venezuela's economy, which has shrunk by 50% since Mr Maduro succeeded Chávez in 2013, will now shrink faster. The United States, which had been the main cash buyer of oil, Venezuela's biggest export, imposed sanctions on PDVSA, the state oil company, in January. "Very significant" measures are planned for financial institutions that support the regime, says Elliott Abrams, the United States' special envoy for Venezuela. The government of India, an alternative customer for Venezuela's oil, has, under American pressure, said it will ask importers to buy less. The power cut deepens these woes. It shut down the main port for oil tankers, bringing exports to a halt.

Mr Guaidó and his American backers hope that economic chaos will force a change of regime. But the army continues to support Mr Maduro, as do Russia and China. The government has replaced some of its lost oil income with sales of gold, some of it fresh-mined.

Few people turned out for a protest called by Mr Guaidó on March 12th. Despair is sapping the will to resist. As she waded through the Guaire river in search of clean water, Gladys Cisneros said she feels like a victim of a political game she does not understand. "They are not harming Maduro," she lamented. "They are not harming Guaidó. But they are hurting me." ■

Maduro's plan to limit screen time

Colombia

JEPpardy

BOGOTÁ

The president aims a blow at the peace accord with the FARC

Iván Duque won Colombia's presidency last year on a promise to modify a peace deal between the government and the FARC guerrilla group, which ended their 52-year war in 2016. On March 10th this year Mr Duque kept that promise. In a televised speech he stated six objections to a law governing the operation of a tribunal, known as the JEP, that investigates and judges members of the FARC and the armed forces for war crimes and crimes against humanity. Although congress passed the law in 2017 and the constitutional court endorsed it, Mr Duque is sending it back to the legislature. "We want a peace that genuinely guarantees truth, justice, reparation and non-repetition," he said. But his decision is a blow to the peace process.

This is the first time a Colombian president has reopened a legal question that had been settled by the constitutional court. It is not clear that congress has the power to change such a law for the reasons Mr Duque put forward, or that it will do so.

During his seven months in office, Mr Duque has tried to strike a balance between the hard line of his mentor, Álvaro Uribe, a former president who opposes the peace accord, and Colombians who want to preserve it. Now he seems to have backed Mr Uribe's policy. The president wants former FARC members from lower ranks to go on trial and to ensure that the FARC compensate victims with their own assets.

This may be smart politics. The JEP, which can issue lenient sentences to ex- ▸▸

fighters who confess to their crimes, is unpopular. It became more so on March 1st when the attorney-general's office arrested a JEP prosecutor for allegedly taking a $500,000 bribe to protect a former FARC commander from extradition to the United States. Bashing the tribunal is a way for Mr Duque to boost his own popularity, which plunged last year after he proposed an increase in value-added tax, though it has since recovered.

The success of his gambit now depends on congress and the constitutional court. Congress could override Mr Duque's objections, forcing him to sign the law. That would be a humiliation. Even if congress passes a modified law, the constitutional court is likely to strike it down. That would be a better result for Mr Duque. The court would take up to a year to rule.

In the meantime, the JEP will continue to function, but clumsily. Without the guidelines set out in the law, which give priority to trials of the most important FARC leaders or army officers, it will be up to six of the tribunal's judges to decide which defendants to try first. The danger is that the tribunal will start more trials than it can complete within its ten-year mandate. An overburdened JEP might end up convicting and punishing no one.

Former FARC members had begun to disclose their crimes, such as kidnapping, in the tribunal. They may now fall silent, says Mariana Casij of the Institute for Integrated Transitions, an NGO that helps resolve conflicts. The disruption of the JEP could have worse consequences. Around 2,000 former FARC fighters have kept their guns, and continue to sell drugs and kill people in parts of Colombia. Now, more ex-guerrillas may take up arms. ■

Bello The reluctant liberal

A new sort of leftism is emerging in Mexico

THE LEFT has rarely been stronger in Mexico. Andrés Manuel López Obrador, the new president, won last year's election by a record margin and has sky-high approval ratings. For the first time, leftist lawmakers have a majority in both houses of congress. Parties scorned by Mr López Obrador as "neoliberal", which misgoverned Mexico before he took power, are demoralised.

But there are snags. Not all leftists in congress belong to his Movement for National Regeneration (Morena). Not all members of Morena and its allies are on the left. And those who are do not agree on what that means. Mr López Obrador's priority is to strengthen the state as a weapon against what he calls "economic injustice". Some of his allies are more interested in expanding social liberties or protecting the environment. The outcome of this tussle will help determine the legacy of Mr López Obrador's government and the sort of country that Mexico will become.

A row over abortion, flawlessly timed to spoil International Women's Day on March 8th, illustrates the tension. A pro-life Morena senator was apoplectic to find a green scarf, a pro-choice symbol imported from Argentina, placed on her chair. She used the occasion to denounce abortion as "murder", which drew rebukes from other Morena lawmakers. Mr López Obrador, who is often called AMLO, tried to quell the controversy. "We must not open these debates," he said. Congress should focus instead on "cleaning up government corruption". Morena has put off congressional debate about abortion, which is illegal in most cases in most Mexican states, until September.

Unlike leftists in many other countries, AMLO has never been particularly green or socially liberal. He prefers the dirty oil extracted by state-owned Pemex to clean renewable energy. To the extent he thinks about social issues at all, his views are those of a "moral conservative", says Clara Jusidman, an economist who has known him since the 1980s.

Latin America's left does not care much about "expanding social rights", notes Lorenzo Meyer, a historian whose son, Román, is secretary of rural and urban development in AMLO's cabinet. Cuba's communists sent gay people to labour camps in the 1960s. Among the governments that took power in the region's "pink tide" in the 2000s and early 2010s, only Uruguay's legalised abortion. Nayib Bukele, El Salvador's left-leaning, hip-hop-loving president-elect, has no plans to un-ban same-sex marriage.

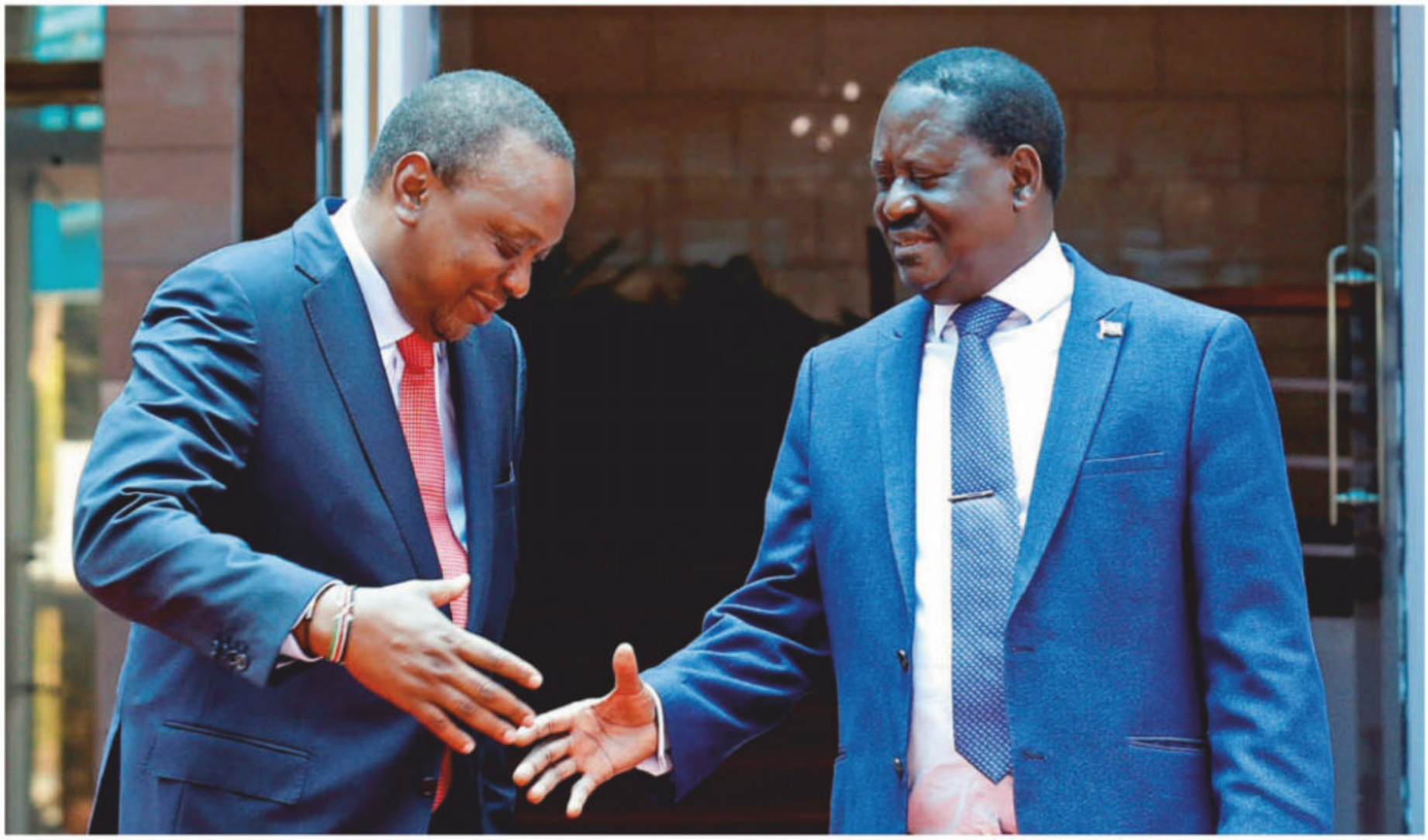
Though conservative on social matters, AMLO is not doctrinaire. He may thus find himself shepherding in more social and environmental change than he had planned. He has given social liberals top jobs. Olga Sánchez Cordero, the interior minister, and Marcelo Ebrard, the foreign minister, are European-style social democrats who grew up in middle-class families in Mexico City. Claudia Sheinbaum, the capital's new mayor, was an author for the Intergovernmental Panel on Climate Change when it won the Nobel peace prize in 2007. Liberals lead both chambers of congress.

Mr Ebrard, who followed AMLO as Mexico City's mayor in 2006, legalised same-sex marriage and abortion in the city. Last week Ms Sánchez Cordero floated the idea of a national law that would allow abortion-on-demand in the first 12 weeks of pregnancy. She has introduced a bill to legalise cannabis for recreational use, which could make Mexico the third country, after Uruguay and Canada, to take that step. In December AMLO mooted the possibility of legalising assisted dying.

Mexico was becoming more liberal before he took office. Fourteen of Mexico's 31 states already have laws that allow same-sex marriage. As Mexico grows richer, the hold of the Catholic church is likely to weaken, as it has done in Chile. Travel and technology are making younger Mexicans more cosmopolitan.

AMLO may give such trends an extra push by choosing a moderate to be his political heir. (He is due to leave office in 2024.) That would follow the example of Lázaro Cárdenas, a leftist president of the 1930s. Mr Ebrard and Ms Sheinbaum are his mostly likely successors.

But Mexico is still conservative. AMLO's election victory, after a campaign during which social issues were barely mentioned, did not change that. This month the state of Nuevo León changed its constitution to say that life begins at conception. AMLO remains fixated on making poor Mexicans richer. The irony is that, if he succeeds, he may also make many of them more liberal.



Kenyan politics

From frog to toady

NAIROBI

A political bargain in Kenya has restored stability by removing the opposition

LITTLE OVER a year ago, Kenya seemed to be teetering. Swathes of the country refused to recognise Uhuru Kenyatta (pictured, left) as their president. Nearly 100 people had died in political violence after he was declared winner of a brace of elections in late 2017. The opposition's leader, Raila Odinga (pictured, right), having rejected his rival's victory in the original poll and boycotted a court-ordered re-run, had declared himself "the people's president". His coalition announced a plan of economic disruption and threatened the secession of opposition heartlands. With tribal animosity rising, another eruption of violence seemed possible.

Then suddenly it was all over. The two men made up in March last year. So startling has the reconciliation been after a bitter 16-year rivalry that it has taken on a fairy-tale flavour. Instead of questioning the president's legitimacy, Mr Odinga now attends rallies, funerals and church services with him, cheerleading all the way. Politicians from Mr Kenyatta's dominant Kikuyu tribe are cock-a-hoop. Their nemesis had not been turned from a frog into a prince, thank heavens, but he had become something rather better: a toady.

Fairy tales are usually heart-warming. They are also, by definition, unreal. Cold political and ethnic calculation lies behind this rapprochement. Mr Odinga, who is 74, has concluded he will never be allowed to defeat a Kikuyu, an ally says, after losing to one in four of the five elections in which his name appeared on the ballot. Sharing power is the best he can hope for. He has won Mr Kenyatta's backing for a referendum to increase the number of executive posts, probably by creating a prime minister and two deputies. These could be earmarked for tribes that supported the opposition, including Mr Odinga's Luo people.

Mr Kenyatta wins, too. He has tamed his opponents, restored stability and given businesses confidence to invest. Growth has ticked up. Most crucially, the president has found an ally who could prevent his deputy, William Ruto, from succeeding him in 2022, when Mr Kenyatta is obliged to stand down. For many Kikuyu, Mr Ruto (a Kalenjin) represents a greater threat than Mr Odinga. Since independence in 1963, the Kikuyu, Kenya's biggest tribe, have lost power only once, during the presidency of Daniel arap Moi from 1978 to 2002. Mr Moi, a Kalenjin, curbed the clout of the Kikuyus. They do not want a repeat.

The reconciliation, known in Kenya as "the handshake", is not without risk. It may not last if Mr Odinga does not get what he wants. And Kalenjin politicians are furious at what they see as a blatant attempt to shut them out of power. When the Kalenjin and Kikuyu last stood on opposing sides of the political divide, in the election of 2007, some 1,400 people were killed. Many Kikuyus live in the Kalenjin heartlands of the Rift Valley. Because they, rather than their political leaders, could face Kalenjin wrath, some are understandably nervous.

The handshake also means Kenya no longer has a functioning opposition. Some fret that the country could in effect become a one-party state again. Few politicians seem bothered. They argue that confrontational democracy is a Western import that has endangered stability and hampered ▸▸

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economic development. Kenya, says a close ally of Mr Kenyatta, would be much better off with a benevolent dictatorship.

Besides, the argument goes, the status quo would be little changed. Commentators sometimes point to the number of political parties Kenya has as a sign of its democratic vibrancy. Some 117 contested the election in 2007 and 47 have won seats in parliament since the end of one-party rule in 1991. Yet Farah Maalim, a veteran MP, says he can think of only one occasion on which a serious opposition party differed in substance from the government of the day, when FORD-Kenya called for widespread land redistribution in the 1990s. The rest have nearly all been temporary vehicles designed to propel their leaders to power or build ethnic coalitions. Mr Odinga has belonged to six political parties, Mr Kenyatta to four. Between them they have formed five separate alliances.

Still, the lack of even a flawed opposition is troubling. In Mr Kenyatta's first term, MPs on the other side of the house sometimes opposed bills that threatened, for instance, to impose controls on the media and non-governmental organisations. There is much less genuine scrutiny now, MPs say. Worse, the vacuum left by the opposition has been filled by government factionalism. Messrs Kenyatta and Odinga have launched an ambitious anti-corruption drive. Powerful officials, including several cabinet ministers, have been called in to explain the suspected disappearance of funds. Yet, because many of those questioned are seen as Mr Ruto's allies, some think that the war on corruption is a ploy to neuter the deputy president.

Mr Ruto is suspected of getting his revenge by using his large parliamentary caucus to hold up government business. An attempt to rescue Kenya Airways, the unprofitable national carrier, may have stalled as a result. Plans to build houses, improve access to free health care and boost manufacturing and agriculture have all been delayed, victims of the infighting.

Such paralysis is hardly beneficial. Perhaps more worryingly, Kenya's faltering democratic progress is also in danger. Although the referendum, which could take place later this year, should broaden the ethnic inclusivity of the government, politicians could use it to weaken oversight bodies created under the constitution of 2010. If everyone is in government, few have an interest in transparency or accountability.

Moreover, there is plenty of evidence that a lack of political competition retards economic development. Many Kenyans remember the stagnation of their own one-party era. As alluring as a big-tent government may seem, a jobs-for-all-the-boys political settlement is likely to foster worse governance. Every ruling party needs an opposition to keep it honest. ■

Tanzania

A dose of bull

DAR ES SALAAM

President John Magufuli hates critics, gay people and accurate statistics

SEDITION AND statistics are two words that crop up with increasing regularity in the utterances of officials loyal to Tanzania's president, John Magufuli. Last month a usually compliant daily newspaper, the *Citizen*, had the cheek to mention that the Tanzanian shilling's value at the unofficial exchange rate had been sliding. Though this was plainly the case, it flouted the country's bizarre Statistics Act, whereby no figure may be disseminated without verification or publication by the official organs of state. The *Citizen* was duly closed down for a week. These days Mr Magufuli, known in Swahili as *Tingatinga* (the Bulldozer), tries to squash anything that gets in his way: "I would like to tell media owners: be careful, watch it."

The charge of sedition is more frequently invoked. Last week the leader of the biggest opposition party, Freeman Mbowe, was released from prison on bail after four months behind bars. But he and eight other politicians are still due to be tried for sedition for attending a banned meeting the government says incited a riot.

According to Zitto Kabwe, another prominent opposition figure who has been arrested several times, no fewer than 17 of his colleagues face—or have recently faced—prosecution, also mainly for sedition. Four, including Mr Mbowe, have served time in prison. But the politician who most rattles Mr Magufuli may be Tundu Lissu, a member of parliament who had been arrested at least six times (including for the sin of insulting the president) before he was shot 16 times in broad daylight shortly after leaving parliament in the sleepy capital, Dodoma, over a year ago. No one has been arrested for the crime.

After a week in a coma followed by a string of operations in neighbouring Kenya and in Belgium, Mr Lissu is back in full cry, with well-aired performances at Western think-tank forums and on television abroad. He has yet to return home, but insists he will do so. Mr Magufuli, he says, is "determined that by 2020 there will be no political opposition in Tanzania. Essentially he wants to return it to one-party rule as it was before 1992," when the ruling Chama Cha Mapinduzi (CCM), or Party of the Revolution, allowed multiparty democracy. The CCM, which evolved out of the party that took over at independence from Britain in 1961, has ruled longer without a break than any other party in Africa.

A leading (but necessarily anonymous) journalist in Zanzibar, a semi-autonomous part of Tanzania, says: "There's no more investigative journalism. People are afraid to give you information, especially people in government. The media these days is more controlled." The *Citizen*, which is owned by Kenya's Nation Media Group, part of the Aga Khan's stable, may, he thinks, be sold to a Middle Eastern bigwig friendly to Mr Magufuli. The office of a leading human-rights lawyer, Fatma Karume, a granddaughter of Zanzibar's first post-independence ruler, has been bombed. Aidan Eyakuze, who runs the country's top independent research group, Twaweza, was harassed last year when he published the results of an opinion poll that showed Mr Magufuli's once sky-high popularity to be falling fast. Under Mr Magufuli a raft of legislation, including on the media, cybercrime and political parties, makes it harder, often illegal, to criticise him. Live television coverage of parliamentary debates, where Mr Magufuli is still castigated, has been barred. The government urges ▸▸

citizens to redirect their anger at gay people, whom Mr Magufuli says "even cows" should condemn.

Western donors, who have indulged Tanzania for many decades, at one point paying for more than a quarter of its annual budget, are losing patience. The head of the European Union mission, Roeland van de Geer, had to quit his post late last year. The Danes and the EU have withheld tranches of aid. Mr Magufuli is looking to the Middle East and China for less conditional help.

The president has been foolish in economic matters too. The effect of his closure of the *Citizen* was the opposite of what he intended: the shilling's true rate dipped further. After Mr Magufuli's row with the paper, capital is reckoned to have fled to Kenya, which Mr Magufuli views as an adversary. Foreign-exchange controls are widely said to be imminent.

Two years ago Mr Magufuli appalled investors by demanding that the country's biggest mining company, Acacia Mining, a subsidiary of Barrick Gold, based in Canada, should pay the absurd sum of $193bn in back taxes—about four times Tanzania's GDP—for allegedly undervaluing its gold exports. Acacia's gold exports have since dipped sharply. Several past and present Acacia officials were arrested last year. The World Bank says foreign investment since 2014 has more than halved. "A lot of us are jittery," says a businessman in Dar es Salaam, the commercial capital. "But it's the unpredictability that really scares us." ■

Coffee, newspapers and freedom make a fine start to the day

Freeing Ethiopia's press

Ink by the barrel in Addis Ababa

ADDIS ABABA

A less autocratic leader lets newspapers thrive

ESKINDER NEGA founded his first newspaper, *Ethiopis*, in 1993. After seven issues it was forced to close, the first paper charged under a muzzling law introduced by the Ethiopian People's Revolutionary Democratic Front (EPRDF), which had shot its way to power two years before. Three more of Eskinder's newspapers were shut down by the courts. In 2012 he was sentenced to 18 years in prison on charges of terrorism. He was released last year as part of an amnesty for political prisoners.

Ethiopis is back in business, its return symbolising the start of a more hopeful era for press freedom. Hundreds of websites, blogs and satellite-TV channels have been unblocked since Abiy Ahmed took office as prime minister in April last year. For the first time in 13 years there are no journalists in prison; no fewer than 23 publications and six privately owned satellite channels have been given licences by the Ethiopian Broadcasting Authority since July.

New provincial titles are emerging, too, including the first ever independent newspaper in Ethiopia's troubled Somali region. Even state broadcasters are loosening up and giving airtime to opposition politicians. A new media bill is expected soon. It will probably soften criminal penalties for libel and lift some restrictions on private ownership that have crimped investment.

This is not the first blossoming of free media. The EPRDF liberalised the press after it snatched power from a Marxist junta known as the Derg in 1991. More than 200 newspapers and 87 magazines were launched between 1992 and 1997. That did not last. Since 2001, 120 newspapers and 297 magazines received licences—but 261 of them were cancelled. At least 60 journalists fled the country between 2010 and 2015.

Repression is one challenge for Ethiopia's would-be press barons; a tough business environment is another. The average lifespan of an Ethiopian newspaper is nine months, reckons Endalk Chala, an academic who has studied the trade. *Addis Zeybe*, which was launched in October, stopped after only four issues. Advertisers "don't want to be associated with media that is critical of the government", says its founder, Abel Wabella.

New titles face especially long odds. The state owns the main printing press, which can pulp issues the government does not like and which increased prices by almost 50% in December. "It's a death blow," says Eskinder. Abiy has spoken of the importance to democracy of a vibrant press, but state media still dominate, says Tsedale Lemma, the editor of *Addis Standard*, a feisty rag that recently returned from exile.

Two tests of the new opening loom. The first is the willingness of state media to give equal time to the prime minister and his opponents in elections next year. Another will be the openness of Abiy himself to scrutiny: he has given only one press conference and few interviews.

Eskinder recalls the aftermath of the election in 2005, when the EPRDF blamed newspapers for its failure to win a majority in Addis Ababa. "When this honeymoon ends I think we will have problems," he says. Ominously, two local journalists reporting on controversial home demolitions near the capital were arrested last month. Upon release they were attacked by a mob outside the police station. ■

Education in Syria

Failing

Syria's broken education system will make it difficult to fix the country

AFTER EIGHT years of civil war, Syria's education system is a wreck. Nearly 3m school-age children, a third of the total, do not attend classes. That is, in part, because 40% of schools are unusable. Some have been damaged in the fighting; others are being used by armed groups or the displaced. The schools that still function are crammed and there are fewer teachers to run them—around 150,000 have fled or been killed. Unsurprisingly, students are way behind. Ten-year-olds in Syria read like five-year-olds in developed countries, says Save the Children, an aid agency. The literacy rate has plummeted.

The consequences are stark. Syrians lack the skills needed to rebuild their country or to escape the grinding poverty in which 80% of them live. The uneducated are easier prey for jihadists and militiamen ▸▸

offering money and a bit of power, or for Bashar al-Assad's regime, which will gladly give them a spot in the army. Shattered schools are yet another reason for more affluent Syrians to leave the country—and for those who have fled to stay abroad. "We'll see the catastrophic results over the next decade as children become adults," says Riyad al-Najem of Hurras, a charity that supports over 350 schools in Syria.

At least seven different curricula compete in Syria. Opponents of Mr Assad purged the state's syllabus of its paeans to the ruling Baath party. But they sparred over a common curriculum to replace it. The Kurds, who rule the north-east, imposed their own curriculum, replacing adulation of the Assads with adulation of Abdullah Ocalan, a jailed leader of Turkey's Kurds. The Turks, meanwhile, have opened 11 religious secondary schools in the strip of Syria that they control. The Syriac Orthodox church and the jihadists of Hayat Tahrir al-Sham (HTS) and Islamic State have opened their own schools, too.

As the frontlines of the war shifted, children lurched between curricula. Certificates earned in one place are often not recognised by the authorities in other parts. That makes it hard for students to get into universities, almost all of which are in regime-held areas. Many simply drop out. In some parts of the country 50% of kids leave school by the age of 13 and 80% by the age of 16. Sometimes parents pull their children out in order to marry them off or have them work on the streets. "They'll make the same wages for their rest of their lives and bring up their children to do the same," says Harun Onder of the World Bank.

Western donors have withheld aid from rebel-held areas in order to avoid helping terrorist groups, such as HTS, which controls Idlib province. In 2017 the European Union, which has invested €2bn in Syrian education since 2012, stopped all but emergency relief in areas controlled by the regime. A scheme to train teachers from Syria at the American University in Beirut was postponed after the EU backed away. "We don't want to do anything which would legitimise the regime or the terrorists," says an EU official.

But withholding aid may help them. Syrians are being pushed into the arms of militants, says Mr Najem, who fears a rash of school closures. Massa Mufti, an education expert from Damascus who advises the UN, worries that there will be more bloodshed: "We are generating another cycle of radicalisation and violence." ■

Correction: In our article on Lebanon ("Default settings", February 2nd) we said the country had $49bn in outstanding dollar bonds. In fact, it had $33bn. We also said that the finance ministry released a study on the economy by McKinsey, a consultancy. It was the ministry of economics that released the study. Sorry.

Algeria

Bouteflika bows out

CAIRO

But the president is not resigning, and protesters are not going home

THE MAN who does not speak finally listened. On March 11th Algeria's president, Abdelaziz Bouteflika, announced that he would not run for a fifth term. That has been the demand of tens of thousands of protesters over the past three weeks. Mr Bouteflika, 82, has ruled for 20 years. A stroke in 2013 left him confined to a wheelchair and barely able to speak. Yet he was to be the only real candidate in an election on April 18th. With him out of the race, the vote has been postponed. In a letter released by state media, he—or his coterie—acknowledged his health problems and promised to leave "a new republic…in the hands of the new generations of Algerians".

Not right away, though. The letter proposed a transitional period, with a national convention to draft a new constitution that would be put to a public vote. Elections will follow. The timing of all this is vague, and Mr Bouteflika will preside over a technocratic government until the election. There is talk of Lakhdar Brahimi, a veteran diplomat, heading the constitutional effort.

Joy at the announcement soon turned to doubt. Mr Brahimi is close to the president and, at 85, is even older than him. The unpopular prime minister has resigned, but his replacement and his new deputy are both former ministers and loyalists. "We demand a radical change of the system, not a change of puppets," read one banner hoisted in the street. Protests have continued. Algerians had hoped to be rid of both the invalid president and the clique of generals and businessmen that runs the country. Instead, *le pouvoir* (the power), as the latter is known, seems to be stalling for time to anoint a successor.

Decades ago the army called the shots. It stepped into politics in 1992 by cancelling Algeria's first (and only) free election after Islamists were poised to win. That touched off a decade-long civil war that killed 200,000 people. But the army's influence has waned during Mr Bouteflika's rule. He and his brother, Said, strengthened the presidency at its expense, sacking generals seen as insufficiently loyal. The army chief, Ahmed Gaid Salah, made a point of appearing on television with Mr Bouteflika after his announcement.

A new economic elite has gained strength. The best-known businessman is Ali Haddad, a construction magnate who grew rich off state contracts and now heads the Business Leaders Forum (FCE), a powerful federation. Algeria is one of the largest energy producers in Africa and a key supplier of natural gas to Europe. Mr Bouteflika doled out billions of dollars in oil-and-gas revenue to allies, ostensibly for infrastructure projects. A good bit of it disappeared. An oft-cited example is the A1, a 750-mile highway. It took more than a decade to finish and cost as much as $15bn, making it one of the most expensive roads in the world. Several officials who worked on the project were jailed for corruption.

Yet big business is divided. Executives compete for rents in a state-dominated economy. Many dislike Mr Haddad. Earlier this year Mohamed Benamor, the boss of a food conglomerate, was rumoured to have met an ex-general and presidential hopeful called Ali Ghediri. After the protests began, Mr Benamor and other businessmen quit the FCE and criticised Mr Bouteflika's re-election bid.

With so many competing interests, *le pouvoir* could not agree on a successor. It had hoped to find one during Mr Bouteflika's languid fifth term—until the protests caught it unprepared. They grew to include not only frustrated young people but also vital functionaries, such as judges, who refused to supervise the election, and employees of state energy firms, who went on strike. The regime hopes to reassert some control by managing the transition and national convention.

The protesters may not oblige. "Leave means leave" has become a popular slogan on social media. The police have so far been restrained, for fear of exacerbating the unrest. But things could get out of hand. Private disagreements between Mr Bouteflika's allies may spill into public; Gulf states may start competing for influence in Algeria, as they already do in Tunisia and Libya. The days ahead will be uncertain. After decades of stagnant leadership, though, many Algerians will find that refreshing. ■

Algeriatric

Thailand's rigged election

All for show

UBON RATCHATHANI

The generals plan to remain in charge, whatever the voters say

"WE WILL TAKE good care of the price of rice in the market," declares Uttama Savanayana, the leader of the Palang Pracharat party, to a sweating crowd of farmers in Thailand's north-east. The party, which supports the ruling military regime and is staffed by several of its former ministers, such as Mr Uttama, was founded last year. It will carry the flag for the junta in a national election on March 24th. The generals, having supposedly put an end to the instability they cited to justify taking power five years ago, are now purporting to return power to the people. It is ironic that the chief failing of the government the generals ousted, according to the courts, was to cause losses to the state by intervening in the rice market. But this seems lost on Mr Uttama. Then again, his party also does not seem to see the irony in naming as its candidate to lead a restored democratic government the man who overthrew the previous one, Prayuth Chan-ocha, the junta's leader and the current prime minister.

The election is the first since 2011 (a partially boycotted one in 2014 was invalidated) and many Thais are delighted at the chance to vote. Roughly 7m are eligible to do so for the first time. Turnout may be as high as 80%. Dozens of parties and thousands of candidates are running. They fall roughly into three camps: those who support the generals and their attempts to retain power; those who abhor the regime and are pushing for greater democratic freedom; and fence-sitters.

The three camps reflect deeper divisions. For the past 13 years royalist elites and military types, known as "yellow shirts", have feuded with those keener on electoral democracy, known as "red shirts". Thaksin Shinawatra, a populist former prime minister who has lived in exile since being ousted in a coup in 2006, is the figurehead for the reds. Parties linked to him have won every election since 2001. So the junta has designed an electoral system to thwart him.

The new parliament will consist of a 250-seat Senate and a 500-seat House of Representatives. The entire Senate will be appointed by the junta. The prime minister, who does not need to be a member of parliament, will be selected by a joint sitting of the two houses. That means that Mr Prayuth (pictured), with the Senate in the bag, would require just 126 supporters in the house to keep his job.

To foil Pheu Thai, Mr Thaksin's main political party, and help the likes of Palang Pracharat, the government has introduced a contorted, partly proportional voting system that favours smaller parties. Only 350 seats will go to the winner of the vote in each constituency. Votes for losing candidates will be used to allocate the 150 party-list seats. According to Prajak Kongkirati of Thammasat University in Bangkok, if Pheu Thai wins the same share of the constituency vote as it did in 2011, it will receive 41 fewer seats.

The generals have other tools at their disposal, too. Section 44 of the interim constitution that they promulgated shortly after seizing power allows them to do almost anything in the name of protecting the monarchy, national security, public order and other worthy causes. It will cease to apply only once a new cabinet is installed, ▸▸

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after the election. A harsh cyber-security law allows the government to monitor online traffic in the event of "an emergency". A proliferation of obscure rules surrounds campaigning. Doling out any sort of gift to supporters is prohibited. So is mentioning the monarchy. The single placard allowed to be posted at each party office cannot exceed 4 metres by 7.5 metres. On social media, posts with anything other than candidates' names, pictures and biographies, and the party's name, logo, policies and slogans are banned.

Politicians fear that minor violations of these rules may result in disqualification or other punishments from the Election Commission, before or after the election. It can dole out "yellow cards", which require a new ballot in the constituency concerned, or "red cards", which require a re-run without the offending candidate.

The constitutional court, at the commission's recommendation, has already dissolved another party favourable to Mr Thaksin, Thai Raksa Chart, and banned its leaders from politics for a decade. The court said that, by naming a princess as its preferred candidate for prime minister, the party had shown itself to be hostile to democracy, even though the move was not against the law and Thailand has had prime ministers of royal descent in the past. This is the third time a party linked to Mr Thaksin has been banned. Thai Raksa Chart was fielding candidates in 100 constituencies. They have all been struck from the ballot.

They are not the only opponents of the junta to face legal troubles. On March 21st the attorney-general will announce whether he intends to charge two candidates for Pheu Thai and a senior member of Thai Raksa Chart with sedition, for attempting

Banyan The art of the impossible

Narendra Modi is having a good war

The starter's gun has been fired on the biggest democratic exercise on Earth: an Indian general election. The Election Commission has set out a schedule for the country's 900m-odd eligible voters to select a new parliament, in seven stages, with results due on May 23rd. The process, despite electronic voting and an increase in polling stations, to 1m, is lumbering. The scale is intimidating. Some 84m Indians—a whole Germany—have become eligible to vote since the previous poll, in 2014.

To young Indians, economic opportunity counts above all. Five years ago Narendra Modi clothed a reputation as a Hindu firebrand in an inclusive message about jobs and progress: *sabka saath, sabka vikas*, or "all together, development for all". His Bharatiya Janata Party (BJP) swept to power.

Yet Mr Modi's record is patchy. Growth of 6.6% might sound good, but it has not generated enough work. His promise of 10m new jobs a year has proven hollow. Unemployment is close to half-century highs.

In the countryside, the strains are severe. Five years ago India's 230m farmers opted for Mr Modi in droves. Yet in office, he eased imports of food and curbed exports to bring prices down. That was good for urban consumers, but hurt farmers, many of whom protested.

Then, just over two years ago, the government voided over four-fifths of banknotes in circulation. The move was supposedly to curb corruption and tax evasion. In practice it hit lowly trades, from farmers to barbers, whose receipts are in cash. Rural Muslims and lower-caste Hindus have faced growing violence from vigilantes out to lynch people suspected of slaughtering cows, which are sacred to Hindus, or just acting above their station. Mr Modi, to whom inclusiveness does not come naturally, has often met such outrages with silence.

Congress, the once-lame opposition, has found new pep. Late last year it won three state elections in the BJP's Hindi-speaking heartland. Even its 48-year-old president, Rahul Gandhi, a political dynast with the perennial air of a management trainee, has shown leadership, landing punches on Mr Modi over the economy and murky procurement deals.

But what a difference a few air strikes make. Mr Modi has changed the dynamics of the race with his response to the deaths of 40 paramilitary police in a suicide bombing in Kashmir on February 14th that was claimed by Jaish-e-Muhammad (JeM), a terrorist group based in Pakistan.

The chattering classes of New Delhi, who despise Mr Modi and his coterie as cynical rabble-rousers, hold that view reluctantly. They level (justified) criticism at the prime minister for dangerously escalating matters with a rival nuclear power by sending warplanes to bomb undisputed Pakistani territory—a first (for either side) since 1971. They level scorn at government claims to have killed hundreds of JeM terrorists, when the presumed target, an empty madrasa, may (intentionally or otherwise) not even have been hit. They say Mr Modi's adventurism stands in contrast to the statesmanship of his Pakistani counterpart, Imran Khan, who swiftly handed back a downed Indian pilot, Abhinandan Varthaman. And (again justifiably) they worry that crucial national-security decisions are being made by only a tiny band around Mr Modi; even the defence minister is said to be out of the loop.

To many voters, though, none of this matters. Mr Varthaman, whose bewhiskered face has popped up on billboards, is a national hero. At weekends enthusiastic crowds flock to the new war memorial behind India Gate. Jingoism abounds. The national cricket team has taken to playing in army-camouflage caps. Cabin attendants with Air India, the state airline, are required to proclaim *Jai Hind*—"Victory for India"—after every announcement. They must do this "after a slight pause and [with] much fervour".

Mr Modi is in his element again. Settling scores, he says proudly, is "my habit". That is a challenge not just to jihadists whom the prime minister has promised to "go below the seven seas to find". It is a dog-whistle to bigots looking for other supposed traitors, among them the harmless Kashmiri fruit-sellers recently beaten up in Lucknow.

Mr Modi knows that even Indians at the bottom of the pile, exposed to social media and tub-thumping television channels, are patriots. Many are surely warming to him. *Namumkin ab mumkin hai*: "the impossible is now possible" is the new government slogan. Mr Modi, for one, is not writing himself off.

to hold a press conference last year to discuss the regime's failings. Three members of Future Forward, a popular new party, including its leader, Thanathorn Juangroongruangkit, were charged with computer crimes last month. They apparently "uploaded false information" during Facebook live sessions last year when they stated, truthfully, that the junta had been poaching MPs from other parties.

The junta's assiduous efforts to manipulate the election have led it to neglect much else. For a regime with almost unlimited powers, it has got little done. Although it has promised lots of new infrastructure, not much has materialised. Meanwhile it has neglected even bigger drags on the economy, such as the sorry state of the education system. Growth has been relatively stable since the last coup, but lower than in Mr Thaksin's heyday. The poorest two-fifths of Thais have seen their incomes drop. Farmers reminisce about the far higher prices of commodities such as rubber and rice under Mr Thaksin's leadership; the most recent data from the national statistics service show farm debt rising from 2.4trn baht ($67bn) in 2016 to 2.8trn baht the following year.

Palang Pracharat loudly touts the welfare cards the junta has introduced, which provide a small monthly stipend to be spent on subsidised goods at designated shops. More than 14m of them have been handed out to the poorest Thais. At a rally for the party in a huge auditorium at Ubon Ratchathani University, Thongpan Puangpua says she is there because of her card, "even if it is a bit complicated to use". She used to support Pheu Thai. The party also promises more help for expectant mothers and those with young children, as well as three years of relief from debt repayments, subsidies for rice farmers and other goodies. Mainly, however, it pledges stability and continuity.

When they are not simply bashing the junta, Pheu Thai's candidates try to lure voters with similar handouts. They say they will improve the welfare-card scheme, and promise debt relief and subsidies for farmers as well as a big cut in military spending. Sudarat Keyuraphan, a former health minister under Mr Thaksin, is its most prominent leader. She is the main attraction at the party's bustling rallies in Isaan, the north-eastern region that elects more MPs than any other part of the country. But the gatherings are not as crammed as they were eight years ago, says Titipol Phakdeewanich, a local academic. One party insider worries that its standard-bearers are not popular enough to secure yet another election victory.

Analysts agree, assuming that Pheu Thai will remain the biggest party but not win enough seats to overturn Mr Prayuth's built-in advantage. Even with the support of other parties at odds with the junta, such as Future Forward, Pheu Thai will struggle to muster the 376 seats to form a government. However, analysts also project that Palang Pracharat will fall short of the 126 seats Mr Prayuth needs to remain prime minister. That means he will have to win over some smaller parties or strike a deal with the Democrats, who may emerge as the second-biggest party. They are yellow shirts, broadly speaking, but the party's leader, Abhisit Vejjajiva, says Mr Prayuth should not stay on as prime minister.

Given that the Election Commission has 60 days before it must announce the official results, there will be plenty of time for the generals to secure the outcome they want. King Vajiralongkorn's glitzy coronation ceremony will probably occur in the midst of it all, distracting the public from unseemly goings-on. But if Mr Prayuth has to knock heads to keep his job, his new government is likely to be even less effective than the current one. He may not need a majority among elected MPs to become prime minister, but he will need one to pass legislation. "I'm only half confident in this election," confides a farmer watching Mr Uttama speak in Isaan. She is being extremely generous. ■

Where to now?

Afghanistan's Syrian problem

Demob unhappy

HERAT

Afghans are worried about the return of Shias who fought in Syria's civil war

ALIREZA QANBARI has still not told his parents the truth about what he did when he left Afghanistan for Iran. The 23-year-old is happy for his father to believe he worked as a labourer. In fact, he fought with an Afghan militia recruited by Iran to help prop up the government in Syria's civil war. With the war now dying down, Afghan fighters are starting to come home. Just as the West agonises about the return of radicalised émigrés, many in Afghanistan worry about what the former fighters will do—and where their loyalties lie.

At its height, the Fatemiyoun, as the Afghan militia was known, had as many as 20,000 fighters, largely from the Hazara ethnic minority. Most Hazaras are Shia Muslims, as are the ruling elite in both Iran and Syria. Long downtrodden, Hazaras were especially persecuted by the Sunni Muslims of the Taliban. More recently the Afghan branch of Islamic State has launched terror attacks on Hazara targets.

Mr Qanbari, which is not his real name, was desperate to escape stifling poverty in the countryside near Herat, close to Afghanistan's border with Iran. So, like many of his peers, he crossed the frontier to find work. A Hazara friend of his in Iran disappeared, only to resurface nine months later in a military hospital. His friend revealed he had been wounded in Syria with the Fatemiyoun, which paid three times a labourer's wage. Moreover, Iran was handing out prized residency permits to those who fought—a powerful incentive given that around 250,000 Afghans who lack the right papers are deported from Iran each year.

There were also historical reasons for the birth of the Fatemiyoun. Many Afghans had fought for their neighbour during the Iran-Iraq War, and ties between those veterans and the Iranian security apparatus endured. The founder of the Fatemiyoun, Alireza Tavasoli, was one such veteran.

While most recruits joined the Fatemiyoun for the money, they also received religious indoctrination, Mr Qanbari and others say. Young recruits were told they would be defending Shia shrines against Islamic State. After scant training, they were sent into some of the war's worst fighting and suffered terrible casualties.

Although most Fatemiyoun veterans are thought to have remained in Iran, many have returned to Afghanistan. That is causing unease. During the most chaotic phase of Afghanistan's civil war, in the 1990s, Iran backed militias as proxies, just as Pakistan backed the Taliban. The Fatemiyoun may play such a role in the future, Afghan intelligence officials fear. "It is a concern that when the national interests of the country that trained them are in danger, these people will go back and even act against our national interests," says Sayed Azim Kabarzani, an MP from Herat. Fatemiyoun veterans say they feel they are under scrutiny by the authorities. They are reluctant to talk to journalists.

Yet Iran would struggle to mobilise the ▸▸

Fatemiyoun inside Afghanistan, says Said Reza Kazemi, an academic. There would also be great resistance among Afghan Shias to any sort of mobilisation against the Afghan state. Hazaras have benefited from the current political order and have no desire to turn against it. A more likely prospect, says Ahmad Shuja, who has interviewed dozens of Hazara leaders and veterans for a report for the United States Institute of Peace, is that if security in the Hazara areas worsens and residents feel abandoned, veterans will form self-defence forces. When Taliban fighters overran previously safe Hazara areas in central Afghanistan last year, Fatemiyoun veterans tried to hold them off, but were not well organised, intelligence officials say.

Mr Qanbari carries many scars from his years at the front. His mental health has suffered and he is prone to seizures. But he is also unemployed and short of money. With Iran having declared victory in Syria, the future of the Fatemiyoun is uncertain. In January America blacklisted it for its ties to Iran's Revolutionary Guards. But Mr Qanbari wonders if his best hope is to return to Iran and start lying to his parents again. ■

Renaming the Philippines

Back to basics

MANILA

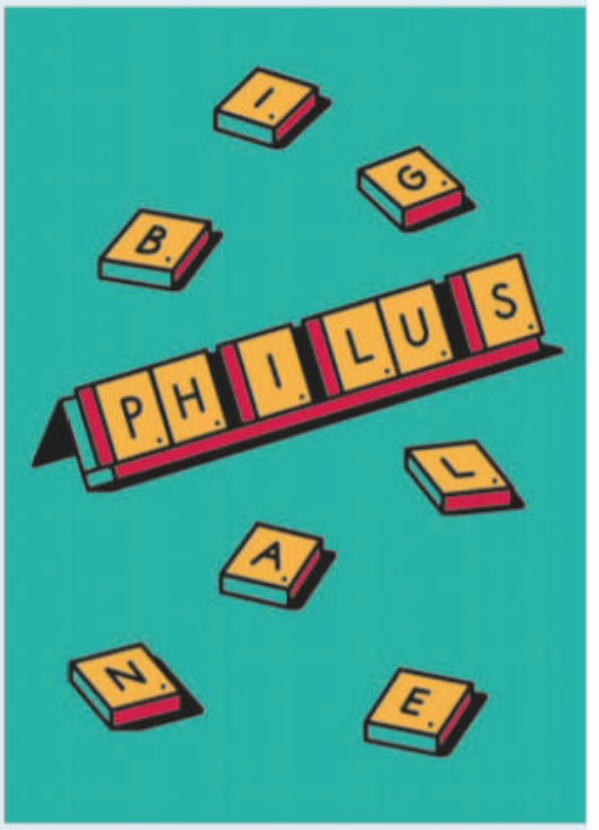
The president has another big idea

RODRIGO DUTERTE, the perpetually disgruntled president of the Philippines, is unhappy about the name of his country. "I want to change it someday," he remarked earlier this month in one of his customary rambling speeches. "No particular name yet but, sure, I would like to change the name of the Philippines, because the Philippines is named after King Philip." The Philip in question was a 16th-century king of Spain. A Portuguese explorer in the pay of the Spanish crown, Ferdinand Magellan, was the first European to visit the archipelago, which he claimed for Spain. (He was then killed by locals.) Mr Duterte says he would prefer a name inspired by the indigenous, Malay culture.

It was the second time in three weeks that Mr Duterte had called for a new name, making it sound like an official government policy. But his spokesman, Salvador Panelo, is woolly about that: "He is expressing an idea again...as usual." If it is policy, it will require an amendment to the constitution, which would have to be approved by plebiscite.

That seems unlikely. If the reminder of colonialism makes ordinary Filipinos bridle, they do so less openly than their president. And the first time Mr Duterte aired the idea of a name change, in February, he diminished the chances of it ever becoming reality by suggesting a new name associated with Ferdinand Marcos, a former dictator: Maharlika. Mr Duterte explained: "Marcos, he is really right. He wanted to change the name to Maharlika, the Republic of Maharlika, because Maharlika is a Malay word." Mr Marcos thought the word meant "nobility", and said it had been the name of a guerrilla group he claimed to have led to resist Japanese occupation during the second world war.

Most historians, however, believe that Mr Marcos invented the guerrilla group, or wildly exaggerated its exploits, in order to cast himself as a war hero. Many academics also dispute the assertion that Maharlika means nobility, saying it refers to a lower class in the ancient hierarchy. Moreover, the word does not seem to be Malay at all, but rather derived from Sanskrit. The consensus seems to be that it means "man of ability", although a persistent minority translate it as "big phallus". In 2016 an online petition urged Mr Duterte to rename the Philippines the Republic of Maharlika. Of the country's 105m citizens, just seven signed up.



Japan

The unkindest cut

TOKYO

The Supreme Court agrees that transgender people should be sterilised

SHOULD TRANSGENDER people be sterilised before they are recognised? Earlier this year Japan's Supreme Court decided that the answer is yes. Takakito Usui, a transgender man (ie, someone who was born female but identifies as male), had sued over a requirement that, to be officially designated a man, he has to have his ovaries and uterus removed (as well as have surgery to make his genitals look male, be over 20, single, have no minor children and have been diagnosed as suffering from "gender-identity disorder"). He argued that all this violated his right to self-determination and was therefore unconstitutional. The court disagreed.

Human-rights groups say demanding irreversible surgery is outrageous. Although several Asian countries, including South Korea, have similar laws, Western countries that once also used to require sterilisation, such as Norway, France and Sweden, no longer do. In 2017 the European Court of Human Rights called for the change in all 47 countries under its jurisdiction. Sweden has started to compensate transgender people who underwent mandatory sterilisation.

Critics of Japan's laws also reject the notion that transgender people are suffering from a psychological disorder. "The movement here has not been viewed as about rights but more about helping sick people overcome their illness," says Junko Mitsuhashi, a professor and campaigner who studies the history of transgender issues. She is also a transgender woman who has not gained legal recognition for her gender, having been unwilling to undergo massively invasive surgery.

Japanese courts often seem more concerned with maintaining social harmony than defending individual rights. In its ruling, the court said that the law was intended to avoid "confusion" and "abrupt change" to society. Yukari Ishii, a researcher at Toyo University in Tokyo, says that whereas in America and Europe long campaigns for gay rights paved the way for transgender people to call for more equitable treatment, Japan is further behind. Japanese society is patriarchal and retains strong gender stereotypes, she says.

Change is coming, however. The court in Mr Usui's case did acknowledge that the law may need to evolve as society does. Polls suggest that Japan is becoming more liberal on many social issues. Over 70% of respondents to a survey in January said they were in favour of stronger legal pro- ▸▸

tections for gay or transgender people. Almost no Japanese ground their objections to such rights in religion, as people often do in other countries.

In recent years a handful of Japanese towns and cities have introduced partnership certificates for same-sex couples. Some have gender-neutral bathrooms. A small number of firms are trying to be more welcoming to transgender people, as well as offering benefits to same-sex partners. Ms Mitsuhashi says she has had no problems at her university (in contrast, when she first came out as transgender, one of her employers at the time fired her). Nonetheless, Japan needs to be much readier to accept diversity in general, says Ms Ishii. The country can be *donkan*—"thick-headed"—about where the world is going, says Ms Mitsuhashi. ■

Politics in Indonesia

Outer-island views

AMBON

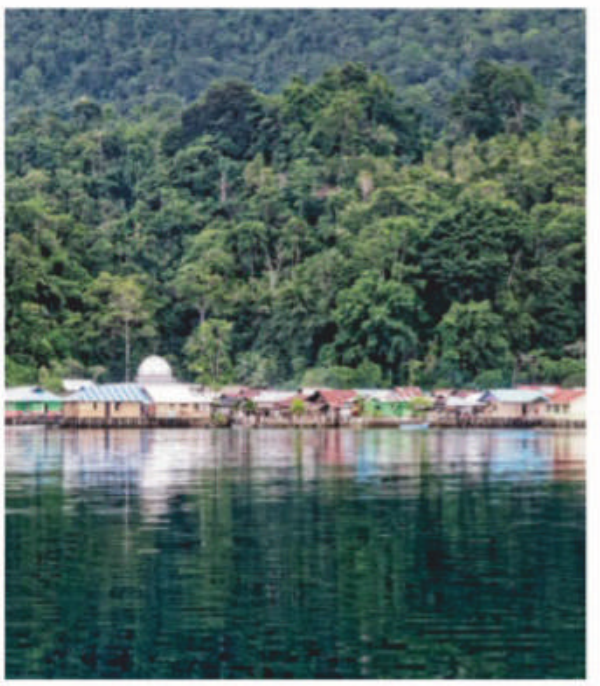
In remote parts of the archipelago, voters feel let down

THE MAIN market in Ambon, the capital of the Indonesian province of Maluku, is a riotous affair. Stalls sprawl from the pavement into the road. Shouting over the screech and rattle of traffic, vendors and customers haggle over bags of spices and fresh-cut bunches of bananas. The smell of durians and barbecued fish hangs in the air. Amid the hubbub, a group of vendors finds time to talk politics. They hold a dim view of their leaders in Jakarta, Indonesia's distant capital, insisting that their lives are never improved by new policies. "The central government does not really think about us," says one. "It just does whatever people in the west think."

By "the west", she means the islands of Java and Sumatra, which together are home to more than three-quarters of Indonesians (see map). The rest are spread across a further 13,000 or so islands. On April 17th 190m voters across the archipelago will head to the polls to pick a president as well as national and regional legislatures. Because national politicians naturally lavish attention on the most populous places, people in the far-flung corners of the country often feel neglected.

Maluku is a good example. It is sparsely populated, with less than 2m of the country's 265m people. It is also remote—some 2,400km from Jakarta. Small wonder national politicians rarely visit. That peeves Moluccans, giving them the sense that their problems are not understood by those in power in Jakarta. Olivia Latuconsina, a candidate for the local parliament, points out that Maluku consists of more than 1,400 islands. That makes building infrastructure and delivering public services much more expensive than on Java. But this cost is not reflected in the central government's transfers to the regions.

Poor public services, partly due to meagre funding, amplify resentment. In remote bits of Maluku schools lack textbooks and classrooms; teachers are often anyone from the village with a high-school diploma. On some islands locals have to get in a boat even to collect fresh water. Moluccans are aghast when they see photos of Jakarta's highways and high-rises. "We are being left behind," laments Iqbal Kumkelo, a student.



Not as idyllic as it looks

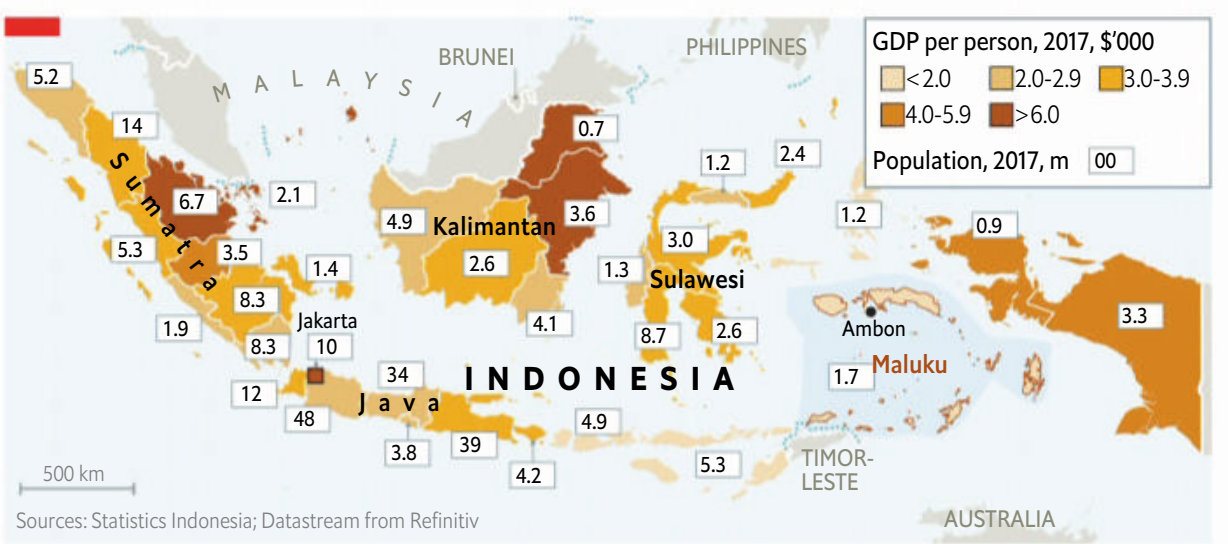
Almost a fifth of Moluccans live below the poverty line of $28 a month, twice the national average. GDP per person in the province is about $1,700, on a par with Congo. In Jakarta it is ten times higher, similar to Poland's. Last year three villagers in a remote part of the province died of starvation before the government could send aid, after rodents ate their crops.

In theory a strong local government should help counter the sense of disenfranchisement. In 1999 Indonesia started a process of decentralisation, partly to sap support for the country's various separatist movements, including a largely dormant one in Maluku. Provincial and local governments have accrued ever more powers. They now account for half of all government spending.

But many in Maluku have lost trust in local politicians, citing broken promises. Ido, a fisherman, complains that a lending scheme announced by the local mayor never got off the ground. Roly, another fisherman, says local officials only distribute handouts from the central government to their friends and relatives. One well-connected farmer was given free fishing equipment, which lies unused in his field.

Nonetheless, Moluccans seem determined to vote. Students, businessmen, fishermen and street vendors all proudly say that it is their duty to participate, no matter how disillusioned they feel. And the province is refreshingly free of identity politics. Most Indonesians are Muslims. Elections often become contests of piety rather than policy. Smear campaigns have accused Joko Widodo, the president, who is running for re-election, of being a closet Christian. Maluku, where two-fifths of people are Christian, suffered a paroxysm of religious violence from 1999 to 2002. More than 5,000 people died.

Those horrors have made Moluccans particularly wary of attempts to capitalise on divisions between Christians and Muslims. Two of the local candidates for PAN, an Islamic party, are Protestant. A Muslim student group recently helped paint a new church near their university. "We are united, just like brothers and sisters," says Max Hallussy, a local priest. It is a unity forged in adversity. ■

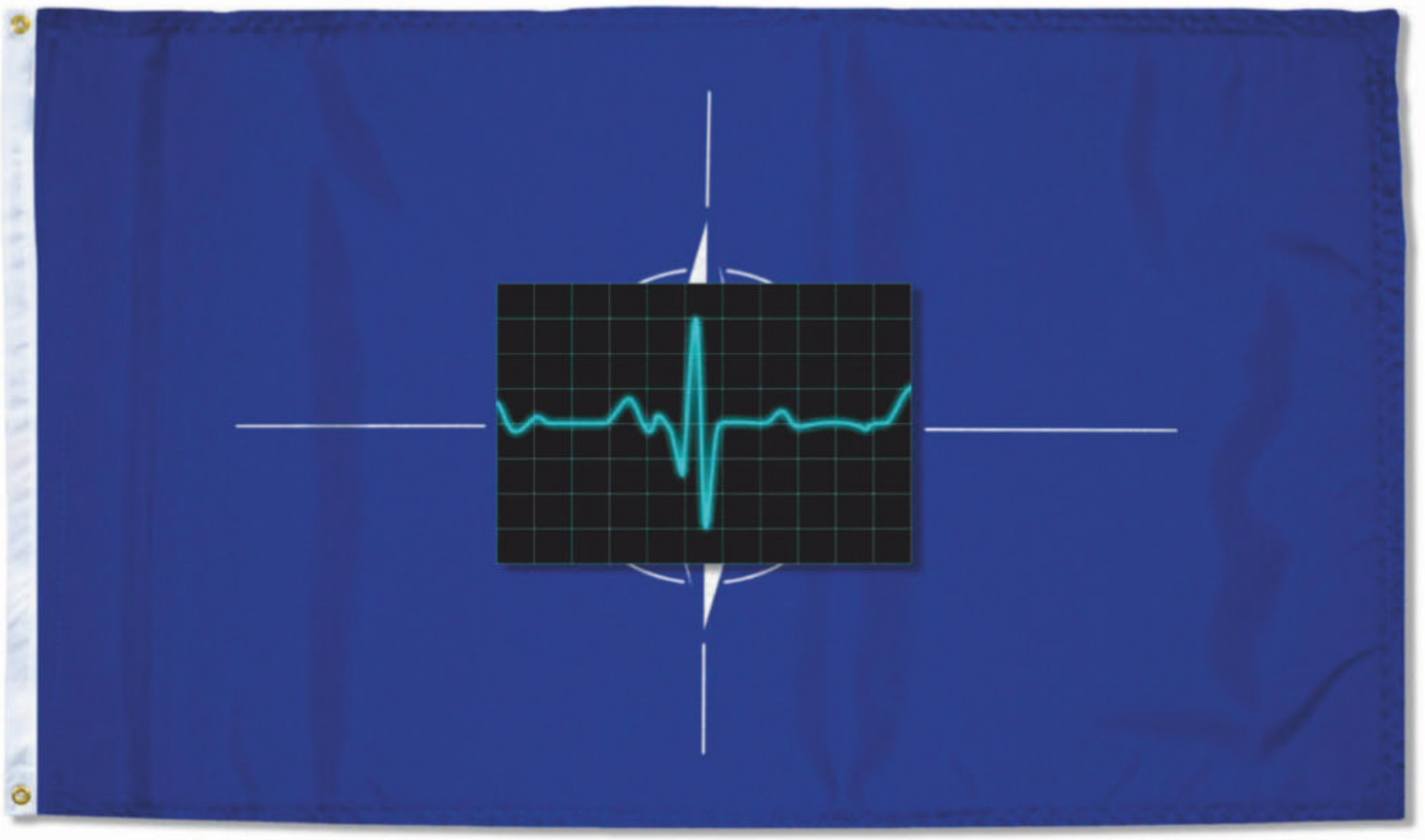


Sources: Statistics Indonesia; Datastream from Refinitiv

The Economist

SPECIAL REPORT:

NATO at 70



Mature reflection

The Atlantic alliance has proved remarkably resilient, says Daniel Franklin. To remain relevant, it needs to go on changing

REACHING 70 IS an extraordinary achievement for the North Atlantic Treaty Organisation. Most alliances die young. External threats change; national interests diverge; costs become too burdensome. Russia's pact with Nazi Germany survived for only two years. None of the seven coalitions of the Napoleonic wars lasted more than five years. A study in 2010 by the Brookings Institution, a Washington think-tank, counted 63 major military alliances over the previous five centuries, of which just ten lived beyond 40; the average lifespan of collective-defence alliances was 15 years.

"NATO is the strongest, most successful alliance in history", says Jens Stoltenberg, the organisation's secretary-general, "because we have been able to change." It has expanded from 12 members at its birth to 29—soon to be 30 when North Macedonia joins, its dispute with Greece over its name now settled. Of the eight countries that made up its erstwhile rival, the Warsaw Pact, seven have become part of NATO, as have three former Soviet republics. The eighth one, the Soviet Union itself, has ceased to exist.

For its first four decades NATO was busy deterring the Soviet threat. Its role was to keep "the Russians out, the Americans in and the Germans down", as its first secretary-general, Lord Ismay, put it. But after communism collapsed, the alliance did not proclaim victory and shut up shop; instead it reinvented itself, helping to stabilise the new democracies of eastern Europe.

Realising that it needed to go "out of area or out of business", it then embarked on a period of far-flung crisis-management, from the Balkans (with interventions in Bosnia and Kosovo) to the Horn of Africa (where an anti-piracy mission ran from 2009 to 2016) and Afghanistan (where it still leads some 16,000 troops in Operation Resolute Support). NATO's founders would have been stunned by such mission creep—as well as by the circumstances in which Article 5 of its treaty, which says that an armed attack against one member will be considered an attack against them all, was put to use. The only time the allies invoked this pledge was on September 12th 2001, the day after al-Qaeda's terrorist attacks on America.

After Russia's annexation of Crimea in 2014 the alliance moved swiftly back to its core business of deterrence against its eastern neighbour. Now for the first time it is having to juggle invigorated collective defence and crisis management simultaneously. At 70, it is hardly settling for an easy life.

Its birthday celebrations will be modest: just a one-day gathering of foreign ministers on April 4th in Washington, DC, where the North Atlantic Treaty was signed in 1949. NATO wants to avoid a repeat of the bruising confrontations that took place at its summit in Brussels last July, where America's president, Donald Trump, berated his allies for not pulling their weight on defence. If they did not shape up, he said, his country might go its own way. Another damaging row is the last thing the organisation needs as it struggles with intimations of its own mortality. "We don't have a guarantee that NATO will survive for ever," says Mr Stoltenberg.

At times Mr Trump has seemed to suggest that he would be happy to see it die. On the campaign trail he called it "obsolete". Once in office, he initially avoided backing its collective-security pledge; instead, he seemed to regard NATO as just another deal, in which American taxpayers were getting ripped off. In January the *New* ▸▸

York Times reported that several times last year he privately said he wanted to pull the United States out of NATO. Such reports only fuel fears that he might be doing Russia's bidding. Mr Trump calls these suspicions "insulting".

If he were to decide to abandon NATO he would face resistance in Congress, where bipartisan support for the alliance remains strong and control of the purse strings powerful. A record number of more than 50 senators and representatives attended the Munich Security Conference last month to show solidarity. Last July the Senate voted 97-2 to back NATO. In January the House of Representatives voted 357-22 in favour of the NATO Support Act, which would prohibit any use of federal funds for withdrawal. Though heartening for NATO, these votes highlight the sense of threat hanging over it.

Yet its pharaonic new headquarters on the outskirts of Brussels projects the permanence of an organisation preparing for its next 70 years, not one about to perish. Opinion polls show solid public support for NATO in its member countries (with the significant exceptions of Turkey and Greece). Even in America, despite Mr Trump's attacks, 64% of those polled by Pew Research Centre are favourable towards NATO, up from 49% in 2015, and a survey last year by the Chicago Council on Global Affairs showed that more Americans than at any point since polling began in 1974 favour increasing their country's commitment to the alliance.

NATO optimists offer three reasons for not fretting too much over Mr Trump. First, NATO is no stranger to crises, from Suez in 1956 to France quitting the integrated military command in 1966 and splits over the Iraq war in 2003. It has a record of resilience.

Second, they point out that since becoming president, Mr Trump has said that the alliance is "no longer obsolete", that he is "committed to Article 5" and that America will be "with NATO 100%". True, he continues to lambast his allies for failing to pay their fair share of their own defence, but on this matter his bullying is justified and useful: the allies do need to spend more.

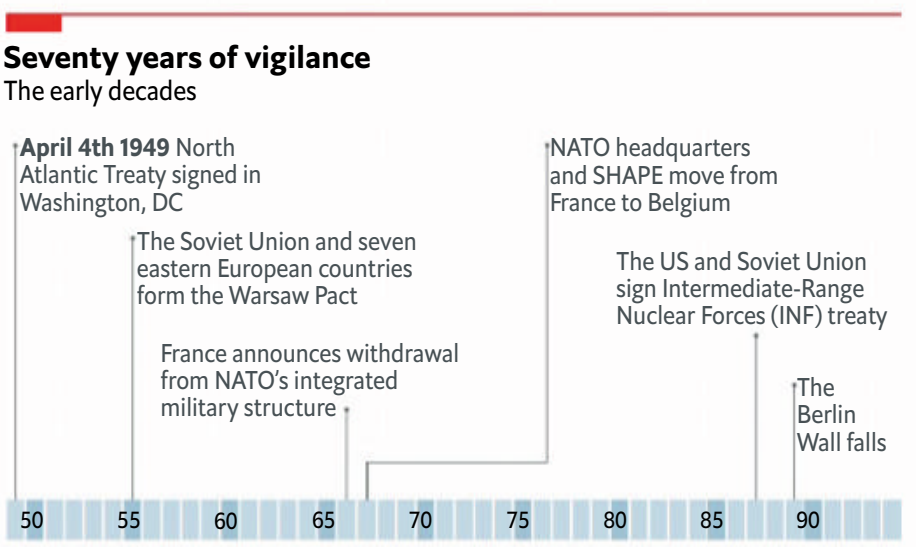
Their third and strongest argument for remaining sanguine about Mr Trump is based on his deeds rather than his tweets. On his watch America has increased, not decreased, its defence efforts in Europe, with more equipment, more troops and more money. Funding for America's military presence in Europe, under what is called the European Deterrence Initiative, has risen by 40%.

This is part of NATO's determined response to the increased threat from Russia. At summits in Wales in 2014, Warsaw in 2016 and last year in Brussels—even as the world focused on Mr Trump's bolshiness—the allies took a series of decisions designed to restore robust territorial defence. They created a Very High Readiness Joint Task Force, prepared to move within days, and put combat-ready multinational battlegroups into the three Baltic countries as well as Poland. They committed themselves to a costly "Four 30s" initiative, with the aim of having 30 mechanised battalions, 30 air squadrons and 30 warships ready to move in no more than 30 days by 2020. To ensure swift movement of forces, they planned two new commands, in Norfolk, Virginia, and Ulm in Germany.

Last autumn NATO tested its capabilities in Trident Juncture, its biggest exercise since the end of the cold war, which involved some 50,000 people in and around Norway. Gaps remain, but the erosion of defence capacity that NATO had allowed as a peace dividend after the collapse of communism is being reversed.

This special report will run a health check on NATO. It will assess the alliance's chances of surviving through its 70s and consider how it needs to change in order to remain vigorous to 100. In the short term the wild card remains Mr Trump. For two years the allies were reassured by the presence around him of NATO-friendly "adults in the room", especially generals such as James Mattis, the defence secretary. These grown-ups could not prevent transatlantic rows over trade and the nuclear deal with Iran, which Mr Trump has abandoned, but they could exercise some restraint. They are now gone; Mr Mattis quit in December. His resignation letter pointedly stressed the importance of "treating allies with respect".

Even without Mr Trump, however, the cohesion and the democratic values that the alliance is supposed to share are under strain. It can still summon up solidarity, for example in response to Russia's nerve-agent attack on Sergei Skripal, a Russian ex-spy, and his daughter Yulia in Salisbury in England. But divisions among the



Europeans look worryingly wide.

Britain, usually a NATO stalwart, is consumed by Brexit, and might even elect a seasoned NATO-basher, Labour's Jeremy Corbyn, as its next prime minister. Nationalist governments in Hungary and Poland are at odds with their EU partners. France's relations with Italy sank so low that it recently recalled its ambassador.

Relations between America and strategically critical Turkey, which will soon be overtaking Germany as NATO's second-most-populous country, have been strained, too. Turkey's plan to buy a Russian air-defence system is a sore topic in Washington. The two countries have also been at odds over Turkey's detention of an American pastor (now released) and over America's refusal to extradite a Turkish cleric, Fethullah Gulen, whom President Recep Tayyip Erdogan blames for an attempted coup in Turkey in 2016. And they disagree over the fate of Kurds in Syria who fought alongside America but are seen as terrorists by Mr Erdogan. If relations were to sour badly, America could "devastate Turkey economically", Mr Trump has said. Both sides seem to be working to avoid that.

These are not the best of times for the allies to be tackling an issue as thorny as intermediate-range nuclear forces (INF). On February 1st America pulled out of the 31-year-old INF treaty banning land-based missiles with a range of 500-5,500km, in response to what it called clear Russian violation. NATO has backed America's move, but the issue threatens to become as fraught as when American cruise and Pershing II missiles were being deployed in Europe in the 1980s to counter the Soviet Union's mid-range nuclear arsenal. Now, as then, there is a risk of holes in America's nuclear umbrella that could leave the European allies vulnerable.

Look farther east

NATO has been very effective for 70 years, says Mike Pompeo, America's secretary of state, who will host the anniversary meeting in Washington, "and we want to make sure that it continues to be effective for the next 70 years." That will not be easy. The tectonic plates of geopolitics are shifting. A return to great-power rivalry is in prospect. Although Russia has a potent nuclear-tipped military force and an opportunistic willingness to disrupt the status quo, in the long run it is seen as a declining power. The emerging giant is China. The old Soviet Union peaked at less than 60% of America's GDP and a population about a fifth bigger. In China, America faces a rival that has four times as many people and will soon outstrip its economy. As China rises, challenging America's interests around the world, it will take up ever more of America's attention and resources. That process started before the Trump presidency, and will continue and intensify far beyond it.

How can the transatlantic alliance hold together as America becomes less focused on Europe and more immersed in Asia? That is a vital question, but so far NATO has barely started tackling it. ■

Keeping Russia in check

Disquiet on the eastern front

The increased threat from Russia has prompted a vigorous, if uneven, response from the allies

"FOR ME, I'M living the dream," says Major Pierre Gosselin, a Canadian company commander in NATO's multinational battlegroup in Latvia. A bleak, freezing-cold firing range in January at Camp Adazi, a military base 45 minutes' drive from Riga, is not everyone's idea of heaven. But Major Gosselin and his men, recently arrived for their six-month stint here, are loving the camaraderie, testing their weapons and trying out the different models of the small contingent from Montenegro, NATO's newest member, which has sent troops to the battlegroup for the first time.

Last July, asked in a television interview why Americans should defend Montenegro from attack, President Trump seemed to question whether NATO's mutual-defence guarantee made sense. Montenegrins "may get aggressive", he said, "and congratulations, you're in world war three." The Montenegrins at Adazi, however, are blending in easily. Their leader is particularly impressed by the interoperability of the magazines.

The Canadian-led battlegroup is one of four that NATO has deployed since 2017 as part of its "enhanced forward presence"; the others are in Estonia (under British leadership), Lithuania (led by Germany) and Poland (where America takes the lead). The battlegroup in Latvia is the most international of the four: nine countries contribute to its 1,400-strong force. Colonel Josh Major, the commander of Task Force Latvia, calls it a "pretty good representation of all of Europe". His forces have been involved in outreach activities all over the country, helping to counter Russian efforts to discredit NATO's presence there. It's been a "great experience for all our troops", he says.

But they are not there to have fun. Their job is to change the calculus in Russia, making any incursion much costlier to an aggressor. "The closer you get to Latvia, the more the sense of threat becomes real," he notes. Part of this is a reflection of history. At the Latvian War Museum in Riga a new exhibition marks the centenary of the country's war for independence, hard-won with help from allies including Britain and France. But in 1940 the Latvians allowed the Russians in without a fight, and then lived under Soviet occupation for half a century. Next time, if there is one, they are determined to shoot.

In 2014 Russia provided a fresh reason for Latvians to feel

threatened: it invaded Ukraine, with devastating speed, surprise and the use of "hybrid" tactics involving disinformation and disguised troops. It is all too easy to imagine how the same tactics could be applied in the Baltics. "War with Russia", a novel by General Sir Richard Shirreff, describes exactly such a scenario, drawing on his experience at NATO, where he served as deputy supreme allied commander for Europe.

The Latvians and their Baltic neighbours are also on their guard because Russia has been building up its forces near their borders in recent years. Russian military modernisation has reached a stage, says Rose Gottemoeller, NATO's deputy secretary-general, "where we have to be hyper-alert".

Land, sea and air

That is why NATO has enhanced its presence not only on the ground but also in the air. At Amari in Estonia it has added an extra arm of its Baltic air-policing operation (the leading part of it remains in Lithuania). NATO countries take turns to do four-month stints at Amari; currently the Germans are there. Twice a day two of their Eurofighters are in the air within 15 minutes of the siren sounding. Once or twice a week these are live interceptions, typically of Russian planes flying between St Petersburg and the enclave of Kaliningrad. The interceptors get close enough to identify the Russian planes, but without provoking them.

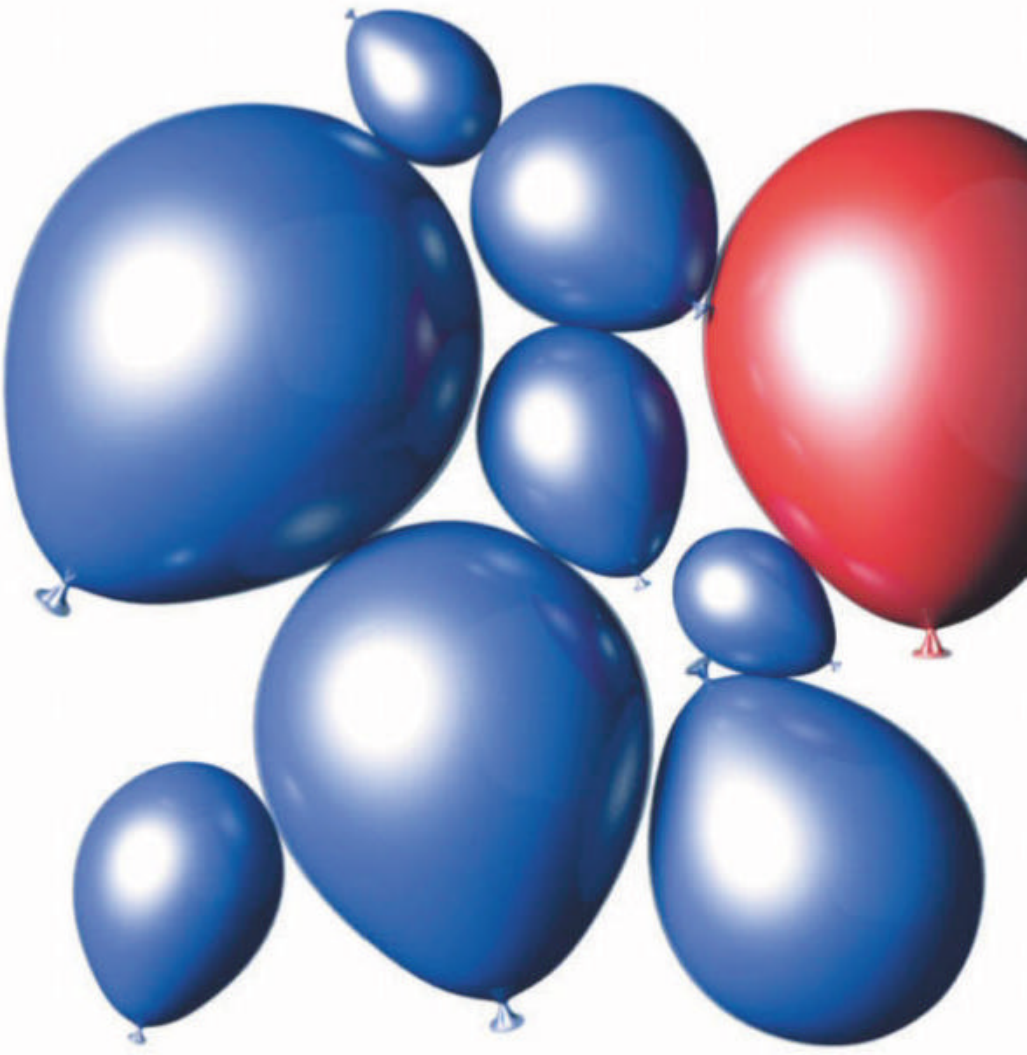
NATO's presence in Adazi and Amari is just a start. Some would like to see both missions beefed up to convert the Baltic air policing into air defence and to enlarge the battlegroups and make them permanent. Radek Sikorski, a former Polish foreign minister, calls the Baltic battlegroups "symbolic".

So keen is the current Polish government to host a bulkier American force that it has offered to pay the United States about $2bn to set up a permanent base. Poland's European allies frown on such bilateral deals, which are at odds with NATO's collective spirit. Critics fear the move could divide the alliance and provoke Russia. Polish officials are confident of getting a beefier American presence in return for "enhanced host-nation support", stressing that they see this as a regional hub benefiting NATO.

NATO has plenty on its plate implementing the decisions it has already taken. The credibility of its forward presence depends on having reinforcements ready and being able to deploy them rapidly to prevent Russia from creating a fait accompli in the Baltic states. Simply clearing away obstacles to moving troops across Europe is a big task.

This is not just about NATO's eastern front. The alliance needs to be able to respond to threats wherever they may arise. "The alliance has got to get the initiative back, rather than always reacting to Russia," says Lieutenant-General Ben Hodges, a former commander of the US army in Europe, now at the Centre for European Policy Analysis (CEPA), a think-tank.

Recently Russia has been flexing its muscles in the Black Sea region. In November it seized three Ukrainian navy ships trying to cross, as they are entitled to do, from the Black Sea to the Sea of Azov via the Kerch Strait. Mr Hodges worries that NATO has not paid enough attention to the area. Russia's actions have now brought a fresh focus on it.



NATO's individual members have different perceptions of potential threats. Whereas the Baltic countries are alert to any change in the wind from Russia ("We feel it on our skin," says Latvia's defence minister, Artis Pabriks), what Greeks feel on their skin is menace from Turkey, a fellow NATO member. Italians are less worried about Moscow than about migrants crossing the Mediterranean. The French concentrate especially on efforts to stabilise former colonies in Africa. And the Germans seem to feel threatened mainly by the thought that if NATO and the EU were to collapse they would lose the cornerstones of their stability and prosperity.

To accommodate these diverse interests, the allies have developed what they call a 360-degree approach to security. That involves tackling threats not just from Russia but also from north Africa and the Middle East, sources of migration and terrorism. This has bolstered solidarity among NATO members. It is why Canada is happy to lead a training mission in Iraq and why Latvians have fought and died alongside Americans in Afghanistan.

But this inclusive approach has its problems. One is that NATO may try to do too much and lose focus on its core mission of defence against Russia. Another is that, though speed is of the essence, decisions get gummed up in a search for consensus among 29 countries. Efforts to cut through this by granting more autonomy to NATO's military chief, the supreme allied commander for Europe, meet resistance from members wary of ceding sovereignty.

Contrasting perceptions of threat also make it harder to resolve what has become one of the most contentious issues for NATO: the level of its members' defence spending, the agreed aim for which is at least 2% of GDP. Because they are so wary of Russia, Latvia and Poland are among the countries that meet this target, but the same is not true for many other members, especially Germany—which is why Mr Trump has criticised it loudly. ■

Compare and contrast

2018 or latest available

	GDP, $trn	Population, m	Defence spending % of GDP	Nuclear warheads
NATO Europe	17.0	570	1.5	515
Russia	1.6	144	4.3	6,850

Sources: IMF; NATO; UN Population Division; SIPRI

Spending

Promises, promises

Germany is in the crosshairs for not spending enough on defence

THE PRESIDENT did not mince his words. "We cannot continue to pay for the military protection of Europe while the NATO states are not paying their fair share and living off the fat of the land. We have been very generous to Europe and it is now time for us to look out for ourselves." A tweet from Donald Trump? In fact the words were John F. Kennedy's, speaking to his National Security Council in 1963. Complaints about the Europeans' failure to spend enough on their own defence are almost as old as the alliance itself. But Mr Trump's attacks have been angrier and more sustained. He links complaints about the perceived NATO rip-off with gripes about trade, where he thinks the European Union is "killing us". "We pay for LARGE portions of other countries [sic] military protection," he tweeted last November, "hundreds of billions of dollars, for the great privilege of losing hundreds of billions of dollars with these same countries on trade."

The allies may not like the bullying (and could argue with the economics), but on the matter of military spending Mr Trump has a point. At their summit in Wales in 2014, NATO leaders agreed to a guideline of spending no less than 2% of national GDP on defence, of which at least 20% should go on major equipment, including research and development. At the time only three countries met the 2% target; all the rest pledged to "move towards" it by 2024.

Now eight countries more or less pass the 2% test, and 15 meet the 20% target for major equipment. Taken together, the 2018 defence budgets of NATO's European members would have needed to be $102bn bigger (an extra 38%) to reach 2% of GDP, according to the International Institute for Strategic Studies (IISS). Still, their spending has been rising significantly since 2015. At the World Economic Forum in Davos in January, Mr Stoltenberg said that since 2016 members other than the United States had spent an extra $41bn in real terms and that, based on their national plans, by the end of 2020 the figure would be $100bn. If his remarks were designed to catch Mr Trump's attention, it worked. "Now we have secured more than $100bn of increase in defence spending from NATO allies," the president boasted a couple of weeks later in his state-of-the-union speech. "They said it couldn't be done."

"You should note that Vladimir Putin sees that increase," says Mr Pompeo. But he also stresses that "there remains tremendous work to be done." It is not even clear that Mr Trump will be satisfied with 2%. At the Brussels summit last year he caused a stir by mentioning a figure of 4% of GDP. (The United States spends 3.5%, though this pays not just for the territory covered by NATO but for America's global role; the IISS calculates that only 5.6% of its defence outlays go directly on Europe, a figure that leaves out its nuclear umbrella and the reinforcements it would send in a crisis.) Whatever the aim, it is the big countries that count, and several of these fall woefully short of 2%, including Canada, Italy and Spain (see chart). But the most notable laggard is Germany, which has the largest economy.

Germany spends just 1.24% of its GDP on defence. It has promised only that the share will rise to 1.5% by 2025. Even that may be optimistic, since the spending is not "plumbed in" to actual budget plans, notes Claudia Major of SWP, a think-tank in Berlin. She expects the number to be 1.3% by 2024.

The Germans have lots of excuses. A coalition government makes it hard to agree on higher defence spending. Germany's economy is so large that even a modest increase in the share of GDP going on defence translates into a lot more money. The country hosts facilities that are important for America's wider role, including its Africa Command in Stuttgart and a state-of-the-art military hospital near Landstuhl where Americans wounded in Afghanistan and Iraq are treated. Besides, the 2% target is a crude one, measuring input not output, so it should not be taken too literally.

You cannot be serious

Yet it is what Germany signed up to in 2014, and it does need to spend more. Last year's annual report to the federal parliament on the state of the country's armed forces was devastating. It pointed to "major gaps in personnel and materiel in all areas of the Bundeswehr". All six of its submarines were out of action. At times not one of its 14 Airbus A400M transport planes was flying. This year's report was scarcely better, urging "immediate action". The contingent that took part in the recent Trident Juncture exercise had to plunder all sorts of gear from other units, according to Julie Smith, an American expert on transatlantic security currently at the Robert Bosch Academy in Berlin. "It's just hard to fathom how it got this bad, for a country of its size and resources," she says.

Another puzzle is Germany's embrace of Nord Stream 2, a pipeline that by the end of this year is due to bring it Russian gas. Because this bypasses Ukraine, it leaves that country open to pressure from Russia. Mr Trump says it will also make Germany "a captive of Russia". The Germans suspect that his true motive is to sell them American gas, but the project has many other critics.

Despite Russia's deployment in Kaliningrad of nuclear-capable missiles that can reach Berlin in less than five minutes, Germans do not seem to feel unduly threatened. As Jan Techau of the German Marshall Fund in Berlin puts it: "We have exactly the kind of armed forces we want: basically unusable."

What can be done? Mr Trump's ire is not the best incentive for Germany to tackle its gaps in military spending: only 10% of Germans are confident that he will do the right thing in world affairs, according to Pew Research Centre. But politicians could do more to explain the need for extra resources, and they could be more creative, tackling problems of civilian infrastructure that also pose problems for military mobility. Germany's rail system is "completely inadequate" for moving troops at scale, says Ben Hodges of CEPA. "We don't need more German tanks, we need more German trains." Counting such investment could help nudge Germany towards 2%.

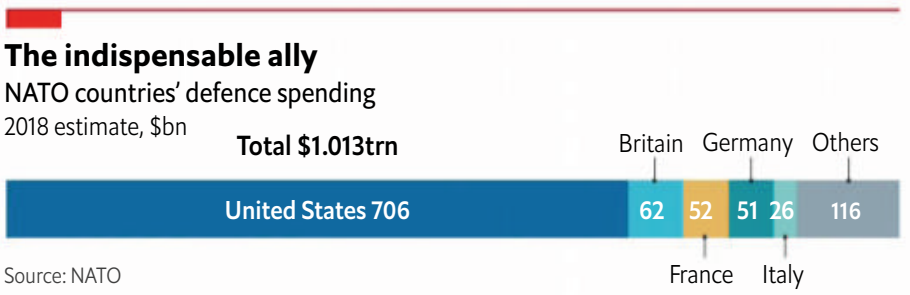
One way to make European defence spending go further would be to improve collaboration between member countries, ▸▸

Mostly falling short

NATO members' defence spending

Selected countries, as % of GDP

Source: NATO *Estimate



cutting duplication and reaping economies of scale. Angela Merkel, the German chancellor, has asked why Europe needs 160 weapons systems when America has 50 or 60, not to mention all the replication of training and support staff across the continent. Initiatives to do better are at last under way. One, called permanent structured co-operation, or PESCO, aims to attract commitments to projects identified in a Co-ordinated Annual Review on Defence, or CARD.

The EU has also launched a European Defence Fund. From 2020 it hopes to have €500m a year to invest in joint research projects and €1bn a year (leveraged to perhaps €5bn with the help of national financing) for collaborative development and buying equipment. Crucially, this has been plugged into the machinery of the European Commission. But Britain, a European defence giant, could find itself relegated to third-country status after Brexit. And Germany has inhibitions about arms exports, evident in its recent willingness to all but ground Saudi Arabia's Eurofighter Typhoon fleet by blocking parts. That makes it tricky to work with the more gung-ho French. More collaboration may improve matters, but at best slowly. Meanwhile, what if Mr Trump, or a successor, were to carry out the threat to quit? ■

European defence

Going solo?

Time to start thinking the unthinkable

WHY, A STRATEGIST from Mars might wonder, do Europeans doubt their ability to defend themselves against Russia without American help? The total GDP of NATO's European members is more than ten times that of Russia, which has an economy about the size of Spain's. They spend three-and-a-half times as much on defence as Russia, which has lately had to cut its budget sharply because of a broader squeeze on its economy. True, Russia has 13 times as many nuclear warheads as western Europe has, but surely Britain and France, the two nuclear powers, have more than enough to deter an attack?

For decades Europeans did not need to worry about the Martian's question, because America's commitment to their defence was not in doubt. That has changed. "The times when we could unconditionally rely on others are past," Angela Merkel told the European Parliament in November. She echoed the call of France's president, Emmanuel Macron, for "a true European army". In January the two leaders signed a treaty between France and Germany which includes a mutual-security pledge similar to NATO's Article 5 (as well as Article 42.7 of the European Union's Lisbon treaty).

This is sensitive territory. Mr Macron's talk of a European army, and of "strategic autonomy", irritates Americans. It is only prudent for Europeans to start hedging their bets against over-reliance on America, but hedging can be costly, and they have to be careful lest the hedge become a wedge, as François Heisbourg of the Fondation pour la Recherche Stratégique, a think-tank, pithily puts it.

Still, Mr Trump's ambivalence about allies is almost an invitation to think through the implications of an end to Pax Americana. Suppose one morning a tweet announces that the United States is leaving NATO. Under Article 13 of the alliance's founding treaty, a country can cease to be a member one year after notifying the government of the United States. So, bizarrely, Mr Trump would be serving notice on himself. An optimistic version of what happens next, apart from howls of protest, is that Europe makes a concerted effort to organise its own defence. Call it Europe United.

The conventional wisdom on Europe's ability to protect its interests may be too defeatist, suggests Kori Schake of the IISS. The middle powers, in which she includes countries like Britain, France, Italy and the Netherlands, have been talking themselves into "exquisite uselessness", but they have impressive capabilities. And, she argues, "the high-end American way of war is not the only way of war."

A pale shadow

Yet the Europeans would immediately face institutional hurdles. Compared with Russia's top-down system, command and control is hard enough in consensus-bound NATO. It would be a bigger challenge for Europeans alone, especially if they did not inherit NATO's command structure. The EU may want to take the lead, but military thinking is not in its DNA. Besides, an EU-only alliance would be a pale shadow of NATO: after Brexit, non-EU countries will account for fully 80% of NATO defence spending.

There would be gaps in capabilities, too. How bad these were would depend on the mission, and how many operations were under way at the same time. The European-led interventions in Libya and Mali exposed dependence on America in vital areas such as air-to-air refuelling and intelligence, surveillance and reconnaissance. A detailed look at the sort of scenarios Europe might face would help to identify other gaps, and what it would take to fill them. Bastian Giegerich of the IISS, who is starting to work on such assessments, reckons that realistically the gap-filling could take 15 years or so. That is a long time for places like Poland and the Baltic countries that feel under threat. Fear and mistrust could quickly conspire to make narrow national interests trump efforts to maintain European unity. Hence a second, perhaps likelier, version of what might follow an American withdrawal: Europe Divided.

Jonathan Eyal of the Royal United Services Institute in London imagines a frenzy of activity, a cacophony of summits—and a renationalisation of defence strategies. Lots of countries would seek bilateral deals. In central Europe he would expect an alliance between Poland and Romania to guarantee the eastern border. The Russians and Chinese would not sit idly by, he says, but would play their own games with the Greeks, Hungarians and others.

It is these games of mistrust that the American security guarantee has largely helped to avoid. They could all too easily resurface. "Establishing a purely European defence", warns Michael Rühle, a long-time NATO official, "would overwhelm the Europeans politically, financially and militarily."

That is why a third way forward for Europe looks more attractive: what might be called Europe Upgraded. This would involve the Europeans doing a lot more to improve their capacity in defence, but in ways that would help persuade the Americans to stay in: less loose talk about a European army, more effort to develop capabilities currently lacking.

Europe Upgraded sounds like an easy option, but it is not. It would demand cash, creativity and care. A serious push to plug the gaps in Europe's capabilities would not be cheap. European governments, especially the big ones, would have to find a way to sell ▸▸

far larger defence budgets to their voters.

As for creativity, the European Intervention Initiative, championed by Mr Macron and launched last year, is an example of the sort of innovation that could help. It is inclusive: its ten members include Finland, not part of NATO, and Britain, soon to be out of the EU. The aim is to foster a common strategic culture that will help Europe respond more nimbly to crises in its neighbourhood without calling for American help.

The care is needed to make sure a more robust Europe is seen as supporting NATO rather than undermining it. America is suspicious of any duplication of NATO's efforts, such as the creation of rival headquarters. And bigger spending on defence could trigger disputes over industrial protectionism, especially if broader trade rows between Europe and America rumble on.

Even as the allies grapple with different visions of the future, a nuclear elephant has entered the room. Last October America declared (without warning the Europeans) that it was leaving the INF treaty, claiming a blatant violation by Russia, and served formal notice in February. Russia has since responded by pulling out too, threatening to develop new missiles. To make matters worse, the New START treaty, which limits strategic nuclear warheads and has strong verification provisions, is up for renewal in 2021.

A new nuclear-arms race would be a nightmare for NATO. In Berlin, Claudia Major is "enormously worried" that arguments over INF could divide Germany, Europe and the transatlantic alliance. Radek Sikorski fears that Russia's missiles will leave Europe "defenceless" if it lacks a proportionate response to a first use of nuclear weapons by Russia, giving the Russians time to get where they want to by using conventional forces.

A new nuclear-arms race would be a nightmare for NATO

NATO has been here before. In the 1980s concern that Russian SS-20 intermediate-range missiles would "decouple" the European allies from America led to a dual-track approach: pursuit of arms control along with deployment of American cruise and Pershing II missiles in several European countries. The deployment went ahead despite mass protests, but the INF treaty signed in 1987 resulted in their removal and a long period of relative nuclear calm.

America is keen to maintain alliance solidarity, and officials say there are no plans to deploy intermediate-range missiles. There are other tools in the kit to keep Europe coupled. These include submarine-launched nuclear cruise missiles, currently in development, and new low-yield warheads for existing Trident missiles. A strengthening of missile defences would ramp up tensions with Russia.

The abandonment of the INF treaty is the most urgent reason to ask questions about the nuclear future. But the broader doubts about the strength of America's commitment to defend Europe are also stirring things up. Like it or not, for the first time this century Europeans are having to brace themselves for a serious debate about the role of nuclear weapons on their continent.

Taboos could tumble. In a paper last November for the Finnish Institute of International Affairs, a French expert, Bruno Tertrais, suggested a range of "realistic" scenarios for expanding French and British nuclear protection, with or without NATO. Maximilian Terhalle, of the University of Winchester, and Mr Heisbourg recently argued that France should extend its nuclear umbrella to its European partners, including Germany. They acknowledge that "great leadership skills" would be needed to win support for this at home while not "prompting the withdrawal of US nuclear weapons from Europe".

The context for this debate extends far beyond Europe. Russia's deployment of its 9M729 missiles is in part a response to the growing muscle of other countries, notably China, which is not bound by the INF treaty. President Trump has floated the idea of broader arms-control efforts also involving China and others, though there is little sign of Chinese interest. The INF question is an early indicator of how China's rise might affect the future of the alliance. ■

Future-gazing

The next ACT

When the world changes, NATO must change too

FOR AN IDEA of what the alliance will be dealing with in the years to come, head to Norfolk, Virginia. It is home to Allied Command Transformation (ACT), one of NATO's two strategic commands, the other being its operational one with its headquarters at Mons, in Belgium. Since 2009 French generals have been at the helm of ACT, a reward for France's return to NATO's integrated military structure; the most recent American in charge was James Mattis, seen by some in Europe as NATO's saviour as defence secretary for the first two years of Mr Trump's presidency.

What makes ACT interesting is its focus on the future. Its job is to shape NATO's response to emerging demands as the world changes. That includes devising "minimum capability requirements" for new technology. It also involves getting out a crystal ball to divine big global trends and their military implications decades ahead. General André Lanata, the current supreme allied commander transformation (SACT), says his command "is one of the motors of adaptation for NATO".

That motor is having to speed up. Digital technology is moving at a faster rate than traditional military investment, often driven by the private sector, leading ACT to do things in new ways: more bottom-up, more plugged into outside networks and with a greater willingness to accept the risk of failure. "Experimentation is key," says General Lanata.

ACT co-ordinated more than 20 experiments at Operation Trident Juncture last year. One tested in-field "additive manufacturing" (known as 3D printing) for critical components. Another tried out unmanned sensors that could cut the personnel needed to protect forces and bases. A third sought to show how autonomous vehicles could improve battlefield logistics and cut manpower.

The West used to assume that it could count on maintaining its technological superiority. Today that looks complacent. The Aspen Strategy Group, in a recent book, "Technology and National Security: Maintaining America's Edge", sees a "transformative era" ahead which could threaten America's position as the world's strongest military power. The Pentagon's National Defence Strategy, published last year (the first for a decade), notes that many vital new technologies come from the commercial sector and are available to rivals, eroding the "conventional overmatch" that America has grown accustomed to. Russia innovated in the field of hybrid warfare to devastating effect in Ukraine, blurring the line between peace and war. China has ambitions to be a world-beater in artificial intelligence, big data and quantum computing, all of which will have major military uses.

Such technologies promise to compress the time available to deal with a crisis, which can put a 29-country alliance at a disadvantage. NATO's need for consensus is often seen as its Achilles heel. Advances in hypersonic weapons, moving at more than five times the speed of sound, will shorten response times further. Military types are fond of talking about responding at the "speed of relevance"; that speed will get ever faster.

Technology is opening up whole new dimensions for warfare

Technology is also opening up whole new dimensions for warfare. One is space. Some of the alliance's larger members—America, France, Britain—are thinking hard about it. President Trump recently launched a new space force. Oddly, ACT does not yet have a mandate to tackle it, but cyberspace is now one of its core areas. In 2016 NATO agreed that a cyber-attack could ▸▸

The art of info-war

Social media are being weaponised

WHEN LATVIA conducted its biggest-ever national military exercise last August, which mobilised more than 10,000 people, a group of researchers discovered that using only open-source information they could identify about 10% of the individuals involved—and use that knowledge to track the exercise in real time. They also found they could make a soldier leave his post, against orders. Janis Sarts, director of NATO's Strategic Communications Centre of Excellence, which ran the experiment, said it was very simple.

The StratCom unit was set up in 2014. It now has about 40 people and is already outgrowing its home in a white building in Riga. Its expansion reflects the rising importance of information warfare in the age of social media.

Part of its job is to do something for which surprisingly few governments have the capacity: monitor the information environment. It tracks the "weaponisation" of social media, including the use of bots and a growing trend towards "hybrid" activity involving both humans and machines. It studies what Russia and terrorist groups are up to. Iran is also increasingly active, says Mr Sarts, and China is quickly becoming the most capable country, though it is less willing than Russia to take risks in Europe.

The other part of the job is to put this knowledge to use. The unit helps with training, introduces information warfare into NATO exercises and gets involved in operational support beyond the military sphere, such as election resilience. Tracking Russian propaganda efforts to undermine NATO's new multinational battlegroups in the Baltics allowed StratCom to push back quickly and effectively.

As data get ever richer, Mr Sarts expects information to be increasingly used to influence behaviour; he talks of "cognitive warfare". Deep fakes will make it hard to know whether a video or voice recording is genuine or not, undermining trust and making more people move to closed groups with embedded beliefs, he predicts. Some of the tech giants, including Instagram (owned by Facebook) and YouTube (owned by Google), deserve more scrutiny, he says. He does not think that self-regulation will work, and sees a need for a proper regulatory framework.

StratCom collaborates on some projects with a well-regarded centre in neighbouring Estonia that specialises in cyber-defence. Lithuania has an outfit for energy security. They are among 25 NATO-accredited "centres of excellence" with a range of expertise—one way in which small countries can make an outsized contribution to the alliance.

trigger an Article 5 response. It has recognised cyber as a separate domain for warfare, alongside land, sea and air. Last year it established an operations centre for cyber at Mons.

So far NATO has concentrated on cyber-defence. It is reckoned to have done a good job at protecting its own installations from cyber-attack. But many of the broader networks on which communications among the allies depend, as well as national military facilities, are more vulnerable. The alliance has not developed collective offensive capabilities in cyber (those remain national, like intelligence), though it is said to be contemplating them.

At ACT, work on a cyber-doctrine should be approved within a year or so. As in other areas, interoperability is at the core, be it for defending networks, ensuring situational awareness or carrying out plans. By the end of 2019 NATO should be able to start conducting cyber-operations. Even so, the whole cyber area remains a huge task for the alliance which it has only just started to tackle.

Russia today, China tomorrow

In the long term it is the rise of rival powers that concentrates minds. The central challenge identified in America's National Defence Strategy is the re-emergence of long-term, strategic competition from China and Russia, out to shape the world according to an authoritarian model. Russia is a declining power and increasingly a regional one. Over time, the global challenger is China.

Every four years NATO's crystal-ball-watchers at ACT produce their "Strategic Foresight Analysis" (SFA), looking ahead two decades and beyond at the big trends that will affect the security environment. Now, as part of the next round, they plan to look at regions: north Africa, a potential source of mass migration; the Arctic, increasingly on the security radar because of global warming; Russia, NATO's traditional focus; and, last but not least, Asia-Pacific. In the most recent SFA report, released in 2017, China was mentioned more than twice as often as Russia. China's joint exercises with Russia in the Baltic in 2017 and its growing interest in the Arctic are part of the trend.

China's importance for the future is awkward for NATO. The alliance was not set up to handle it. It has no policy for dealing with it and no real relationship with it. Yet in the coming years, as America has to devote ever more attention and resources to it, China could profoundly affect the choices the alliance faces. ■

The next three decades

NATO at 100

A new transatlantic bargain could help the allies reach a century

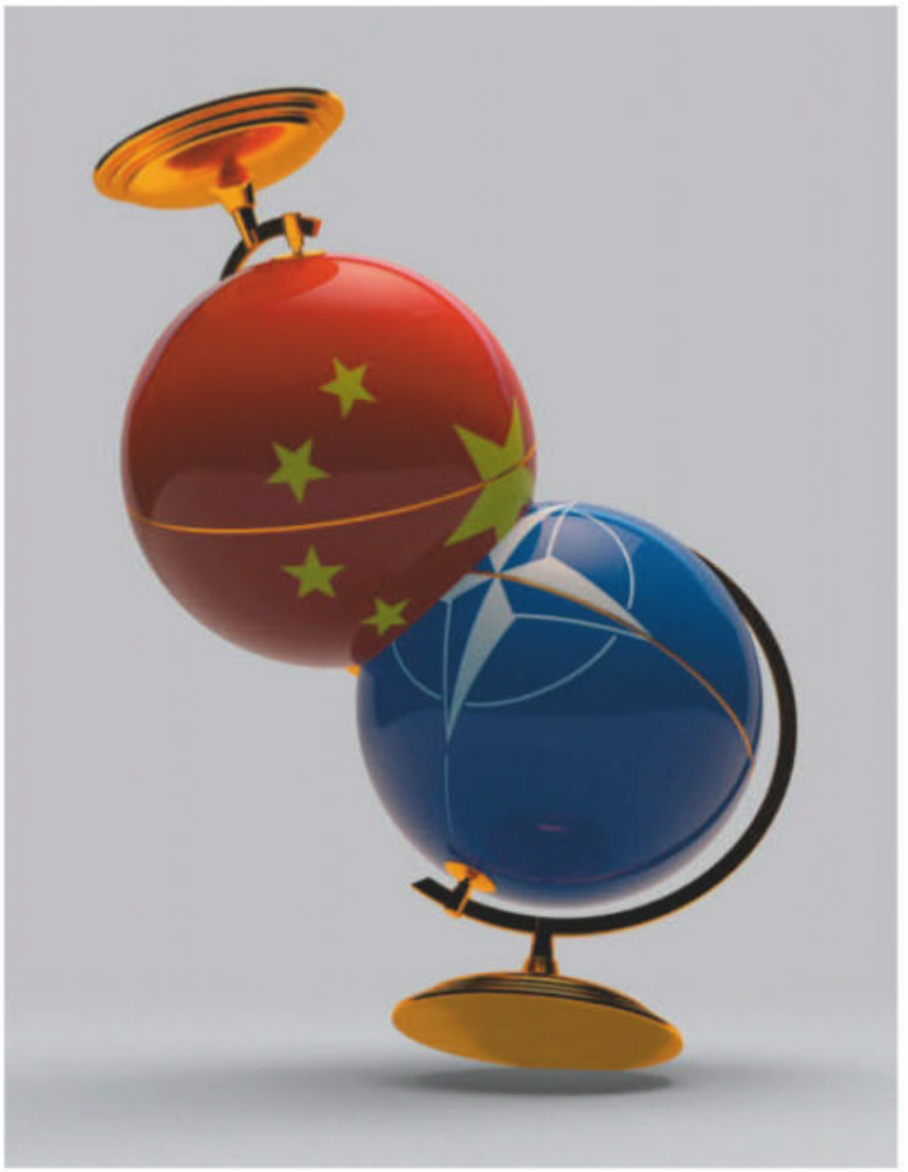
THE TRANSATLANTIC alliance deserves a resounding "happy birthday". It kept the peace for 40 years of cold war, protected western Europe from communism, helped stabilise central Europe after the Soviet Union's collapse and enabled unprecedented prosperity. It has shown admirable openness, adaptability and commitment. "We're incredibly complacent about the continuous delivery of peace and stability in our lives, and a hell of a lot of that depends on NATO," says Sir Adam Thomson, a former British ambassador to NATO, now with the European Leadership Network, a London-based think-tank. "We tend to take it for granted."

In many respects the alliance looks stronger than ever. It will soon have 30 members, encompassing more than 930m people. Together they produce around half the world's GDP and account for about 55% of global defence spending. The allies are getting on with a long to-do list drawn up at last year's summit, from ambitious readiness plans to new command centres.

Yet as this special report has pointed out, NATO is also deeply troubled. Douglas Lute and Nicholas Burns, two former American ambassadors to NATO, say Donald Trump has "hurtled the alliance into its most worrisome crisis in memory". In a thorough assessment of "NATO at Seventy" for Harvard Kennedy School's Belfer Centre, they set out a daunting array of the challenges it faces. The greatest of them is "the absence of strong, principled American presidential leadership for the first time in its history".

Still, in some ways Mr Trump has done NATO a favour by concentrating minds on the need for the allies to spend more, and do more, for their own defence. And he has been right to highlight the German problem. To update Lord Ismay's aphorism, NATO now needs Germany to be up, not down.

Mr Trump has also been an antidote to complacency. He has ▸▸



provoked the alliance into re-examining the fundamental reason for its existence, prompting Congress to spring to its defence and ministers to write editorials explaining why the world still needs NATO. He has set off a frenzy of thinking about the future of European defence. If anyone had started to wonder whether NATO mattered any more, Mr Trump (with more than a little help from Mr Putin) has ensured that it will continue to receive attention.

By keeping Europe secure, NATO serves America's interests. Its defenders say that Mr Trump's transactional approach is wrongheaded. Yes, America's allies should do more, but their contribution adds to American strength, providing forces, firepower and valuable bases. In a coming era of great-power rivalry, it would be folly to give this up. America has many allies, in NATO and in Asia, which makes it quite different from China and Russia, says Mr Burns: "They have none."

These are good reasons for expecting NATO to survive Mr Trump. But beyond the storms of his presidency, the geopolitical climate is anyway changing. If NATO wants to remain strong in the decades ahead, it needs to start preparing now. That will involve still more adaptation, none of it easy. Three areas stand out.

One is speed. Having to co-ordinate 30 countries makes quick decisions harder, yet they will become ever more vital. Streamlining NATO's bureaucracy should help, but it is not enough. James Stavridis, who served as supreme allied commander for Europe, says that if he could wave a magic wand, decisions in the North Atlantic Council (NAC), where members vote, could be reached with a three-quarters majority rather than unanimously. In some circumstances, even that would be too slow: it can take three hours to get the NAC together. "If you have to convene the North Atlantic Council as a missile is flying to Manchester, it's bye-bye Manchester," notes Sandy Vershbow, a former NATO deputy secretary-general. Clear protocols for responses are needed, too.

Second, the alliance should take a hard look at its priorities. Currently it finds itself doing both beefed-up collective defence and crisis-management at the same time. It risks being pulled in too many directions so as to keep its diverse membership on board. Sooner rather than later it should confront tough strategic choices. Which missions could it drop? How much attention should it pay to areas of rising strategic importance, such as the Arctic? Should it continue to keep the door open to new members, or has its expansion reached its practical limits for now?

A fundamental realignment

The third shift in thinking is the one likely to matter most if NATO is to maintain its relevance: adjusting to China's rise. As America's strategic priorities pivot further towards the Pacific, what are the implications for the transatlantic alliance? The European allies are only just starting to become aware of how America's emerging rivalry with China could affect them—through wariness of Chinese 5G telecoms technology, for example, or of infrastructure investments through President Xi Jinping's Belt and Road Initiative. Not all member countries are equally concerned about this, but they should be in no doubt about its future significance.

Small initial steps for NATO could include gestures such as opening a diplomatic dialogue with China and flying the flag in friendly countries in the Pacific, including Australia and Japan. The more global-minded European allies, notably France and Britain, are becoming more involved in freedom-of-navigation and overflight operations in the Pacific.

But eventually a clearer division of labour between Europeans and Americans will need to be considered. Stephen Walt of Harvard Kennedy School says there could be a time for "a new transatlantic bargain" between America and its European allies: America agrees to stay on in Europe, but at a reduced level of engagement; the Europeans agree to up their game in their own region and take on board America's concerns over China on trade and intellectual property. At the moment the chances for such a grand agreement look slim. It presupposes a shared view of the world that does not exist. Europe and America are at odds on many fronts. Mr Trump has described the EU as a "foe" on trade. The Europeans are making efforts to get round America's extraterritorial reach over sanctions on Iran.

And where would the leadership for an ambitious new division of labour come from? NATO's big players are all distracted: America by the Trump show, Britain by Brexit, France by protests and Italy's populists, Germany by the end of the Merkel era and Turkey by its temptations to wander away from Europe. In such circumstances, just staying together as allies looks like a heroic task.

Still, it would be foolish to underestimate NATO's ability to reinvent itself. It has done so before. If it wants to be in rude health at 100, this septuagenarian is due for another metamorphosis. ■

ACKNOWLEDGMENTS A list of acknowledgments and sources is included in the online version of this special report

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Health products

Spin doctors

TIANJIN

A scandal surrounds a big seller of traditional medicine. How much is local government to blame?

THE FAKE advertisement was uncommonly cruel. Zhou Erli, a farmer from Inner Mongolia, first noticed it gaining popularity online when his four-year-old daughter, sick with cancer, was in intensive care. His girl was smiling in a photograph being circulated by Quanjian, a big health-products company. The ad claimed she had fully returned to health after taking the firm's miraculous herbal remedies.

In fact, says Mr Zhou, bosses at Quanjian had told him to take his daughter off her chemotherapy treatment at a state-run children's hospital in Beijing. They had offered what they assured him was a potent new cure: a drink made of jujube powder and gromwell-root oil. He had spent 5,000 yuan ($800) on it. But his daughter's cancer had spread. In 2015, after the ad appeared, Mr Zhou filed a lawsuit alleging that the company had duped him, but the court dismissed his case for lack of evidence. Little Zhou Yang died a few months later.

Her story might have ended there, had it not been taken up by a popular online myth-busting forum, Dingxiang Doctor. In late December, in an article that went viral, the website took aim at Quanjian, which it said had been taking in billions of yuan from annual sales. It had investments in football and equestrian clubs, cosmetics, banking, insurance and hotels. The article said the firm had earned huge profits by swindling patients. It accused Quanjian's founder and boss, Shu Yuhui, of running the company like an illegal pyramid scheme. Quanjian's salespeople, Dingxiang Doctor said, made money mainly by corralling new ones to join, earning commission on their sales too.

The Communist Party's palliative

Amid an online outcry, the government reacted swiftly. Mr Shu's name disappeared from a list of advisers to the legislature in Tianjin, a northern port city where his company is based. On January 7th state media reported that Mr Shu and 17 others had been arrested. Market regulators launched a 100-day inspection of the health-product business. By March 1st more than 4,800 cases had been lodged against firms involved in it, the regulators said.

On a recent visit to the site of Quanjian's headquarters in a semi-rural suburb of Tianjin, a lone employee said the firm was closed. Nearby noodle restaurants that once fed its staff were shuttered. Ownership of the firm's crown jewel, Tianjin Quanjian FC (now Tianjin Tianhai), has been transferred to the local football association. The club is seeking a new investor.

It has been a remarkable fall for one of Tianjin's health giants. A guard says the headquarters was once busy "like Tiananmen Square". Buses from out of town daily disgorged hundreds of Quanjian "teachers", as the firm called its senior salespeople. Mr Shu once boasted that his 10,000-bed cancer hospital was the largest in Asia. It is now shut.

In the company's heyday, over 7,000 shops nationwide offered Quanjian's signature "fire therapy" (patients are draped in alcohol-soaked towels and set alight). Among its popular products were "negative-ion" sanitary pads that claimed to prevent menstrual cramping and cervical cancer. The brand's insoles, which purport to cure arthritis and heart disease, are still available online. A pair sells for 1,068 yuan.

Tianjin has been known since imperial days for health-care research and manufacturing. Tong Ren Tang, a 350-year-old herbal-medicine business, is based in the nearby capital. It is the best-known maker of traditional Chinese medicine, a system of often unproven remedies that goes back 2,500 years. Zhu Yonghong, co-founder of Tasly, a big traditional-medicine firm in Tianjin, says Quanjian and firms like it set up in Tianjin to profit from Tong Ren Tang's aura. According to Mr Zhu, they "blurred the line" between regulated traditional ▸▸

medicine and outright quackery.

Quanjian's founder, Mr Shu, first came to the port to work for Tianshi (known abroad as Tiens), a large seller of health products. The company's name means "heavenly lion". Two such beasts with gigantic wings flank the entrance to Tianshi's headquarters. The firm says it has more than 10,000 staff in 110 countries. It also owns hotels, a college and a hot-spring resort. Its chairman, Li Jinyuan, a former oilfield worker, is Tianjin's richest man. In 2015 he took 6,000 staff to France on a splashy holiday. Sustaining this are Tianshi's machines offering diagnoses based on palm-readings. They claim to detect ailments ranging from HIV to hepatitis, for which the firm offers pricey treatments.

According to his biography, Mr Shu later set up Quanjian with 600 secret traditional recipes (he is said to come from a family of herbal doctors). A board in the entrance to his shuttered hospital reads: "To say something is real that isn't, is deception; to make something real that isn't, is skill." A user on Weibo, a Twitter-like site, sums up the appeal: "Quanjian tells patients they will live when hospitals tell them they will die."

To boost demand for its products, Quanjian devised an alluring scheme. Buying seven pairs of the magic insoles would earn a member the right to become a distributor. To innocent consumers, that seemed above-board: Quanjian has all the trappings of a legal direct-sales firm, including licences from the Ministry of Commerce (in February the ministry said it had suspended the issuing of permits for direct selling). But Quanjian's pyramid-type recruitment method is banned. Companies that use it are commonly described in China as "business cults". That is because gangs often ensnare jobseekers into joining. Ecstatic rallies keep alive participants' illusory dreams of enrichment.

Local governments, eager to foster the growth of job-creating firms, have an incentive to turn a blind eye. Last year Tianjin's said Quanjian, as well as Tianshi (which is involved in direct selling but has not been publicly accused of wrongdoing), were "brilliant national corporations" that were socially responsible and innovative. Health-product firms are among Tianjin's most valuable companies: Quanjian paid 147m yuan in local taxes in 2017.

This causes some bosses in Tianjin's health industry to wonder whether the authorities' action against Mr Shu may be about more than his company's products and sales techniques. Could he have offended a powerful politician? After all, many cases similar to that of Mr Zhou's daughter have gone unheeded by the government. Since 2009, according to court papers, activities carried out in Tianshi's name have been linked to 155 deaths and 2,781 cases of illegal activity (the company blames these on criminals usurping its name). On February 18th police in Tianjin rejected a case filed by Mr Zhou in which he accused Quanjian and its boss of using his daughter for false advertising.

The outcome of another recent case is disheartening. In December 2017 Hongmao Yaojiu, a popular traditional tonic from Inner Mongolia that has long billed itself as a cure-all for the elderly, was denounced online by a doctor as ineffective and harmful. Police jailed him for three months, despite public indignation (soon censored online). On his release he apologised publicly for "not thinking clearly". On China's social media, it did not go unnoticed that an evening news segment on the Quanjian arrests was followed by an ad for the tonic. ■

Comedy

A blind eye to turn

CHANGCHUN

Despite the Communist Party's war on smut, performers keep delivering it

"CUT! THAT was dead awful. Deliver with more passion!" roars He Xiaoying at a group of adolescent girls who had been rehearsing a comedy routine. Ms He is the eponymous head of a boarding school in the north-eastern city of Changchun, in China's rust belt. Her mission is to train young people in the art of *errenzhuan*, or "two-person turn", a traditional form of comic song-and-dance that often involves raunchy gags. The children also study subjects that are more academic, but these take a back seat.

There are at least a dozen such schools in the three provinces of the north-east where *errenzhuan* originated. Ms He's 80-odd students, most from poor backgrounds, dream of appearing on national television, or, failing that, at a well-known theatre. In a region plagued by unemployment, some people see a promising future in comedy.

Don't call us "cultural garbage"

Errenzhuan requires arduous training. It involves duets, typically between a man and a woman, that are often delivered in seven- or ten-character rhyming lines. The dance is usually in folk style, as is the performers' dress (though modern touches are permissible). In the north-east, where *errenzhuan* has many fans, some proudly call it the world's hardest form of comedy.

It is certainly among the most notorious in China for its bawdiness. A common routine is called "The 18 Touches". One variant of this involves a female performer cracking lewd jokes while stroking the genitals of her male counterpart (with his trousers on). In 2004 Zhao Benshan, the godfather of *errenzhuan* and China's first billionaire comedian, said *errenzhuan* without smut was not *errenzhuan* at all.

President Xi Jinping is no fan of lewd comedy. In 2014, in a speech on the role of the arts, Mr Xi said some artists were spewing out "cultural garbage". He demanded that creative works serve the Communist Party and not "provoke the ecstasy of the senses". It may be no coincidence that Mr Zhao has not appeared on national television's Chinese New Year gala since Mr Xi assumed power in 2012. He had once been a regular (in cleaned-up form) on the hugely popular show. Last year Mr Zhao was booted out of the advisory body to China's parliament. His flamboyant lifestyle may also have contributed to his fall from grace.

Mr Zhao is now leading a campaign to bowdlerise *errenzhuan*. In his chain of theatres he puts on only family fare. Dirty jokes and swearing are all but banned. Other venues have followed suit. Television stations only invite the cleanest *errenzhuan* performers. Ms He, the head teacher, says she does not teach her students any dirty lines or gestures. A Changchun resident says this trend may explain why attendance at *errenzhuan* theatres is falling.

But head to public parks in the north-east and you will find the art form refreshingly unchanged. *Errenzhuan* entertainers often make extra money with impromptu, open-air gigs. On a recent afternoon in Changchun's Labour Park, an animated crowd surrounds an *errenzhuan* duo. Egged on by the audience, the pair engage in profanity-laced banter and sway their hips suggestively. After the show the crowd disperses, but quickly forms again around another act nearby. It involves a male performer reaching up his female partner's dress. The woman smiles at him seductively, then slaps his face. The park's security guards, whose job might be supposed to include putting a stop to such displays, appear happy to watch. ■

Chaguan | Let policy wonks proliferate

Xi Jinping is encouraging a boom in "independent" Chinese think-tanks. What does that mean?

FRUSTRATED BY the quality of the advice he was receiving, the first Song emperor of China had an idea. The tenth-century ruler, it is said, promised that officials would not be executed for disagreeing with him. President Xi Jinping appears to be testing a less flamboyant remedy to a similar problem. To ensure a supply of diverse opinions, even as public debates face strict controls, Mr Xi is encouraging a boom in "think-tanks with Chinese characteristics".

State-funded think-tanks, many of them serving individual ministries or Communist Party bodies, have long existed in China. But recent years have seen a flourishing of think-tanks that eschew direct state sponsorship. Some are privately funded foundations, or attached to universities. Others register as private consulting firms, bringing both flexibility and vulnerability.

The boom throws up puzzles. In the West, measuring clout is easy. When a Democrat wins the White House, a flotilla of progressive wonks bobs across Washington from places like the Brookings Institution to join the government. When a Republican is elected, conservative wonks who share the winner's politics take their turn— hard-edged partisan think-tanks have hit the jackpot under President Donald Trump. In Europe, think-tanks send staff into government as special advisers and work to shape public debate. Assessing influence is harder in China, where the revolving door is one-way: officials may retire into think-tanks, but seldom return to government. And the party in power never changes.

In China, real influence is rarely wielded in public. Among researchers, the term *neibu* ("internal") is used a lot. Each day, favoured think-tanks and universities send policy papers via *neibu* channels to Mr Xi and other leaders. If he reads a paper, or—a high honour—scrawls a note in its margins, aides send word to its authors, casting a roseate glow over all involved. Well-connected think-tanks send staff to internal government and party meetings. Behind closed doors, their scholars weigh in on big, divisive questions. An example is the Belt and Road Initiative, a scheme to connect the world with railway lines, telecommunications networks and other infrastructure. Some think-tanks argue that China gains by funding and controlling the project. Others call it a financial and diplomatic burden that should be shared with other countries. During the trade war with America, scholars have been summoned to advise on the wording of Chinese government announcements. Smart think-tanks prepare public and *neibu* versions of papers. They are also asked by officials to advance arguments that bigwigs prefer not to make aloud. Distrust any policy wonk who claims to speak for a grandee, though, says a prominent researcher. "If he is really close to those VVVIPS, he cannot tell you."

Chaguan asked the heads of some very different think-tanks about another puzzle: that proximity to power is good for prestige but bad for credibility, especially in an autocracy. Diplomats and foreign analysts call the China Institutes of Contemporary International Relations (CICIR) the country's shrewdest foreign-policy think-tank, despite (or perhaps because of) its links to the deep state. With over 200 scholars following both individual countries and broad questions of national security, CICIR's leafy campus resembles a small university. Paramilitary guards and massive gates hint at CICIR's (unacknowledged) affiliation with the Ministry of State Security, China's main intelligence service. CICIR's president, Yuan Peng, notes that Western think-tanks use punchy phrases and attack politicians for past blunders. CICIR uses "subtle" language to describe present realities accurately and to offer constructive suggestions about the future, he says. Mr Yuan accepts no lessons about objectivity from the West, calling American think-tanks beholden to rich ideologues: "Western think-tanks are independent from government, but not from interest groups."

Wang Huiyao leads the Centre for China and Globalisation, a think-tank that promotes free trade and greater opening to the world. Mr Wang is proud that his "independent" think-tank is funded by Chinese entrepreneurs and companies, not the state. But he is an outsider with *neibu* access, serving as an appointed adviser to the State Council, or cabinet, and as vice-chairman of a group that seeks to influence foreign-educated Chinese, the Western Returned Scholars Association. Today's China may not allow political competition, but it has opened a door to "political-proposal competition", he argues.

The Chongyang Institute for Financial Studies, which is backed by private donors but attached to Renmin University, an elite academy in Beijing, is headed by Wang Wen, a rising star on what might be dubbed the Make China Great Again right. He downplays his rumoured access to powerful folk, insisting that Chinese leaders consult widely, gathering opinions "like bees collect nectar". The institute's walls are thick with framed photographs of foreign dignitaries, for favoured think-tanks also do quasi-diplomatic work.

Sending honest scholars into exile: a long tradition

True independence brings costs. The Unirule Institute for Economics, founded in 1993 by distinguished liberal reformers, is under siege. It currently perches in a small apartment in north Beijing, down a hallway crowded with bicycles and buckets of yellowing vegetables. The government last year cancelled the business licence of one of its sponsoring entities, after Unirule criticised policies that favour state monopolies and hamper private firms. Authorities say its fault was hosting training courses without an educational permit. Its director, Sheng Hong, was until January a member of Chinese Economists 50 Forum, a body closely linked to Liu He, a deputy prime minister who is Mr Xi's chief economic adviser. Mr Sheng says forum members feel they are offering advice to national leaders. But access comes with "invisible limitations". Too often, sensitive subjects are not raised, he says.

Wise emperors understood this. Diverse opinions may provoke autocratic rulers. What really hurts is the advice they never hear. ■

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Ukraine

Tragicomedy

KIEV

An actor could be Ukraine's next president

A MEMORIAL COMPLEX featuring photographs of brave protesters fills Kiev's Independence Square, or Maidan. Displays reproduce Ukrainians' Facebook posts from key moments during the movement that overthrew the former president, Viktor Yanukovych, five years ago. "I stopped counting covered bodies," reads one, recalling the day when police opened fire on demonstrators. "How many of them are there?" The revolution was dubbed the "Revolution of Dignity". Yet ahead of a presidential election on March 31st, the campaign is anything but dignified.

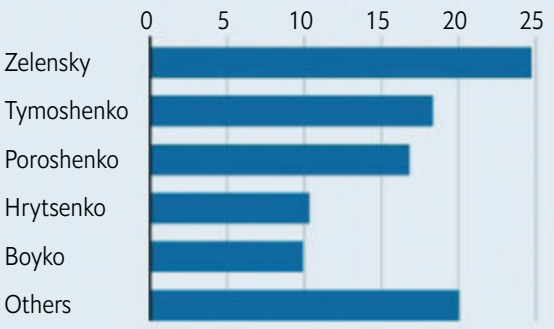
Among more than 40 candidates, the front-runner is Volodymyr Zelensky, a comedian and actor best known for playing a teacher who becomes president in a popular television show called "Servant of the Nation". He is now attempting to turn make-believe into reality, presenting himself as a fresh face to a population frustrated with the old elite. "People want to show the authorities the middle finger, and he is playing the role of this middle finger," says Volodymyr Fesenko, a political analyst.

The two other main contenders are the incumbent president, Petro Poroshenko, and a former prime minister, Yulia Tymoshenko. Many reformers had pinned their hopes on Slava Vakarchuk, a rock star who declined to run. Anatoliy Hrytsenko, a former defence minister, has the backing of many opinion-formers but few voters. The choice in the second-round run-off, on April 21st, will be between the lesser of two evils, and the stakes are high.

Ukrainians are frustrated with their post-revolutionary leadership. Three-quarters of them say the country is headed in the wrong direction, despite the fact that Ukraine has moved closer to Europe (it now has visa-free travel to the EU, for instance). That is because the central promise of the revolution—uprooting the country's deeply corrupt, oligarch-controlled political system—remains unfulfilled. A recent Supreme Court decision to strike down a key anti-graft law passed in 2015 exemplifies the backsliding. Falling living standards, rising utility bills and a simmering war with Russia in the country's east have meant steep sacrifices for ordinary people. Polls show that more Ukrainians now mistrust their own Rada (parliament) than they do the Russian media, which spew propaganda to fuel the conflict.

Showtime

Ukraine, presidential candidate support, % polled who intend to vote and have chosen a candidate*



Source: Rating Group *Poll published March 11th 2019

Nowhere is the oligarchs' enduring influence more evident than in the campaign. A successful presidential run requires exposure on television, but the main channels are still owned by oligarchs. "We made a revolution, but you can't win elections when the oligarchs control the media," says Vitaliy Shabunin, an anti-corruption activist. The main oligarchic contest is between President Poroshenko, a sweets magnate whose net worth has grown while in office and who owns his own TV channel, and Ihor Kolomoisky, a billionaire who saw his bank, PrivatBank, nationalised and accused of fraud. Mr Zelensky's ties to Mr Kolomoisky have raised eyebrows. His show runs on Mr Kolomoisky's network, 1+1, which has promoted ▸▸

Mr Zelensky's presidential bid; his circle includes people close to the oligarch. (Both men deny any links.) Yet some reformers and many voters see him, however imperfect, as the only chance for change. "We've had lots of experienced folk, but haven't got anything from them," says a schoolteacher eyeing the Maidan memorial.

One evening earlier this month, Mr Zelensky could be found on set in a chilly Kiev basement, in costume as his man-of-the-people-turned-president character, Vasyl Holoborodko. The show's latest season, set to air in the heat of the campaign, serves as Mr Zelensky's main political advertising. In one scene being filmed, Mr Zelensky's character prepares to take the oath of office. A trio of historical figures—Plato, Prince Vladimir of Kiev and the Slavic philosopher Grigory Skovoroda—emerge from the shadows to advise the would-be president. "What is power?" Plato muses.

What Mr Zelensky would do with power remains a mystery. "I want to do something to change the mistrust towards politicians," Mr Zelensky says, unhelpfully. He has offered little indication of what exactly he plans to do, beyond vague assurances to maintain Ukraine's Western course, improve the investment climate and end the war in the east. He has promised to crowdsource his cabinet and his policies. When pressed to name world leaders he admired, Mr Zelensky invoked Brazil's Jair Bolsonaro, a right-wing populist, and France's Emmanuel Macron, a liberal technocrat. Western diplomats find him frighteningly unprepared. Many fret that Vladimir Putin will gobble him up like one of Mr Poroshenko's chocolate bars.

The old guard hopes that voters will opt for experience once more. Mr Poroshenko is running on a platform of "army, faith and language", pushing patriotism to distract from his failure to fight corruption. Ms Tymoshenko has reinvented herself as a populist, raging against the IMF and its demands that Ukraine raise its gas prices to market rates. Both hope to win the likely run-off with Mr Zelensky on April 21st, and then to compete for control over the Rada in a parliamentary election due in October.

What worries observers more than who will win is whether the election will be seen as legitimate. Many fear Russian disinformation and hacking. A greater threat, however, may come from the candidates themselves. Both Mr Poroshenko and Ms Tymoshenko have faced allegations of vote-buying. The presence of private armies with murky loyalties, an angry populace and an abundance of weapons makes for a volatile mix, as seen last week when dozens of officers were wounded in clashes with ultranationalists opposed to Mr Poroshenko. If Ukrainians wake up on April 1st distrusting the results of the first round, it will be no laughing matter. ■

Turkey, Russia and America

Weapons of choice

ISTANBUL

Turkey risks American sanctions for the second year in a row

FOR TURKEY's president, Recep Tayyip Erdogan, a deal is a deal. "There can never be a turning back," Mr Erdogan said on March 6th, referring to his country's purchase of a Russian air and missile defence system, which America and NATO strongly oppose. "Nobody should ask us to lick up what we spat."

The two S-400 batteries Turkey has ordered from Russia, which come with their own radar, command centre and missile launcher, for a reported $2.5bn, pack more bang for the buck than most rival systems. But they may end up costing Turkey much more. Unless it walks away from the deal or mitigates the risks the system poses to NATO, the country could end up on the receiving end of American sanctions. The clock is ticking. Russia plans to deliver the first of the batteries by July of this year.

Having simmered since 2017, when the purchase was made public, the row over the S-400s has recently come to a boil. Days after Mr Erdogan's statement, the Pentagon warned that Turkey would face "grave consequences" for buying the system. Two senior State Department officials are said to have delivered a similar message in person the previous week.

According to the Pentagon, Turkey risks expulsion from the F-35 programme, under which the country stands to acquire 100 fighter jets from America, and sanctions under a law (known as CAATSA) that targets transactions with the Russian intelligence or defence sectors. That would be messy. America would have to return over $1bn in Turkish contributions to the F-35 programme. Turkish manufacturers supply vital components; replacing them would take up to two years, delaying deliveries to other allies.

From Russia, with trouble

The row would not be a first. Last year the Trump administration responded to the arrest of an American pastor on outlandish terrorism charges by freezing the assets of two of Mr Erdogan's ministers and doubling tariffs on Turkish steel and aluminium products. Turkey eventually released the pastor, but not before its currency plunged. Turkish markets have already shuddered at the thought of a showdown over the S-400s. Having recovered from last summer's battering, the lira has fallen steadily over the past seven weeks (see Finance and Economics).

Mr Erdogan insists there is no conflict between buying the Russian weapons system and his country's NATO commitments. Others disagree. American and NATO officials have repeatedly warned that Turkey would not be able to plug the S-400 into the alliance's early-warning system. They also say the system's radars might allow Russia to spy on the F-35s, compromising their stealthiness.

Had Turkey's interest in the S-400 been intended merely to nudge America into making Turkey a competing offer, it would have been a success. Late last year America proposed to sell Turkey a package of 140 Patriot missiles for $3.5bn, but only once it cancelled the deal with the Russians.

Mr Erdogan has rejected the offer. Turkey might consider buying the Patriots, his government has announced, but not at the expense of the S-400s. Turkey would probably not be able to walk away from the deal even if it wanted to. Doing so would create major problems for Turkey's relations with Russia, particularly when it comes to Syria, says Emre Ersen, an academic at Marmara University. There is speculation in Ankara that Mr Erdogan may try to sidestep the crisis by offering to keep the Russian weapons in storage, or by reselling them to another country. Yet even that may not be enough. America opposes not just the system's deployment, but its purchase.

Most analysts say the question is no longer whether things will come to a head, but how and when. Some think that America may decide to pile on the pressure ahead of local elections in Turkey on March 31st, placing Mr Erdogan in an uncomfortable spot. In theory, America can still grant Turkey a CAATSA waiver. Officials say this is unlikely. Another deadline looms this autumn, when two F-35s are set to arrive in Turkey. Unless the two NATO allies work out a solution, the planes might never touch Turkish soil. ■

German politics

Annegret's progress

BERLIN

Germany's chancellor-in-waiting makes a rightward tilt

DUMPING ON VOTERS is rarely a winning strategy for politicians. But Annegret Kramp-Karrenbauer, who leads the Christian Democratic Union (CDU), Germany's largest party, says her compatriots are becoming "the most uptight people in the world". Ms Kramp-Karrenbauer had been criticised for a joke, made during west Germany's riotous carnival season, about "third-gender bathrooms" for "men who can't decide if they want to sit or stand when they pee". But she was not in the mood to apologise. How absurd to police jokes at a carnival, she thundered last week, going on to defend the rights of carnivores, fireworks fans and children who like to dress up as cowboys and Indians.

The semiotics of carnival in Germany are difficult for outsiders to parse. But what initially seemed a silly-season story now looks like a tactical gambit. Last December Ms Kramp-Karrenbauer narrowly beat a conservative rival in an election to replace Angela Merkel, Germany's chancellor and her mentor, as CDU leader. That put her in the top position to take over as chancellor when Mrs Merkel steps down, as she has promised to do. Many on the party's right who had grown tired of Mrs Merkel's big-tent centrism feared they were in line for years more of the same. Ms Kramp-Karrenbauer wants to change their minds.

She has started by sharpening the CDU's conservative profile. Liberated by her lack of ministerial responsibility, she has accentuated differences with the Social Democrats (SPD), the CDU's junior coalition partner, on everything from pensions to arms exports. Her jabs at politically correct pieties delight the party's base, and the SPD, having been suffocated in coalition with Mrs Merkel, is happy to play along. Indeed, there is a growing sense that German party politics is emerging from a long Merkel-induced slumber.

In policy, too, Ms Kramp-Karrenbauer is signalling a rightward shift. During a recent CDU workshop she backed a policy of closing Germany's borders as a last resort in the event of another migration crisis. That unsettled moderates who had supported Mrs Merkel's open-border approach in 2015, but for now most accept the need for internal bridge-building. The mood in the CDU is "very upbeat", says one MP.

Whether this approach will appeal to ordinary Germans is another matter. Manfred Güllner at Forsa, a pollster, notes that voters who have defected from the CDU have slightly stronger centrist tendencies than those who remain. That suggests a permanent rightward tilt would leave Ms Kramp-Karrenbauer fishing for votes in the wrong pool. Yet as premier of the Saarland, the tiny German state she ran for seven years, Ms Kramp-Karrenbauer pursued a moderate, pragmatic path. Those instincts probably provide the best guide to how she might operate as chancellor.

That question is acquiring fresh urgency. Last weekend Ms Kramp-Karrenbauer issued a set of EU reform proposals in response to an article published a few days earlier by Emmanuel Macron, France's president. Her list—which will have been sanctioned by Mrs Merkel—included provocative calls to close the European Parliament's second seat in Strasbourg, a French city, and for France to hand its UN Security Council seat to the EU. France's unamused ministers were left in the odd position of having to respond not to another government but the leader of a political party.

With the CDU leader thus adopting the air of chancellor-in-waiting, Berlin has taken to guessing when Mrs Merkel will seek to hand over the reins of government to her protégée. Should that happen before the chancellor's term expires in 2021 the SPD might quit the government, triggering an election. Both women insist that no change is imminent, and two-thirds of Germans want Mrs Merkel to serve out her term. But as Ms Kramp-Karrenbauer stakes out her territory, some wonder if the current arrangement can last that long. ■

Croatia

Speed king

SVETA NEDELJA

A superfast new car from an unlikely spot

YOU GET what you pay for. And if you pay €1.7m ($1.9m), next year you can take delivery of an electric car that can reach 412kph (256mph). The C_Two, says Mate Rimac, who builds them, is the most powerful road car ever. "Not electric, not hybrid, not combustion engine, but ever." (Definitional issues mean his claim is sure to be contested, for example by Bugatti or Hennessey.) If you allow time to charge the battery after every 650km, but ignore speed limits, traffic jams and a wait for the Channel Tunnel, you could leave Sveta Nedelja, the town outside the Croatian capital where they are being built, after lunch and be in London, 1,650km away, for dinner.

Croatia's economy grew by 2.8% last year but Mr Rimac's company left it in the dust. A year ago he employed 200 people; now he says he employs 500. In a few years he expects to employ thousands. Thanks to a low national birth rate and high emigration, Croatian companies are experiencing labour shortages. But finding workers is not Mr Rimac's problem. The trouble is that nobody in Croatia has the right experience.

"Eight and a half years ago I was one man in my garage," says the 31-year-old entrepreneur. Now he is planning a 50,000 square-metre campus for his company that other countries would "give their liver for". He thinks many of his compatriots don't like him because they believe he just builds cars for rich people, and because they don't celebrate success. In fact, he says, the 150 new cars he is building are really "the showcase of our technology and a test bed for our

technologies". Jeremy Clarkson, the host of a popular motoring show, said of the earlier version—which cost €1.2m and had a top speed of 355kph—that he had never seen anything "with number plates" move as fast.

But will Mr Rimac stay in Croatia? He pulls up a map that shows where Europe's carmakers and suppliers are. Within striking distance of Croatia there is a forest of dots from northern Italy through to Bavaria and down to Romania and Serbia, but in Croatia itself, "zero", he says bluntly. "I have stayed here because of patriotism, but realistically it would have been much easier and much better for the company to be somewhere else," he says. Unlike Nikola Tesla, another electrically gifted citizen of what is now Croatia, he is staying put for now.

Norway, Switzerland and the EU

Pragmatic v prickly

GENEVA

Two quite different approaches to life on the EU's periphery

THE SWISS are getting ready once again for a referendum that could muck up their relations with the European Union. On May 19th they will have a chance to block an EU law that is meant to protect the continent against terrorism by forcing the Swiss, along with everyone else in Europe's Schengen free-movement zone, to tighten rules on gun use and ownership. Swiss men, most of whom do an annual stint as army reservists, may keep a weapon under their bed at home when they are not on duty. The EU's instruction to curb this privilege, among other things by banning people from possessing semi-automatic weapons, has enraged Swiss on the prickly right, even though their federal parliament has diluted the EU's edict, for instance by exempting members of shooting clubs from such strictures.

In any case, the nationalist Swiss People's Party, the country's largest, still jibs at the Schengen zone's freedom of movement and rails against the European Convention on Human Rights. It argues, for instance, that migrants who commit crimes should be expelled forthwith and that asylum-seekers should be denied legal aid in pursuit of residence; the right lost referendums on those issues three years ago. But if the Swiss repeatedly use referendums in an effort to block such European laws from affecting them and propose nationwide initiatives to amend their own constitution with the same aims, they could be forced out of the convention or even out of the Schengen zone, membership of which is vital for business.

Brexiteers often cite Norway and Switzerland as shiny models for Britain to emulate once the shackles of the European Union have been shaken off. Yet the two countries, though superficially akin, differ sharply in legislation and popular attitudes to Europe. True, both are enviably prosperous and stable democracies, and both laud pragmatism in politics. Yet the Norwegians have much smoother relations with the EU, whereas the Swiss—influenced by a large minority—tend to be twitchy and awkward, even if recent referendums have generally gone against the anti-EU nationalists. Bigwigs in the Brussels bureaucracy dread the prospect that the post-Brexit British will cleave to a Swiss rather than a Norwegian model.

On the face of things, the similarities should outweigh the differences. Both countries, along with remote Iceland and tiny Liechtenstein, belong to the European Free Trade Association (EFTA), which grants access to the single market. Both belong to the Schengen zone: in 2005, 55% of the Swiss voted in favour of joining it. Both keep out of the customs union and have steadfastly refused to join the actual EU, mainly to preserve their own cherished sense of independence and sovereignty. Norwegians said no (by 52.2% to 47.8%) in 1994 and have not been asked again. In 1992 the Swiss rejected a bid to join the European Economic Area, which the other three EFTA members have joined, by 50.3% to 49.7%; in 2001 the Swiss voted overwhelmingly against reopening negotiations to join it. In both countries, minorities of only around a fifth still want to join the EU wholesale; a similar proportion (though it is bigger in Switzerland) want to withdraw from the web of EU arrangements they now have; and easily the largest group—well over half—in each country is satisfied with the way things are. There is not the slightest chance of either country fully joining the EU soon.

Yet the Norwegians seem much happier with their deal. True, there have been complaints about the EU forcing Norway, as part of the single market, to open up its postal services and electricity companies, among other things. And Norway's Progress Party, like the Swiss People's Party, balks at unlimited immigration within the EU's Schengen area.

But the Swiss are regarded in Brussels as a lot more awkward, for two main reasons. First, their relations with the EU are governed by a tangle of more than 100 bilateral agreements. So the EU longs to build a so-called "institutional architecture" to put the Swiss under the roof of Europe's laws.

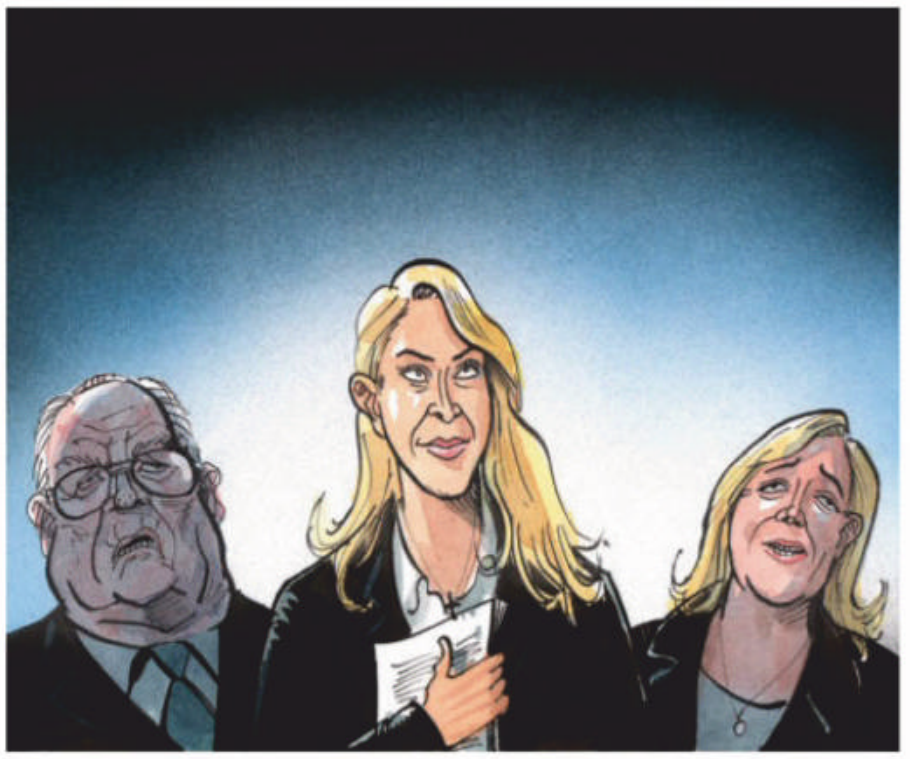
This is where the second hiccup, in the view of Brussels, occurs. For whenever the EU wants to bring the Swiss into line with a new law, the threat of a blocking referendum pops up. The Swiss need only 50,000 signatures (within a timeframe) to put one to the people. This unpredictability constantly creates tension. Last November the Swiss People's Party put forward a "Swiss Law First" initiative to assert the superiority of Swiss law over European. Though it was decisively defeated (on the same day as an initiative to ban the dehorning of cows and goats was more narrowly fended off), such events make relations between Switzerland and the EU endlessly twitchy.

Because of its long history of neutrality, Switzerland is oddly isolated in the midst of Europe. It joined the UN only in 2002 and has never bid for a seat on its Security Council. Norway, by contrast, despite its refusal to join the EU, is outward-looking, with an energetic foreign policy that punches above its weight and has pushed it into diplomatic peace missions in such far-flung places as South Sudan, Colombia, Sri Lanka and Israel-Palestine. With its bitter involvement in the second world war, its border with Russia, vast territorial waters and an Atlantic naval and fishing fleet, it remains a vigorous member of NATO. Though many UN agencies are housed in Geneva, the Swiss are careful not to take sides when disputes arise—unless their own sovereignty is threatened. There is little talk of diplomatic or economic fraternity between Switzerland and Norway. And Brexiteers mention a "Swiss option" much more rarely these days. ■

When EU pry it from our cold, dead hands

Charlemagne | Meet Marion Maréchal

Marine Le Pen's niece takes her crusade to protect Catholic France into the classroom



The revamped Confluence neighbourhood of Lyon is a laboratory for modern eco-living. A self-driving electric bus runs along the river Rhône, and green architecture overlooks converted docks. Waterfront cafés serve health food, and arts centres rise on former industrial land. The new influx of metropolitan types into the district helped Emmanuel Macron win fully 82% of the vote in the second round of the French presidential election in 2017 against the nationalist Marine Le Pen.

Yet today this neighbourhood is also the improbable new home to a rather different sort of experiment, run by the youngest member of the Le Pen political dynasty. In a side street a private graduate school, the Institute of Social, Economic and Political Science, opened its doors last autumn. It is the brainchild of Marion Maréchal, niece of Marine, and granddaughter of Jean-Marie, founder of the National Front (now the National Rally). In theory the 29-year-old Ms Maréchal has given up politics, having been elected to the National Assembly for a term in 2012 while still a law student. In reality the third-generation Le Pen has ambitious plans to shape the agenda on the right—from outside electoral politics.

France may cherish conceptual thinking, but its aspirant politicians usually tread a route to electoral office via jobs as party hacks or on ministerial staff. Time spent in think-tanks or academia, American-style, is uncommon. What makes Ms Maréchal's choice arresting is not that it reflects her political retirement: sitting in an empty classroom at the Lyon site, she states unambiguously that "I will certainly go back into politics." It is, rather, that she sees the spread of ideas, and honing of a right-wing ideology, as a means of "continuing to be in politics, but in a different way".

Dismissed by French educationalists as a gimmick, the school is a centre of training, not research. It offers two-year diplomas—not yet approved by the French state—to just 90 students in social sciences and business. Class topics, pinned to the wall in the entrance hall, range from media training and leadership to "France, Christianity and secularism" and "world Islamist organisations". This push to break the "ideological conformity" of French thinking is part of what Ms Maréchal calls "cultural politics" or "meta-politics". "Our fight cannot only take place in elections," she told the Conservative Political Action Conference in Washington last year.

Ms Maréchal calls her brand of politics "conservative". Which is telling, not least because the word is rarely used in France to define politics, and carries American echoes. Indeed, Benjamin Haddad, of the Atlantic Council in Washington, sees a parallel between the youngest Le Pen's plans and the way American conservatives built institutions to mount a takeover of the Republican Party ahead of Ronald Reagan's election in 1980. She is in contact, if irregularly, with Steve Bannon; and the former editor of the London edition of Breitbart News is on her school's advisory board. The conservative label also reflects Ms Maréchal's obsession with preserving French Catholic identity, in an attempt to put an acceptable face on what is often a toxic nativist discourse. If Ms Maréchal rails against French secularists, who chase nativity scenes from town halls at Christmas, her main gripe is mass Muslim immigration. "I don't want France to become a land of Islam," she says. The "great replacement" theory popularised by Renaud Camus, an essayist who warns that Europe will be demographically swamped, is "not absurd", she adds, quoting a study suggesting that the "indigenous French" will be a minority by 2040. "Just like you," she told her Washington audience, "we want our country back."

Perhaps most striking, Ms Maréchal's embrace of the word "conservative" reflects a political strategy that sets her apart from her aunt. Marine Le Pen is more exercised by unfettered capitalism and "savage globalisation" than by family values, in line with her courtship of the working-class former Communist vote in France's rustbelt. Hers is a classic anti-elite populism—her slogan for elections to the European Parliament in May is "Let's give power to the people"—and she wears the populist tag as a badge of pride.

Ms Maréchal, like her grandfather, is more attuned to the economic worries of small businesses and artisans. And her core project is the defence of a France of church spires, rural roots and family values, which taps into a seam of Catholic nationalism. Unlike her aunt, she marched against gay marriage. Naturally, she does this with a modern French twist: Ms Maréchal is separated from the father of her young daughter, and photos of her with a member of Italy's Northern League have made the celebrity press. But Ms Maréchal's aim is not, Italian-style, to unite the populist right and left; "I don't call myself a populist," she says. It is, rather, to merge the right and the far right, by allying the working-class vote with that of the "*bourgeoisie enracinée*" (rooted bourgeoisie).

A new Maréchal plan

Plenty of obstacles stand in the way, among them historical baggage and wide differences between the far right and the French Republicans over Europe, not to mention Ms Le Pen's tight grip on her own party. Ms Maréchal will not challenge her aunt any time soon. Yet party politics in France, and in Europe, are unusually fluid. The Republicans have bled moderates to Mr Macron, shifting the party's centre of gravity to the right. One ex-deputy, Thierry Mariani, recently defected to Ms Le Pen. Italy shows how unlikely political bedfellows can nonetheless end up together, and in power.

Above all, Ms Maréchal is in no rush. She stands to benefit from the broader success of reactionary books (by authors such as Eric Zemmour) and journals. *Valeurs Actuelles*, a right-wing magazine, sells more copies each week than *Libération*, a leftish paper, does each day. The editor of *L'Incorrect*, a monthly, sits on Ms Maréchal's advisory board. It was in 1992 that the youngest Le Pen made her debut, as the blonde infant on a campaign poster in her grandfather's arms. Today, confessing "admiration" for "his struggles", she is playing the long game. It would be rash to ignore her. ■

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Brexit and Parliament

Three strikes

After yet more votes against her Brexit strategy, Theresa May is to beg the European Union for more time. But what will she do with it?

THE SYMBOLISM was painful. Facing the reality of another lost vote in the Commons on March 12th, Theresa May lost her voice too. The prime minister croaked that, now that MPs had decisively rejected her Brexit deal for a second time, by 149 votes, they faced "unenviable choices". But the truth is that, along with her voice, she has lost control of the Brexit process.

That was brought home a day later when MPs voted against leaving the European Union with no deal, on a motion proposed by cross-party backbenchers rather than the government. In a further sign of lost control, four cabinet ministers defied their party whip, yet escaped sanction. The motion does not eliminate the risk of a no-deal Brexit, since under both British and EU law this remains the default course. But it shows that MPs have rejected not just Mrs May's Brexit plan but also her mantra that no deal is better than a bad deal.

Hostility to a no-deal Brexit is understandable. The government's analysis shows it would inflict heavy economic damage, disrupting supply chains and causing chaos in ports, airports and on roads. Brexiteers say the EU would immediately offer Britain a series of mini-deals. But the EU is clear that contingency plans for no-deal protect its 27 members, not Britain. As if to confirm this, Brussels expressed concerns about British plans this week to cut most tariffs and impose no customs controls on the Irish border in the event of a no-deal Brexit. Such a smugglers' charter would, the EU thinks, breach World Trade Organisation rules.

After such a difficult week the prime minister must sympathise with Shakespeare's character Dick, who declares that "the first thing we do, let's kill all the lawyers." For it was her own attorney-general, Geoffrey Cox, who scuppered the chances of winning recalcitrant MPs over to her deal, precipitating her Commons defeat.

It was not meant to be like this. Late on March 11th Mrs May had rushed to Strasbourg to meet the European Commission president, Jean-Claude Juncker, and win some last-minute concessions from the EU over the Irish "backstop", an insurance policy to avoid a hard border in Ireland by keeping the entire United Kingdom in a customs union with the EU. The fear of Tory Brexiteers and of the Northern Irish Democratic Unionist Party (DUP) was of being stuck in this backstop with no escape. Mr Juncker duly agreed to a new legal text promising not only that the backstop would be temporary but also that the EU would do its utmost not to use it. And Mrs May appended a unilateral declaration, which the EU agreed not to oppose, asserting Britain's right to exit the backstop.

Her hope was that these new texts would allow Mr Cox to soften the warning he gave about the backstop in November, when he concluded that there was no mechanism giving Britain a unilateral right of exit. Mr Cox duly advised that the new texts had indeed reduced the risk of being stuck in the backstop. But he went on explicitly to repeat his earlier conclusion that Britain would still have no lawful means of exiting the backstop save by agreement with the EU. This was enough for the DUP and most Tory hardliners to reiterate their opposition to the deal, despite Mrs May's efforts.

What now? Almost incredibly, Mrs May plans another vote on her deal next week. She may press Mr Cox to amplify his advice by noting that the Vienna convention on international treaties can allow countries ▸▸

to pull out of them. She will defy a convention against repeated votes on the same measure. She will lobby the DUP hard. Yet for all such efforts, the voting arithmetic still seems stacked against her.

If she loses again, the focus will switch to the need for delay. Shortly after we went to press MPs were due to vote on motions asking the government to seek more time. Brexit day is March 29th, two years after Mrs May triggered Article 50 of the EU treaty. But there is provision for extending the deadline, subject to the unanimous approval of other EU governments. Mrs May is expected to take a request for such an extension to the EU summit that convenes in Brussels on March 21st.

Most observers believe the EU will agree. But its approval cannot be taken for granted (see next story). Other governments will want to debate how long any extension should be and what it will be used for. EU leaders will also be anxious to avoid British participation in the European elections in late May. So their instinct will be to offer Britain no more than two or three extra months.

Mrs May might use the extra time to keep trying to get her deal through Parliament. After all, as both she and the EU insist, it is still the only one on the table. She may take comfort from the fact that it was defeated by "only" 149 votes this week, down from a record-breaking 230 in January, and may be defeated by even fewer next week. Yet the EU has made clear that it will not reopen negotiations on any aspect of the deal. So unless she can lure over more Brexiteers fearful of losing their goal altogether, or more MPs still worried by the no-deal risk in May or June, Mrs May's deal could just keep failing.

That means searching for an alternative way forward. In the Commons this week the prime minister asked if MPs wanted to revoke the Article 50 letter, to hold a second referendum or to have an entirely different Brexit deal. Several Tories have openly floated the idea of replacing her as prime minister, preferably with a more fervent believer in Brexit (see Bagehot). And the leader of the opposition, Jeremy Corbyn, argued as ever that the solution was another general election, followed by a magical Labour Brexit that would be easy and quick to negotiate.

There are three big problems with any of these ideas. The first is that, although MPs have made it obvious that they do not support Mrs May's deal, there is no clear majority for a different one. This might not change even if "indicative votes" on potential alternatives were held, as was suggested this week by the Commons Brexit committee. Second, any other Brexit deal, such as a permanent customs union or the Norwegian option of joining the European Economic Area, would still require the passage of the withdrawal agreement, including the Irish backstop. And third, a short extension will not allow enough time for most possible alternatives, including holding another referendum.

It is tempting to blame the EU's tough negotiating stance for the mess. Yet the real culprit was Mrs May's incompatible goals. She wanted to leave the single market and customs union, to have no hard border in Ireland and to impose no new barriers between Northern Ireland and the British mainland. But an independent trade policy and open borders are incompatible. Refusal to accept the trade-offs inherent in leaving the EU bedevils the whole process, no matter who is in charge of it. ■

Article 50

Extend, but don't pretend

BRUSSELS

The EU is willing to grant an extension if Britain has a plausible plan

THE MORNING after Theresa May's Brexit deal was defeated, 27 fed-up ambassadors from across the European Union gathered in Brussels for yet another meeting on Brexit. But, for once, there was something to discuss: whether to grant an extension to the Article 50 deadline.

Delaying Brexit beyond March 29th requires the unanimous approval of heads of government at the EU summit, set for March 21st. The parameters of any extension are already becoming clear. Britain must offer a "credible" reason, in the words of Donald Tusk, the European Council president, which were echoed by leaders from across the block. And if it wishes to hang on as a member beyond the European elections at the end of May it must elect a new batch of MEPs.

But what counts as "credible"? A long delay so that Britain could have a general election or a second referendum would almost certainly cover it, say diplomats and EU officials. Likewise, a fundamental change in Britain's Brexit strategy.

A short extension to avoid Britain crashing out comes with little cost to the EU. A no-deal exit may be worse for Britain, but it is hardly a good outcome for the EU either, point out diplomats. Most predict that the EU will happily offer a short extension until the European elections.

Mr Tusk has urged members to be "open" to a longer delay. But there is reluctance to give extra time purely so that Mrs May can continue banging her head against a wall, or to allow MPs to propose ideas already dismissed by Brussels. France is firm on this, calling any such extension "totally unacceptable". It is not alone. "If it is the same old stuff, why would we give any extension?" asks one commission official.

Other than demanding unanimous agreement, Article 50 is silent on what terms must be offered. EU leaders can be as strict or as lenient as they like. An extension that bleeds into the EU's next budget period would be too complicated, say some diplomats, suggesting a natural upper limit of 2020. It may be a strict one-off or more open-ended. Whatever happens will be a nakedly political decision taken by 27 leaders, all with their own national concerns, round a table in Brussels.

Patience is not infinite. Throughout the negotiations, heads of government have tended to be tougher than their ministerial underlings. All 27 leaders face the ballot box in the upcoming elections, where a gamut of populists and radicals are expected to sweep up seats, turning the European Parliament into a political zoo. A firm line with Britain may help some EU leaders fend off this domestic populist menace.

When it comes to the European elections, the main concern is legal rather than political. If Britain is still in the EU by the time elections roll around, the country will be obliged to elect new MEPs, insist diplomats. Any doubts about the legality of a European Parliament constituted without British MEPs while Britain is still a member risks legal challenge, destroying the quarantine maintained between Brexit and other policy areas in the EU.

An election campaign in the dog days of Brexit wrangling is the last thing many MPs want. The proportional representation system for European elections would probably boost a populist, Brexit-supporting party, and allow insurgent Remainers, such as the Independent Group of MPs, to gain a foothold. Brexit could yield a final irony: British voters may, for the first time, pay attention to European elections. ■

Bagehot | After May

Conservatives are manoeuvring to replace a broken prime minister

TUESDAY WAS the most humiliating day in a prime ministership scorched by humiliations. Theresa May's voice was so hoarse that she could hardly make herself heard. Philip May, watching his wife from the visitors' gallery, looked thoroughly miserable. Storm Gareth rattled the roof of the chamber with Shakespearean fury. When it came, the defeat by 149 votes was a surprise to even the most pessimistic government flaks.

In normal times the prime minister would have resigned immediately, whisky glass in hand. Mrs May lost her authority some time ago. Cabinet ministers openly defy her and backbenchers merrily do their own thing. Now she has lost her raison d'être as well: the deal that she spent two-and-a-half years negotiating has crumbled on contact with parliamentary reality.

But these are not normal times. The prime minister still believes, to the incredulity of those around her, that one more heave will do it. Her party has no clear mechanism for getting rid of her. Having survived a confidence vote among Tories at the end of last year, she cannot be challenged again until December. Britain is consequently in a political no-man's-land, with a prime minister who has no authority and a band of assassins who have no bullets.

The result is one of the most bizarre leadership races in the Conservative Party's history. All leadership races are odd because "he who wields the knife seldom wears the crown". The party's current rules add to the oddity because candidates have to appeal to two very different electorates. MPs whittle down the list of challengers to two and then the party's 125,000 members make the final selection. But this race is particularly surreal. The 14-odd candidates who are jostling for position have to be prepared for Mrs May to resign within the next 24 hours but at the same time keep their powder dry in case she clings on for months.

The best way to make sense of the field is to think in terms of one of the Westminster village's favourite devices, a grid. There are two types of candidate: party-wide sorts, who can appeal to Brexiteers and Remainers alike, and factional candidates, who have the strong support of one or other side of the referendum divide. There are also different levels of seniority, from big beasts who have held the great offices of state, to middling beasts who have a bit of experience but a high opinion of themselves, and a few mini-beasts.

The two leading cross-party candidates are Jeremy Hunt, the foreign secretary, and Sajid Javid, the home secretary. They both campaigned for Remain but believe that the government has a duty to honour the referendum result. They have lots of experience, Mr Hunt previously having been health secretary for nearly six years and Mr Javid also having run the departments of business and housing. They also have the vulnerabilities that come from long experience. Mr Hunt has made plenty of enemies in the public sector and Mr Javid's decision to remove the citizenship of Shamima Begum, a British schoolgirl who went to join Islamic State in Syria, has become even more controversial since the death of her baby. But they are both making serious attempts to rethink the meaning of Conservatism in an age of populism. Mr Javid would also allow the Conservative Party to "hit the triple", with the first Jewish prime minister (Disraeli), the first woman (Thatcher) and, with him, the first Asian.

These two potentially unifying figures will have to contend with factional candidates. Amber Rudd, the work and pensions secretary, is the Remainers' most powerful weapon, a polished performer who has the sort of jolly-hockey-sticks manner that goes down well with the grassroots. But the party is so thoroughly Brexitised that it is hard to see her winning. The Brexiteer faction has a more crowded field, including Boris Johnson, a former foreign secretary, Dominic Raab and David Davis, former Brexit secretaries and, at a stretch, Liz Truss, the chief secretary to the Treasury. After what they take as Mrs May's betrayal of their cause, the Brexiteers will move heaven and earth to get a true believer on the shortlist. The only question is who it will be.

Mr Johnson was forced to withdraw, humiliated, from his leadership bid in 2016. Too many Tory MPs had too many doubts about his character. Mr Raab is doing his best to seize Mr Johnson's mantle, making speeches outlining his philosophy and running a social-media campaign, "Ready for Raab". But he is small beer by comparison. He sat in the cabinet for only a few months, as the second in a line of ineffectual Brexit secretaries, and comes across as ideological, blinkered and throbbingly boring. Pro-Brexit MPs are in such a frenzy that they may be willing to forgive Mr Johnson's personal failures for the sake of the cause. Jacob Rees-Mogg, the leader of the powerful European Research Group of Tory MPs, has given him the nod and ambitious younger MPs such as Johnny Mercer have attached themselves to his coat-tails. If he can make it onto the shortlist he is probably home and dry. Some 24% of members support him, according to the latest survey by ConservativeHome, an activists' website, and their mood is becoming more bellicose as Brexit goes from bad to worse.

Remember the Johnson

There is a strong case for being done with Mrs May. She has led the Tory tribe into the wilderness and refused to listen to advice from better guides. Mr Hunt or Mr Javid would do a better job—at the very least they would be able to clear out the accumulated dead wood from the cabinet, such as Chris Grayling, the hapless transport secretary, and promote a new generation. But the lesson of the past few years is that things can always get worse. Mr Johnson is too big a risk to take: a man who bears comparison to Donald Trump in his shoddy personal life, his willingness to play to the lowest common denominator and, it must be said, his raw political genius. The Labour Party rolled the dice in 2015 and ended up with Jeremy Corbyn. Does the Tory party really want to test the populist gods and run the risk of Mr Johnson? ■

Mental-health care

Talk is cheap

AMMAN

Counselling by amateurs costs little and can work wonders

At Jabal Amman mental-health clinic, perched atop a hill in the old town of Jordan's capital, Walaa Etawi, the manager, and her colleagues list the countries from where they see refugees—and what ails them. There are Iraqis (many with post-traumatic stress, says a nurse), Syrians (a lot of depression), Sudanese (anxiety), and at least ten other nationalities. By official estimates, 1.4m people have poured into Jordan from Syria's civil war alone. Disaster-relief groups like the International Medical Corps (IMC), which runs the Jabal Amman clinic, came to help.

In the past two decades care for mental distress in such emergencies, whether wrought by conflict or natural calamity, has become an immediate priority—on a par with shelter and food. And what has been learnt from disasters has inspired new, pared-down mental-health care models that can be deployed quickly to help lots of people. In parts of Indonesia, Sri Lanka, the Philippines and elsewhere these models became part of rebuilt health-care systems. They are now being picked up in America and Europe, as people wake up to the scale of mental-health problems and the shortage of specialists to treat them.

In Jordan IMC has the luxury of hiring psychiatrists and mental-health nurses. But in most countries suffering civil wars, earthquakes or typhoons a single mental hospital and a handful of psychiatrists for a population of millions is typically all there is. For foreign medics who fly in after a disaster, mending crushed limbs and stanching bleeding wounds is straightforward. Alleviating mental distress is trickier, not least because the medics seldom speak the local language. "We have to learn about the culture in their country to understand what affects their symptoms," says Khawla Aljaloudy, a nurse at the Jabal Amman clinic. "If an Italian says 'I'm possessed', I would suspect a serious problem," says Luana Giardinelli, a clinical psychologist at IMC. In other cultures, she says, that is what people might say about symptoms of mild distress.

As disaster-relief experts wondered how quickly to train local people to provide mental-health care, they realised that, for the most part, non-specialists might be able to do the job. "We used to assume that people need professional counselling," says Julian Eaton of the London School of Hygiene and Tropical Medicine, a veteran in post-disaster care. But it turned out this was not so. Rates of mental-health problems usually doubled after a calamity. But few people needed a psychiatrist. Most got better with simple, appropriate help that anyone could provide. Known as "psychological first aid", it is something that can be taught in a matter of hours.

This training is now standard fare in the first days after a disaster. Teachers, pastors, barbers and taxi-drivers are taught to notice people in distress, to provide the right kind of emotional support, and to avoid common mistakes such as pressing sufferers to recount stressful events.

This approach has also been formalised as a way of preventing post-traumatic stress disorder. In Western countries it has been adopted by emergency responders helping people who have been through traumatic events. Of necessity, the version used for refugees and survivors of natural disasters also includes help with pressing practical issues, such as finding safe hous- ▸▸

ing and making contact with others from their village or town. For survivors of disasters, the root cause of psychological distress is often practical hardship.

That problems of daily life take a toll on mental health is also becoming evident in rich countries. A study in 2015 found that primary-care doctors in Britain spend one-fifth of their consultation time on issues that are not medical, such as distress stemming from financial difficulties or loneliness. In response, Britain's National Health Service has been expanding the use of "social prescribing" whereby family doctors refer patients to organisations that provide housing, welfare and debt advice, or social connections through activities such as dance classes or gardening groups.

Seeking unprofessional help

Disaster relief has taught that non-specialists can be trained to treat mild-to-moderate depression and anxiety, which affect 15-20% of people in any given year. The idea, known in the jargon as "task-shifting", was "born out of necessity", says Peter Ventervogel of UNHCR, the UN's refugee agency. When psychiatrists are too few, he says, it is best that they work with those most in need, such as the suicidal.

Dispensing pills may seem an obvious task to train non-specialists for. But in disaster relief, says Ms Giardinelli, medication is the option of last resort. Displaced people move often and unpredictably, she says, so the priority is to give them something of lasting value—such as information about their condition and ways to manage their symptoms (a calming slow-breathing technique, for example).

In Western countries a psychotherapist's qualification usually takes several years of training, on top of a university degree. Dixon Chibanda, a psychiatrist in Zimbabwe, showed that lay people can be trained in a couple of weeks to do some parts of the job. In 2005 in Zimbabwe's capital, Harare, the bulldozing of slums that voted for the opposition left 700,000 people homeless. Many were also viciously beaten by the police. At the time, the whole country had five psychiatrists for its 13m people. So Dr Chibanda decided to train elderly women already known for some kind of community work in aspects of cognitive-behavioural therapy, a Western staple that involves teaching people to spot the real-world situations that set off their anxieties, and suggesting concrete steps to deal with those situations. He dispatched these amateur counsellors to "friendship benches" installed in health centres' courtyards. There, they talked to people troubled by *kufungisisa* ("thinking too much"), the local expression for depression and anxiety.

A study in 2014-15 found that after six months only 13-14% of people seen by the grandmothers still had symptoms of depression or anxiety, compared with about half of those who received the standard treatment, in which a nurse talked to them and prescribed medication. The friendship-bench model has been replicated in Malawi (which added elderly men as counsellors) and Tanzania. In 2016 it was picked up by New York City's health department.

Unlike the plain garden benches in Africa, those in New York are made of attention-grabbing bright orange plastic. They are staffed by trained social workers who offer advice to people with mental-health and addiction problems. Whereas kindly grandmothers are Africa's trusted confidantes, many of those in New York are former sufferers such as addicts.

Gary Belkin, the city's mental-health commissioner, who has advised on health projects in Africa and disaster relief in Haiti, says that places like New York can learn from poor countries that mental-health care is not the preserve of qualified specialists. "These are smarter ways," says Dr Belkin, who calls ideas such as the friendship

bench "innovation of a higher order". As part of an $850m mental-health initiative launched in 2015, New York City has plans to train 250,000 of its firefighters, police officers, teachers, shopkeepers and citizens to spot common risk factors and warning signs of mental illness and respond appropriately. The city has also trained over 1,200 workers at organisations that help groups at high risk of mental illness (such as young people, the homeless, abused women and immigrants) to screen for risks and provide counselling.

The idea of using non-specialists is spreading in Europe, too. Italy is testing guidelines for mild perinatal depression that, so far, have been used only in poor countries such as Pakistan to train village paramedics with at best a secondary education. Italy is trying the approach with midwives, who would provide some of the perinatal-depression care now reserved for psychiatrists. "We had to adapt the manual," says Antonio Lora from the Lombardy region's health department, which is running the trial. That included deleting the parts where the midwife tells the woman not to worry if the baby is a girl and how to ask her husband for permission to go out.

Such models are not without drawbacks. Trainees are taught a set of structured sessions, to use for everyone. Some may simply parrot the phrases in the manual, says Mr Ventervogel. Where psychiatrists are too few, patchy supervision of new trainees can fail to weed out problems that lead to poor quality.

England is a test case for standardised talk-therapy. It has rapidly expanded access to it by training thousands of new therapists to provide a uniform bundle of sessions. James Binnie of London South Bank University worries that the programme is a "therapy factory" which ignores the variety of personal and social issues that shape each person's psychological problems. Psychotherapy, he says, is a relationship, so cannot be reduced to separate "active ingredients". David Goldbloom of the University of Toronto sees things differently. He says that standardising talk-therapy ensures that patients get the care they are supposed to get—just as they would with any form of medical treatment. "The alternative is a bit of a Wild West," he says.

Concerns about amateur shrinks resemble those raised in the past over other types of health care, such as training community health workers (or "barefoot doctors") to provide basic prenatal care, treat malaria or diagnose pneumonia. They may not be as good as doctors, but training armies of them has been crucial to the steep reductions in maternal and child mortality in Ethiopia, Rwanda and many other poor countries in the past decade. In England's programme, half the people seen for depression and anxiety recover (though of course some would have done so anyway).

In some developing countries the mental-health care models spawned by disaster relief were adopted by primary health-care systems. In Aceh, an Indonesian province devastated by a tsunami in 2004, there were no community mental-health nurses at all until relief organisations trained the first cohort. They are now established at health centres, whizzing around on motorcycles to check on patients at home. Disasters also set off an expansion of mental-health care in Sri Lanka, Nepal and the Philippines. In 2017 Zimbabwe's friendship-bench grandmothers, of whom over 400 were trained, treated over 30,000 people.

In rich countries, the need is less dire. But mental-health care is often underfunded and less than a third of those needing it get it. These countries may not be facing humanitarian disasters, but the needs have been acute enough to spur a search for ideas beyond their own borders. ■

Boeing

A crisis of confidence

Two tragic air disasters may not down America's aerospace giant. But they herald troubled times

BOEING WAS hoping for good headlines on March 13th, the day on which it planned the glitzy unveiling of its new long-haul 777X jetliner at its factory outside Seattle. Instead, tragic events three days earlier in Ethiopia prompted it to cancel the event. On March 10th a Boeing 737 MAX 8 crashed near the capital, Addis Ababa, killing all 157 people aboard. The apparent similarities between this crash and one five months ago involving a MAX 8 operated by Lion Air in Indonesia raised concerns among aviation authorities around the world. By March 13th virtually all the world's fleet of MAX 8s had been grounded by airlines or regulators. The tragedy has also frightened Boeing's investors. Within days its share price fell by more than 10%, wiping nearly $30bn off its market value.

Accidents, even tragic ones, do not usually have such a chilling effect on planemakers' shareholders. The crash last month off the coast of Texas of a Boeing 767 carrying cargo had virtually no impact on its maker's share price, despite claiming three lives. As Howard Wheeldon, an aerospace analyst, explains, this is because most crashes are caused by human error. Airlines who hired those humans therefore get most of the blame.

This time is different. It is the second crash in less than a year involving a brand-new MAX 8. As in Indonesia, the Ethiopian airliner crashed within minutes of take-off. Both appeared to stall, nosedived and hit the ground at speed. A preliminary report into the earlier disaster, which killed 189 passengers and crew, said that pilots struggled to maintain control following an equipment malfunction (see next article). Tewolde GebreMariam, the chief executive of Ethiopian Airlines, has claimed that something similar happened in the moments before the latest accident. If investigators prove him right, that could mean not humans were at fault, but the jet itself.

No definitive conclusions can yet be drawn about the causes of either crash. Investigators are still at work in Indonesia. In Ethiopia, they have barely begun. Yet the accidents in both places look so alike that authorities are not taking any chances. China's regulator was the first to act, instructing its domestic airlines on March 11th to ground all 737 MAX aircraft, not just version 8. Authorities in Australia, Britain, France and Germany banned the jets from their airspace the next day, as did Europe's aviation-safety regulator. On March 13th President Donald Trump announced that the Federal Aviation Administration (FAA) would halt all flights of MAX 8s and newer MAX 9s over America.

This came as a blow to Boeing. The FAA had resisted the global moves to ground the MAX, given uncertainty over the causes of the latest tragedy. After the crash on March 11th it reaffirmed its airworthiness. If the model remains grounded for a prolonged period, airlines may not accept deliveries of new planes. Boeing gets paid for each one on delivery, so this would hurt its bottom line.

The 737 is Boeing's most important plane, generating 30% of the company's revenues and 35% of its profits, according to George Ferguson of Bloomberg Intelligence, a research firm. It first took to the sky in 1967. A year ago Boeing delivered its 10,000th 737. The MAX 8 is the latest, re-engined version of the aeroplane, which entered service into May 2017. Airlines have ▸▸

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already purchased over 5,000 of them, accounting for around 80% of Boeing's entire order book of civil aircraft. Mr Trump said that the FAA and Boeing were "in agreement" with his decision to ground the aircraft temporarily. On March 13th the company reiterated it had "full confidence in the safety of the 737 MAX".

The long-term damage to Boeing will not be clear until investigators complete their work. Carter Copeland of Melius Research estimates that the direct cost of the crash in terms of compensation and fixing faulty planes could be as little as $1bn. If a software problem caused the crash, it should be easy to fix. Boeing has promised to update the code suspected of having contributed to the Lion Air crash by next month. Whether this reassures airlines and passengers remains to be seen.

A hardware problem would be costlier to fix—and demands for reassurance, louder. Boeing's boosters believe that even then the long-term damage could be contained. Mr Copeland points out that the grounding of Boeing's 787 wide-body airliner for three months in 2013, because its lithium-ion batteries kept catching fire, did little to hurt demand for the aircraft.

Yet even spectacular battery failures are not the same as two deadly crashes. A stronger hint that Boeing may recover comes from the reaction of investors in its European arch-rival, Airbus. Between them, the two companies account for all large commercial aircraft sold around the world. If the crash were to do lasting damage to Boeing, Airbus should benefit commensurately. Its share price has gained half as much as Boeing's has lost.

That understates the long-term costs for Boeing, argues Marc Szepan, a former executive at Lufthansa, now at Oxford University. Airbus has little to gain in the short term from airlines switching orders from the 737 MAX to its A320neo aircraft because its production lines for the model are already fully booked until at least 2025. Boeing stands to lose if airlines bargain down prices of the MAX 8, pointing to the poor public perception of its safety.

A change in consumer attitudes towards plane models makes that likely. Today many passengers, not just aviation geeks, take note of what planes they board. This week carriers have fielded questions from nervous customers about their scheduled aircraft, asking to change their itinerary should it involve a MAX. Shares in airlines that have made large orders for the planes have been hit; those in BOC Aviation, a big aircraft-leasing firm, dipped nearly 5%. Some airlines, including Lion Air, want to switch away from the MAX 8 model for fear of losing customers.

Analysts whisper that the issues with the MAX may be only the start of bad news for Boeing. Before the latest rout, its share price had tripled in three years. In 2017 it was America's best-performing industrial stock. In 2018 it was the eighth-best. But this, industry watchers caution, has more to do with its generous dividends and share buy-backs, which return 95% of the cash it generates to investors, than with a careful assessment of the risks associated with the company. If the MAX or another issue stopped the flow of cash, investors could be in for a rude shock.

Boeing's current strategy increases the risk of that, thinks Richard Aboulafia of Teal Group, an aviation consultancy in Virginia. The company wants to grab its suppliers' fat margins by making more components in house. But this exposes it to losses if margins turn negative in a downturn. The company is vulnerable to Mr Trump's trade wars, and the protectionism they stoke abroad: 85% of its civil aircraft sales come from outside America. Lastly, Boeing cannot increase the amount of money it returns to shareholders indefinitely. Its net debt is rising, albeit from low levels.

It is possible that Boeing will be exonerated from blame for the latest crash. Some threats to its business may not materialise. No one has died in accidents involving the previous five aircraft types that Airbus and Boeing have developed. This happy streak has now come to a solemn end. The damage to Boeing's prospects may not be irreparable. But they have been battered. ■

Correction: In last week's Schumpeter column, the surname of Alf Wight, a vet and author, was misspelled. Sorry.

Autonomous systems

The computer in the cockpit

Why partial automation can be more dangerous than none at all

One way to tell who made the aircraft you are boarding is to steal a glimpse of the cockpit. A traditional control yoke in front of the pilots suggests a Boeing; a joystick beside each seat, an Airbus. Pilots argue about which system is better; neither is considered safer than the other. Each exemplifies a different approach to a problem that manufacturers of not just aircraft but also cars, trains and ships must grapple with as long as human operators handle increasingly automated machines.

The challenge of what engineers call the "human-machine interface" has tragically gained attention after the crash of an Ethiopian Airlines Boeing 737 MAX 8 on March 10th. Eyewitnesses reported that shortly after departing Addis Ababa, the aircraft climbed and dived repeatedly. Similarities were drawn with a fatal crash in Indonesia in October last year. That time, the pilots of a Lion Air MAX 8 struggled, also soon after take-off, with an automated safety system that erroneously tried to prevent the aircraft from stalling by lowering its nose.

Although authorities around the world have grounded the model, Boeing insists that it is airworthy. The company is updating the MAX's automated flight-control software to make it easier for pilots to assume manual control. Boeing and Airbus both pack their planes with computers that do most of the flying. Each, though, espouses a different philosophy on how a pilot reacts to them, says Mudassir Lone of Cranfield University in Britain. Boeings are designed to make the pilot feel like the aviator in charge. Although the control yoke looks and feels like something from the analogue era, the way it behaves—including shaking when approaching a stall—is created digitally by a computer. Airbus's joystick is seldom used besides take-off and landing. A sound alerts the pilot to trouble; in an Airbus, he is more supervisor than airman.

The big worry is what happens if a sensor feeds the flight-control system the wrong data. This might have happened in the Lion Air crash, according to a preliminary report. Something similar downed an Air France Airbus A330 over the Atlantic in 2009: an airspeed sensor iced over and the ensuing loss of data caused the autopilot to disengage. Unable to work out what was happening, the pilots lost control.

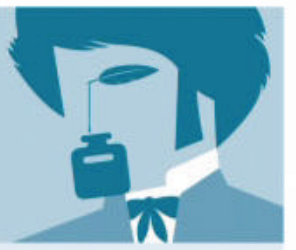
Switching from automatic to manual is not straightforward. Flight-control sys-

tems may not disengage entirely. Instead, they might continue to assist the pilot in an attempt to prevent a dangerous manoeuvre. When things do go wrong, it is critical that pilots follow the correct procedures, which are different for each model of aircraft. Pilots learn these and carry checklists spelling them out. Proliferation of systems necessitates frequent retraining. To make life easier for pilots, the MAX 8 employs a system that makes it feel to them like older, more familiar versions of the 737. But this adds another layer of complexity.

Incidents are not confined to aviation. In Washington, DC, automated trains have largely been out of service since 2009, when a faulty circuit made a stationary train invisible to the safety system on the one behind it. The driver was unable to brake in time; the resulting crash killed nine people. Ships may soon face similar problems. Some ferries and offshore support vessels have already replaced ship's wheels with computer-assisted joysticks. A series of accidents involving self-driving cars may have been caused by sensors' failure to recognise objects in the road, and drivers failing to respond fast enough.

Studies have shown that when people have to wrest control from an automated system, it can take them around five seconds to grasp what is happening. The monotony of monitoring a semi-automated vehicle may reduce vigilance by provoking what psychologists refer to as "passive" fatigue. Such concerns have led some carmakers, Ford among them, to consider skipping semi-automation and go straight to something closer to full autonomy, cutting people out of the loop. That would remove the human-machine interface—but not humans' machine-induced fears. ■

Bartleby The tech factor



How the internet led to greater wage inequality

THE GREAT detective has summoned everyone to the library. "I was asked to identify the culprit behind the growing wave of wage inequality" he says. "I can reveal that the offender is there." And the assembled suspects gasp as he points, not at a human, but at the computer in the corner.

In real life, few would be too be surprised at that verdict. Economists have long pointed to "skill-biased technological change" as one of the driving forces behind inequality. But demonstrating the influence of technology is important in an era when politicians routinely blame immigration or cut-price competition from imports instead. And the evidence that technology is indeed the perpetrator is getting stronger as academics look at its impact on inequality within individual firms, as well as across the broader economy.

A new working paper* by Christopher Poliquin of the University of California, Los Angeles, examined the effect on wages at Brazilian firms that adopted broadband between 2000 and 2009. The average employee experienced a 2.3% cumulative gain in real wages, relative to workers at firms without broadband. But managers at the firm gained 8-9% while executive directors enjoyed an 18-19% boost. Mr Poliquin thinks that the internet allowed skilled workers to be much more productive than before.

His suggestion chimes with a previous study** of Norwegian companies which found that the arrival of broadband improved the relative position of skilled employees. That study found that the internet made it easier for them to do "non-routine abstract tasks" such as problem-solving, while allowing the company to automate routine tasks and replace unskilled workers.

What happens inside firms is only part of the story, however. Research*** published in the *Quarterly Journal of Economics* suggests that around two-thirds of the rise in inequality is the result of wage differentials between firms, rather than within them. Workers are being "sorted" into two groups; those who work for high-wage firms in sectors like technology and those who work for low-wage businesses in sectors like retailing. Outsourcing may also be playing a part, with large firms spinning off low-wage activities like cleaning and catering, thus constraining the level of in-firm inequality.

The pay gap may be related to education and training. A survey of OECD countries in 2016 found that, on average, more than half of adults could, at best, carry out no more than the simplest digital tasks, such as writing an email. Only a third had the kind of "advanced cognitive skills" that would allow them to flourish.

However, this seems a little odd. On the one hand, a moral panic has swept nations over adults glued to smartphones and teenagers obsessed with digital games or online make-up tips from the Kardashian clan. At the same time, people are apparently unable to use digital technology to boost their careers.

This suggests that neither schools nor employers are striving hard enough to translate consumers' familiarity with using technology for leisure into workers' or students' ability to use it in the office or classroom. More inventive ways of teaching skills, perhaps with virtual reality or video games, may be in order.

For the corporate sector, this ought to be a win-win proposition. A more productive workforce means bigger profits and faster growth, and thus higher earnings for managers as well as employees.

Maybe executives fear that money spent on training will be wasted, as workers take their newly honed skills to companies offering higher pay. But like sweeping statements about tech illiteracy, the claim that millennials (those born after 1982) are particularly disloyal to employers also turns out to be something of a myth. Figures from America's Bureau of Labour Statistics show that the average job tenure for American workers in January 2018 was 4.2 years, compared with 4.1 years in January 2008. A higher proportion of thirty-somethings had worked for the same employer for a decade in 2018 than had been the case ten years earlier. Technology may be to blame for the historic rise in inequality. But with the right training for users, it could yet redeem its reputation.

* The Effect of the Internet on Wages
**The Skill Complementarity of Broadband Internet by Anders Akerman, Ingvil Gaarder and Magne Mogstad, The Quarterly Journal of Economics, 2015
*** Firming Up Inequality, February 2019

Economist.com/blogs/bartleby

Big energy and big tech

Oil rush

HOUSTON

Technology firms stampede to woo the energy industry

A GIANT HOTEL in Houston teemed with oil-and-gas executives on March 11th, the start of a CERAWeek. IHS Markit, a research firm which organised the shindig, lined up America's energy secretary, the chief executives of BP and Chevron (two of the world's largest oil companies), and other luminaries. Among the dark suits was an open-collared newcomer: Andy Jassy, head of Amazon Web Services. Speaking to a vast ballroom, he extolled the cloud-computing giant's virtues of moving quickly and learning from failure. Mr Jassy was there not just to offer management advice to what were once the world's most valuable companies. He was also after their custom.

Energy companies are keen to produce oil and gas more efficiently, as they grapple with volatile prices and uncertain long-term demand. Digital investments promise to cut costs and boost output. Tech giants like Amazon, Microsoft and Alphabet, as well as a clutch of startups, want to help. For all of Silicon Valley's professed support for clean power over fossil fuels, the energy industry represents a huge opportunity. Oil companies' valuations are dwarfed by tech firms', but their coffers remain deep (see chart).

Countless industries claim that big data and artificial intelligence (AI) will usher in new prosperity. The trend in oil and gas is nevertheless notable, partly because it is marked, partly because it comes late. For years, many companies remained focused on increasing reserves of oil, not extracting it cost-efficiently. Managers struggled to use data siloed in different parts of the company or in different parts of the world.

Quick, call the IT desk

That is changing. Abundant shale oil has made the hunt for reserves less urgent than the need to protect profits. Shale also highlights the utility of new analytics, says Paul Goyden of BCG, a consultancy, as data gush from thousands of wells studded through Texas, North Dakota and other rich fields. Falling costs of sensors, storage and computing power have made digital investments even more attractive.

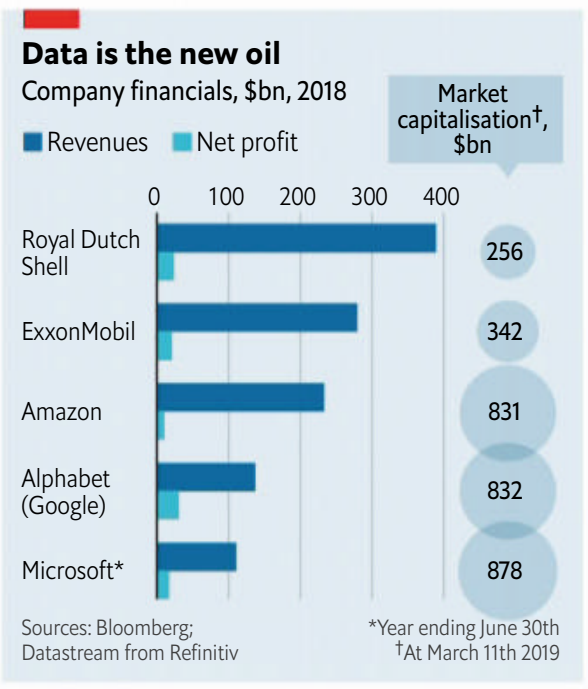
Early projects are starting to bring results. BP is combining real-time information from sensors with its own models and analytics to optimise output—it estimates such digital tools boosted oil production by more than 30,000 barrels per day last year. Yuri Sebregts, the chief technology officer for Shell, says it could take months for a geoscientist to map faults underground. Software can now sort through seismic data, performing the same task in a few hours for about $20.

As such efforts ramp up, energy firms are pairing in-house expertise with that of the tech industry. Microsoft has courted them the longest. In February ExxonMobil announced that its sprawling shale operations in the Permian basin, in Texas, would use Microsoft's cloud, AI and other services. That may help ExxonMobil to drill and deploy staff more efficiently, and limit methane leaks. Amazon is trying to catch up. The size of its oil-and-gas team has tripled in recent years, and the company is working with energy giants such as Halliburton and Shell. In Houston it showed off data-storage kit that was continuously showered with water, to prove its mettle in inhospitable oilfields.

Alphabet, Google's parent company, is a relative laggard, but hopes to change that. Last year Google Cloud hired Darryl Willis, a former BP executive, to lead a new energy group. He estimates that the industry is using 1-5% of available data. Alphabet has signed deals with Total of France, as well as Anadarko, an American oil company that is testing automated drilling and has an AI specialist on its board of directors.

Energy companies feel somewhat jittery about working with large tech firms—and not just because the Silicon Valley stars have outshone them. Automation raises the risk of hacking. Tech firms' ballooning ambitions raise eyebrows. One questioner asked Mr Jassy if Amazon would itself start producing oil and gas. He said no, as the room giggled nervously.

It is not just the oilmen who are uneasy about the partnerships. Amazon, Microsoft and Google rely on clever young coders, who dislike working for controversial industries. "We are a partner and we follow the energy partner's needs," says Caglayan Arkan, who oversees Microsoft's work with the energy sector. But in February Microsoft employees demanded that it cancel a contract to sell augmented-reality headsets to America's military. Last year Google decided not to renew a contract with the Pentagon, after some staff argued the company should not be in the "business of war". Tech workers may yet insist they not be in the business of fossil fuels either. ■



Video games

Ahead of Steam?

The maker of "Fortnite" is eyeing the retail business

A YEAR AND a half after its launch, "Fortnite Battle Royale" remains one of the world's most popular games. Epic, the maker of the lighthearted online shooter, reported that 10.7m players watched an in-game concert on February 2nd by Marshmello, a DJ. Concurrent player numbers regularly exceed 7m. Netflix says it views "Fortnite" as more of a competitor than video-streaming rivals like Hulu or HBO. Epic, meanwhile, has set its sights on a new set of rivals: digital shopkeepers.

These days video games are mostly sold not in boxes but as digital downloads. On the PC, the market is dominated by Steam, an online store run by Valve, a reclusive American games developer. On Android, Google's Play Store rules. Epic wants in.

Steam, the smaller of Epic's targets, already has competitors, such as Good Old Games and digital stores run by big publishers such as Electronic Arts and Ubisoft. None has made much of a dent. Valve is pri- ▸▸

vately owned, so reliable numbers are scarce. But Steam is thought to have around 290m users and 20,000 titles; its PC market share may be above 70%. It takes a 30% cut of each game sold. A conservative estimate puts Valve's revenues in 2017 at $4.3bn, making the total market worth at least $13bn. Google's Play Store is even bigger. Once again, the firm does not report detailed numbers. But according to one estimate from SensorTower, a market-intelligence firm, in 2018 total sales were $24.8bn, mostly from games. Like Valve, Google takes a 30% cut of every app sold.

Neither will be a walkover. Steam has social features that let gamers chat to friends and jump into games alongside them. The Play Store comes pre-installed on most Android phones (though it is not available in China). Both platforms benefit from "network effects" that reinforce their dominance. Developers face strong incentives to sell their games there because most other developers already do so, and users like having a one-stop shop.

Nevertheless, Epic makes a credible contender. It is part-owned by Tencent, a Chinese gaming goliath. "Fortnite" has earned it bucketfuls of cash, which have been topped up with a recent injection of $1.25bn from private equity. It also has plenty of experience. Besides making games, Epic sells its "Unreal" video-game engine, a prefabricated framework around which developers can construct their own products. That gives the firm a good understanding of what developers want.

Most important, it has "Fortnite". Despite its popularity, the game is not available on either Steam or the Play Store. Gamers must instead download Epic's own software if they want to play. The PC version now includes a shopfront where they can buy other games. Later this year Epic's Android app will offer something similar.

Epic's playbook recalls Steam's own when it first started in 2003. Popular Valve games such as "Counter-Strike" and "Half-Life 2" were bundled with Steam, providing an initial user base. Its 30% cut was a steal for developers compared with bricks-and-mortar shops. Epic plans to undercut Valve (and Google) in turn. It will charge developers just 12% and waive the 5% fee it levies on games that make use of "Unreal".

Epic's PC shop has already attracted several big titles, including "Metro Exodus" and "World War Z". Valve has responded by reducing its cut to 25% or even 20%—but only for games with sales of more than $10m and $50m, respectively. The Android market is already fragmented; smartphone makers such as Huawei and Samsung run their own stores.

One firm missing from Epic's target list is Apple. Its app store is the biggest of all, with estimated revenues of $46.6bn in 2018. For now, it is invulnerable. Apple prevents smartphone users from installing software from anywhere but its own store. (A case alleging this is anti-competitive is currently before America's courts.)

That may be just as well. Epic's simultaneous attack on PC and mobile distribution is ambitious, says Joost van Dreunen at SuperData, a video-games analyst. To pull it off, the company must act fast. "Fortnite" will not remain a hit for ever; a rival game called "Apex Legends" signed up 25m players in the week after its launch last month. But Tim Sweeney, Epic's founder and boss, does not lack ambition. Steam sells non-game software. The Play Store sell apps of all kinds. "If we succeed with games," he says, "anything is possible." ■

Volkswagen

New wave

BERLIN AND GENEVA

The German giant is going full-steam ahead with electric cars

"THE SUPERTANKER is picking up speed," declared Herbert Diess, boss of Volkswagen (VW), presenting future plans to investors and the press on March 12th at the company's headquarters in Wolfsburg. A fast move by the giant carmaker into electric vehicles (EVs) will become quicker still, he vowed. His promise of 70 new electric models by 2028, rather than 50 as previously pledged, and 22m EVs delivered over the next ten years is the biggest commitment to battery power by any car company. Mr Diess is taking on the tough task of turning a supertanker around.

VW's investors have long grumbled that its vast bulk has not delivered high profits or helped its share price. Mr Diess wants to raise both. Before the "dieselgate" emissions scandal the firm's bosses bet on scale. VW made nearly 11m vehicles last year. Putting growth before profits also suited its mighty unions, for which preserving jobs is paramount. As a result, VW disproportionately relies on its two premium brands, Audi and Porsche, for earnings. Productivity at its mass-market brands is woeful, and that in a segment where margins are anyway slender.

Diess charging

Any attempt to change the balance has met with stiff resistance. Workers occupy half the seats on the firm's supervisory board and can usually count on the state of Lower Saxony, which owns 12% of VW, to back them. The board can block job cuts and other unwelcome changes. Nearly half of VW's 660,000 employees are in Germany but the company has been unable to shift manufacturing to lower-wage countries, as rival carmakers have done. In 2017 unions successfully opposed the mooted sale of Ducati, a small Italian motorcycle-maker that is hardly core to VW. "Labour dominates the firm," says Arndt Ellinghorst of Evercore ISI, an equity-research firm, and corporate governance is "a catastrophe".

Mr Diess arrived from BMW three years ago with a reputation as a cost cutter and took over as boss last year with a mandate from the Porsche and Piëch families, which control just over half the firm's voting rights, to take on the unions. On March 4th Wolfgang Porsche, spokesman for the families, criticised VW's "fossilised structures" and bemoaned labour blocking progress. Mr Diess explained his "EV heavy" vision as a broad attempt to cut global emissions of carbon dioxide as well as meeting extremely tough European emissions targets. But it may also provide an excuse to slash the labour force. Mr Diess said lay-offs would be unavoidable as the simpler mechanics of EVs require 30% less "effort" to manufacture than a petrol-powered car.

Another jerk of the supertanker's tiller that will upset VW's unions is Mr Diess's new focus on shareholders. VW is introducing a scheme linking incentives for senior managers to the firm's share price. Although on March 13th VW postponed plans to spin off its lorry-making division, the company has promised more details on other restrucuring efforts, such as cutting costs and unlocking the firm's "huge conlgomerate discount", in the summer.

Tales abound of tensions between Mr Diess and Bernd Osterloh, VW's pugnacious labour leader. Mr Osterloh has said that management should focus on its mishandling of new emissions tests in Europe, which delayed new models and cost VW €1bn ($1.1bn), rather than changes to the workforce. If Mr Diess is serious about leading the car industry's charge on electrification, the latter will be unavoidable. ■

Schumpeter | The end of the affair

How to prevent business break-ups—or end them amicably

It has been a week of romantic second-chances in the business world. On March 11th Barrick Gold, the world's most valuable gold producer, said it would no longer pursue its $17.8bn hostile quest for Newmont Mining, its nearest rival. Instead both parties agreed to form a joint venture (JV) to create the world's largest gold-mining site, in north-eastern Nevada. The tie-up cemented the view that the state is the easiest place to get hitched in America.

A day later in Japan, the partners in what had become the business world's most spectacular falling-out announced a "new start" to their ménage-à-trois. Renault, Nissan and Mitsubishi launched a "consensus-based" board to replace the command-and-control structure imposed by Carlos Ghosn, who chaired all three companies until his arrest in Japan on charges of financial misconduct (which he denies). The aim is to rekindle the romance that began when Renault first rescued Nissan from near-bankruptcy in 1999.

Such JVs and strategic alliances, however schmaltzy, receive too little attention as business entities. They lack the swashbuckling allure of mergers and acquisitions (M&A). Investment bankers shun them because they generate few fees. Yet they are indispensable. They enable businesses to collaborate without entering the touchy terrain of changing who controls them. The Renault-Nissan-Mitsubishi alliance is a car-producing powerhouse. But it is also a textbook example of why such structures often go wrong.

JVs and strategic alliances are structured differently but share some characteristics. As PwC, an accountancy firm, describes it, a JV enables companies to pool resources in a separate business entity, like the Nevada gold company. An alliance is looser; it allows firms to share production platforms, for instance, which lets them preserve more autonomy, as in the car industry. In an era of globalisation, blurred lines between industries and technological disruption, such ad hoc relationships become more important. Firms want to keep their options open, rather than undergoing the Herculean task of buying and integrating a firm that may not provide the answers to the challenges of the age. By some estimates, the value of JVs and alliances is growing even faster than M&A.

The partnerships share some overlapping motivations. The most common is to enable cross-border transactions. In some countries (like China) and some industries (like airlines), they have been a key way to enter new markets. Call these long-distance relationships. A second is access to new products and technologies; pharmaceutical firms forming partnerships with biotech companies, for example. In other words, friends with benefits. The most traditional rationale is cost-savings, which underpins Barrick-Newmont's JV. This is a bit like civil unions: closely akin to marriage, but not quite. The most modern motivation is to avoid the threat of strategic disruption. In the car industry, for instance, electrification and autonomous driving are forcing companies to pool ideas. A study by the Boston Consulting Group says that a typical European carmaker has more than 30 partners across five different industries in a handful of countries. Call this constructive promiscuity: sleeping around to gain experience.

While hookups may be easier to pull off than a full-scale merger, they often end in tears. According to Water Street Partners, a consultancy, only around half succeed. Common reasons why they go wrong include partners' changing strategic objectives, new executives finding them tedious, and culture clashes. Under Mr Ghosn, the Renault-Nissan-Mitsubishi alliance eventually came to exemplify many of their worst traits. It and other tie-ups could do with a corporate equivalent of a "prenup" clause—a legal contract stating how to terminate the relationship when the passion runs out.

The Franco-Japanese fling started out well, with a clear, limited aim: Mr Ghosn was parachuted in by Renault to rescue Nissan. Then the focus turned to preserving each firm's independence and sharing costs such as purchasing. Though there were cross-shareholdings, their main objective was not control.

But as often happens in partnerships, control eventually became a problem. Mr Ghosn began to consider a full-scale merger, on terms the Japanese executives feared would be unequal—even though Nissan had become the stronger partner. The alliance had no governance structures in place for dealing with such questions; it was shaped largely by the force of Mr Ghosn's personality. That may be why things only came to a head when the police arrested him in Tokyo last November.

It is a credit to the alliance that it has, at least for now, survived the bedroom brawl. On March 12th Jean-Dominique Senard, Renault's chairman, took the helm of a new four-man board, that includes the bosses of the three car companies, and which aims to replace the patriarchal Mr Ghosn. To further mollify the Japanese, Mr Senard is likely to be vice-chairman of Nissan, not chairman.

Behind the boardroom door

Some of the Ghosn-era shortcomings remain, however. Strategic objectives are still ill-defined. The questions of ownership continue to be taboo, even as the alliance moves further to combine operations. There are no rules for resolving disputes; Mr Senard said only that he would use his diplomatic skills if they arose. The potential for clashes persists (as Japanese journalists noted, Renault provides two of the alliance's board members, Nissan and Mitsubishi one each). And there is no hint of a prenup.

If partnerships want to adapt to new circumstances, taking evolving strategies and strong personalities in their stride, they should do what Renault-Nissan-Mitsubishi has failed to and establish clear rules of engagement—and disengagement, just as banks now have "living wills" to wind them down if disaster strikes. JVs and alliances are tricky to manage for a reason. The more successful they become, the more the question of control that they were set up to avoid will rear its ugly head. ■

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The Chinese economy

Package deal

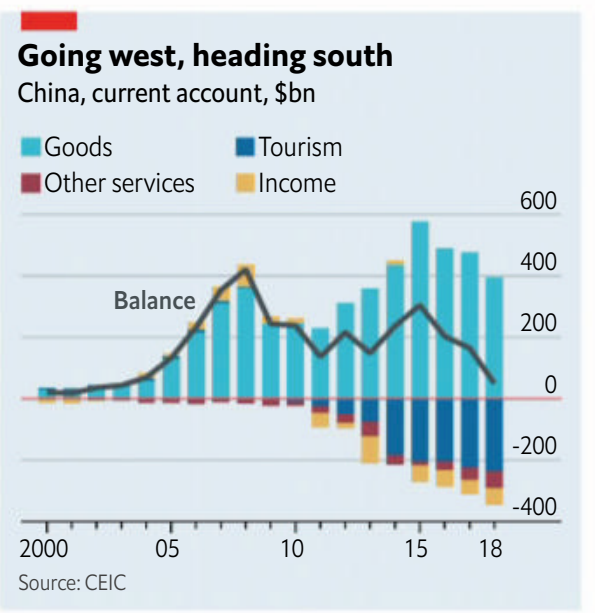
SHANGHAI

A current-account deficit could remake China's financial system, if the government lets it

IN A CONTROL room at the headquarters of Ctrip, China's largest online travel agency, dozens of fluorescent lines flash every second across a big digital map of the world. Each line represents an international flight sold on Ctrip's platform. The top destinations on the morning of March 11th, when your correspondent visited, were Seoul, Bangkok and Manila. A live ranking for hotel reservations put Liverpool in first place among European cities, Merseyside's rough-hewn charms briefly trumping Venice and Barcelona (and apparently benefiting from a special offer).

In this century's first decade Chinese citizens averaged fewer than 30m trips abroad annually. Last year they made 150m, roughly one-quarter of which were booked via Ctrip. That is not just a boon for hotels and gift shops the world over. It is a factor behind a profound shift in the global financial system: the disappearance of China's current-account surplus.

As recently as 2007 that surplus equalled 10% of China's GDP, far above what economists normally regard as healthy. It epitomised what Ben Bernanke, then chairman of the Federal Reserve, called a "global saving glut", in which export powerhouses such as China earned cash from other countries and then did not spend it. China's giant surplus was the mirror image of America's deficit. It was the symbol of a world economy out of kilter.



No longer. Last year China's current-account surplus was just 0.4% of GDP. Analysts at Morgan Stanley predict that China could be in deficit in 2019—which would be the first annual gap since 1993—and for years to come. Others, such as the International Monetary Fund, forecast that China will maintain a surplus, though only by the slimmest of margins. Either way, it would be a sign that the global economy is better balanced than a decade ago. It could also be an impetus for China to modernise its financial system.

The basic explanation for the change is that China is buying much more from abroad just as its exporters run into resistance (see chart). Its share of global exports peaked at 14% in 2015 and has since inched down. The trade war with America adds to the headwinds. At the same time, imports have soared. China's surplus in goods trade in 2018 was the lowest for five years.

The tale of trade in services, especially tourism, is even more striking. When Beijing hosted the Olympic games in 2008, foreign visitors splashed out a little more in China than Chinese did abroad. Since then the number of foreign arrivals in China has stagnated, while Chinese outbound trips have surged. Not only that: Chinese travellers have proved to be big spenders, as anyone who has queued for a VAT refund at London's Heathrow airport knows only too ▸▸

well. In 2018 China ran a $240bn deficit in tourism, its biggest yet.

Some of the current-account fluctuations are cyclical. Chen Long of Gavekal Dragonomics, a research firm, notes that the price of oil and semiconductors, two of China's biggest imports, was high last year. If they come down, a current-account surplus could swell up again.

Yet deeper forces are also at work. At bottom, a country's current-account balance is simply the gap between its savings and its investment. China's investment rate has stayed at a lofty 40% or so of GDP. But its savings rate has fallen to about the same, from 50% of GDP a decade ago, as its people have learned to love opening their wallets (or rather, tapping their mobile payment apps). An ageing population should lead to a further drawdown of savings, because fewer workers will be supporting more retirees. The disappearance of the surplus is, in this sense, a reflection of China growing richer and older.

There is, nevertheless, some concern about the implications. In emerging markets big current-account deficits can be a warning sign of financial instability, indicating that countries are living beyond their means and relying on fickle foreign investors to fund their spending. But China is in no such danger. Any deficit is expected to be small, as a fraction of GDP, in the coming years. What is more, the government still has a fat buffer of $3trn in foreign-exchange reserves. That should buy it time.

The crucial question is how China uses this time. By definition any country that runs a current-account deficit needs to finance it with cash from abroad. In an economy with a wide-open capital account and a freely floating currency, inflows and out-

Buttonwood Gross returns

How to be a rock-star bond investor

ONE NIGHT in 1965, Keith Richards woke up with a riff going around inside his head. He reached for his guitar, played the bare bones of a song into a cassette recorder and promptly fell asleep. Mick Jagger was soon scribbling lyrics by the swimming pool. Four days later, the Rolling Stones recorded "(I Can't Get No) Satisfaction".

Hit records are not made like that any more, according to John Seabrook's book, "The Song Machine". Instead they are assembled from sounds honed on computers. It can take months. A specialist in electronic percussion does the beats. Another comes up with hooks, the short catchy bits. A third writes the melody. Everything is calibrated against what worked well on previous hits.

This brings us to Bill Gross, who founded PIMCO, the world's biggest bond firm, and ran its market-beating Total Returns fund from 1987 until 2014. Mr Gross, who retired last month, is often called a rock-star fund manager. A new paper by Aaron Brown of New York University and Richard Dewey of Royal Bridge Capital, a hedge fund, gives him the "Song Machine" treatment, breaking his performance into constituent parts. It finds that even if you could simulate his strategy, a human factor would remain that algorithms cannot match. A Stones fan might call it inspiration. In finance, it is known as alpha.

What were Mr Gross's trademark beats and hooks? He spoke of three. He took on more credit risk, buying bonds from issuers who might default, than would a bond manager tracking a benchmark index. He similarly loaded his portfolio with mortgage-backed bonds. His third signature trade relied on the shape of the yield curve. A five-year bond will usually have a higher yield (and lower price) than a four-year bond. Bonds therefore become more valuable as time passes. As a five-year bond yielding, say, 6% becomes a four-year bond yielding 5%, its price goes up. Mr Gross's trick was to isolate the sweet spot where this "roll-down" is strongest—around the five-year mark—and hold more of those bonds. He offset this by holding fewer 30-year bonds, where roll-down is weak.

Messrs Brown and Dewey compiled simple trading rules to mimic these elements. They then undertook a statistical exercise to gauge how far they explain Mr Gross's excess return. Even when you allow for these factors, they find he still beats the index. He had the magic alpha.

The template for this kind of analysis is "Buffett's Alpha", a paper in 2013 by Andrea Frazzini, David Kabiller and Lasse Pedersen. It found that the market-beating performance of Warren Buffett, the Beatles to Mr Gross's Stones, could have been matched by an investor following a well-defined strategy, a core part of which was buying "value" stocks (ie, those with low prices relative to the worth of a firm's assets). Their conclusion is a tad reductive for some tastes—like saying anyone with an Apple Mac could come up with "Satisfaction". Mr Buffett was able to identify a winning strategy and to stick with it, which is not easy. But the main goal of these exercises is to show that systematic investing can work well.

It appears, though, that Mr Gross did something that could not easily be replicated. Whatever his edge, it was just as well he had it, argue Messrs Brown and Dewey. When you think you have a market-beating strategy, it is wise to ask, "If I am to win, who loses?" A value investor of the Buffett stamp wins because of other investors' tendency to extrapolate the initial success of "growth" stocks and overpay for them. Similarly, Mr Gross's roll-down trade may work because excess demand for long-dated bonds from certain kinds of investors with long-term liabilities leaves that end of the yield curve rather flat.

Profiting from the errors of others is what skilful investors do. But two of Mr Gross's strategies involved taking on extra risks that a lot of bond investors would prefer not to bear. Credit securities and mortgage bonds give a little extra return compared to safe government bonds. But from time to time they inflict big losses. An investor who makes better returns by taking on such risks is not demonstrating skill, say the authors.

Even the most talented rock stars take risks. Keith Richards took enough illicit drugs to fell a herd of bison. He lived to tell the tale. Mr Gross's riskier bets also paid off. But as Messrs Brown and Dewey argue, the risk of catastrophic loss that comes with these strategies is hard to gauge upfront. Things might have gone differently. As Mr Richards has noted, a lot of rock stars don't survive.

flows balance without the central bank giving it much thought. But in China the government keeps a tight grip on both its capital account and its exchange rate.

So now that it is facing the prospect of current-account deficits, it has little choice but to relax its grip, in order to bring in more foreign funding. It is moving in that direction. China has long controlled access to its capital markets by issuing strict quotas to foreign investors, with a preference for institutions such as pension funds. But in recent years it has opened more channels, notably through carefully managed links to the Hong Kong stock exchange.

These moves, though incremental, have been enough in aggregate to persuade compilers of leading stock and bond indices, important benchmarks for global investors, to bring Chinese assets into their fold. Last month MSCI said it would more than quadruple the weight of mainland-listed shares in its emerging-markets stocks index to 3.3%. Next month China will enter the Bloomberg Barclays bond index, which could fuel roughly $100bn of inflows into Chinese bonds within two years.

In a new book on China's bond market, the IMF argues that this could foster a virtuous cycle. More active investing in bonds would support the government's goal of using interest rates as a bigger weapon in its monetary-policy arsenal (instead of old-fashioned administrative guidance). With a more flexible exchange rate to boot, China would end up with a more modern, efficient financial system—proof that a current-account deficit can, handled well, be a welcome development.

But there are clear limits to how far China is willing to go. Efforts to lure in foreign investors have not been matched by moves to make it easier for its citizens to invest abroad. Yi Gang, the newish governor of the central bank, has repeatedly vowed to maintain the "basic stability" of the yuan. Louis Kuijs of Oxford Economics thinks the constraint is ultimately philosophical. The Chinese government is wary about ceding too much control to the market. "It implies a relatively slow opening up," he says.

Another element of China's approach to managing a deficit is therefore to stop it from getting too big in the first place. Guan Tao, a former central-bank official, says that China has to improve its competitiveness in services. With a better tourism industry, better universities and better hospitals, China would, he believes, attract more foreigners and keep more of its own spending at home.

Think of it as the second act for the Great Wall. It never much worked as a fortification for China: over the course of its two-plus millennia in existence, barbarian invaders repeatedly breached it. But now its role is to lure in tourist hordes. In this battle it has a better chance of success. ■

The euro area's economy

Self-defence

At last, governments are loosening their fiscal belts. But not by enough

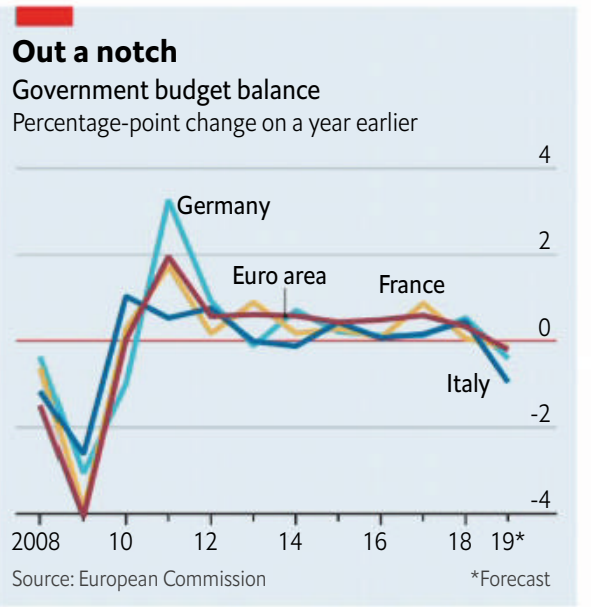
IT IS HARD to defend yourself with one hand tied behind your back. Yet the euro area's economy has been repeatedly asked to do just that. Whenever it is taking a beating, it has had to fight back with monetary policy alone. The European Central Bank (ECB) has cut rates to zero and below, bought bonds by the bucketload and lent super-cheaply to banks. Fiscal policy has been barely used—and has sometimes done more harm than good. Debt crises forced governments in the south of the bloc to tighten their belts; those in the north chose to do the same.

The economy is struggling again, and the ECB's firepower is waning. The central bank said on March 7th that it would keep interest rates on hold at least until the end of this year and extend its programme of cheap loans to banks. Even then, it does not expect inflation, now 1.5%, to reach its target of close to but below 2%. Its interest rates are already at rock bottom. Its bond-buying programme cannot easily be expanded because its holdings of German government bonds are close to legal limits.

Just as well, then, that for the first time in a decade fiscal policy in the euro area is expected to loosen this year (see chart). But the extent of easing is small and its composition is not best suited to kick-starting growth. The zone has no common budget—although its members' finance ministers discussed the topic on March 11th—so overall policy is simply the sum of individual countries' fiscal plans.

Those plans point to a wider aggregate deficit in 2019, of 0.8% of GDP. Italy's deficit is growing. So is France's, which could be expanded further by concessions to the *gilets jaunes* protesters late last year. Germany plans a smaller surplus. Fabio Balboni of HSBC, a bank, expects fiscal policy to add 0.2-0.3 percentage points to the zone's GDP growth this year. Every little helps. But it's still only a little.

Some countries have more room for manoeuvre than others—and those that have it might not make the most of it. Both Germany and Italy have been hit hard, partly by slowing demand for their exports. But whereas Germany has plenty of fiscal room, Italy, with public debt of more than 130% of GDP, would risk scaring financial markets (again) if it splurged. A German boost would help Italy too. But some economists note that Germany has tended to run larger surpluses than first projected.



Mr Balboni adds that much of the expected stimulus takes the form of tax cuts and benefit increases. Because people could choose to save rather than spend the extra cash, that lifts the economy less than public investment, which also brings the benefit of increased economic potential.

Public investment has yet to recover from deep cuts during the crisis years. Its share in euro-zone GDP is still lower than it was in 2007; in Germany it is below the zone's average. The OECD, which on March 6th published gloomy economic forecasts for the euro zone, estimates that if only the countries with scope to loosen policy—eg, Austria and the Netherlands, as well as Germany—spent an extra 0.5% of GDP for three years, and all countries undertook structural reform, the zone's economy would be 1% larger in the long run.

The OECD would welcome such co-ordination, but there is little sign of it yet. The common budget discussed by finance ministers this week would at least aim to encourage public investment and structural reform. But at the insistence of northerners, who loathe the idea of fiscal transfers to the supposedly profligate south, the budget cannot be used to stabilise the economy in rough times. Crucial details, such as its size, are yet to be decided. Meanwhile, threats abound, from American protectionism to a Chinese slowdown and a chaotic Brexit. With only one and a half hands free, the euro area's economy could be in for a clobbering. ■

Correction: In "Having its cake" (March 9th) we said that ICE owned the Paris stock exchange. In fact it was spun off as part of Euronext in 2014. Sorry.

Wells Fargo

In the pillory

WASHINGTON, DC

The bank takes a pasting, from both Congress and a regulator

"YOU HAVE not been able to keep Wells Fargo out of trouble," Maxine Waters told Tim Sloan, the chief executive of America's fourth-biggest bank, on March 12th. Ms Waters, the Democrat who since January has chaired the House of Representatives' Financial Services Committee, is not alone in her ire. Patrick McHenry, the committee's senior Republican, piled in too. Soon after Mr Sloan faced the panel, the Office of the Comptroller of the Currency (OCC), a regulator, said it was "disappointed" with Wells's "performance under our consent orders", corporate governance and risk management. "We expect national banks to treat their customers fairly, operate in a safe and sound manner, and follow the rules of law." A public dressing-down from politicians is one thing; such a rebuke from a regulator is a true ear-burner.

Over the past three years a series of misdeeds has been uncovered at the San Francisco-based bank. Under pressure to meet demanding sales targets, staff opened 3.5m fake accounts and signed customers up for credit and debit cards without their consent. The bank charged people for car insurance they did not need and overcharged members of the armed forces for refinancing mortgages. Wells has had to set aside money to reimburse foreign-exchange and wealth-management clients. It has even had to refund mis-sold pet insurance.

These transgressions have cost the bank dear. Since 2016 Wells has paid more than $1.5bn in fines to federal and state regulators (including $500m to the OCC), plus $620m to resolve lawsuits brought by customers and shareholders. The Federal Reserve capped its balance-sheet at $2trn in February 2018—a limit that will stay until the Fed is satisfied that Wells has cleaned up its act. At the House hearing Mr Sloan admitted that Wells is operating under 14 consent orders (settlements agreed with regulators without admitting guilt).

Investors are grumbling too. Wells's share price fell by 24% in 2018 (though it has begun 2019 more steadily). The asset cap, which Mr Sloan expects to stay in place all this year, is starting to bite, while rival megabanks can take advantage of America's robust economy to lend more. In recent times Wells has enjoyed a higher return on equity than its competitors. Last year it was overtaken by JPMorgan Chase.

Mr Sloan—who assumed the top job in 2016 after his predecessor, John Stumpf, was forced out amid the fake-accounts scandal—insists that Wells has reformed. He told the committee that the offending sales targets have been changed. The 5,300 workers who opened phoney accounts have been sacked. A quarter of Wells's board members stepped down in 2018.

The result, he claims, is a more customer-friendly bank. For instance, Wells has revised its overdraft rules, to make them more lenient on those who make mistakes. If a withdrawal is made the day before a customer's monthly pay-cheque clears, the customer will no longer be charged.

But lawmakers and regulators are still furious. "Each time a new scandal breaks, Wells Fargo promises to get to the bottom of it," said Mr McHenry at this week's hearing. "But then a few months later, we hear about another case of dishonest sales practices or gross mismanagement."

Other banks are not guiltless, but in this category of sin Wells has been in a league of its own. In June the same committee quizzed the OCC after it ended an investigation into malpractice at other banks without publishing its findings. It emerged that employees at unnamed banks had opened around 10,000 fake accounts. But that is minuscule next to the tally at Wells.

Even so, there is some small consolation for Mr Sloan: he will not be the only one in the pillory. In April the heads of all America's large banks are due to testify before Ms Waters's committee. She is probably just getting started. ■

Gold in India

Lacklustre

THANE

Indians may at last be falling out of love with the yellow metal

P.N. GADGIL & SONS, a jewellery shop in Thane, a suburb of Mumbai, is gearing up for the wedding season—a busy time for gold sales, even if demand is brisker still during Hindu festivals, when jewellers stay open almost round the clock. Free samosas and Pepsi are offered to those queuing outside; inside, the noise and bustle are non-stop.

Indians have long regarded gold as the surest store of wealth. Brides bring it as dowry. Newborns are given bangles and anklets. Astrologers prescribe gold rings for stress. Indian households own 23,000 tonnes, three times more than the bullion held by America's Federal Reserve. In the year to March 2018 gold imports, at $74.7bn, ranked after only oil.

The government has tried repeatedly to break Indians' addiction, increasing import duty fivefold since 2013. In 2015 it began a scheme allowing investors to exchange gold for interest-bearing bonds and get it back when the bonds mature. Television commercials nudge viewers to invest in mutual funds instead.

Now with a little less sparkle

Such efforts long seemed unavailing, but something seems to have shifted. Demand has fallen by a fifth since 2010.

Consumer preferences are one reason: many prefer lighter jewellery for daily wear. Millennials, a third of the population, spend more than older generations on mobile phones and other electronic goods. The international price of gold has gone up; last month it was near a five-year high, measured in dollars. The weak rupee, close to a record low at 70 to the dollar, makes the domestic price dearer still. A goods-and-services tax introduced in 2017, one-third higher than the levy it replaced, has also hit sales. And with inflation down to just 2.6%, gold's utility as a hedge has lessened, says Ajit Ranade, an economist.

Jewellers' margins are already slim, gripes Rajendra Jain, who owns another shop in Thane. Online firms selling small amounts for as little as one (American) cent are adding to the pain. Since 2016 over 30m customers have traded three tonnes via Paytm, an e-commerce giant. The average transaction is 50-100 rupees. It's like "buying shampoo in small sachets instead of the whole bottle," says Gaurav Mathur of SafeGold, a rival.

Jewellers, who account for 70% of sales, are also still recovering from the government's messy recall, in 2016, of high-value banknotes, which squeezed cash purchases. The end of India's love affair with gold may be overdue. But it is bad luck for the shopkeepers of Thane.

Turkey

Default setting

Credit curtailed, imports imploding: the struggle to restore a stricken economy

During Turkey's constitutional upheavals in 2016-17, when President Recep Tayyip Erdogan faced down an attempted coup and gathered up new political powers (and prisoners), the country's economic reformers remembered better days. They talked wistfully of an imminent return to "factory settings". Turkey, they believed, had a default set of successful policies, from which it had recently deviated and to which it could quickly revert, undoing any mistakes in between.

Instead the economy suffered something closer to a system crash. Excessive lending, some of it guaranteed by the government, contributed to rising inflation and a widening current-account deficit. The central bank's ability to restore order was stymied by Mr Erdogan's hostility to orthodox monetary policy (he compared interest rates to tools of terrorism). When the government fell out with President Donald Trump over the arrest of an American pastor working in Anatolia, foreign investors (and many Turkish depositors) lost their nerve. Turkey's currency, the lira, fell by 40% against the dollar in the first eight months of 2018.

That drop was excruciating for the many companies that had borrowed in euros or dollars: foreign-currency corporate debt amounted to over 35% of GDP in 2018. Hundreds of firms have since defaulted or applied for *konkordato*, a court-approved rescheduling of debt that allows them to avoid declaring bankruptcy. Their number includes the Turkish franchises of Gloria Jean's Coffees owned by Haci Sayid, a cafeteria chain founded by two brothers who have been making baklava since 1968.

The full extent of the damage became clearer on March 11th, when Turkey reported its latest GDP figures. They showed that the economy shrank by 3% in the fourth quarter of 2018 compared with a year earlier (see chart). That was an even sharper fall than expected. But if anything, it understates the suffering. An unusually large share of this diminished output was exported to foreigners, rather than enjoyed at home. Household consumption, a better measure of pleasure and pain, shrank by almost 9%.

The crisis has, however, forced the government to reset its reckless macroeconomic policies. The appointment in July of Berat Albayrak, the president's son-in-law, as finance minister did not bode well. But for the moment the family dynamic seems to be working in the economy's favour, helping to reconcile Mr Erdogan to the need for monetary and fiscal restraint. The central bank was belatedly permitted to unholster its terrorist tools and raise interest rates. The government has also set itself ambitious fiscal targets that will require cutting pensions and postponing investment to narrow the budget deficit.

The flow of credit has been sharply curtailed, imports have collapsed and exports have boomed. The current account even swung into surplus for four months in a row from August to November, as Turkey welcomed more foreign tourists and fewer foreign goods. This rebalancing has helped to revive the lira, which rose by 28% from the end of August to the end of January.

But how long will it take for stability to translate into growth? An economy, unfortunately, cannot be reset as easily as a smartphone. Past mismanagement tends to become embedded in the circuits. The Turkish public, for example, will not quickly forget last year's erosion in the value of the lira. They now hold nearly half of their deposits in foreign currency. And the central bank will have to keep interest rates high for some time to convince people that it can conquer inflation, which remains at almost 20%. In its impatience, the government has resorted to opening subsidised food stalls in big cities to dampen the rise in the price of groceries, which Mr Albayrak has branded "food terrorism".

Inflation should fall further later in the year, as the effects of the lira's decline wear off. Credit is already beginning to revive, led by state banks. And some early indicators for 2019 suggest that the pace of economic contraction is starting to ease. BBVA, a bank, believes growth will return in the second half of the year, leaving the economy 1% bigger this year than last.

A cyclical recovery will not, however, resolve questions about Turkey's longer-term future. It is hard now to argue that the market-friendly policies embraced by Mr Erdogan's party from 2002 to 2011 represent the economy's default mode. After all, the populism and cronyism of more recent years is hardly new in Turkey. A similar kind of mismanagement reared its head many times before the financial crisis of 2001 and the promise of European Union membership motivated a decade of reform. Perhaps populism, not liberalism, represents Turkey's factory settings, to which it has returned after all. ■

In the front line

Free exchange | Magic or logic?

A new macroeconomic idea is gaining in popularity. Eminent economists think it's nuts

"Modern monetary theory" sounds like the subject of a lecture destined to put undergraduates to sleep. But among macroeconomists MMT is far from soporific. Stephanie Kelton, a leading MMT scholar at Stony Brook University, has advised Bernie Sanders, a senator and presidential candidate. Congresswoman Alexandria Ocasio-Cortez, a young flag-bearer of the American left, cites MMT when asked how she plans to pay for a Green New Deal. As MMT's political stock has risen, so has the temperature of debate about it. Paul Krugman, a Nobel prizewinner and newspaper columnist, recently complained that its devotees engage in "Calvinball" (a game in the comic strip "Calvin and Hobbes" in which players may change the rules on a whim). Larry Summers, a former treasury secretary now at Harvard University, recently called MMT the new "voodoo economics", an insult formerly reserved for the notion that tax cuts pay for themselves. These arguments are loud, sprawling and difficult to weigh up. They also speak volumes about macroeconomics.

MMT has its roots in deep doctrinal fissures. In the decades after the Depression economists argued, sometimes bitterly, over how to build on the ideas of John Maynard Keynes, macroeconomics' founding intellect. In the end, a mathematised, American strain of Keynesianism became dominant, while other variants were lumped into the category of "post-Keynesianism": an eclectic mix of ideas consigned to the heterodox fringe. In the 1990s a number of like-minded thinkers drew on post-Keynesian ideas in fleshing out the perspective embodied in MMT.

That perspective is not always clear; there is no canonical MMT model. But there are some central ideas. A government that prints and borrows in its own currency cannot be forced to default, since it can always create money to pay creditors. New money can also pay for government spending; tax revenues are unnecessary. Governments, furthermore, should use their budgets to manage demand and maintain full employment (tasks now assigned to monetary policy, set by central banks). The main constraint on government spending is not the mood of the bond market, but the availability of underused resources, like jobless workers. Raising spending when the economy is already at capacity can lead to rapid inflation. The purpose of taxes, then, is to keep inflation in check. Spending is the accelerator, taxation the brakes. Fiscal deficits are irrelevant as long as unemployment is low and prices are stable.

To those versed in orthodoxy—in which governments must eventually pay for their spending through taxes—these ideas sound bizarre. This strangeness is partly a result of MMT scholars' unconventional idiom. Speaking with MMT's adherents is sometimes like watching a football match with friends who insist the ball remains stationary while every other element in the game, including the pitch and goalposts, moves around it. Communication is made harder still by MMTers' sparse use of mathematical models. To economists who consider heavy-duty maths a mark of seriousness, such reluctance to use equations is either evidence of intellectual inferiority or a way of avoiding scrutiny.

It may instead reflect the fact that MMT is less a rival theory than a qualitative critique. Yes, central banks can use interest rates to achieve full employment, if rates are not too close to zero. But MMTers think governments are better equipped. Monetary policy works via banks and financial markets, but when markets panic, this mechanism is weakened. Rate cuts stimulate the economy by encouraging firms and households to borrow, but that can engender risky levels of private-sector debt. Government spending sidesteps these problems. Similarly, rate rises can slow inflation. But they often work by inducing indiscriminate involuntary unemployment. The state could instead tame an unruly boom, MMTers argue, by breaking up monopolies—thus loosening supply constraints—or by aiming tax increases at fossil-fuel firms.

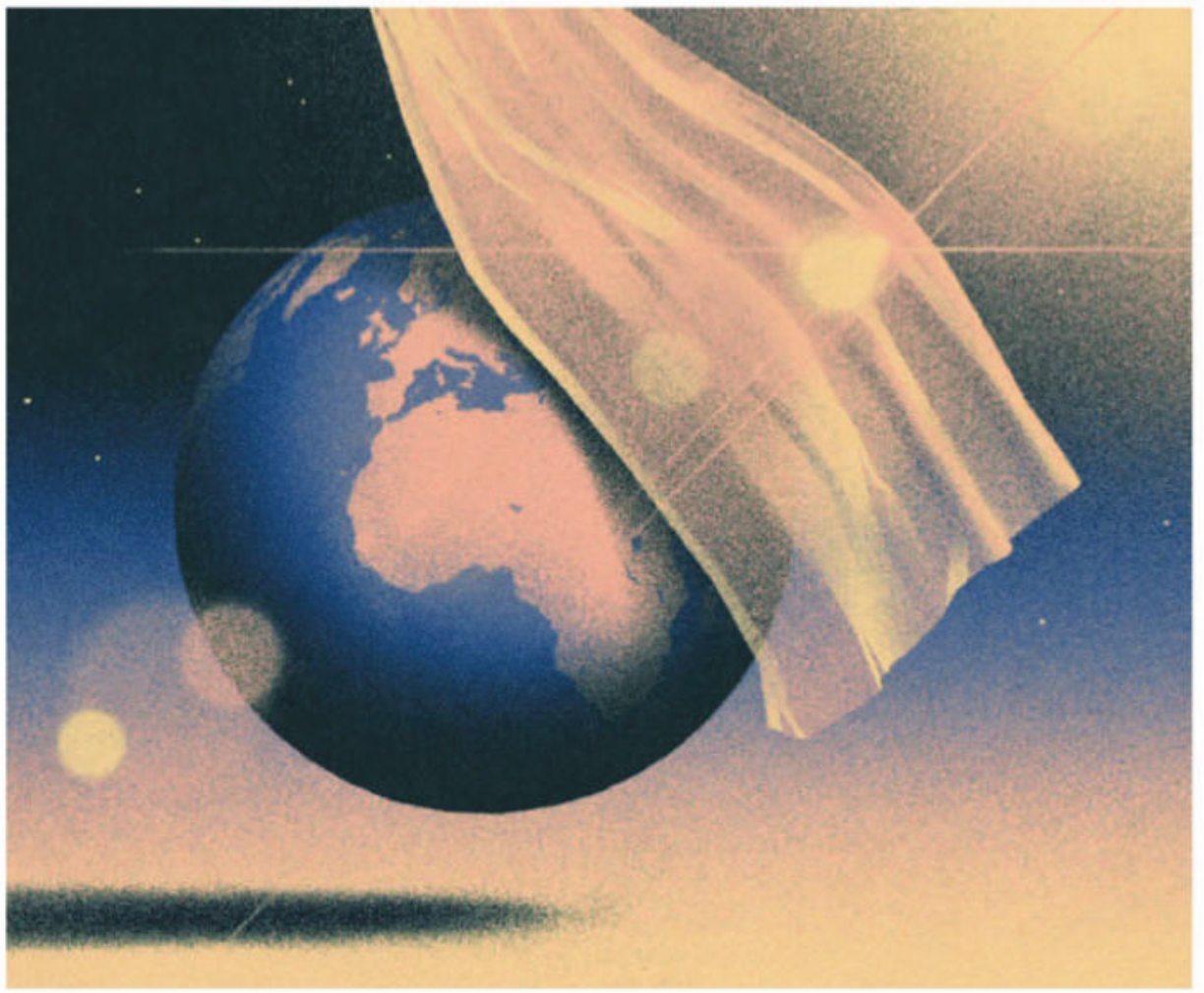
Economists recognise that their models have shortcomings, and that monetary policy is not all-powerful. But most economists have long held that macroeconomic policy should stabilise the economy with the lightest possible touch, the better to let markets allocate resources. Other means can then be used to tackle reckless lending, market failures or inequality. MMT's supporters question this—and believe that recent economic history bolsters their case.

You might suppose that the feud could be settled by testing rival claims. Alas, macroeconomics rarely works this way. Macroeconomists cannot run experiments as laboratory scientists can. Statistical analysis of the world is muddied by the vast number of variables, many of which are correlated with the thing whose effect the economist is trying to isolate. Macroeconomic arguments tend not to produce winners and losers: only those with more influence and those with less. Post-Keynesian ideas were never proven false, unlike the Ptolemaic model of the solar system. Rather, they declined in status as mainstream Keynesianism rose.

Stupor models

Mainstream Keynesianism was tarnished in turn amid the inflation of the 1970s. The monetarism which then gained favour floundered a decade later, when central banks targeting money-supply growth discovered that the link between their targets and inflation had vanished. Keynesians regrouped and built "new Keynesian" models which became the workhorses of much recent analysis. They too have disappointed. In 2016 Olivier Blanchard, a former chief economist of the IMF, described the workhorses as "seriously flawed", "based on unappealing assumptions", and yielding implications that are "not convincing". Paul Romer, a Nobel laureate last year, wrote in 2016 that "for more than three decades, macroeconomics has gone backwards".

MMT is not obviously a step forward. But if it wins political support and influences policy only to flop, that is hardly voodoo. It is macroeconomics as usual. ■



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Geoengineering

Sunny with overcast features

Countries fall out over plans to tinker with Earth's thermostat

THE IDEA of cooling the climate with stratospheric sunshades that would shield the planet from the sun's warming rays moved up the international agenda this week, with mixed results. On the one hand, new research suggested that it is theoretically possible to fine-tune such a shield without some of its potentially damaging consequences. Publication of this work coincided with a proposal at the biennial UN Environment Assembly (UNEA), held in Nairobi, Kenya, for an expert review of such geoengineering methods. This was the highest-level discussion of the topic so far. On the other hand, the more than 170 nations involved could not arrive at a consensus. In a fitting illustration of the heat surrounding geoengineering, the proposal was withdrawn at the eleventh hour.

Under the Paris Agreement, governments have pledged to keep average global warming to "well below" 2°C above pre-industrial levels and to try to limit maximum warming to 1.5°C. Many see these targets as wishful thinking: the planet is already roughly 1°C warmer than it was in pre-industrial times, global greenhouse gas emissions are still on the rise and national pledges to cut them fall short of what is needed to hit the 2°C target, let alone 1.5°C.

Faced with this, some think there is a need to turn down the global thermostat using geoengineering. This encompasses a range of possibilities, including technologies that suck carbon dioxide out of the atmosphere and others that block incoming solar energy. One concern, however, is that these methods do not deal with the cause of the problem: greenhouse-gas emissions. Despite calls to map out the risks and benefits of geoengineering, progress on the international stage has been limited, in part, because it might detract from efforts to reduce emissions. That shifted this week when the delegates in Nairobi debated a proposal for an international assessment. It is the first time that geoengineering has been discussed at such a level and in a forum that includes America.

The UNEA resolution was tabled by Switzerland, and by the start of the week it had received support from most governments. It called for an expert review of the science of geoengineering, including studies on the suite of available technologies, how each might be deployed and how well they would or would not work, as well as any possible negative consequences. The proposal also called for an analysis of the challenges in regulating each approach.

Among the most controversial but also effective and affordable geoengineering options are planetary sunshades. By using high-flying aircraft, for instance, to spray a fine mist of mineral or man-made particles into the upper stratosphere, a portion of the sun's incoming energy could be bounced back out into space before it gets a chance to warm the planet. The decades-old idea is inspired by large volcanic eruptions, like that of Mount Pinatubo in the Philippines in 1991, which cooled global temperatures by up to 0.5°C for four years.

In the shade

That event demonstrated that relatively simple sunshades could have a significant effect on global temperatures. Indeed, while climate models project that doubling the concentration of carbon dioxide in the atmosphere could cause between 1.5°C and 4°C of global warming, the models also suggest that it is theoretically possible to reduce temperatures by an equal amount using a sunshade.

But there are challenges. Stratospheric particles eventually fall back to Earth in rain, so the effect is short-lived. A sunshade would need to be continually resupplied, which is one reason for an international governance framework. If a sunshade were allowed to dissipate while atmospheric CO_2 concentrations remained high, global temperatures would rapidly ▸▸

shoot up, with devastating consequences in some regions of the world.

Another problem is the effect of solar geoengineering on the water cycle. Over the past decade, several studies have suggested that sunshades could disproportionately affect rainfall, bringing drought to some regions. But that argument may be oversimplified, according to the new study published in *Nature Climate Change*.

So far, most studies have modelled a "fully" geoengineered world in which CO_2 concentrations are doubled compared with current or pre-industrial levels, and all the resulting warming is counterbalanced by a stratospheric sunshade. Instead, Peter Irvine of Harvard University and his colleagues simulated a partial sunshade. They were able to eliminate half the warming effect of doubled CO_2 concentrations while stabilising the water cycle.

In a warmer world, due to greenhouse gas emissions, the water cycle is intensified, making drier regions drier and wetter regions wetter, leading to floods and droughts. In their modelled "half-warmed" world, Dr Irvine and his colleagues found that both temperature and precipitation extremes were moderated, which should lead to fewer droughts and floods.

The team also looked at how solar geoengineering would affect tropical cyclones. Doubling CO_2 concentrations compared with present-day levels increased the cumulative intensity of all tropical cyclones by 17.6%. The partial sunshade brought that increase down to 2.4%. Limitations in the model made it impossible to see if this benefit was equally distributed across different regions, such as the Pacific and the Atlantic.

The researchers say their study is more relevant to real policy decisions because it shines some light on what could be done by, for instance, combining solar geoengineering with efforts to cut greenhouse gas emissions. But all this would require international consensus, and obtaining that may be a fantasy.

The barriers to unity were on display in Nairobi. In 2010 the Convention on Biological Diversity advised against geoengineering activities "until there is an adequate scientific basis" to justify them, but America is not a party to that convention. It was represented at UNEA. However, several delegates told this newspaper that America and Saudi Arabia opposed the Swiss proposal to review geoengineering, preferring the issue to be assessed by the Intergovernmental Panel on Climate Change (IPCC), which is due to include something about the technologies in its next big report, expected in 2021.

The distinction may seem procedural, but the Swiss proposal was for a more comprehensive appraisal and one that would be delivered more quickly, by August 2020. What is more, the IPCC's mandate is primarily to consider the science of geoengineering, not whether and how to regulate its various technologies. And the impact of those technologies on a regional and global scale means governance questions will be at least as tricky as the scientific ones. Indeed, there are concerns that some geoengineering methods could be unilaterally deployed by one or more nations, to the possible detriment of others. "UNEP is the right space because it is the anchor institution of the UN for the environment that collects information but also has a policy function," said Franz Perrez, Switzerland's ambassador for the environment.

The Americans, some said, did not appear to want to make room for conversations, let alone make decisions, about a framework for geoengineering that could restrict their future options. A spokesman for their delegation declined to comment.

Supporters of the proposal insisted they sought an honest analysis. There is a bitter irony in the meeting's outcome. The only reason the world may need geoengineering is that talks about cutting emissions have gone on so long but achieved so little. Yet in Nairobi delegates could not even commission a report. Geoengineering, the toolbox that a decade ago nobody wanted, could end up stuck in the same international procedures as efforts to tackle the root cause of global warming. ■

Palaeontology

Monkey puzzle

The conundrum of monkey evolution

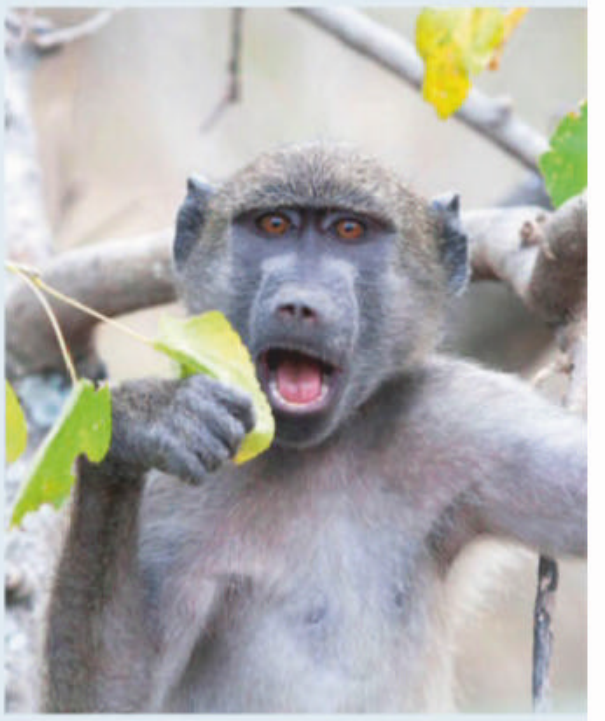
WHY MONKEYS and apes took separate evolutionary paths has long been a mystery. One widely held theory is that environmental changes that led to more open habitats drove a wedge between these animals, leading the ancestors of monkeys to make do with a less nutritious diet of leaves and those of modern apes to thrive upon fruits and seeds. A study led by John Kappelman of the University of Texas and the late David Rasmussen of Washington University, published this week in *PNAS*, suggests that this idea is wrong.

There are few vertebrate groups that have a worse fossil record than monkeys. Fossils form best when animals die in places where sediment is constantly being deposited to cover up their bones, like streams, river deltas, coastlines and sand dunes. Because monkeys typically live in lush forests where sediment is rarely deposited, they rarely fossilise. Indeed, while genetic analysis of modern species makes it clear that they diverged from apes 30m years ago, evidence of their first 12m years of existence has until now been composed of just two molars that are too worn to show much detail.

A new fossil discovered in Nakwai, Kenya by a team of Kenyan and American scientists has now been dated as being 22m years old. Composed of several jaw fragments with well-preserved teeth still stuck in their sockets, the fossil clearly belonged to a monkey. Yet the specimen has raised more questions than it has answered because it lacks an important dental trait known as bilophodonty.

Best described as teeth that have crests running between their cusps, bilophodont molars are found in all members of the old world monkey family and play a pivotal part in helping these animals to chew leaves efficiently. Because the Kenyan fossil does not have these crests, Dr Kappelman and his colleagues believe it was much more likely to have fed on fruits and seeds. That goes against the prevailing theory that leaves became a major part of the monkey diet after their split from apes 30m years ago.

Although Alophia, as the researchers have named the fossil, may just be an odd early monkey lineage that broke from its kin and later started eating fruit, it is also possible that this animal had teeth that were typical for monkeys of the time. If so, the monkey puzzle deepens: something other than a taste for leaves must have led them away from apes.



Something to chew on

Antidepressants

Ketamine treatment

A new drug could help treat depression

IT HAS BEEN over 30 years since a genuinely new type of drug for treating depression, or indeed any psychiatric illness, has come to market. Most antidepressants to date have been based on the "monoamine hypothesis", which holds that depression is caused by low levels of a class of chemical messengers (the monoamine neurotransmitters: serotonin, norepinephrine and dopamine) in the brain. Unfortunately, over a third of patients fail to respond to these drugs, and even when the drugs do work, it can take weeks or months for their effects to kick in.

Hence the interest in a recent announcement by the Food and Drug Administration (FDA) in America that it had approved a new drug for patients with "treatment-resistant" depression, defined as having not responded adequately to at least two previous antidepressants. Of particular note is that it is based on ketamine, a recreational drug. Esketamine, as the chemical is known, is branded as Spravato by its developer, Janssen Pharmaceuticals, a branch of Johnson & Johnson.

Widely used as an anaesthetic, ketamine blocks specific chemical receptors, especially one for glutamate, the most abundant chemical messenger in the brain. Animal research in the 1990s implicated glutamate in depression. A small clinical trial in 2000 showed that not only did ketamine have antidepressant effects in humans, but it took hold within hours. Subsequent studies showed it worked on treatment-resistant depression.

The main side-effect of ketamine is that it has hallucinogenic effects, such as out-of-body or "dissociative" experiences. There is some evidence suggesting the side-effects of esketamine, although similar, are slightly less severe. Nevertheless, the potential for abuse, together with elevated blood pressure and the dangers of wandering around in such a state, are why the FDA has recommended a strict treatment strategy. This stipulates that the drug is administered under supervision, in a clinic or a doctor's office. Patients should be monitored for at least two hours before they leave, record their experiences and not drive that day.

In research and in clinics that give ketamine to patients able to pay around $3,000, the drug is administered intravenously. The new treatment is taken in the form of a nasal spray. Janssen says the cost of a one-month course will be between $4,720 and $6,785. Previous studies of generic ketamine suggest the effects of multiple doses last a few weeks, on average, but as long as a few months in some people.

The trial data Janssen submitted to the FDA was somewhat mixed, but the agency would probably have taken into account the wealth of information that already existed on ketamine's effectiveness, says Carlos Zarate of the National Institute of Mental Health. That includes a trial he led, published in 2006. One of ketamine's remarkable properties, says Dr Zarate, is that it has a "broad spectrum" effect, alleviating many of the different mood symptoms that can occur in depression, including anxiety and the inability to experience pleasure. For patients at acute risk of suicide, for which drugs can take too long to work, there is evidence that it might be a lifesaver by reducing suicidal thoughts. ■

Psychology

Dinner diplomacy

Sharing food leads to more successful negotiations

SHRIMP COCKTAIL, grilled sirloin with pear kimchi and chocolate lava cake. Donald Trump and Kim Jong Un had the same food brought to them on individual plates during their summit on February 27th. Psychologists think a meal like this is a good first step towards improving relations. But new work suggests there might have been a more positive outcome with a different serving arrangement.

As Kaitlin Woolley of Cornell University and Ayelet Fishbach of the University of Chicago report in *Psychological Science*, a meal taken "family-style" from a central platter can greatly improve the outcome of subsequent negotiations.

Sharing the kimchi would have helped

Having conducted previous research in 2017 revealing that eating similar foods led to people feeling emotionally closer to one another, Dr Woolley and Dr Fishbach wondered whether the way in which food was served also had a psychological effect. They theorised that, on the one hand, sharing food with other people might indicate food scarcity and increase a notion of competition. However, they also reasoned that it could instead lead people to become more aware of others' needs and drive co-operative behaviour as a result. Curious to find out, they set up a series of experiments.

For the first test they recruited 100 pairs of participants from a local café, none of whom knew each other. In return for a $3 gift card and a chance to win $50 based upon their performance during a negotiation game, the participants were sat at a table and fed tortilla chips with salsa. Half the pairs were given their own basket of 20 grams of chips and a bowl of 25 grams of salsa, and half were given 40 grams of chips and 50 grams of salsa to share. As a cover for the experiment, all participants were told this snack was to be consumed before the game began.

The game required the participants to negotiate an hourly wage rate during a fictional strike. Each person was randomly assigned to represent the union or management and follow a set of rules.

The researchers measured co-operation by noting the number of rounds it took to reach an agreement, and found that those who shared food resolved the strike significantly faster (in 8.7 rounds) than those who did not (13.2 rounds). A similar experiment was conducted with 104 participants and Goldfish crackers, this time negotiating an airline's route prices. The results were much the same, with the food-sharers negotiating successfully 63.3% of the time and those who did not share doing so 42.9% of the time.

To see if food-sharing among friends worked in the same way as it did among strangers, Dr Woolley and Dr Fishbach ran their strike experiment again with 240 people, partnering together two friends or two strangers. Regardless of whether the pairs were friends or strangers, those who shared food went into fewer rounds during the game, averaging 6.4 rounds, than those who did not share food, averaging 9.8. Friendship did have an effect, though. Whether they shared food or not, friends were generally more co-operative.

Mr Trump and Mr Kim might balk at having to take turns serving themselves from platters in the centre of a table. But these results suggest that such an arrangement really could help world diplomacy. ■

Lives of the artists

This soul of a woman

Four centuries on, the life and work of Artemisia Gentileschi are freshly relevant

Two men, their cloaks billowing, peer over a wall at a bathing woman. The biblical story of Susanna and the Elders—in which the lechers threaten to tell her husband she has been unfaithful unless she has sex with them—was a popular subject for Baroque and Renaissance artists. Rubens, Tintoretto and Rembrandt all painted it. Their Susanna is a temptress; Artemisia Gentileschi's version (see next page), which she painted in 1610 at the age of 17, is different. Susanna twists and shields her body, her face contorted in revulsion.

The few women who painted professionally in her era mostly stuck to modest portraits and still lifes. Gentileschi demanded to be judged by the same artistic standards as men, depicting bold, often violent biblical scenes and female saints such as Mary Magdalene. As well as being the first female artist admitted to the Accademia delle Arti del Disegno in Florence, she was an astute negotiator. She was paid five times more than her collaborators for her part in a cycle of frescoes honouring Michelangelo. She painted her panel—which was on a ceiling—while pregnant. "I will show Your Most Illustrious Lordship what a woman can do," she told a patron.

Roughly 60 paintings attributed to Gentileschi survive, along with dozens of her letters. But her character is evoked most vividly in the transcript of a trial in Rome in 1612 (when she was 19), in which she recounts her rape by Agostino Tassi. Her father, Orazio, also an artist, had hired Tassi to teach her perspective. "He placed a hand ...at my throat and on my mouth," she tells the court. "I tried to scream as best I could."

A parade of witnesses denounce her as promiscuous. Two midwives examine her body in front of the judge. And, in a barbaric procedure deemed necessary to prove her honesty, cords are tightened around her fingers while she is questioned. "It is true, it is true, it is true," she pleads, over and over again, until the torture ends.

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The spirit of Caesar

Gentileschi's "Self-Portrait as St Catherine of Alexandria" was acquired last year by the National Gallery in London, becoming only the 21st work by a woman in a 2,300-piece collection. It was recently dispatched on a year-long tour of Britain. Letizia Treves, a curator at the gallery, insists Gentileschi's work should not be viewed only through the prism of Tassi's assault. The artist should not be defined by her rape, Ms Treves says, and so frozen in history as a victim. Still, the story of an ambitious woman who overcame sexual predation has bolstered her appeal in the #MeToo era.

"Her voice in the court transcript is so bold, so forthright, that you immediately want to stage it," says Ellice Stevens, co-author of "It's True, It's True, It's True", a play about Gentileschi's travails that won awards at the Edinburgh Fringe Festival last year, transferred to London and will soon be staged elsewhere. In this telling, her life becomes a parable of sex and power, pain and revenge. She is both a great artist and a feminist hero.

Her legend has come a long way in a short time. In "Artemisia", a film released in 1997, Gentileschi is a headstrong young ingénue who falls for her teacher. During the trial—occasioned, in the movie, by Orazio's fury that his daughter has engaged in sex out of wedlock—Tassi screams, "I love her." ("Looking back," Ms Stevens, the playwright, says of the film, "it's inexcusable.") In "Painted Lady", a television series starring Helen Mirren released in the same year, a murder-mystery is constructed around Gentileschi's ferocious painting, "Judith Beheading Holofernes" (above). In an experimental novel by Anna Banti, published in 1947, the Italian author wove the story of her own life in Nazi-occupied Florence with her mental image of Artemisia, "my companion from three centuries ago".

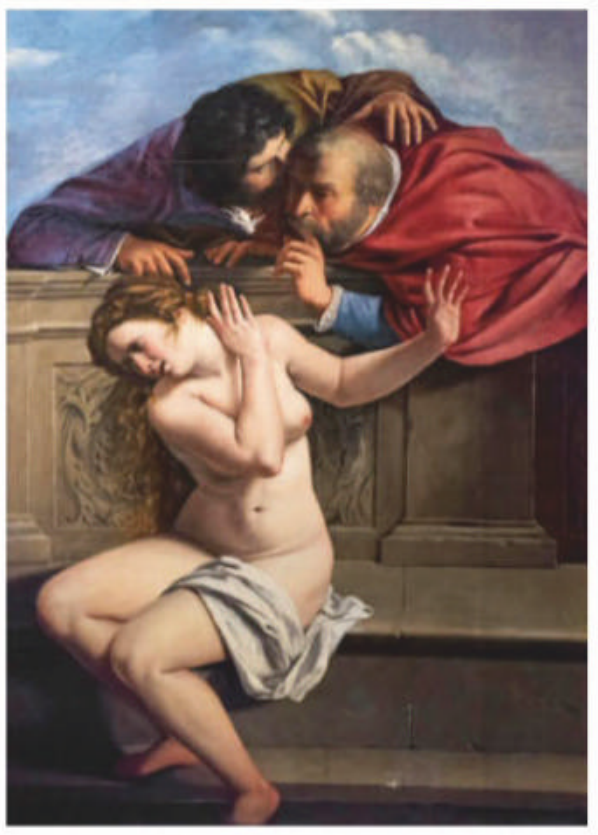
Relevant as Gentileschi's biography ▸▸

now seems, some scholars are wary of the tendency to find echoes of 21st-century experience in a life lived 400 years ago. "We have to be careful not to confuse the women of the 17th century with feminists of today," says Babette Bohn, an art historian at Texas Christian University. In Gentileschi's time, for instance, rape was not viewed as a violation of a woman's rights but as a matter of family honour. The trial in Rome came about because Orazio had petitioned the pope for compensation. His daughter was considered damaged goods.

Yet a key feature of her story—the peril of reporting sexual violence—remains indubitably pertinent. "We still see all the same victim-blaming and character-assassination that Gentileschi faced," says Joy McCullough, author of "Blood Water Paint", a book about the artist for teenagers that was published last year. Sexual assault remains vastly underreported, in part because of a lack of trust in the authorities and fear of public humiliation. "Her story can give young people a language to face these issues," Ms McCullough hopes.

As Artemisia informs the audience at the end of "It's True, It's True, It's True", "the final pages of the court transcripts are missing." Tassi, however, seems to have been found guilty. "He's exiled from Rome," Artemisia recounts, "for a while." A favourite artist of successive popes, the real-life Tassi returned to work after a few months.

But, as the heroine of the play explains, so did she. Gentileschi—who once declared in a letter, "You will find the spirit of Caesar in this soul of a woman"—moved to Florence. Married off to a mediocre artist, she nevertheless set up her own studio. The Medicis commissioned her; King Charles I bought one of her self-portraits. She worked in Naples and London. She became the great artist she always wanted to be. ■



America and the world

Pointillist power

Imperialism is an unduly neglected feature of American history

How to Hide an Empire: A History of the Greater United States. By Daniel Immerwahr. *Farrar, Straus and Giroux; 528 pages; $30. Bodley Head; £25*

The United States was born out of rebellion against imperial power. Yet it then amassed more of an empire than is commonly realised, including by Americans. Indeed the country's history, according to Daniel Immerwahr's lively new book, is a history of empire.

Grasping that history means looking beyond today's "logo map" of America, as Mr Immerwahr, a historian at Northwestern University, calls the country's core. His focus is on the wider lands that have come under its control: the Greater United States. At various times this has included the Philippines (a colony from 1899 to 1946) and Puerto Rico (now a commonwealth), as well as American Samoa, Guam, the US Virgin Islands, Northern Marianas and myriad other territories around the world.

This history is a drama in three acts. The first describes the amassing of "logo" America through westward expansion and the displacement of Native Americans. The story of the land-hungry country's manifest destiny is well known but well told by Mr Immerwahr.

Next, in act two, comes the annexing of other territories. In the 19th century a craze for guano for use as fertiliser leads to the occupation of dozens of uninhabited islands in the Caribbean and Pacific. Alaska is purchased. Military victories bring in the northern part of Mexico and then Spain's overseas empire, including the Philippines, Puerto Rico, thousands of islands and 8.5m people, though at great cost. By one calculation, the fight for the Philippines claims more lives than the American civil war. With hostilities stretching from 1899 to 1913, it is America's longest conflict save for the one that is still raging in Afghanistan today. The killing in the Philippines in the second world war is the most destructive event ever on American soil.

At the end of that war the Greater United States contains some 135m people outside the mainland, more than the 132m living in the core country itself. However, except for a brief period of enthusiasm for empire around the turn of the 20th century, the country's imperial reach is played down by its politicians. Unlike London, Washington is not festooned with grand offices to run the colonies.

And then, in act three, something remarkable happens: America gives up territory. The population of American lands beyond the core states shrinks from 51% of the total in 1945 to 2% in 1960 (after Hawaii and Alaska join the union). These days, all the overseas territories add up to an area smaller than Connecticut.

Why the retreat? Projecting power no longer requires going to the trouble of holding large amounts of land, often against the will of the local population. Instead, globalisation replaces colonisation. Thanks to aviation, logistical mastery and other world-shrinking innovations, America can substitute technology for territory.

Not that holding territory is wholly irrelevant, even now. The superpower has roughly 800 overseas bases (compared with some 30 held by others in total); in Mr Immerwahr's vivid formulation, its empire is now a "pointillist" one. The United States did not abandon empire, but "reshuffled its imperial portfolio, divesting itself of large colonies and investing in military bases, tiny specks of semi-sovereignty strewn around the globe".

Up from the depths

Mr Immerwahr peppers his account with colourful characters and enjoyable anecdotes. This tale of territorial empire, he suggests, throws light on the histories of everything from the Beatles to Godzilla, the birth-control pill to the transistor radio—even on the use of the word "America", which entered common parlance surprisingly late, spreading only after 1898. It also has darker sides: racism, the legal grey zone in which many overseas territories exist and the lack of full representation that still affects the 4m or so people living in them. Deadly impacts of empire, according to Mr Immerwahr, range from terrorism in retaliation against the presence of American bases to inadequate responses to disasters in places with second-class citizenship (such as the feeble reaction to the carnage wreaked by Hurricane Maria in Puerto Rico in 2017).

He does not explore the implications of President Donald Trump's back-to-the-core America First approach for the Greater United States. Nor does he dwell on the rise of a rival empire, which is famous for learning from the American experience. Some observers will look at the Belt and Road Initiative, and the occupation of islands in the South China Sea, and detect pointillism with Chinese characteristics. ■

New American fiction

Desert storms

The Other Americans. By Laila Lalami. *Pantheon; 320 pages; $25.95. Bloomsbury Circus; £16.99*

Laila Lalami's debut novel, "Hope and Other Dangerous Pursuits", charted the plight of four desperate Moroccans who attempt to flee their country and cross the Strait of Gibraltar in search of a better life. In "The Moor's Account" she gave voice to a real-life Moroccan slave who accompanied a Spanish conquistador on a disastrous expedition to the modern-day Gulf coast of the United States. In both books, characters learned the hard way that it is better to travel in hope than to arrive.

Ms Lalami's latest novel, "The Other Americans", revolves around a Moroccan family who are not travellers but long-term settlers. Nora Guerraoui, a young jazz composer, receives a call in Oakland informing her that her father, Driss, has been killed by a speeding car. She returns to her childhood home-town in the Mojave desert to join her mother Maryam and follow the police investigation. Was the death a tragic accident or a premeditated killing?

The story unfolds from multiple perspectives. Maryam reflects on the life she left in Casablanca, the culture shock of California and her fragmented family: "We were like a thrift-store tea set, there was always one piece missing." Efraín, a Mexican eyewitness, is reluctant to give evidence because he lacks papers. Coleman, a detective, is as keen to solve her first homicide in town as to decipher her son's mood swings.

Two main characters emerge from the ensemble: Nora and her former classmate Jeremy, now a veteran of the Iraq war. As a romance develops between them, he comforts her through her grief and she helps him cope with his trauma. The narrative opens out to become a tender love story, a family drama and a gripping mystery.

When Ms Lalami brings in other minor characters and relays their versions of events, she loses momentum and the book becomes episodic. But she recovers the pace to orchestrate a charged denouement in which secrets are shared, loyalties tested and fates hang in the balance. The result is a powerful novel of intolerance and compassion, resilience and weakness, love and loss, populated by flawed but sympathetic characters whose lives are rocked by actions and emotions beyond their control. It turns out that this family's journey was not quite finished, after all. ■

Music therapy

The ballad of King D

GOMA

Three young Congolese musicians teach street children to rap

Danny Kubuya, also known as King D, takes to the stage wearing red sneakers and a blue cap turned backwards. He raps in Swahili. "If I were president, I would make those who have nothing feel valued." "Yeah," his backing group intone as they jiggle from side to side. "I would teach the people to look after our nation's riches." "Yeah," repeat the boys behind him, slicing the air with outstretched fingers. "I would stop women from being raped." The audience of three nod in approval. A goat, tied to a fallen tree trunk and scavenging for food in the dirt, bleats noisily.

It is a Saturday afternoon in Goma, a town sandwiched between a lake and a volcano in embattled eastern Congo, and a local pop group called Life Song are halfway through teaching a rap lesson. Their 15 students are a mix of boys from their own rundown neighbourhood and children they have found listlessly roaming the streets. These homeless youngsters spend their nights curled up in doorways on folded cardboard boxes. Their stage is a slab of concrete in front of a half-painted wall, a collection of old car tyres propped up against it (see picture).

At 12, Danny is the youngest, shortest and quietest of the boys off-stage, but oozes charisma on it. His swagger alone sets him apart from the rest. "We took him to one of our shows to perform with us and the audience loved him," says Robert Rubenga, one of Life Song's three members. "His lyrics are powerful."

That is partly because they are grounded in bitter experience. If Danny were president, he sings, he would plant more cassava so that nobody in Congo has to go hungry (some 15m across the country are severely underfed). He would bring electricity to a country where less than 1% of the rural population has electric light. He would stop the fighting in Rumangabo, a village where his aunt and cousins live that has been intermittently attacked by looting militia for over two decades.

When Mr Rubenga first met Danny, he was trying to make money carrying bags for shoppers in a market close to the lake. High on glue, he was huddling with friends in an alley at night. He had fled his home after stealing $10 from his mother's handbag, following orders from a local teenager whose gang he wanted to join. Terrified of his father's temper, he took to the streets. "My mother forgave me but my father did not. I was scared," he says.

From the moment Danny uttered his first rap, Mr Rubenga saw his potential. He had been roaming one of the shabbiest bits of Goma with another band member, Etienne Hodari, when they encountered a posse of street kids. "First we bought them drinks and biscuits, then we sat in a circle and asked them to sing or rap something for us," says Mr Rubenga. "They were not shy, they like to think of themselves as gangsters." Danny started showing up to the weekly classes.

The band can offer music lessons, but not much more, as they are strapped for cash and often go to bed hungry them- ▸▸

selves. Their income from performing in bars and at local concerts is meagre; Irene Baeni, the group's third and only female member, also sews and sells clothes to make ends meet. Though Congo is famous for producing talented musicians (and for its breezy rumba beats), earning a living in the industry is tough. Many stars are financed by wealthy political patrons. Before elections their music tends to turn into propaganda and be peppered with shout-outs to rich officials.

Yet the country's problems, exacerbated as they are by predatory and inept leaders, have provided inspiration for generations of lyricists. For their part, Life Song say they want to use music to "tap into people's consciences". One of their raps reminds the audience that those who sleep rough are really "just like us".

Danny no longer does. Over a number of rap classes, he began to confide in the band members. He eventually gave them his family's address. After six months on the streets, Mr Rubenga escorted him home. "His mother was so happy when she opened the door, she was crying and crying. She had thought he was dead," he remembers. In a region where children are killed or kidnapped by armed groups nearly every week, her fear was well-grounded.

Life Song's students turn their lives into rap. In the West that might be called music therapy; in Goma it amounts to three musicians and some scruffy boys, hopping around in black volcanic dust, watched by an audience of goats. But in a place where music is as ingrained as hardship and war, tunes with a message retain the power to inspire people and change lives. They might change more if the politicians paid heed to Danny's rhymes. ■

Johnson Mightier than the sword

Academies wield less power over a language's development than you might think

IT IS HARD to imagine now, but once upon a time a prominent writer in English envied the powerful role of an authoritarian French institution. The writer was Jonathan Swift, who in 1712 wrote to the Earl of Oxford that the "daily corruptions" of English were outpacing its "improvements". The Académie française had been founded to stop exactly that process, and Swift called for an English Academy to do the same.

In the centuries since, though, many Anglophone writers have been glad that Swift did not get his wish. There is no English Academy. This, allegedly, has let English flourish, promiscuously incorporating vocabulary from around the world, allowing the language, even the grammar, to develop organically. In this version of events, in the matter of language—as in economics and politics—the English are the liberals, while the French are the rigid statists, and French suffers as a result.

Nonsense. Foreign journalists pay more heed to the Académie française than do the French themselves. It is an endless source of articles like those in recent weeks saying that the Académie will finally "allow" the feminisation of job titles. The sexism of masculine titles such as *le président*, *le premier ministre* and *le docteur* has troubled the country for decades. Traditionally, these had no feminine forms. On February 28th the Académie gave its blessing to feminine variants: *la présidente*, *la première ministre* and *la docteure*.

This is all to the good, but it is a mistake to think of the Académie as "allowing" anything. Founded in 1634, it is certainly venerable. Its members, of whom there are only 40, are called *les immortels*; even some of France's greatest literary luminaries have been denied entry to the club. Academicians wear special green-embroidered jackets and swords, and meet in the palatial rooms of the Institut de France.

Swords they may have, but no power. As long ago as 1998 the government recognised those feminine job titles, and decreed that they be taught in schools. At the time the Académie strongly objected—and was ignored. Its work is strictly advisory; even then, it is not always the best source of counsel. Its dictionary—in theory the outfit's premier product—is not considered France's finest. The membership's average age is in the 70s; only five of the members are women.

That the Académie is at best aspirational—a source of guidance people might say they want but often cheerfully ignore—is better understood by the French than by outsiders. France Culture, a radio station, called the recent change of mind on gendered titles "a *mea culpa* rather than a revolution". The Académie was behind the times, as even its own ruling acknowledged: its job is to observe "good usage" as already practised, and to recognise the language's evolution, not to steer it.

France has the best-known language academy, but not the only one. Italy's is even older; countries from Spain to Sweden have academies too, others have bodies that perform a similar function. These institutions are not totally useless. Some elements of language can tolerate plenty of variation—words can have several meanings, grammar changes slightly over time, and it was ever thus. But sometimes standardisation is best, which is where academies can help.

Take the tango of pronunciation and spelling. Always and everywhere, the sounds of words evolve; so every once in a while, official bodies step in to tidy up the orthography, getting rid of inconsistencies and silent letters, nativising foreign borrowings and so on. Traditionalists howl—this too is universal—but in most cases, the new spellings settle in without much fuss. In Europe in the 20th century alone, various spelling reforms affected the writing of Russian, German, Danish, Dutch and other tongues.

But in other, deeper aspects of language, such as grammar, academies can at best slow natural developments that happen perpetually. Their blessing of a change usually amounts to a belated acceptance of a *fait accompli*. When academies claim the right to stop a socially or politically motivated update, they enter dangerous territory. Even if they maintain otherwise, their conservatism tends to be as much political as linguistic.

A language is too big and diverse to be run by even the wisest group of overseers. Some deferential French people may say they want the guidance of their *immortels*. They fail to realise that another rule-making body wields the real power: the millions of ordinary French-speakers themselves.

Property

Economic data

	Gross domestic product, % change on year ago: latest		quarter*	2018†	Consumer prices, % change on year ago: latest		2018†	Unemployment rate, %		Current-account balance, % of GDP, 2018†	Budget balance, % of GDP, 2018†	Interest rates, 10-yr gov't bonds: latest,%		change on year ago, bp	Currency units, per $ Mar 13th	% change on year ago
United States	3.1	Q4	2.6	2.9	1.5	Feb	2.4	3.8	Feb	-2.4	-3.8	2.6		-26.0	-	
China	6.4	Q4	6.1	6.6	1.5	Feb	1.9	3.8	Q4§	0.3	-4.0	3.0	§§	-66.0	6.71	-5.7
Japan	0.3	Q4	1.9	0.7	0.2	Jan	1.0	2.5	Jan	3.5	-3.2	nil		nil	111	-4.1
Britain	1.3	Q4	0.7	1.4	1.8	Jan	2.3	4.0	Nov††	-4.2	-1.3	1.2		-35.0	0.76	-5.3
Canada	1.6	Q4	0.4	2.1	1.4	Jan	2.3	5.8	Feb	-2.8	-2.2	1.8		-43.0	1.33	-3.0
Euro area	1.1	Q4	0.9	1.9	1.5	Feb	1.7	7.8	Jan	3.5	-0.7	0.1		-55.0	0.88	-8.0
Austria	2.4	Q4	5.1	2.7	1.7	Jan	2.1	4.8	Jan	2.2	-0.2	0.4		-45.0	0.88	-8.0
Belgium	1.2	Q4	1.4	1.4	2.2	Feb	2.3	5.6	Jan	0.4	-1.0	0.5		-37.0	0.88	-8.0
France	0.9	Q4	1.0	1.5	1.3	Feb	2.1	8.8	Jan	-0.8	-2.6	0.5		-43.0	0.88	-8.0
Germany	0.6	Q4	0.1	1.5	1.6	Feb	1.9	3.2	Jan‡	7.5	1.4	0.1		-55.0	0.88	-8.0
Greece	1.6	Q4	-0.4	2.1	0.6	Feb	0.6	18.0	Dec	-2.9	-0.1	3.9		-28.0	0.88	-8.0
Italy	nil	Q4	-0.4	0.8	1.1	Feb	1.2	10.5	Jan	2.6	-1.9	2.6		57.0	0.88	-8.0
Netherlands	2.0	Q4	1.8	2.5	2.6	Feb	1.6	4.5	Jan	10.3	1.4	0.1		-52.0	0.88	-8.0
Spain	2.4	Q4	2.8	2.5	1.1	Feb	1.7	14.1	Jan	0.9	-2.7	1.1		-30.0	0.88	-8.0
Czech Republic	3.2	Q4	3.8	2.9	2.7	Feb	2.2	2.2	Jan‡	0.6	1.2	1.9		-3.0	22.7	-9.4
Denmark	2.1	Q4	2.9	1.1	1.1	Feb	0.8	3.7	Jan	6.1	-0.4	0.2		-51.0	6.60	-8.9
Norway	1.7	Q4	1.9	1.7	3.0	Feb	2.8	3.7	Dec‡‡	8.5	7.0	1.7		-35.0	8.58	-10.0
Poland	4.5	Q4	2.0	5.4	0.9	Jan	1.7	6.1	Jan§	-0.7	-0.9	2.9		-48.0	3.80	-10.8
Russia	1.5	Q3	na	1.7	5.2	Feb	2.9	4.9	Jan§	6.6	2.7	8.4		126	65.5	-13.3
Sweden	2.4	Q4	4.7	2.2	1.9	Feb	2.0	6.5	Jan§	2.0	0.8	0.3		-49.0	9.30	-11.8
Switzerland	1.4	Q4	0.7	2.6	0.6	Feb	0.9	2.4	Feb	9.6	0.9	-0.3		-42.0	1.00	-6.0
Turkey	-3.0	Q4	na	3.1	19.7	Feb	16.3	12.3	Nov§	-3.6	-1.9	15.9		321	5.47	-29.4
Australia	2.3	Q4	0.7	3.0	1.8	Q4	1.9	5.0	Jan	-2.4	-0.3	2.0		-85.0	1.41	-9.9
Hong Kong	1.3	Q4	-1.4	3.4	2.5	Jan	2.4	2.8	Jan‡‡	3.0	2.0	1.8		-28.0	7.85	-0.1
India	6.6	Q4	5.1	7.3	2.6	Feb	3.9	7.2	Feb	-2.8	-3.6	7.5		-11.0	69.5	-6.7
Indonesia	5.2	Q4	na	5.2	2.6	Feb	3.2	5.3	Q3§	-3.0	-1.9	7.8		110	14,265	-3.6
Malaysia	4.7	Q4	na	4.7	-0.7	Jan	1.0	3.3	Jan§	2.2	-3.7	3.9		-12.0	4.09	-4.7
Pakistan	5.4	2018**	na	5.4	8.2	Feb	5.1	5.8	2018	-5.8	-5.4	13.1	†††	431	139	-20.4
Philippines	6.1	Q4	6.6	6.2	3.8	Feb	5.3	5.2	Q1§	-2.8	-2.8	6.3		19.0	52.8	-1.4
Singapore	1.9	Q4	1.4	3.2	0.4	Jan	0.4	2.2	Q4	17.7	0.4	2.2		-24.0	1.35	-3.0
South Korea	3.2	Q4	3.9	2.7	0.5	Feb	1.5	4.7	Feb§	4.9	1.1	2.0		-78.0	1,133	-5.8
Taiwan	1.8	Q4	1.5	2.6	0.2	Feb	1.4	3.7	Jan	12.7	-0.6	0.8		-20.0	30.9	-5.4
Thailand	3.7	Q4	3.3	4.1	0.7	Feb	1.1	1.0	Jan§	6.9	-3.0	2.3		-20.0	31.6	-1.2
Argentina	-3.5	Q3	-2.7	-2.0	48.9	Jan	34.3	9.0	Q3§	-6.0	-5.7	11.3		562	41.7	-51.5
Brazil	1.1	Q4	0.5	1.2	3.9	Feb	3.7	12.0	Jan§	-0.8	-7.0	6.9		-117	3.82	-14.9
Chile	2.8	Q3	1.1	4.0	1.7	Feb	2.4	6.8	Jan§‡‡	-2.5	-2.0	4.1		-46.0	667	-9.8
Colombia	2.9	Q4	2.4	2.6	3.0	Feb	3.2	12.8	Jan§	-3.2	-2.2	6.5		-5.0	3,148	-9.7
Mexico	1.7	Q4	1.0	2.0	3.9	Feb	4.9	3.5	Jan	-1.7	-2.0	8.1		53.0	19.3	-4.1
Peru	4.8	Q4	11.4	4.0	2.0	Feb	1.3	8.0	Jan§	-1.5	-2.5	5.6		64.0	3.29	-0.9
Egypt	5.5	Q4	na	5.3	14.3	Feb	14.4	8.9	Q4§	-1.8	-9.5	na		nil	17.4	1.2
Israel	2.8	Q4	3.0	3.3	1.2	Jan	0.8	4.3	Jan	1.8	-3.0	2.0		22.0	3.60	-4.7
Saudi Arabia	2.2	2018	na	1.5	-1.9	Jan	2.5	6.0	Q3	9.6	-5.0	na		nil	3.75	nil
South Africa	1.1	Q4	1.4	0.9	4.0	Jan	4.5	27.1	Q4§	-3.4	-3.9	8.7		62.0	14.4	-18.3

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

In local currency	Index Mar 13th	% change on: one week	Dec 31st 2018
United States S&P 500	2,810.9	1.4	12.1
United States NAScomp	7,643.4	1.8	15.2
China Shanghai Comp	3,027.0	-2.4	21.4
China Shenzhen Comp	1,656.5	-0.2	30.7
Japan Nikkei 225	21,290.2	-1.4	6.4
Japan Topix	1,592.1	-1.4	6.6
Britain FTSE 100	7,159.2	-0.5	6.4
Canada S&P TSX	16,150.0	0.4	12.8
Euro area EURO STOXX 50	3,323.5	nil	10.7
France CAC 40	5,306.4	0.3	12.2
Germany DAX*	11,572.4	-0.1	9.6
Italy FTSE/MIB	20,749.2	-0.5	13.2
Netherlands AEX	539.3	0.1	10.5
Spain IBEX 35	9,192.7	-1.1	7.6
Poland WIG	59,895.9	-0.1	3.8
Russia RTS, $ terms	1,189.1	-0.2	11.5
Switzerland SMI	9,387.4	-0.2	11.4
Turkey BIST	102,196.6	-1.2	12.0
Australia All Ord.	6,246.0	-1.3	9.4
Hong Kong Hang Seng	28,807.5	-0.8	11.5
India BSE	37,752.2	3.0	4.7
Indonesia IDX	6,377.6	-1.2	3.0
Malaysia KLSE	1,678.2	-0.5	-0.7
Pakistan KSE	38,928.9	-1.6	5.0
Singapore STI	3,195.6	-0.8	4.1
South Korea KOSPI	2,148.4	-1.2	5.3
Taiwan TWI	10,373.3	0.2	6.6
Thailand SET	1,639.7	0.9	4.8
Argentina MERV	34,023.0	5.2	12.3
Brazil BVSP	98,903.9	5.0	12.5
Mexico IPC	41,932.6	0.1	0.7
Egypt EGX 30	15,125.8	3.3	16.0
Israel TA-125	1,423.6	-0.4	6.8
Saudi Arabia Tadawul	8,526.7	-0.1	8.9
South Africa JSE AS	55,829.1	-0.4	5.9
World, dev'd MSCI	2,095.7	0.8	11.2
Emerging markets MSCI	1,050.5	-0.5	8.8

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2018
Investment grade	171	190
High-yield	473	571

Sources: Datastream from Refinitiv; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist **commodity-price index**

2005=100	Mar 5th	Mar 12th*	% change on month	year
Dollar Index				
All Items	138.9	137.6	-1.0	-10.8
Food	142.7	141.0	-4.0	-11.4
Industrials				
All	135.0	134.1	2.6	-10.1
Non-food agriculturals	123.7	121.4	-0.4	-14.5
Metals	139.9	139.5	3.8	-8.4
Sterling Index				
All items	192.7	191.1	-2.6	-4.7
Euro Index				
All items	152.8	151.8	-0.7	-1.9
Gold				
$ per oz	1,285.1	1,297.4	-0.9	-2.2
West Texas Intermediate				
$ per barrel	56.6	56.9	7.1	-6.3

Sources: CME Group; Cotlook; Darmenn & Curl; Datastream from Refinitiv; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit **Economist.com/indicators**

Then and now

A new paper on electoral geography unearths unsettling historical parallels

FEW COUNTRIES have done more than Germany to repent of the sins of the past. Its post-war constitution banned Nazi symbols and anti-democratic parties. For decades the conservative Christian Democratic Union has guarded the right-wing frontier of German politics and kept extremists out of parliament.

Against this background, many Germans were alarmed when the far-right Alternative for Germany (AfD) won 13% of the vote in 2017, making it the third-biggest force in parliament. The party was founded to oppose EU bail-outs of debt-stricken countries like Greece, which many Germans saw as a transfer from industrious German taxpayers to feckless Greeks. In 2013 it fell short of the 5% of votes needed to enter parliament. The AfD was then transformed as nationalists took it over and began to rail against immigrants and Islam.

The AfD rejects the "extremist" label. People seen giving Nazi salutes have "nothing to do with our party", said Beatrix von Storch, its deputy leader. And it goes without saying that the AfD's agenda, though distasteful to liberals, is not remotely similar to that of the Third Reich.

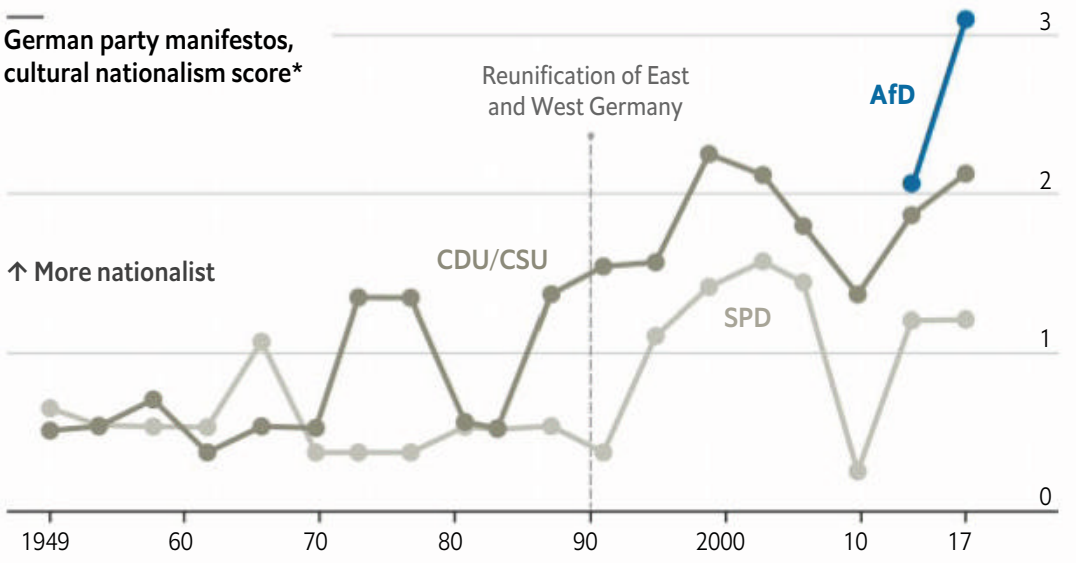
But a new paper finds an uncomfortable overlap between the parts of Germany that support the AfD and those that voted for the Nazis in 1933. At first glance, the link is invisible. The Nazis fared well in northern states like Schleswig-Holstein; the AfD did best in the former East Germany.

However, northern Germany has changed a lot. After the war, 12m ethnic Germans living in territory ceded to other countries fled to Germany. They flocked to northern states—by 1950 "expellees" made up 36% of Schleswig-Holstein—but mostly avoided the south-west. These transfers reshuffled Germany's political map.

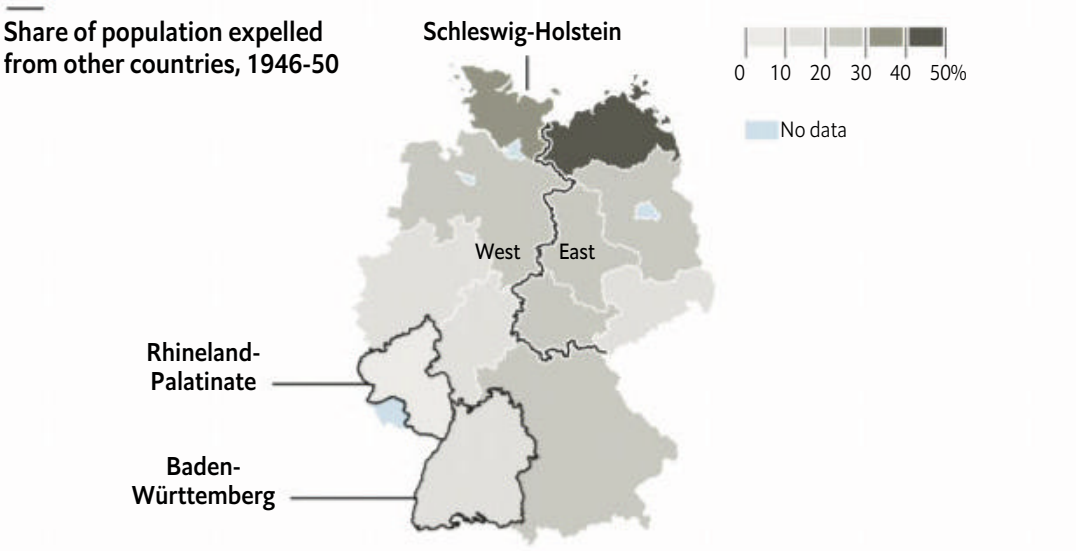
It is only in areas where pre-war demographics still persist that electoral maps show strong echoes of the past. Parts of the south-west that backed the Nazis in 1933 also embraced the AfD, and those that shunned Hitler rejected it. Overall, the paper's authors found that among municipalities with average far-right support but few expellees, a 1% increase in the Nazis' vote share in 1933 was associated with an extra 0.3-0.5% gain for the AfD from 2013-17.

These findings should be understood in a modern context. The Nazis are not coming back. But it seems that modern German nationalism has deep historic roots. ■

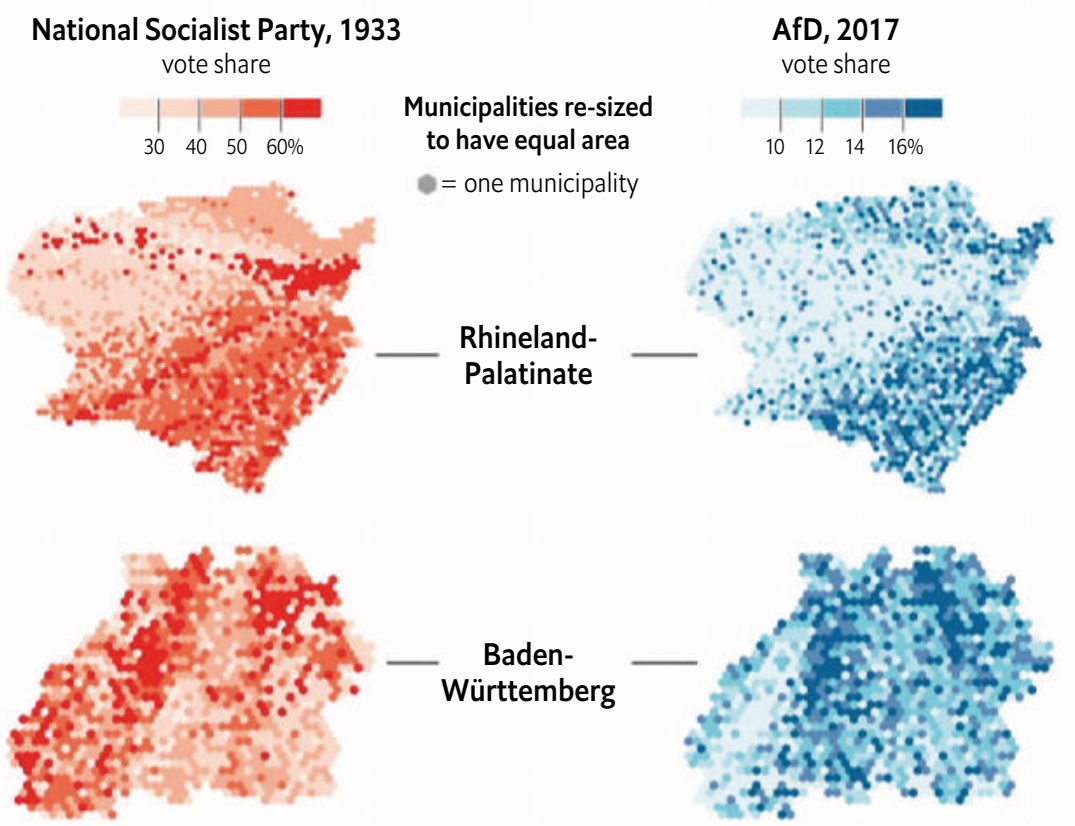
→ The Alternative for Germany (AfD) is the most culturally nationalist party to enter parliament in post-war Germany



→ Post-war population transfers changed politics across Germany. But few migrants settled in the south-west, preserving pre-war demographics



→ Within the south-western states that received few migrants, AfD did best in municipalities that had voted for the Nazis



Sources: "Persistence and Activation of Right-Wing Political Ideology", by D. Cantoni, F. Hagemeister, M. Westcott and E. Bogucka, 2019; Manifesto Project

*Harmonic mean of standardised Manifesto Project scores for supporting a "national way of life" and "traditional morality", and opposing "multiculturalism", re-scaled to positive numbers

One tablet, taken daily

Dr Margaret (Mags) Portman, sexual-health pioneer and campaigner for PrEP, died on February 6th, aged 44

THE YOUNG man Mags Portman had come to meet that day in 2015, in a wine bar near her clinic in the Mortimer Market Centre in London, was clearly nervous. He seemed lost; he was homeless and sofa-surfing. So in her bright Yorkshire way she came straight to the point: "What can I do?"

Greg Owen was HIV-positive, for a start. But, like her, he was well aware of a treatment called PrEP (for Pre-Exposure Prophylaxis, with an anti-viral drug sold as Truvada), which could have prevented his now-incurable infection. It couldn't be prescribed in Britain. So he had built a website so that others like him, men having sex with men and hoping to stay safe, could click through to get PrEP from pharmacies in Asia. But now traffic to the website was growing fast, he told her, and he wasn't sure whether it was legal to skirt round the doctors like this. He needed backing from someone in the profession who was credible and visible.

And hey, he had come to the right person! Visible and credible was just what she was, with loads of confidence (even fairly stubborn at times). Petite she might be, but you couldn't overlook her. And she knew as much about PrEP as anyone. Through her clinic she had helped conduct a study of 545 men at risk of HIV which had produced the fantastic conclusion, laid out in the PROUD report in 2015, that use of PrEP reduced the risk of infection by 86%. If Greg had taken one of those blue pills daily, he could have had sex with any male partner with almost no danger. It was high time Britain's doctors got on board! "Leave it with me," she said.

She then took off like a whirlwind. First stop was the General Medical Council, the governing body of doctors, which told her—hallelujah!—that clinicians had a responsibility to get the best treatment for their patients, even if it was not commissioned. With that under her belt, she started testing the generic pills coming in via the IwantPrEPnow website, to check there were no dummies and to quell her own professional doubts about safety. She got Greg and other activists to train doctors at Mortimer Market to recommend PrEP to gay men, and other clinics did the same. Between 2015 and 2016 the number of gay men diagnosed with HIV in England fell by a third. In London the number fell by 40%.

Meanwhile, she didn't forget the visibility bit. She campaigned up and down the country for PrEP, which wasn't difficult, since despite working in London she lived in Leeds with her husband and two little boys. So she could talk to the doctors in Westminster on Monday and the next day be hitting Blayds Bar in Lower Briggate. Copious cups of Yorkshire tea kept her going. She tweeted and retweeted the latest HIV news, paraded with placards and wore the "PrEP up your LIFE" T-shirt (great look with a flouncy pink miniskirt and rainbow socks!). For HIV Testing Week she teamed her scarlet HIV ribbon with scarlet lipstick and a red stripe in her hair. She campaigned for HIV-testing points in saunas, bars, churches, pop-ups at festivals. Awareness was everything.

Still the NHS dragged its feet on PrEP. (How could it, her beloved NHS, her life? Come on!! Even cheap generics were too expensive for too many people.) In 2016, after 18 months' mulling, NHS England said it would not fund PrEP except for a small group at highest risk. She was horrified. Even after losing a court challenge, it kept access low. There had to be a bit of moralising going on here: gay men shouldn't be encouraged in a reckless lifestyle. They could use condoms, couldn't they? Well, she'd retort, they often did, but not always; just as straight men often did, but not always.

Gay and straight love had to be seen in the same way. It was obvious. All through her 20-year medical career she helped out in sexual-health projects set up by gay men as if she was one of them. Perhaps because she had been an outsider as a child, she especially liked working with others who felt that way and in a field, genito-urinary medicine, where shame could reinforce pain. When she appealed for PrEP in the *British Medical Journal*, the interest she declared at the end was "a mutually supportive relationship" with men who loved, but were often scared of loving, other men. That sounded pretty defiant because, of course, she was still fighting.

And she was getting a bit tired, which wasn't like her at all, what with cycling everywhere, sitting down only with knitting in her hands, and juggling the chaos and joy of the clinic with the chaos and joy of home. She had a cough, too, but it was probably something the boys had brought back from school. Then came the devastating diagnosis: she had mesothelioma, a rare cancer of the lung lining caused by asbestos. The prognosis was dreadful.

Determined to keep chirpy, she started a blog about her illness called "Not Doing Things by Half". As it went along, she couldn't help making comparisons with HIV—though this time as a flailing patient, rather than a know-it-all doctor. Unlike HIV, "Mr Meso" didn't inspire much research; but like HIV, there was no cure and no NHS funding of treatments that might do some good. How she hated having to go private! It upset all her principles, that care ought to be about love, respect and kindness, not about money.

By a real irony, her illness too had been preventible. She'd contracted it, she was sure, from working in a hospital in south Lanarkshire which was full of asbestos. Here was a new and urgent cause, then: to check all hospital buildings for the stuff, and to teach staff about the dangers. Awareness was everything. Where there was no cure, save lives by prevention! That was still worth repeating and repeating, as long as her fading lungs would let her. ■