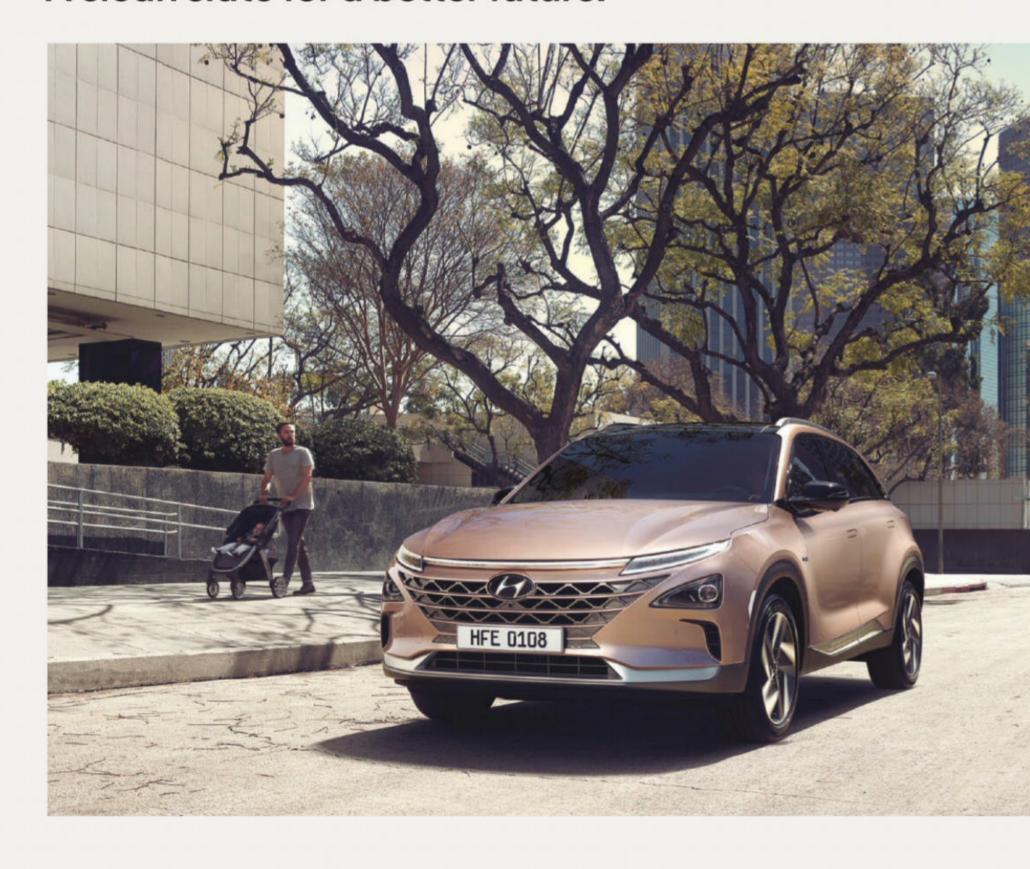
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Who will stop a no-deal Brexit now?

Opioids: pain and payouts

Why vertical farming is on the up

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Democracy's enemy within







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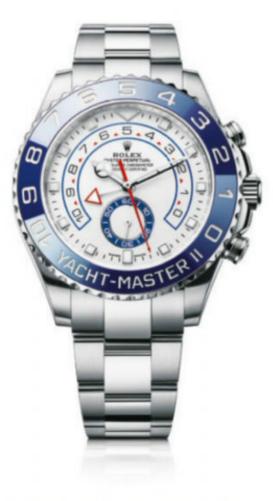




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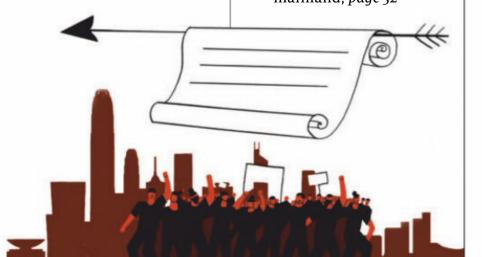
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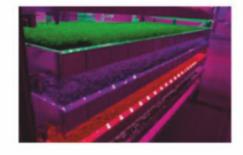
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The world this week Politics



Boris Johnson, Britain's prime minister, asked the queen to suspend Parliament soon after it returns on September 3rd. The move caught opposition parties, and many of Mr Johnson's own Conservative MPS, off guard. The timing of the move, though perfectly legal, was designed to squeeze the already-tight timetable for MPS who want to block a no-deal Brexit. Parliament will not reassemble until October 14th, with votes on the Oueen's Speech in the following week. With Britain due to leave the EU on October 31st, Mr Johnson's claim that any new deal can be passed in the remaining time is unrealistic.

Reaction to the **suspension of Parliament** was split along
Brexit lines. John Bercow, the
Speaker of the Commons and a
Remainer, called it a "constitutional outrage". Jacob ReesMogg, the Leader of the House
and an ardent Leaver, said it
was a "completely proper
constitutional procedure".

Italy's centre-left Democratic Party and the populist Five Star Movement reached an agreement to form a new coalition government that would see Giuseppe Conte remain prime minister. Mr Conte recently quit his job after Matteo Salvini, the hard-right leader of the Northern League, withdrew his support from the government. The deal keeps Mr Salvini out of power. He had served as interior minister, overseeing a crackdown on migrants.

A **Russian** man was arrested in **Berlin** on suspicion of assassinating a **Chechen** exile in one of the city's parks. The victim, Zelimkhan Khangoshvili, had fought Russian troops during

the Chechen insurgency and was considered a terrorist by the Kremlin, which denied any involvement in the killing.

Table talk

Iran's foreign minister,
Muhammad Javad Zarif, met
President Emmanuel Macron
of France on the sidelines of
the G7 summit in Biarritz. Mr
Macron tried to arrange talks
between Donald Trump and
Iran's president, Hassan
Rouhani. Mr Trump appeared
tempted, but Mr Rouhani said
there would be no negotiations
until American sanctions on
Iran are lifted.

Hizbullah threatened to launch a "surprise" attack on Israel. The Lebanese militia-cumpolitical party blamed Israel for two drones that crashed in the southern suburbs of Beirut, one of which damaged a Hizbullah office. Separately, Israel said it thwarted an Iranian drone attack with air strikes in Syria.

Sudan's new prime minister, Abdalla Hamdok, said his country needs \$8bn in foreign aid over the next two years to fix the crippled economy. Meanwhile, Sudan's newly created sovereign council declared a state of emergency in Port Sudan. Clashes between tribes in the city have killed at least 16 people.

Moving home

The **Indonesian** government announced that it would relocate the country's capital from Jakarta to the Indonesian part of Borneo. It has selected a site in the province of East Kalimantan and hopes to begin construction next year.

South Korea's supreme court overturned part of an appeals-court verdict in the bribery case of Lee Jae-yong, the de facto boss of Samsung, who had been given a suspended sentence for seeking favours from Park Geun-hye, a former president. It said that the lower court's definition of what constituted bribery was too

narrow, and that three expensive horses which Samsung gave to the daughter of the president's confidante were bribes. The ruling is a blow for Mr Lee. The court also ordered a retrial of Ms Park's case. She had been given a 25-year sentence for abusing her power.

A row between Japan and South Korea over compensation for South Koreans forced to work in Japanese factories during the second world war intensified. South Korea pulled out of an intelligence-sharing pact with Japan over its refusal to honour South Korean court rulings. It also conducted military exercises near islands that it controls but Japan claims.

In **India**, a crackdown on corruption was criticised by some for unfairly targeting political enemies of the ruling BJP party. Police recently arrested a former finance minister under the previous government for influence peddling.

Australia's opposition Labor Party came under pressure to answer allegations that it tried to hide a donation in 2015 from a Chinese property developer, who has since been stripped of permanent residency on suspicion of working for the Chinese Communist Party.

The first Catholic bishop was ordained in **China** under a new arrangement between the state and the Vatican which gives both a say in appointing prelates. Around half of China's 12m Catholics belong to a body supervised by the government, while the other half swear allegiance only to Rome. Bishops must register with the official church, but Antonio Yao Shun's ordination in Inner Mongolia also received the pope's blessing.

The courts have their say

A federal judge blocked Missouri's recently enacted ban on **abortions** after eight weeks of pregnancy from coming into effect. Similar attempts to restrict abortion were recently

obstructed by the courts in Arkansas and Ohio.

Kirsten Gillibrand dropped out of the race to become the Democratic candidate for president, the biggest name to do so, so far. Ms Gillibrand, a senator from New York, had struggled to gain much traction in a crowded field.

Fanning the flames



As fires raged in the **Brazilian** Amazon, the presidents of Brazil and France directed insults at each other. Emmanuel Macron, the French leader, accused Jair Bolsonaro, his Brazilian counterpart, of lying when he promised to help protect the climate and biodiversity. Mr Bolsonaro decried Mr Macron's "colonialist stance". G7 countries offered Brazil \$22m to fight the fires. Mr Bolsonaro said he would reject it unless Mr Macron apologised, though he accepted \$12m in aid from Britain and sent the armed forces to help fight the blazes.

Ecuador imposed a visa requirement on Venezuelans fleeing the chaos in their country. Migrants now need to carry a passport and show they do not have a criminal record. Chile and Peru have imposed similar restrictions. Thousands of Venezuelans rushed to cross the Ecuadorean border before the rule took effect.

At least 26 people died in a fire at a bar in Coatzacoalcos, a port city on **Mexico's** east coast. Armed men shut the exits and set fire to the entrance hall. The country's president, Andrés Manuel López Obrador, suggested that the authorities may have colluded.

8 The world this week Business

A judge in Oklahoma ruled that Johnson & Johnson had broken the state's "public nuisance" law with its aggressive marketing of opioids and ordered it to pay \$572m. It was the first time a drugmaker had stood trial for its part in creating America's opioid-addiction crisis; others have so far elected to settle rather than face a courtroom. Oklahoma had sought \$17bn in damages. J&J said it would nevertheless appeal against the judgment, arguing it followed the rules.

Following the judge's ruling it was reported that **Purdue Pharma**, the maker of
OxyContin, was in talks to settle its exposure to 2,500 outstanding opioid lawsuits.
The negotiations involve the Sackler family, which owns
Purdue and has seen some of its donations to museums returned over the opioid issue.

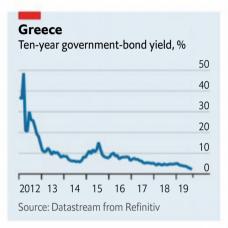
Tone it down, or else

Google laid out new staff guidelines in an effort to curb the disruptive internal political debates that have come to characterise its workforce. Its employees often take strident positions on social issues and have pressed management to cancel contracts, most notably with the Pentagon for an image-recognition system. This has left Google open to the charge that it has a leftish bias and stifles conservative views. Its latest rules ask staff "to do the work we've each been hired to do, not to spend working time on debates about non-work topics".

The latest escalation of the **trade war** saw China announcing new tariffs on \$75bn-worth of American goods from September 1st. Donald Trump responded by announcing a five-percentage-point increase on existing and planned tariffs on Chinese exports.

In a Twitter outburst, Mr Trump described **Jerome Powell**, the chairman of the Federal Reserve, as an "enemy", after he dodged mentioning any further cuts to interest rates in his speech to central bankers at Jackson Hole.

More concerns were raised about the independence of India's central bank, after it transferred its entire annual net income and excess reserves to the government. The \$25bn windfall, along with a set of stimulus measures, will help kick-start a slowing economy. The Reserve Bank of India has come under political pressure to do more for the economy; its previous governor, Urjit Patel, resigned amid a row with the government last year.



The Greek government said it would remove any remaining restrictions on the movement of capital from September 1st.

Capital controls were introduced to avoid a run on the banks in 2015, when Greece failed to reach an agreement on extending its bail-out terms and was frozen out of interna-

tional credit markets. The European Commission said ending capital controls was an "important milestone" for Greece, which now enjoys historically low borrowing costs in bond markets.

Argentina will delay payments on short-term debt held by institutional investors. It will also seek to replace another \$50bn of securities with later-dated paper and reschedule \$44bn owed to the IMF. That will leave it more money to defend the peso, which has fallen steeply on fears the government will lose the election in October to a Peronist opposition that may be even tougher on creditors.

With Germany's economy in the doldrums, a poll of German executives found that business confidence had dropped to levels last seen in 2009, during the financial crisis. In a gloomy prognosis, the IFO survey said "Not a single ray of light was to be seen in any of Germany's key industries."

BP decided to dispose of its business in Alaska, bringing an end to the company's 60-year association with the state. In a \$5.6bn deal, BP is selling its assets, which include holdings in Prudhoe Bay on Alaska's Arctic coast, to Hilcorp. Alaska was once a powerhouse in the oil industry, but it is now just America's sixth-largest oilproducing state.

Boeing faced its first lawsuit from a customer over the grounding of its 737 MAX fleet following two fatal crashes. Avia, a Russian firm that leases aircraft, wants to cancel its order for the 737 MAX, arguing that Boeing misrepresented the safety design of the plane.

Philip Morris International confirmed it was holding merger talks with Altria, which, if successful, would create a behemoth in the tobacco industry.

The carmakers' carmaker

Tributes were paid to Ferdinand Piëch, who died aged 82. Mr Piëch ran Volkswagen during its transformation into one of the world's biggest car companies, heading the supervisory board until his departure in 2015 amid the dieselgate scandal. Mr Piëch was a brilliant engineer. His achievements included the Porsche 917, the most influential racing car of its time, and the Quattro, a four-wheel-drive sports car that turned Audi into a rival to вмw and Mercedes.





Democracy's enemy within

Cynicism is gnawing at Western democracies

 $D_{\text{gun, in coups and revolutions.}}^{\text{EMOCRACIES}}$ ARE generally thought to die at the barrel of a gun, in coups and revolutions. These days, however, they are more likely to be strangled slowly in the name of the people.

Take Hungary, where Fidesz, the ruling party, has used its parliamentary majority to capture regulators, dominate business, control the courts, buy the media and manipulate the rules for elections. As our briefing explains, the prime minister, Viktor Orban, does not have to break the law, because he can get parliament to change it instead. He does not need secret police to take his enemies away in the night. They can be cut down to size without violence, by the tame press or the taxman. In form, Hungary is a thriving democracy; in spirit, it is a one-party state.

The forces at work in Hungary are eating away at other 21st-century polities, too. This is happening not just in young democracies like Poland, where the Law and Justice party has set out to mimic Fidesz, but even the longest-standing ones like Britain and the United States. These old-established polities are not about to become one-party states, but they are already showing signs of decay. Once the rot sets in, it is formidably hard to stop.

At the heart of the degradation of Hungarian democracy is cynicism. After the head of a socialist government popularly seen as corrupt admitted that he had lied to the electorate in 2006, voters learned to assume the worst of their politicians. Mr

Orban has enthusiastically exploited this tendency. Rather than appeal to his compatriots' better nature, he sows division, stokes resentment and exploits their prejudices, especially over immigration. This political theatre is designed to be a distraction from his real purpose, the artful manipulation of obscure rules and institutions to guarantee his hold on power.

Over the past decade, albeit to a lesser degree,

the same story has unfolded elsewhere. The financial crisis persuaded voters that they were governed by aloof, incompetent, self-serving elites. Wall Street and the City of London were bailed out while ordinary people lost their jobs, their houses and their sons and daughters on the battlefield in Iraq and Afghanistan. Britain erupted in a scandal over MPS' expenses. America has choked on the lobbying that funnels corporate cash into politics.

In a survey last year, over half of voters from ten European countries and North America told the Pew Research Centre that they were dissatisfied with how democracy is working. Almost 70% of Americans and French people say that their politicians are corrupt.

Populists have tapped into this pool of resentment. They sneer at elites, even if they themselves are rich and powerful; they thrive on, and nurture, anger and division. In America President Donald Trump told four progressive congresswomen to "go back...to the broken and crime-infested places from which they came". In Israel Binyamin Netanyahu, a consummate insider, portrays official inquiries into his alleged corruption as part of an establishment conspiracy against his premiership. In Britain Boris Johnson, lacking support among MPs for a no-deal Brexit, has outraged his opponents by manipulating procedure to suspend Parliament for five crucial weeks (see next leader).

What, you might ask, is the harm of a little cynicism? Politics has always been an ugly business. The citizens of vibrant democracies have long had a healthy disrespect for their rulers.

Yet too much cynicism undermines legitimacy. Mr Trump endorses his voters' contempt for Washington by treating opponents as fools or, if they dare stand on honour or principle, as lying hypocrites—an attitude increasingly mirrored on the left. Britain's Brexiteers and Remainers denigrate each other as immoral, driving politics to the extremes because compromising with the enemy is treachery. Matteo Salvini, leader of Italy's Northern League, responds to complaints about immigration by cutting space in shelters, in the knowledge that migrants living on the streets will aggravate discontent. Mr Orban has less than half the vote but all the power—and behaves that way. By ensuring that his opponents have no stake in democracy, he encourages them to express their anger by non-democratic means.

Cynical politicians denigrate institutions, then vandalise them. In America the system lets a minority of voters hold power. In the Senate that is by design, but in the House it is promoted by routine gerrymandering and voter-suppression. The more politicised the courts become, the more the appointment of judges is contested. In Britain Mr Johnson's parliamentary chicanery is doing the constitution permanent damage. He is prepar-

ing to frame the next election as a struggle between Parliament and the people.

Politics used to behave like a pendulum. When the right made mistakes the left won its turn, before power swung back rightward again. Now it looks more like a helter-skelter. Cynicism drags democracy down. Parties fracture and head for the extremes. Populists persuade voters that the system is serving them ill, and

undermine it further. Bad turns to worse.

Fortunately, there is a lot of ruin in a democracy. Neither London nor Washington is about to become Budapest. Power is more diffuse and institutions have a longer history—which will make them harder to capture than new ones in a country of 10m people. Moreover, democracies can renew themselves. American politics was coming apart in the era of the Weathermen and Watergate, but returned to health in the 1980s.

Scraping Diogenes' barrel

The riposte to cynicism starts with politicians who forsake outrage for hope. Turkey's strongman, Recep Tayyip Erdogan, suffered a landmark defeat in the race for the mayoralty in Istanbul to a tirelessly upbeat campaign by Ekrem Imamoglu. Anti-populists from all sides should unite behind rule-enforcers like Zuzana Caputova, the new president of Slovakia. In Romania, Moldova and the Czech Republic voters have risen up against leaders who had set off down Mr Orban's path.

The bravery of young people who have been protesting on the streets of Hong Kong and Moscow is a powerful demonstration of what many in the West seem to have forgotten. Democracy is precious, and those who are lucky enough to have inherited one must strive to protect it.

Brexit

Who's gonna stop no-deal?

Boris Johnson has sidelined Parliament and set a course for a no-deal Brexit. MPs must act now to stop him

One by one, the principles on which the Brexit campaign was fought have been exposed as hollow. Before the referendum, Leavers argued that victory would enable them to negotiate a brilliant deal with the European Union. Now they advocate leaving with no deal at all. Before the vote they said that Brexit would allow Britain to strike more free-trade agreements. Now they say that trading on the bare-bones terms of the World Trade Organisation would be fine. Loudest of all they talked of taking back control and restoring sovereignty to Parliament. Yet on August 28th Boris Johnson, a leading Leaver who is now prime minister, announced that in the run-up to Brexit Parliament would be suspended altogether.

His utterly cynical ploy is designed to stop MPS steering the country off the reckless course he has set to leave the EU with or without a deal on October 31st (see Britain section). His actions are technically legal, but they stretch the conventions of the constitution to their limits. Because he is too weak to carry Parliament in a vote, he means to silence it. In Britain's representative democracy, that sets a dangerous precedent.

But it is still not too late for MPS to thwart his plans—if they get organised. The sense of inevitability about no-deal, cultivated by the hardliners advising Mr Johnson, is bogus. The EU is against such an outcome; most Britons oppose it; Parliament has

already voted against the idea. Those MPS determined to stop no-deal have been divided and unfocused. When they return to work next week after their uneasy summer recess, they will have a fleeting chance to avert this unwanted national calamity. Mr Johnson's actions this week have made clear why they must seize it.

Of all her mistakes as prime minister, perhaps Theresa May's gravest was to plant the idea

that Britain might do well to leave the EU without any exit agreement. Her slogan that "no deal is better than a bad deal" was supposed to persuade the Europeans to make concessions. It didn't—but it did persuade many British voters and MPS that if the EU offered less than perfect terms, Britain should walk away.

In fact the government's own analysis suggests that no-deal would make the economy 9% smaller after 15 years than if Britain had remained. Mr Johnson says preparations for the immediate disruption are "colossal and extensive and fantastic". Yet civil servants expect shortages of food, medicine and petrol, and a "meltdown" at ports. A growing number of voters seem to think that a few bumpy months and a lasting hit to incomes might be worth it to get the whole tedious business out of the way. This is the greatest myth of all. If Britain leaves with no deal it will face an even more urgent need to reach terms with the EU, which will demand the same concessions as before—and perhaps greater ones, given that Britain's hand will be weaker.

Mr Johnson insists that his intention is to get a new, better agreement before October 31st, and that to do so he needs to threaten the EU with the credible prospect of no-deal. Despite the fact that Mrs May got nowhere with this tactic, many Tory MPS still see it as a good one. The EU wants a deal, after all. And whereas it became clear that Mrs May was bluffing about walking out,

Mr Johnson might just be serious (the fanatics who do his thinking certainly are). Angela Merkel, Germany's chancellor, said recently that Britain should come up with a plan in the next 30 days if it wants to replace the Irish backstop, the most contentious part of the withdrawal agreement. Many moderate Tories, even those who oppose no-deal, would like to give their new prime minister a chance to prove his mettle.

They are mistaken. First, the effect of the no-deal threat on Brussels continues to be overestimated in London. The EU's position—that it is open to plausible British suggestions—is the same as it has always been. The EU's priority is to keep the rules of its club intact, to avoid other members angling for special treatment. With or without the threat of no-deal, it will make no more than marginal changes to the existing agreement. Second, even if the EU were to drop the backstop altogether, the resulting deal might well be rejected by "Spartan" Tory Brexiteers, so intoxicated by the idea of leaving without a deal that they seem ready to vote against any agreement. And third, even if an allnew deal were offered by the EU and then passed by Parliament, ratifying it in Europe and passing the necessary laws in Britain would require an extension well beyond October 31st. Mr Johnson's vow to leave on that date, "do or die", makes it impossible to leave with any new deal. It also reveals that he is fundamentally

unserious about negotiating one.

That is why Parliament must act now to take no-deal off the table, by passing a law requiring the prime minister to ask the EU for an extension. Even before Mr Johnson poleaxed Parliament, this was not going to be easy. The House of Commons' agenda is controlled by Downing Street, which will allow no time for such a bill. MPs showed in the spring that they could take

temporary control of the agenda, when they passed a law forcing Mrs May to request an extension beyond the first Brexit deadline of March 29th. This time there is no current legislation to act as a "hook" for an amendment mandating an extension, so the Speaker of the House would have to go against precedent by allowing MPs to attach a binding vote to an emergency debate. All that may be possible. But with Parliament suspended for almost five weeks there will be desperately little time.

So, if rebel MPS cannot pass a law, they must be ready to use their weapon of last resort: kicking Mr Johnson out of office with a vote of no confidence. He has a working majority of just one. The trouble is that attempts to find a caretaker prime minister, to request a Brexit extension before calling an election, have foundered on whether it should be Jeremy Corbyn, the far-left Labour leader whom most Tories despise, or a more neutral figure.

If the various factions opposed to no-deal cannot agree, Mr Johnson will win. But if they needed a reason to put aside their differences, he has just given them one. The prime minister was already steering Britain towards a no-deal Brexit that would hit the economy, wrench at the union and cause a lasting rift with international allies. Now he has shown himself willing to stifle parliamentary democracy to achieve his aims. Wavering MPS must ask themselves: if not now, when?

Avoidable pain

Legal settlements alone will not solve America's opioid crisis

THIS WEEK saw a landmark reckoning in court for a drugmaker f L involved in America's opioid disaster. A judge in Oklahoma ordered Johnson & Johnson (J&J) to pay \$572m to fund a state plan to combat opioid addiction. Whatever the outcome of J&J's legal appeal, this is a milestone in a public-health calamity that cost 47,600 American lives in 2017 and could well claim a further 500,000 over the next decade (see Business section). Faced with such devastation, states, counties and municipalities have served firms with roughly 2,500 lawsuits.

The roots of the epidemic lie in the marketing of prescriptions by pharma firms almost 25 years ago. Opioids have long been known to be highly addictive and easy to overdose on. Almost one in five addicts dies within a decade. Yet newer versions

of the drugs were sold as having lower risks. Firms also worked hard to promote the idea that doctors were undertreating chronic pain.

Drugmakers involved in mis-selling opioids could begin to make amends by shouldering their share of the blame and settling quickly. That way the money will arrive sooner, and less of it will go to lawyers. There are encouraging signs that Purdue Pharma, which lies at the ori-

gin of the epidemic, may settle a batch of lawsuits for up to \$12bn. Yet it is vital not to lose sight of why the opioid crisis struck America so much harder than anywhere else. The blame lies partly with the incentives woven into its health-care system.

For a start, many drug distributors and pharmacies, mesmerised by growing sales, failed to take action, as they are obliged to, when signs emerged that opioids were being diverted for illicit use. Doctors and hospitals, eyeing the bottom line, also veered towards incaution when handing out pills. The system put sales and "customer" satisfaction before patients' well-being. Medical-professional societies were at best supine, and in a few cases complicit in encouraging overuse. Regulators fell short, too. States could have limited prescription volumes, or set rules for how opioids were to be prescribed. The Food and Drug Administration (FDA), the federal regulator, failed to take account of the public-health impact of opioids when it deemed them safe. It has since not done enough to reform its approval regime, and it has still not properly reassessed the opioids already on the market to determine whether they need to be removed from sale.

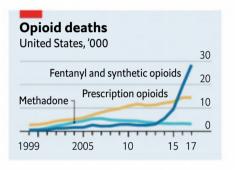
Keen to signal they mean business, some states have introduced laws to tighten supply. Paradoxically, perhaps, they need to be careful. Prescription opioids are no longer the main cause of death from addiction. Efforts to cut off people who are addicted risk sending them onto the black market for supplies. Regulators need to focus instead on medically assisted treatment for addicts, which has been scandalously neglected. This would

save thousands of lives a year.

The full cost of dealing with the crisis will run to hundreds of billions of dollars, which is why legal redress is needed—and why, unlike in tobacco settlements, the damages from pharma companies should go directly into alleviating the harm from opioids rather than into general government spending. Unfortunately, even then, generous settlements with drug firms and

distributors will not foot the entire bill. Large sums will thus have to come from taxpayers.

All this should be a warning to governments everywhere. In most parts of the world there is a shortage of pain relief. But as governments expand access to drugs, they should heed the lessons from America. Opioids need to be dispensed according to properly enforced rules. Regulators have a role in supervising how they are marketed. Doctors should be vigilant and inform patients of the risks. None of this is to absolve the companies that mis-sold drugs or looked the other way. Patients have a right to expect high ethical standards from those who supply their medicines. But making sure that opioids are a gift to humanity and not a curse is a job for the entire health system.



Security in Asia

Slight club

South Korea and Japan are letting a row about the past endanger their future

TORTH KOREA has spent the past few weeks testing an apparently new missile. It seems to have only a short range, so does not much bother President Donald Trump, who says what matters is stopping North Korea from developing missiles that can reach America. But the governments of South Korea and Japan are naturally alarmed. The missile can manoeuvre in flight, making it harder for anti-missile batteries to shoot it down. And "short range" is relative: the weapon seems to have the capacity to slam a nuclear warhead into Seoul or Tokyo.

How have South Korea and Japan reacted to this alarming threat? Not, as you might expect, by putting their heads together to work out what North Korea's device is capable of and how they can best counter it, but the reverse. On August 22nd, two days before the latest missile launch, South Korea said it would let an intelligence-sharing pact with Japan lapse. A few days later it further antagonised Japan by conducting big military exercises in the sea between the two countries, around two rocky islands which Japan claims, but which South Korea controls.

South Korea's provocations are just the latest blows in a growing tit-for-tat dispute (see Asia section). They are a petulant reaction to Japan's abrupt decision to remove South Korea from a list of trusted countries subject to minimal export controls and to >> ▶ impose extra restrictions on shipments of chemicals that are essential to chipmaking. That affront came in response to a ruling from South Korea's Supreme Court, which found that Japanese companies should pay compensation to South Korean plaintiffs forced to work in Japanese factories during the second world war, even though the two countries had signed a treaty that supposedly resolved all claims.

Japan and South Korea often fight about the past. Many South Koreans feel, quite rightly, that Japan has not sufficiently acknowledged, let alone properly atoned for, all the horrors of its colonial rule over the Korean peninsula. Many Japanese feel, quite rightly, that South Korean governments often foster this resentment for domestic political purposes and are constantly changing their mind about what they want Japan to do. The result has been decades of bickering.

The latest outbreak of this row is especially worrying because it is infecting areas that had previously been immune to it. South Korea's willingness to curb intelligence-sharing is unnerving, given the gravity and immediacy of the threat from North Korea in particular. But equally troubling is the alacrity with which Ja-

pan imposed trade sanctions. South Korean chipmakers have not had any trouble getting hold of the chemicals they need so far but, by imposing export restrictions, Japan seems to be signalling that it could at any moment cripple South Korea's biggest industry—a wildly aggressive, disproportionate threat.

Japan and South Korea need to wake up to their real interests, but Mr Trump also has a duty to help. He is partly to blame for this mess. His enthusiasm for using tariffs and other trade restrictions to compel governments to bow to his will has established a dangerous pattern of behaviour, which Shinzo Abe seems all too happy to follow. Neither has Mr Trump been prepared to take on the role America used to play in Asian rows, of knocking heads together. "How many things do I have to get involved in?" he moaned, when asked whether he was prepared to mediate.

The network of alliances that America has built up in Asia to counter not just North Korea, but also China, has been hugely valuable to regional and global stability. Without careful maintenance, it risks disintegrating. If Mr Trump really wants to persuade North Korea and China to behave well, he should start by getting his allies to respect each other.

Vertical farming

Plant power

Would you like some vertically grown mizuna with that?

Many foodies pin the blame for farming's ills on "unnatural" industrial agriculture. Agribusinesses create monocultures that destroy habitat and eliminate historic varieties. Farmers douse their crops with fertiliser and insecticide, which poison streams and rivers—and possibly human beings. Intensive farms soak up scarce water and fly their produce around the world in aeroplanes that spew out carbon dioxide. The answer, foodies say, is to go back to a better, gentler age, when farmers worked with nature and did not try to dominate it.

However, for those who fancy some purple-ruffles basil and mizuna with their lamb's leaf lettuce, there is an alternative to nostalgia. And it involves more intensive agriculture, not less.

A vast selection of fresh salads, vegetables and fruit is on the way, courtesy of a technology called vertical farming. Instead of growing crops in a field or a greenhouse, a vertical farm creates an artificial indoor environment in which crops are cultivated on trays stacked on top of each other (see Science section). From inside shipping containers in Brooklyn, New York, to a disused air-raid shelter under Lon-

don's streets and an innocuous warehouse on a Dubai industrial estate, vertical farms are sprouting up in all sorts of places, nourished by investment in the business from the likes of Japan's SoftBank and Amazon's founder, Jeff Bezos.

This should cheer anyone who wants organic produce that has been grown without pesticides and other chemicals, and which has not been driven hundreds of miles in refrigerated lorries or flown thousands of miles in the belly of a plane. Such farms can greatly reduce the space needed for cultivation, which is useful in urban areas where land is in short supply and expensive. Inside, climatic conditions are carefully controlled with hydroponic systems supplying all the nutrients a plant needs to

grow and recycling all but 5% of their water—which is incorporated in the crop itself. Specially tuned LED lighting generates only the wavelengths that the plants require to prosper, saving energy. Bugs are kept out, so pesticides are not needed. Foliage and fruit can be turned out in immaculate condition. And the harvests last all year round.

There is more. As they will remain safe and snug inside a vertical farm, long-forgotten varieties of fruit and vegetables can stage a comeback. Most of these old-timers have been passed over by varieties bred to withstand the rigours of intensive farming systems. A cornucopia of unfamiliar shapes, colours and flavours could arrive on the dinner table.

This glimpse of Eden is still some way off. The electricity bill remains high, principally because of the cost of powering the huge number of LEDs required to simulate sunlight. That means vertical farming can, for the time being, be profitable only for high-value, perishable produce, such as salad leaves and fancy herbs. But research is set to bring the bill down and the costs of renewable energy are falling, too. In a

hot climate such as Dubai's extensive solar power could make vertical farms a valuable food resource, particularly where water is scarce. In a cold climate thermal, wind or hydroelectric power could play a similar role.

Some field crops, including staples such as rice and wheat, are unlikely ever to be suitable for growing in vast stacks. But as its costs fall thanks to further research, vertical farming will compete more keenly with old-fashioned greenhouses and conventional, horizontal farms where crops grow in the earth. As an extra form of food production, vertical farming deserves to be welcomed, especially by the people whose impulse is to turn their back on the future.



Executive focus 13



Appointments to the BIS Innovation Hub

Hong Kong SAR, Singapore and Switzerland

Deadline for applications: 30 September 2019

The BIS Innovation Hub is a new unit of the BIS with multidisciplinary teams located in Hong Kong SAR, Singapore and Switzerland. Its mission is to identify and develop in-depth insights into critical trends in financial technology of relevance to central banks, explore the development of public goods to enhance the functioning of the global financial system, and serve as a focal point for a network of central bank experts on innovation. The BIS seeks qualified candidates for the Centre Head and Advisers for each of its three Innovation Hub centres located in Hong Kong SAR, Singapore and Switzerland.

Centre Heads Hong Kong SAR, Singapore, Switzerland

Reporting to the Head of the BIS Innovation Hub in Basel and leading a multidisciplinary team, you will direct efforts to identify critical trends in financial technologies of relevance to central banks, and to explore the development of public goods that improve the functioning of the financial system. You will oversee a range of projects in collaboration with the host central bank in your location, and build a network of experts from central banks, academia and the fintech sector.

We would like to meet candidates with relevant work experience within central banking, economic research, the financial industry or the technology sector. You will have a deep knowledge of fintech-related policy issues and their implications for the global financial system, combined with outstanding leadership skills, a history of successfully delivering complex projects, and a proven ability to manage multidisciplinary

Advisers, Innovation Hub Hong Kong SAR, Singapore, Switzerland

Supporting your location's Centre Head, you will lead projects central to the mission of the Innovation Hub by scouting critical trends in financial technology of relevance to central banks, and by working on initiatives that enhance the functioning of the financial system. You will also build networks between central banks, academia and the private sector with a focus on digital innovation.

We seek candidates with relevant experience within central banking, economic research or the technology industry. You will have a good understanding of public policy issues and a sound knowledge of financial technologies and their implications for the financial system, together with a track record of leading projects to a successful conclusion.

To find out more, visit www.bis.org/careers



Director of Governance Geneva, Switzerland

Gavi is a public-private partnership committed to save lives and protect people's health by increasing equitable and sustainable use of vaccines in lower-income countries. The Vaccine Alliance brings together developing country and donor governments, the World Health Organization, UNICEF, the World Bank, the vaccine industry, technical agencies, civil society, the Bill & Melinda Gates Foundation and other private sector partners. Since 2000, Gavi has contributed to the immunisation of nearly 700 million children and the prevention of more than 10 million future deaths.

Gavi has an engaged Board of global leaders which is chaired by Dr. Ngozi Okonjolweala. The Director of Governance works at the heart of the organisation. S/he will ensure that its members are fully supported in their deliberations and that information flows to and from the Board in a way that is effective and leads to clear and acute

Candidates will grasp the focus on urgency and innovation at the core of Gavi's mission. They will bring experience working successfully with complex, multiconstituency, boards. The broader global development landscape will be familiar to candidates. They will also be conversant with the language and mechanisms through which governments, multilateral agencies, corporations, private foundations, and other actors in this domain engage with each other. In addition to broad international experience, the Director will speak English fluently. French language proficiency would be a strong positive.

Gavi is committed to diversity within its workforce and encourages applications from all qualified candidates.

The Gavi Alliance has retained Russell Reynolds Associates to advise on this appointment. For further information about the position and additional details on qualifications, requirements, terms and conditions of service and how to apply, please visit: www.rraresponses.com

The closing date for applications is 29 September 2019.





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Hold on to your cash

You cheered the fact that rich countries are becoming cashless ("The dash from cash", August 3rd). Yet one of the largest benefits of physical cash is that it prevents overspending. Psychologically, it is more difficult for someone to hand over cash than to tap or swipe a bank card. One is much more aware of the act of parting from a physical item of value, and therefore more mindful of how much has been spent. Banks are increasingly providing a variety of spending-management tools to help people keep track of their money when they use digitalcash services. The best method of managing spending would be to encourage people to start carrying and using cash again. **EVAN BYRNE** London

Richard Thaler, who won the Nobel prize for economics in 2017, has shown that people spend at least twice as much with credit cards than with cash. Modern society is growing ever more complex. The phasing out of cash should be discouraged. RODOLFO DE LUCA **Buenos Aires**

Those who advocate digitising everything do not recognise that life is full of nuance. Wallets get lost, but so do phones with digital wallets (which can also break). At 62 I want to be able to delegate errands. I don't want my young grandson to have a card until he is ready to face up to the obligations of using one. Some people will never cope without cash, because of illness, or just a total lack of interest in absorbing more banal mental clutter, such as constantly updating passwords, reviewing transaction printouts or reading tomes of terms and conditions.

Always keep a little cash around. Diversify. It lowers risk. Plastic is useless when power lines are down. If someone can wire you some cash, on the other hand? **MARIA ASHOT** Brussels

Britain's unreliable railway

One of the bugbears of the British rail industry is the perennial search for structural solutions to problems that may not have structural causes. Your article, "Getting back on track" (August 17th), is a case in point. In the 26 years since privatisation the franchising regime has changed little, but rail reliability has fluctuated widely. It improved steadily from 1993 until the Hatfield crash in 2000, which precipitated a sharp decline. It took a long time to recover, but by 2009 Britain had one of the most reliable railways in Europe. It is now back down to dismally low levels.

Given this varied history, it is difficult to see any strong causal link between franchising and reliability. A more plausible diagnosis is that the railway is suffering from financial and political neglect. Tinkering with the franchising system may attract politicians, but it is unlikely to make the trains run on time. MARK LAMBIRTH Former director ик Department for Transport Paphos, Cyprus

Market policy in Canada

It is not often that Canada's competition law makes it into the global economic discussion, as it did in your special report on Canada (July 27th). As the federal commissioner of competition, I was grateful to talk to The Economist about how innovation is reshaping our economy. And I was happy to share thoughts about how we promote competition.

You reported that, "unlike authorities in other rich countries" Canada's Competition Bureau "cannot compel firms to provide information." It is true that Canada cannot compel information for market studies. However, we do use available tools, including applications to our federal courts, to compel firms to provide the information we are seeking in enforcement matters. We also discussed Canada's efficiencies defence,

whereby increased efficiencies attributable to a merger may be used as a defence against the merger's anti-competitive effects. Your report included my comment that the principle of allowing anti-competitive mergers should be, "at the very least" limited to exporting companies. More precisely, it is that the availability of the efficiencies defence should be, at the very least, strictly limited to exporting companies.

The Competition Bureau is working hard to make sure that a fair, competitive and trustworthy marketplace endures in Canada.

MATTHEW BOSWELL Commissioner of competition Ottawa

A parting memory of home

The murals and floor of the airport in Caracas represent much more than just "kinetic art" ("Art that moves", August 3rd). All Venezuelans who have emigrated have taken a picture of their feet on the broken tiles of Carlos Cruz-Diez's floor, as we say goodbye. We do not just pause to admire the art. We pause to cry. We pause to linger a few minutes more with our families. Those broken tiles have seen our youth emigrate with nothing but a suitcase and hope. It is powerful art that captures an entire country's sorrow and longing. RICARDO ROSAS Basel, Switzerland

The last days of Wilhelm II

I was surprised to learn that enough of the belongings of the Hohenzollern family had remained in Germany to be subject to legal actions ("Jacobin fury", August 3rd). Some time after the dethroned Kaiser Wilhelm II was given asylum in the Netherlands in 1918, he purchased Huis Doorn, a villa in the centre of the country. He then miraculously managed to obtain permission from the Weimar Republic to retrieve most of his personal belongings. Since 1956 the villa and its opulent contents have been a charming but often overlooked museum.

After meeting Hermann Goering, Wilhelm realised the true intentions of the Nazis, and that these did not include the restoration of the German monarchy. He therefore arranged to be interred in a mausoleum on the grounds of Huis Doorn, next to his favourite dachshunds. His final wish that no Nazis or swastikas would be present at his funeral in 1941 was rudely ignored. **HANS BARNARD** Associate researcher Cotsen Institute of Archaeology University of California, Los **Angeles**

Party harmony

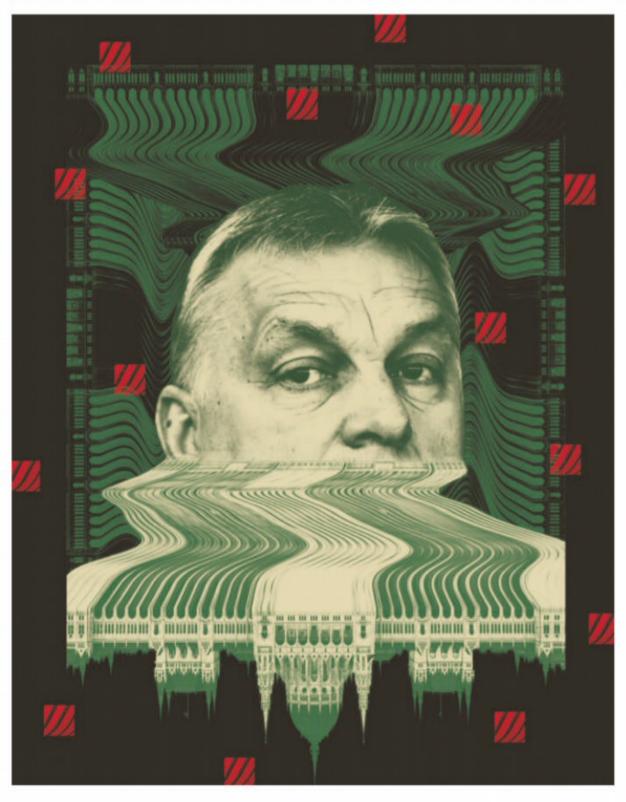
Your report on seating arrangements in parliaments around the world ("Better politics by design", July 27th) brought to mind the seating of choruses. Traditionally, choruses are clustered in sections: soprano, alto, tenor, bass. Thus, singers can be corralled by their section leaders (by political analogy, party whips) and led by the stronger voices.

Some conductors, however, like to challenge their choristers by seating them randomly. The choristers' immediate neighbours are likely to be from sections other than their own, forcing them to tune in to one another. Section leaders have less control, but the chorus is more harmonious. **DAVID CORBETT** Exeter, New Hampshire

What's in the fine print?

Thinking about people's tendency neither to read nor understand contracts ("Critical conditions", July 27th) they should always be aware of what's written down, because while The Large Print Giveth, The Small Print Taketh Away. **CHRIS MARLER** London

Letters are welcome and should be addressed to the Editor at The Economist, The Adelphi Building, 1-11 John Adam Street, London wc2 N 6нт Email: letters@economist.com More letters are available at: Economist.com/letters



The entanglement of powers

BUDAPEST AND DEBRECEN

How the government of Viktor Orban hollowed out Hungary's democracy

AKING", Bruce Springsteen has pointed out, "ain't satisfied 'til he rules everything." It was to thwart this route to royal satisfaction that 18th-century thinkers such as Montesquieu and James Madison came to prize the separation of powers. If the setting of policy, the writing of laws and the administration of justice were the preserve of different people, absolute power could not end up in one set of hands. This was especially true if the different branches of government had some degree of power over one another. Now it is ac-

cepted that a certain amount of friction is the guardian of freedom in a democracy.

Viktor Orban, the prime minister of Hungary, has other ideas. In the place of such strife, he and his colleagues in Fidesz, the governing party, have over the past nine years sought to align the executive, legislative and judicial powers of the state. Those branches now buttress each other and Fidesz—sometimes unobtrusively, sometimes blatantly. Mr Orban refers to the result of these efforts as the "system of national co-operation". He used to speak

more openly of an "illiberal democracy".

Through this systematic entanglement of powers Mr Orban and his associates have turned Hungary into something akin to a one-party state. They have done so with no violence at all and broad public support. The achievement is bad for Hungarian liberty and its long-term prospects—and an object lesson in what is possible for autocrats and would-be autocrats elsewhere.

The subtle workings of the "system of national co-operation" are testament to the legal expertise of those who fashioned it, including Mr Orban. In 1989, when Soviet power collapsed, he was a law student at Istvan Bibo College, an elite institution in Budapest. He was "domineering" but "sincere and likeable", according to his roommate Gabor Fodor, later a political rival. His daring speeches at the anti-communist demonstrations sweeping Hungary quickly made him one of the leading lights of Fidesz, then a liberal student movement.

Mr Orban entered parliament in 1990, and in 1998 he became prime minister. His surprise defeat in the 2002 election accelerated Fidesz's growing shift from liberalism towards nationalism. Over the course of the 2000s the party grew increasingly jingoistic, and by the time it won again in 2010 its appeal was largely grounded in Christian culture and ethnic identity. During the migrant crisis of 2015, Hungary became the first country in Europe to build a fence to keep out Middle Eastern refugees.

Fidesz's image abroad is dominated by such demonstrations of nationalist ideology. But the legal and institutional creativity unleashed at home are a more important part of the story.

In 2010 a wave of anger at the previous Socialist-led government allowed Fidesz to win a two-thirds majority in parliament with just 53% of the vote. This was possible because of a peculiar electoral system set up after 1989 in which all citizens had two votes, one for a one-representative district and another for a multi-member district.

There were also 64 non-constituency seats which, as in Germany, are distributed so as to ensure the make-up of parliament was proportional to the national vote. In 2010 that topping-up proved unequal to the task. With the Socialists and several other parties dividing the rest of the vote, Fidesz won all but three of the 176 single-member districts and 84 of the 146 seats in the multi-member ones. Even with 61 of the 64 top-up seats allocated elsewhere, Fidesz ended up with 68% of the MPS.

 ▶ freeing up hundreds of posts for Fidesz loyalists. It set up a National Judiciary Office run by Tunde Hando, a college contemporary of Mr Orban's. Her nine-year term, which is due to end next year and under current laws could not be renewed, makes her unsackable by parliament. Ms Hando can veto judicial promotions and influence which judges hear which cases. Fidesz now enjoys control of prosecutors' offices, the constitutional court and the Curia (the highest court of appeals).

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With the courts under its thumb, Fidesz pushed through a new constitution, drafted in part by Joszef Szajer, Ms Hando's husband. In 2013 the constitutional court struck down some of Fidesz's new laws, including one that threatened various churches with a loss of official recognition. Parliament responded by writing the laws into the constitution.

In 2018 a new code of procedure gave courts powers to reject civil filings more easily. Peter Szepeshazi, a former judge, says they can stumble over trivial errors such as a wrong phone number: "If it's unfriendly to the political or economic elite, they have an excuse to send it back." (The government calls this claim "unsubstantiated".) A report in April by the European Association of Judges said Ms Hando was riding roughshod over judicial independence.

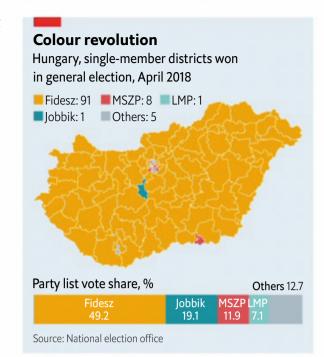
The government appears to want yet more say over the judiciary. Since 2016 it has been planning an entirely new system of administrative courts in which the Justice Ministry would have direct influence. These courts would handle, among other things, disputes over the media and elections—areas where the regular courts still, occasionally, rule against the government. The Venice Commission of the Council of Europe, a legal watchdog, has criticised the system, and in May the government put it on hold to keep its membership in the powerful EPP group of the European Parliament, which had threatened to expel it.

It is not clear why Fidesz worries about the power to settle election disputes. Having gerrymandered the single-member districts after winning power in 2010, the party continues to win almost all elections. In 2011 Mr Orban granted voting rights to some 2m ethnic Hungarians who are citizens of neighbouring Romania, Slovakia, Serbia and Ukraine, and who overwhelmingly plump for Fidesz. They are allowed to vote by post. The roughly 350,000 Hungarian citizens living in the West are much less likely to support the party. They have to vote in person at embassies or consulates.

This all explains how, in the general election last year, Fidesz won 67% of the parliamentary seats—maintaining its supermajority—while taking just less than half of the popular vote. With the system so well re-designed, the party has no need to stoop to voter fraud, as cruder autocracies do. But the "system of national co-operation" is nothing if not thorough. In 2018 the National Election Office ruled thousands of postal votes invalid because the tamper-proof tape on the envelopes had been opened. In response, the government revoked the law requiring tamper-proof tape.

Legal fine-tuning has been used to suppress the opposition's messages. In 2012, when ESMA, a Spanish-Hungarian company that held the concession for advertising on Budapest's streetlamps was accepting advertisements from leftist parties, the city council banned all outdoor advertisements within five metres of roadways. The sidewalk kiosks owned by a government-friendly advertising group were exempted from the ban. In 2015 the almost bankrupt ESMA was bought by Istvan Garancsi, a businessman friendly with Mr Orban. The five-metre ban was promptly repealed.

This is just one of the ways Fidesz keeps the media on its side. The country's biggest opposition newspaper, *Nepszabadsag*, was bought out and shuttered in 2016 by a company thought to be linked to Lorinc Mesza-



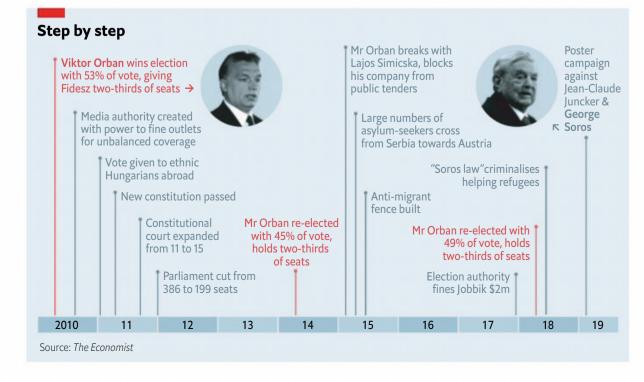
ros, a boyhood friend of Mr Orban's who is now the country's second-wealthiest businessman. Lajos Simicska, a member of Mr Orban's school and college cohort, built a large business and media empire that supported Fidesz in the 2010s. In 2015 he fell out with Mr Orban and lost most of his companies, but held on to Magyar Nemzet, another newspaper. After Fidesz's overwhelming election victory in 2018, though, he closed it. Independent media are now confined largely to websites read by a few people in Budapest's liberal bubble.

Deep Fake State

Content is controlled, too. After taking power in 2010, Mr Orban's government began transforming MTI, the country's public news agency, into a propaganda organ. In 2011 parliament made MTI's wire-service free, driving competing news agencies out of business. Regional newspapers that lacked reporting staff became channels for MTI's pro-government messaging, and it is from those newspapers that Mr Orban's rural base gets its news. The government uses its advertising budget, which has quadrupled in real terms to more than \$300m per year, to bring any rogue newspapers in line.

The country's domestically owned television and radio stations are nearly all progovernment. Last November the owners of 476 media outlets, including some of the biggest in the country, donated them free of charge to a new non-profit foundation known as KESMA, whose goals include promoting "Christian and national values". When opposition groups challenged KESMA for violating the country's media law, Mr Orban declared the foundation vital to the national interest, removing it from the media authority's jurisdiction.

Turning media outlets into propaganda factories has not been good for their quality. In February the KESMA foundation's first chairman, a former Fidesz MP, carelessly joked in an interview that the pro-government media was so dull that even Fidesz



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• members read the opposition press. (He was forced to resign within hours.) Despite being tedious, though, κεςΜΑ and other pro-government media account for more than 80% of the news audience.

The production of news is managed, too. Parliamentary rules require that the government give notice of new bills and allow time for them to be debated, procedures which can lead to public criticism, even dissent. To avoid such problems, Fidesz often has minor MPS table its bills, rather than doing so itself, which allows them to be rushed through in hours with the opposition nowhere to be seen.

To Viktor, the spoils

State-backed "public information" campaigns shape public opinion in ways beneficial to Fidesz. The National Communications Office, set up in 2014, co-ordinates both the government's advertising spending—which is directed almost exclusively to friendly outlets, not critics—and its public-information efforts. This has been used, among other things, to build up antipathy towards George Soros, a Hungarian-American philanthropist. Although his foundation provided a scholarship which allowed Mr Orban to study in Oxford in the late 1980s, Mr Soros has become an appealing hate figure for Fidesz owing to his liberal politics and wealth. His Jewish background also plays a part. In 2017 the government spent €40m (\$45m) on two nationwide surveys asking every citizen whether they favoured an alleged immigration plan supposedly hatched by Mr Soros-in effect, a government-funded propaganda effort. In the first three months of 2019 public-information spending reached €48m, much of it for a billboard campaign that accused Mr Soros of teaming up with Jean-Claude Juncker, president of the European Commission, to promote migration.

When control of parliament, the legal system and the media do not suffice, the government has other tools. Before the 2018 general election, the biggest threat to Fidesz came from Jobbik, originally a farright party. It had moved towards the centre in a bid to go mainstream, and at times polled more than 25%. Enter the State Audit Office, headed by a former Fidesz MP who enjoys an election-proof 12-year mandate. In 2017 the audit office accused Jobbik of receiving illegal in-kind financing, and fined it 663m forints (\$2m). In 2019, in the run-up to the European election, it tacked on another 272m forints, leaving the party close to insolvency. Two new liberal parties, Momentum and Dialogue for Hungary, as well as the Socialists, Democratic Coalition and the LMP (Green) party, were fined or investigated. Only Fidesz has been left untouched.

Some institutions have maintained their independence, but Mr Orban's gov-

ernment seems intent on subverting them. Over the past two years it has harassed the Central European University (CEU), one of the most respected institutions in the region, into leaving Budapest for Vienna. The government insists that the clash stems from a technical dispute over the CEU's awarding of American-recognised diplomas, and not from the fact that its scholars often criticise Fidesz, or that it was founded and endowed by Mr Soros.

Most recently, the government went after an organisation with a storied history: the Hungarian Academy of Sciences, launched in 1825 by Count Istvan Szechenyi. The academy helped standardise the Hungarian language, and played a key role in the nationalist awakening that led to the country's emancipation from Habsburg rule. Last year the government announced that it wanted the academy's 15 state-funded research institutes to be directly controlled by the ministry of technology and innovation. Negotiations went nowhere, says Zsolt Boda, head of the academy's social-science institute. The government would show up with nothing on paper about its plans, sticking instead to deniable verbal statements. In July, parliament simply pushed the new structure through. The government says this brings things in line with the way they are done elsewhere, citing Germany's Max Planck Institutes as an example. Officials at the Max Planck Institutes deny this, saying the Hungarian structure gives the state direct influence over scientists.

Despite its institutional advantages, Fidesz would not be able to stay in power if it were not so popular. It secures that support though its nationalist appeal and its passable economic record.

Like other eastern Europeans, most Hungarians saw the rejection of communism as a victory not so much of liberalism or capitalism as of national identity. And Hungary has a very strong sense of identity. The population of 10m is ethnically homogenous. Fewer citizens can read and write in a foreign language than in any oth-

Middling Magyar GDP, % change on a year earlier 9 Slovakia Hungary 6 Poland 0 Czech Republic -3 Romania -6 -9 2008 10 12 14 16 18 19* Sources: Eurostat; European Commission *Forecast

er EU country, except Britain.

All of this made ethnic nationalism a sound strategy for Fidesz. It deployed an economic populism to match: an indigenous "Orbanomics" deemed superior to the supposed globalist neoliberal consensus. Mr Orban was elected shortly after the financial crisis, when Hungary was in a bad shape for which others were to blame. The crisis-induced fall of the forint meant that many Hungarians who had taken out low-interest mortgages in Swiss francs could not repay their debts. Mr Orban forced the banks to redenominate the mortgages in forints at favourable rates.

In 2011 Mr Orban pulled Hungary out of talks on an IMF rescue package initiated by the previous government. After initially slashing a public-works programme launched by the Socialists, the government doubled its budget starting in 2012, creating hundreds of thousands of jobs. At the same time, it has introduced some relatively radical policies, such as a flat income tax of 15%. Growth and sober budgets have cut the national debt from 80% of GDP in 2010 to 71% last year.

Orbanomics also fits neatly into the authoritarian toolkit. Research by Gyorgy Molnar of the Hungarian Science Academy shows that in many villages with large numbers of public-works jobs nearly all of the votes go to Fidesz. In many cases, local mayors use public-works employees (who make less than the minimum wage) in their own businesses.

A new kind of feudalism

How well Orbanomics works as an economic policy, as opposed to a means of control, is open to question. Over the past six years growth has averaged 3.5%, and unemployment has fallen to 3.4%, which sounds good. But every country in central and eastern Europe has grown fast over the past five years, and Romania, Slovakia, Poland and the Czech Republic have all outpaced Hungary (see chart). Unemployment is below 4% in most of the region. Hungary is less productive than it could be, says Andras Vertes of GKI, a consultancy in Budapest, and growth is dependent on aid from the EU, which amounts to some 2.5% of GDP, among the highest in the club.

Much of the rest is down to German carmakers, whose plants in Hungary account for up to 35% of industrial exports. The government is very eager to keep them happy. Last year, in one of Fidesz's occasional political mistakes, the government passed laws allowing companies to demand that employees work longer overtime to be paid for at a later date. Analysts say the so-called slave law was a government effort to placate car companies worried about labour shortages.

As the "slave law" shows, the government pays less attention to the economic >>>

interests of ordinary people than to those of the elite. "The corruption is terrible," says Mr Vertes. It was bad under the Socialists, he adds, but has got worse. In many industries, "the government decides who wins or loses." Since the downfall of Mr Simicska, the first and most powerful Fidesz oligarch, Mr Meszaros, Mr Orban's old village chum, has risen to comparable prominence. In 2010 Mr Meszaros owned three companies with a total equity of €2m; by 2016 he owned 125 firms worth €270m. He is now the second-wealthiest man in the country, according to an annual ranking published by the website Napi.hu. In an interview in 2014 Mr Meszaros said he had never embezzled and had acquired his wealth through hard work—though he also thanked "God, luck and Viktor Orban".

Transparency watchdogs monitor the rise and fall of Mr Orban's coterie by charting who gets the most public contracts. A new entrant on this year's list of Hungary's wealthiest 100 is Istvan Tiborcz, Mr Orban's 33-year-old son-in-law. In 2017 an investigation by OLAF, the EU's corruption watchdog, recommended that Mr Tiborcz be prosecuted on the basis that his companies had rigged bids for tens of millions of euros in EU-funded municipal-lighting contracts. But OLAF has no enforcement powers, and Hungarian police found no wrongdoing. Top officials tend to declare modest assets but lead luxurious lives.

Balint Magyar, a sociologist and former education minister who is now at the CEU, argues that the state under Fidesz is essentially a vehicle for capturing the economy and distributing its revenue streams to allies. Unlike communist parties, which had real titles of office and rule-governed internal hierarchies, Fidesz is an ideologically flexible vehicle that can be reorganised as the inner circle wants. Mr Magyar calls Hungary a "mafia state", run by a clique whose main creed is loyalty. Kim Scheppele, a political scientist at Princeton University, notes the cunning deniability of the "system of national co-operation". No country's separation of powers is complete. Most of Fidesz's arrangements can be found in one country or another. It is the cumulative effect all in one place that makes Hungary special.

Mr Orban's system is the object of study beyond the academy. When Poland's Law and Justice party took power in 2015, it mimicked Fidesz's first moves, packing the country's constitutional court and lowering the retirement age for judges. In 2017 oligarch-run Moldova's government switched the country to a Hungarian-style mix of single-party districts and proportional representation. Binyamin Netanyahu, who has excellent relations with Mr Orban, has rewritten Israel's constitution to pack more ministers into his cabinet for political convenience.

What could go wrong for Mr Orban? Other parties, which have tended to fritter away their support on squabbles, might team up against him. For the country's mayoral elections this autumn they have struck a pact to stand aside in favour of the opposition candidate with the best chance in each constituency. But the parties' ideological differences make this hard, says Bernadett Szel, the LMP party's prime ministerial candidate in 2018. Liberal voters have qualms about tactically backing socialists, let alone the nationalists of Jobbik.

A serious recession or slowdown could also threaten Fidesz. The economy is excessively reliant on Germany, especially its car industry; near-term risks of German recession, and longer-term worries about the survival of the internal-combustion engine, make that reliance worrying. Hungary needs to shift from serving as a low-wage outsourcer to building its own high-value-added companies. But it ranks lower on competitiveness indices than other central European countries that are trying to do the same, says Mr Vertes of GKI.

Other risks come from the EU. It expects to rejig its multi-year budget to send less aid to central and eastern Europe, which are doing well, and more to southern Europe, which is not. Rule-of-law advocates in Brussels would also like to build in conditionality, so that if countries move towards autocracy, their funding could be cut. But since Hungary would get a veto on this, it is unlikely to become law. Hungary has also opted out of the new European Public Prosecutor's office, which will prosecute corruption on EU-funded projects.

"There are no normal democratic tools in place anymore," says Judith Sargentini, a former Dutch Green MEP. In 2018 she wrote a report on the threat to rule of law in Hungary that led the European Parliament to launch Article Seven procedures against the country; in theory these could lead to



the loss of some EU privileges, though plenty of obstacles could get in the way.

And if the EU is a potential problem for Mr Orban, it is a much greater advantage. European officials find it embarrassing to face up to the existence of a quasi-autocracy within the club, and thus have been slow to punish Hungary for its transgressions. More practically, the EU's guarantee of freedom of movement makes Hungary easy to leave. And this is what many of those dissatisfied with his rule are doing.

Lights out tonight

Debrecen, Hungary's second-largest city, is a conservative town of faded beaux-arts grandeur close to the border with Romania. Lili (not her real name) wants to leave it as soon as she finishes university. To illustrate why, she refers to a scandal at the elite grammar school she attended. In 2018 the Ady Endre school's popular head was replaced with a primary-school teacher whose chief qualification seemed to be that he was a member of Fidesz. Teachers, parents, students and alumni protested, to no avail. "We have no voice," Lili says. She plans to move to a more liberal town in the country's west.

Others hit the border and keep going. Zsike, a graphic designer from Debrecen, ended up in the Netherlands: "If you don't have important friends or family [in Hungary], you can never get anywhere." Maria and her husband went to Austria to keep their children out of Hungary's increasingly rote-oriented schools. For Monika, an English teacher who also ended up in the Netherlands, the final straw was when the government went after civil-society organisations: "That's like dystopian, I'm thinking like 1984."

Other countries in central and eastern Europe have seen a larger share of their citizens move west since joining the EU. But an analysis by R. Daniel Kelemen, a political scientist at Rutgers University, shows that the number of Hungarians living elsewhere in the EU has gone up by 186% since 2010, the biggest percentage increase of any member state. Those who go tend to be well educated. When Mr Boda, of the Academy of Science, is asked how many of his students are thinking of leaving Hungary after graduation, he replies: "All of them."

From the government's perspective, this may be fine. The emigration of liberal-leaning graduates only cements Fidesz's power. Hungary's communists might have been relieved if a free-thinking law student named Viktor Orban had gone off to Oxford and stayed there, ideally on Mr Soros's dime. Instead, he came home, helped unseat them and replaced them with his own quasi-autocratic rule. "We thought we had come out of socialism and now we were going to be normal," says Maria. "Instead it's still the same old shit."

United States



The American economy

Areas of concern

WASHINGTON, DC

Parts of the country are already facing a downturn

T CAN BE hard to know when isolated announcements become something more. Since last November General Motors has cut several thousand factory jobs at plants across the Midwest. In early August us Steel said it would lay off 200 workers in Michigan. Sales of camper vans dropped by 23% in the 12 months ending in July, threatening the livelihoods of thousands of workers in Indiana, where many are made. Factory workers are not the only ones on edge. Lowes, a retailer, recently said it would slash thousands of jobs. Halliburton, an oil-services firm, is cutting too.

In any given month, even at the height of a boom, more than 5m Americans leave a job; nearly 2m are laid off. Most of the time, however, overall employment grows. But not all the time. America may or may not be lurching towards a recession now. For the time being employment and output continue to grow. But in the corners of the economy where trouble often rears its head earliest, there are disconcerting portents.

Recessions are synchronised declines

in economic activity; weak demand typically shows up in nearly every sector in an economy. But some parts of the economic landscape are more cyclical than others—that is, they have bigger booms and deeper slumps. Certain bits tend to crash in the earliest stages of a downturn whereas others weaken later. Every downturn is different. Those caused by a spike in oil prices, for example, progress through an economy in a different way from those precipitated by financial crises or tax increases.

But most recessions follow a cycle of tightening monetary policy, during which

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the Federal Reserve raises interest rates in order to prevent inflation from running too high. The first rumblings of downturns usually appear in areas in which growth depends heavily on the availability of affordable credit. Housing is often among the first sectors to wobble; as rates on mortgages go up, this chokes off new housing demand. In a paper published in 2007 Edward Leamer, an economist at the University of California, Los Angeles, declared simply that "housing is the business cycle". Recent history agrees.

Residential investment in America began to drop two years before the start of the Great Recession, and employment in the industry peaked in April 2006. Conditions in housing markets were rather exceptional at the time. But in the downturn before that, typically associated with the implosion of the dotcom boom, housing also sounded an early alarm. Employment in residential construction peaked precisely a year before the start of the downturn. And now? Residential investment has been shrinking since the beginning of 2018. Employment in the housing sector has fallen since March.

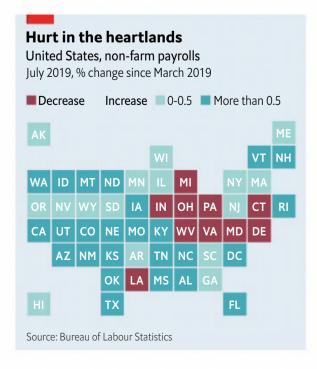
Things may yet turn around. The Fed reduced its main interest rate in July and could cut again in September. If buyers respond quickly it could give builders and the economy a lift. But housing is not the only warning sign. Manufacturing activity also tends to falter before other parts of an

• economy. When interest-rate increases push up the value of the dollar, exporters' competitiveness in foreign markets suffers. Durable goods like cars or appliances pile up when credit is costlier.

In the previous cycle, employment in durable-goods manufacturing peaked in June 2006, about a year and a half before the onset of recession. This year has been another brutal one for industry. An index of purchasing managers' activity registered a decline in August. Since last December manufacturing output has fallen by 1.5%. Rather ominously, hours worked—considered to be a leading economic indicator are declining. Some of this is linked to President Donald Trump's trade wars, which have hurt manufacturers worldwide. But not all. Domestic vehicle sales have fallen in recent months, suggesting that Americans are getting more nervous about making big purchases.

In some sectors, technological change makes it difficult to interpret the data. Soaring employment in oil industries used to be a bad sign for the American economy, since hiring in the sector tended to accompany consumer-crushing spikes in oil prices. But America now produces almost as much oil as it consumes, thanks to the shale-oil revolution. A recent fall in employment and hours in oil extraction may be a bad omen rather than a good one. By contrast, a fall in retail employment was once unambiguously bad news. But retail work in America has been in decline for two and a half years; ongoing shrinkage may not signal recession, but the structural economic shift towards e-commerce.

Other signals are less ambiguous. In recent decades employment in "temporary help services"—mostly staffing agencies—has reliably peaked about a year before the onset of recession. The turnaround in temporary employment in 2009 was among the "green shoots" taken to augur a long-awaited labour-market recovery. Since December it has fallen by 30,000 jobs.



Even if America avoids a recession, the present slowdown may prove politically consequential. Weakness in some sectors, like retail, is spread fairly evenly across the country. But in others, like construction or, especially, manufacturing, the nagging pain of the moment is more concentrated (see map). Indiana lost over 100,000 manufacturing jobs in the last downturn, equal to nearly 4% of statewide employment. It is now among a modest but growing number of states experiencing falling employment: a list which also includes Ohio, Pennsylvania and Michigan.

Those four states, part of America's manufacturing heartland, suffered both early and deeply during the Great Recession. In 2016 all delivered their electoral-college votes to Mr Trump, handing him the presidency. The president's trade war might have been expected to play well in such places. But if the economic woe continues, voters' faith in Mr Trump is anything but assured. Choked states might well turn Democrat-blue.

Real-estate commission

Sellers beware

NEW YORK

Real-estate brokers face investigation for anti-competitive practices

The past decade has not been great for middlemen, who match buyers and sellers for a slice of the transaction value. Travel agents have had their margins crushed by flight-search and hotel-booking websites. Stockbrokers have been squeezed out by whizzy algorithms that carry out transactions for a fraction of the cost. Taxi dispatchers have been replaced by Uber and Lyft.

There is an exception, however. Even though there are plenty of sites, like Zillow and Redfin, which offer home-buyers in America the chance to search for properties, commission rates for real-estate brokers (estate agents in Britain) have not fallen much, staying close to 6% (3% for the buyer's agent, 3% for the seller's). Americans pay twice as much as people in most other developed markets, where similar sites have done much to depress residential-property transaction fees (see chart).

This irks many. "Why is it that residential real-estate brokers' fees are two to three times higher in the Us than in any other developed country in the world?" asks Jack Ryan, who founded REX Homes, a property brokerage that offers to sell homes for just 2% commission. He believes the problem lies in the anti-competitive practices of the Multiple Listing Service (MLS), through

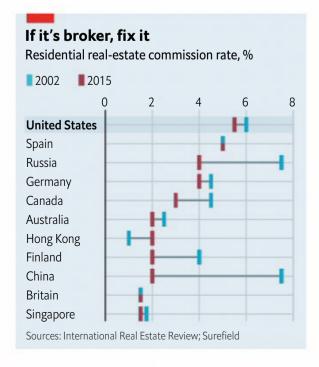
which nearly every broker in America lists and searches for homes, and the National Association of Realtors (NAR), a trade association with 1.3m broker members in America, which regulates it.

That opinion is growing in popularity. Two class-action lawsuits have been filed against the NAR and some of the largest real-estate brokerages, such as Realogy and Keller Williams. In America, a practice called "tying" is common, whereby homesellers are forced to agree upfront on the rate they will pay the buyer's broker. The lawsuits allege that sellers' brokers put pressure on homeowners to offer the industry standard of 3%. If they refuse, buyers' brokers may refuse to show their home to clients.

This is possible because of the MLS. In April, the Department of Justice (DOJ) began to subpoena information about how brokers use the system, looking for evidence that they search for homes by commission rate. If found, it would corroborate the idea that buyers' brokers invariably steer buyers to homes that offer the juiciest commission. The NAR moved to dismiss both suits in early August. John Smaby, the President of the National Association of Realtors, says the lawsuits are "wrong on the facts, wrong on the economics and wrong on the law".

But the market seems to think there is plenty to worry about. Many large real-estate brokerages are privately held, but the share price of Realogy, one of the brokerages named in the suit, has fallen by half since the end of April, just after news of the DOJ investigation leaked. The value of RE/MAX, another listed brokerage, has fallen 40% over the same period.

If transaction fees are being kept artificially high by these practices, that is bad news for homeowners. Some \$1.5trn worth of homes change hands every year. If anticompetitive practices are elevating American brokerage fees by two to three percentage points above where they might be



• otherwise, this is costing consumers as much as \$70bn per year, or 0.25% of GDP.

The costs to the American economy are probably higher than that. When moving house is so expensive, many people may not bother. That means less spending on services associated with moving home, such as gardening and decorating. Worse, it may also be suppressing mobility in America. Ben Harris, who was the chief economist for Joe Biden when he was vice-president, argues that average incomes in poorer cities are not catching up with those in rich ones, "in part because people aren't moving any more". Extortionate real-estate commissions are hardly the only problem—wealthy cities such as San Francisco need to build new housing if people are to move to better-paying jobs there. But they certainly do not help.

The 2020 election

The other primary

A former Republican congressman tries to dethrone Donald Trump

OE WALSH might seem an odd foil to Pres-**J** ident Donald Trump. The media-savvy former congressman, a Tea Party-firebrand, who announced his Republican primary challenge to the president on August 25th, has had a long record of controversial and (self-admitted) racist remarks in his record as both a politician and radio host. "I do feel a responsibility for helping to put Trump in the White House. And I have publicly apologised for that, because to me Donald Trump is like the worst version of a Joe Walsh," he says.

Yet Mr Walsh is plunging into the treacherous waters of primarying a sitting president, all the same. He was not a devoted Never Trumper. In his telling, the spectacle in Helsinki of an American president trusting Vladimir Putin over his own intelligence agencies put him permanently off. The rest of his fellow Republicans might not see it that way. Although the party's most prominent public intellectuals—like William Kristol and George Will have long despised Mr Trump, the voting base remains utterly devoted. Among Republicans, 87% approve of the job that Mr Trump is doing.

Much of Mr Walsh's campaign will focus on the president's character. The biggest policy issue that he raises—the mounting national debt, which Tea Partiers raged against in 2010—is not one that Republicans fret over anymore. He also faults Mr Trump for a "ridiculous" tariff policy and the "public dance" done with

The first straw

WASHINGTON, DC

Donald Trump's campaign swag comes tinged with cultural grievances

WILLIAM HENRY HARRISON WAS 66 in 1839 when he became the Whigs' presidential candidate. His rivals mocked his advanced age, calling him Granny and joking, "Give him a barrel of hard cider, and...a pension of two thousand [dollars] a year...and...he will sit the remainder of his days in a log cabin." Harrison ran with the insult. Though born to a wealthy family, he styled himself the log-cabin- and-cider candidate, a man of the people. He cast his opponent, Martin Van Buren, as an out-of-touch elitist. His supporters sold trinkets plates, lamps and handkerchiefs-with log-cabin designs.

Thus began the American political tradition of producing and distributing campaign merchandise. Usually a campaign hands out yard signs, buttons and stickers with the candidate's name and perhaps an anodyne slogan such as "Kamala Harris For the People" or "Warren Has a Plan for That". Donald Trump's campaign takes a different approach.

Rather than bland slogans designed not to offend, his campaign prefers red meat for the base. Earlier this summer, the president's campaign began selling branded Trump plastic straws after his campaign manager grew frustrated with a flimsy paper one. They cost \$15 for a pack of ten, but sold out quickly.

The straws are not just straws. They express the sort of cultural grievance that has defined Mr Trump's presidency. "Liberals want to ban us," the straws say to his supporters, "but we work better than the politically correct alternative. You like us and using us lets you show your support while triggering the libs.' Mr Trump's party has followed suit: a few days after Mr Trump baffled the world by musing about buying Greenland, the National Republican Congressional Committee began flogging T-shirts depicting the island as part of America.



Getting ahead in politics

His campaign also sells material such as "Pencil-Neck Adam Schiff" T-shirts, which depict the chairman of the House Intelligence Committee as a clown, and "Fredo Unhinged" shirts, which show Chris Cuomo, a television anchor, midmeltdown. Campaigns usually leave such mean stuff, such as Bill Clinton corkscrews (you can guess where the screw protrudes) or Hillary Clinton nutcrackers, to third parties.

Mr Trump's campaign is nimble. The Cuomo shirts were on sale a day after the anchor threatened to shove someone down a flight of stairs for calling him Fredo, the weak brother in the Godfather films. Politico, which covers Washington politics, reported that the campaign manager's straw broke as he was boarding a flight. By the time he landed, the campaign was already advertising the Trump straws. They were not focusgrouped or run through committees, just made and sold. That works for trinkets. It may be less effective for policy.

Kim Jong Un, the dictator of North Korea. But on other points, like ending the Iran nuclear deal and the Paris climate agreement, he sides with the president.

One big problem looms for Mr Walsh's candidacy. Since announcing his presidential bid, past ugly comments have resurfaced and forced a reckoning. "I wouldn't call myself a racist, but... I've said racist things on Twitter," he said in a recent television interview. Many saw him as a proto-Trump—a booster of the conspiracy theory that Barack Obama was a Kenyan-born Muslim. Though Mr Walsh has since recanted, the long list of such remarks might spoil his chances with disaffected Republican voters. Asked whether the president was a racist, or merely someone who says racist things on Twitter, Mr Walsh answers this way: "I think he uses racism for his own self-interest. I think he uses bigotry and xenophobia. And he can use it if it will help Donald Trump, because all Donald Trump cares about is Donald Trump." ■

Criminal-justice policy

Righting the battleship

BOSTON

A few prosecutors show that criminal-justice reform is local, and not easy

A FTER DAN CONLEY announced last year that he would not seek re-election as the district attorney (DA) for Suffolk County, Massachusetts, which includes Boston and a few surrounding towns, five Democrats and an independent vied to replace him. Mr Conley endorsed Greg Henning, who worked for him for ten years. Mr Henning also received endorsements, and plenty of campaign contributions, from local police unions. Such support usually creates a glide-path to victory.

In this case it did not. Mr Henning lost to Rachael Rollins, one of a wave of pas trying to reform the criminal-justice system from within. Ms Rollins has identified 15 charges—including shoplifting, receiving stolen property, drug possession and trespassing-"best addressed through diversion or declined for prosecution entirely". Her office requests cash bail only when the accused is a flight risk. She has created a panel that includes a defence lawyer and a public-health expert to review all fatal shootings by police. These positions are all unusual for an elected DA; traditionally, the toughest-on-crime candidate wins. But the American conversation on criminal justice is changing. Ms Rollins may be in the vanguard, but she is not alone.

Her companions come from both parties. For 12 years Right on Crime, an advocacy campaign run by the conservative Texas Public Policy Foundation and the American Conservative Union Foundation, has advanced conservative arguments for criminal-justice reform. The Trump administration's only significant bipartisan legislative achievement has been passing the First Step Act, championed by Jared Kushner, Donald Trump's adviser and sonin-law. That bill, passed in December, among other things banned the shackling of pregnant prisoners and made thousands of prisoners eligible for early release.

Democratic presidential candidates have sought to build on this momentum; Bernie Sanders and Elizabeth Warren have released particularly ambitious reform plans aimed at reducing mass incarceration. But much of what they propose will either not work or be impossible without Democrats taking control of both houses of Congress, which seems unlikely.

Mr Sanders, for example, wants to spend \$14bn a year on public defence lawyers. That is an admirable idea, but one that a Republican-controlled Senate is unlikely to approve. Ms Warren wants to repeal most of the 1994 crime bill, which increased incarceration rates. But one of the ways it did that was by incentivising states to pass "truth in sentencing" laws, which require prisoners to serve at least 85% of their sentences. Repealing a federal bill will not change those state-level laws. Both candidates want to ban private prisons, but say nothing about prison-guards' unions, which are more effective drivers of mass incarceration. The work being done by DAS like Ms Rollins show how real criminal-justice reform can be achieved.

The primary lesson is that reform produces resistance. Kevin Graham, who heads the police union in Chicago—home to Kim Foxx, another reformist prosecutor—says he does not believe that "a prosecutor is going to achieve social justice in America...The job of a prosecutor is to prosecute people. We have defence attorneys. If we choose not to prosecute...then the laws don't mean anything." Others think that Ms Rollins is making decisions that should be left to legislatures. "If your idea is to basically...decriminalise certain statutes, run for your state general assembly," says Duffie Stone, a prosecutor who heads the National District Attorneys Association.

Ms Rollins replies that her predecessors often declined to prosecute low-level

cases; she just made practice into policy. And that policy is not absolute. She distinguishes between three hypothetical trespassers: a homeless person sleeping on public property, someone who falls asleep while high in a city hospital, and a violent felon caught with a gun outside his exgirlfriend's house. The first two, she argues, need help, not a criminal record; the third deserves the charge.

In a speech to police officers on August 12th, William Barr, the attorney-general, derided "anti-law-enforcement DAS" who refuse to enforce "broad swathes of criminal law. Most disturbing is that some are refusing to prosecute cases of resisting police." As it happens, resisting arrest, when not combined with more serious charges, is on Ms Rollins's do-not-prosecute list. Here too she draws a distinction: "If you're charged with armed robbery and resisting arrest, that's very different than a standalone resisting-arrest charge, which is often just, you've pissed this police officer off." Annoying a police officer may not be good practice, but it is not a crime.

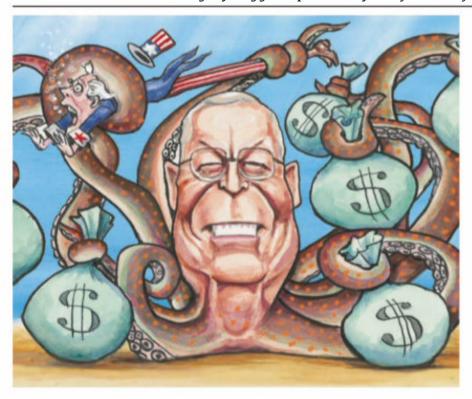
The results of Ms Rollins's approach, Mr Barr warns, "will be predictable. More crime; more victims." Most reformist prosecutors have not been in office long enough to tell. But Ms Rollins does not pretend to be a fortune-teller. Like many reformers, she has invested in data—her department has hired a technologist to update the creaky computer system. And she promises to be responsive to it. "If my policies, through data, show things are getting worse, why in God's name would I want to make anything worse than it is?... And if the Boston Patrolmen's Association wants...to say, 'See, we told you,' I'm going to say, 'You're right'." ■



It is tough to walk the walk

Lexington | The Kochtopus's garden

David Koch's destructive legacy suggests plutocracy is a feature of American democracy, not a bug



FEW INDUSTRIALISTS have been as cruelly self-serving as Andrew Carnegie. Fatal accidents at his steel mills accounted for a fifth of all male deaths in Pittsburgh in the 1880s. Most of his surviving employees, ground down by 12-hour shifts, seven days a week, were discarded by the age of 40. Carnegie did not much mind such human wastage. Influenced by an extreme version of Darwinism, he considered the winnowing of the feeble and thriving of the ablest—in this case, himself—to be progress. Yet he was also a great philanthropist, responsible for endowing thousands of charities, libraries and, in a sense, your columnist. A Carnegie scholarship to medical school was the lifeline that enabled one of his grandfathers to escape his Glasgow tenement and get on.

David Koch, who died last week, presents a similar study in contrasts. On the one hand, the richest resident of Manhattan and more visible of the fraternal owners of Koch Industries did a lot of good. He donated a fraction of his \$50bn fortune to hospitals and universities—especially for research into cancer, the disease that killed him at 79—and the arts. In recent years he and his elder brother Charles, the mastermind behind the Wichita-based energy and chemicals behemoth, also splurged on campaigns to help poor migrants and for criminal-justice reform. Yet they are better-known for their more divisive political activism.

As the vice-presidential candidate for the Libertarians in 1980, Mr Koch's ticket attracted only 1% of the vote. Yet the brothers' lobbying against regulation, unions and entitlements—in almost any circumstance, a position so extreme that William F. Buckley derided it as "anarcho-totalitarianism"—helped push the Republican Party much further to the right than most of its supporters knew or wanted to go. And on climate change in particular this effort was underhand. While acknowledging the reality of global warming, the brothers, both MIT graduates, funded lobbyists, junk scientists and conspiracy theorists to propagate an alternative reality in which climate science is always contestable, and any policy response to it a socialist power-grab. A new book on the brothers' operations by Christopher Leonard suggests this disinformation campaign began as early as 1991, in a successful bid to prevent George H.W. Bush fulfilling his pledge to curb carbon emissions. Thereby the brothers helped corrupt the American right, mislead

the public and destroy a healthy bipartisan consensus on the issue.

Mr Koch's obituarists have tended to stress either the good or bad he did, according to their politics. The settled view of Carnegie—that his philanthropy was great and his business practices unconscionable—suggests history's judgment will be more cleareyed. No amount of charity can negate the damage the brothers have done to Americans' trust in expert opinion, as well as to the environment. Moreover Mr Koch's philanthropy, like Carnegie's, was to some degree expedient. The brothers' work on migrants and criminal justice, though in earnest, was part of a broader effort to improve their awful public image.

Carnegie is also a reminder that the plutocratic tendency the Kochs represent is not new, but cyclical. It reflects America's enduring ability to generate huge fortunes, complacency about concentrations of power, and the many opportunities its diffuse and multilayered democracy provides for influence-peddling. The steel magnate and other robber barons warded off political challenges to their monopolies for decades before Woodrow Wilson ended them. That led to a period of populist ferment hostile to fat cats, including mass strikes and ultimately the New Deal of the 1930s. But the growth and changes in business culture of the 1970s, re-establishing the power of owners over workers, fuelled a new wave of corporate activism, which the Kochs illustrate.

They were more consistent in their beliefs than Carnegie (a protectionist until he sold his steel mills, then a free-trader). Yet their war on regulation, especially of carbon emissions, was squarely in the interests of their shareholders (themselves). As a private company, they were freer than their rivals to make long-term investments in such efforts; the "Kochtopus", as the brothers' political network is known, is believed to have 1,200 employees, three times as many as the Republican National Committee. This represents the broader trend: a relentless and generally effective increase in corporate lobbying. But is the tide now turning against it?

The extent to which the Kochs' priorities have been subsumed by Donald Trump's populism suggests it could be. The president's apprehension that the brothers' anti-government views were not shared by many Republican voters was his major insight. And though he has brought about some things they like, chiefly tax cuts and the dismantling of the Environmental Protection Agency, he has also given them protectionism and insults; last year he called them "a total joke". Meanwhile, in the Democratic primaries, Elizabeth Warren and others promise a new campaign against billionaire influencers—which polls suggest would be wildly popular. Yet though neither party seems likely to revert to the Republicans' former state of corporate vassalage, a sweeping corporate retreat is unlikelier still.

Doing the hokey-kochy

In part, that is because the left is almost as beholden to rich people as the right. Its most free-spending presidential candidate, Tom Steyer, is a billionaire financier—who also promises to smite the "powerful and well-connected". Yet it is mainly because the political economy is vastly more complicated than a century ago, and its institutions, including political parties and the media, weaker. The opportunities for buying influence this throws up would be legion even if a Democratic administration reformed campaign-finance laws. The Kochs' effort to spread climate-change scepticism also illustrates this. It is said to have cost them around \$120m. That is pocket-change for Charles Koch, whose political commitments will in no way be lessened by his brother's demise.

The Americas



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Colombia

No-man's land

BUENAVENTURA

Collective land ownership keeps the country's Pacific coast poor

Cities Built around seaports are often prosperous. Not so Buenaventura, on Colombia's Pacific coast. Its four ports collect more customs revenue than those of any other city in the country. Yet two-thirds of Buenaventura's 400,000 inhabitants are poor, according to a government measure. Few have access to piped drinking water or sewerage. Rows of metal shacks on stilts jut into the sea. Vegetation devours the only public hospital, which lacks equipment to perform even minor operations.

Conditions are no better elsewhere in the Pacific region. Three-quarters of the workforce in Tumaco, the second-busiest Pacific port, is unemployed. The poverty rate in Chocó department exceeds 60%. Colombia is the only South American country with Pacific and Caribbean coasts. Whereas the Caribbean attracts tourists and enterprise, the Pacific has been a backwater.

Corruption is partly responsible. The four previous mayors of Buenaventura, the region's largest city, are or recently were in prison. But the central government in Bogotá bears much of the blame. Since independence in 1810 it has invested in the Ca-

ribbean ports to encourage trade with Europe and the United States. The rise of trade with Asia since the 1990s should have enriched the Pacific. But the government imposes conditions that thwart the building of infrastructure and investment.

Among the most important (and least known) is Ley (Law) 70 of 1993, under which 60% of the land on the Pacific coast—6m hectares—is communally owned (see map). Colombia enacted it to benefit the re-



gion's mainly Afro-Colombian people. The area was settled by fugitives from slavery, then by freed slaves after abolition in 1851. Ley 70 gave their descendants rights similar to those of indigenous peoples, including the right to form councils that can claim title to government lands they have long occupied. Unlike indigenous reserves, this land cannot be transferred to third parties even if a community agrees. Borrowers cannot offer it as collateral.

The law's defenders say it preserves the environment and Afro-Caribbean culture. Families dwell in huts made from wood gathered nearby, cultivate plantains and coconuts and hunt iguanas and turtles. Some bury a baby's umbilical cord to affirm their ties to the land. Juan Camilo Cárdenas, an economist at the University of the Andes in Bogotá, contends that families on communally owned land have lower levels of extreme poverty than others in the region. Collective titling discourages deforestation, which has soared elsewhere. Graciano Caicedo, a leader of the Yurumanguí river community, claims that a return to a way of life that pre-dates white settlement would make hospitals unnecessary.

But in some ways Ley 70 and the related right of communities to be consulted on projects that affect them, derived from the International Labour Organisation's (ILO's) convention on indigenous peoples, hold back the region's people. The effect is made worse by the government's failure to issue rules that define the application of both rights. That makes unclaimed land subject

▶ to an eventual claim by a community. Uncertainty about property rights turns much of the coast into "no-man's land", says Juan Esteban Carranza, head of the Cali branch of Colombia's central bank. In the absence of rules, 10,000 prior consultations are taking place across Colombia, a large share of them in the Pacific. Peru, also a signatory to the ILO convention, has two.

No one knows how many people live on collectively owned land (communities are supposed to conduct their own census, but many fail to). Perhaps 1.5m people in the wider region are affected by Ley 70. Indirect costs are felt across the country. Colombia's president, Iván Duque, wants to create a port and duty-free zone in Chocó plus roads to coffee-growing areas as part of his national development plan. But the government has no way to acquire the land.

Firms that would benefit from proximity to the ports, such as food importers, set up instead in Cali, 100km (60 miles) inland. Companies "are always on alert" about potential land claims and consultations, says Alexander Micolta, the president of Buenaventura's chamber of commerce.

Demands for consultations are block-

ing a project from 2006 to widen to four lanes the congested road from Buenaventura to Cali. A proposal in 2012 to build a power line to the city from a dam 60km away fell apart. Hundreds of wooden huts appeared along the planned route. Their owners demanded 30m pesos (\$10,000) per hut. These and other demands raised the scheme's projected cost by 83%.

Mr Duque promises to mitigate the effects of both Ley 70 and prior consultations by issuing rules next year. But they need the approval of ethnic communities. Some do not share his idea of progress.

Bello Playing with fire

How not to save the Amazon

PICTURES OF FIRES raging in the rainforest. A social-media storm in which #AmazonIsBurning dominated what passes for the global conversation. A war of words in which Emmanuel Macron, France's president, branded as a liar his Brazilian counterpart, Jair Bolsonaro, who in turn accused Mr Macron of colonialism and mocked his wife's looks. An offer of \$22m from the G7 countries to help fight the fires, which Mr Bolsonaro rejected unless Mr Macron ate his words. It has been an extraordinary ten days for Brazil. Through the smoke, two things are clear: Mr Bolsonaro's policies are profoundly destructive of the Amazon rainforest, and deterring him will take much more subtlety abroad and more determination from opponents and even allies at home.

A former army captain of far-right views, Mr Bolsonaro won Brazil's presidency last year partly on a platform of reviving a moribund economy by sweeping away left-wingery and green regulation. He promised to end fines for violations of environmental law, shrink the protected areas that account for half of the Brazilian Amazon and fight NGOS, for which he has a visceral hatred. In office, his government has gutted the environment ministry and Ibama, the quasi-autonomous environmental agency. Six of the ten senior posts in the ministry's department of forests and sustainable development are vacant, according to its website. The government talks of "monetising" the Amazon but sabotaged a \$1.3bn European fund that aims to give value to the standing forest.

Ranchers, illegal loggers and settlers in the Amazon have taken all this as encouragement to power up their chainsaws. Deforestation in the first seven months of this year rose by 67% compared with the same period last year, according to INPE, the government's space research agency. Mr Bolsonaro called INPE's data lies and fired its director. His initial reaction was, preposterously, to blame the fires on NGOS.

Mr Bolsonaro's approach is driven by prejudice and nationalism. "He deeply, ideologically, believes that environmentalism is part of a left-wing view of the world," says Matias Spektor, at Fundação Getulio Vargas, a university in São Paulo. Brazil's armed forces have long thought that outsiders have designs on the Amazon, and that they must develop it or risk losing it. The generals in Mr Bolsonaro's cabinet, usually a force for restraint, are not on this issue. Behind his tirades against Mr Macron is the expectation that Brazilians will rally round the flag. That is why the world needs to tread carefully.

Mr Bolsonaro is right about some things. Mr Macron was high-handed in discussing the Amazon at the G7 without inviting Brazil. While the world has a legitimate interest in the rainforest's fate. it doesn't own it (though French Guiana



has a chunk). Mr Bolsonaro is right, too, that fires were worse in some past years. Many maps exaggerate their extent.

Brazil has some of the world's most stringent controls on deforestation. From 2005 these slowed the forest's destruction dramatically, before they were undermined by budget cuts and now by Mr Bolsonaro.

Like Janus, his government faces two ways on this issue. Brazilian diplomats abroad present their country as committed to halting deforestation. At home, the president winks at those who practise it. That is why it is important to hold his government to its word.

"The main issue is how to get to a rational discussion about what's happening," says Marcos Jank of the Centre for Global Agribusiness at Insper, a university in São Paulo. That is something Brazil's modern farmers want. They persuaded Mr Bolsonaro not to pull out of the Paris agreement on climate change, or abolish the environment ministry. They fear consumer boycotts and the EU pulling out of a recently concluded trade agreement, as Mr Macron threatened. In fact, both would have limited effect. Mr Jank notes that 95% of Brazil's \$102bn-worth of agricultural exports are commodities that don't go directly to consumers; 60% go to Asia. But Brand Brazil has certainly been damaged.

Politically, too, Mr Bolsonaro is on treacherous ground. Although Brazilian nationalism should not be under-estimated, most Brazilians worry about climate change. As the president spoke on television on August 23rd about the fires, there were pot-banging protests in prosperous parts of cities, which helped to elect him. But halting his scorchedearth practices will require organised political action as well as protest.





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The feud between Japan and South Korea

Unique low

SEOUL

America is doing too little to bring its allies back to their senses

ORDER A GLASS of Asahi lager in a pub in Seoul these days and chances are the bartender will shake his head disapprovingly before suggesting one of the watery local alternatives. Shopkeepers have relegated Japanese products to the bottom shelf or removed them from view altogether. Owners of sushi restaurants have put up signs stressing that though their dishes may look Japanese, the fish was caught in Korean waters. Many fashionistas will no longer be seen dead in a branch of Muji or Uniqlo, though both Japanese brands are usually very popular.

The boycott is the most noticeable popular expression of an escalating row between South Korea and Japan, which has evolved from a diplomatic spat over Japan's conduct in the second world war into a full-blown feud over trade and national security. On August 28th Japanese restrictions on the export of hundreds of products to South Korea came into force. Earlier this week, South Korea conducted scaled-up military exercises around Dokdo, disputed islets which South Korea controls but Japan claims as its own (calling them Takeshima). Days before South Korea had halted an intelligence-sharing pact with Japan.

The deteriorating relations between two American allies will make it harder to manage rising tensions in East Asia. Russia and China have become increasingly assertive in recent months, testing the patience of the two regional democracies with deep incursions into their airspace. Kim Jong Un, North Korea's dictator, has continued to expand his missile programme—and in all likelihood, his nuclear one—despite several rounds of denuclearisation talks with America. Over the past few weeks he has tested new weapons which analysts say are designed to foil regional missile-defence systems, making it all the more crucial to keep tabs on their development.

The spat between South Korea and Japan has little to do with such present-day threats and everything to do with chronic historical grievances, notably over Japan's annexation of Korea and the suffering inflicted on its people during the war. It became acute last year, when South Korea's Supreme Court ruled that Japanese companies that used South Koreans as forced labour during the war should pay compensation to surviving victims. Japan says such claims were settled by a treaty in 1965 and has demanded that the South Korean gov-

ernment rein in the court.

In July Japan elevated the conflict to the commercial realm by restricting exports of chemicals that are essential for manufacturing memory chips, one of South Korea's biggest industries. This month the dispute spread to matters of security. Japan decided in early August to remove South Korea from a list of preferred trading partners on national-security grounds, citing concerns that components might end up in North Korea. South Korea then announced it would not renew its intelligence-sharing pact with Japan, which America had brokered in 2016, as trust had broken down.

American officials say they have been taken aback. The State Department issued a rare public rebuke of the South Korean government. But many observers believe the escalation could have been avoided if America had shown more interest earlier on. President Donald Trump has called on the two allies to "get along", but done precious little to mediate in the dispute, complaining that he has too much on his plate already. He has continued to shrug off Mr Kim's weapons tests. "The problem is that the administration has no plan for the region other than the president staying in the news," says Alexis Dudden of the Universitv of Connecticut.

For all the excitable rhetoric, the immediate consequences for security co-operation are unlikely to be severe. The intelligence-sharing pact does not expire until late November. Even after that, Japan and South Korea will still have access to each other's intelligence through a trilateral agreement with America. The trade restric-

▶ tions have yet to bite, too. Japan continues to authorise exports. The red tape generated by the new rules is bothersome but not yet lethal for companies. Businesses in both countries are more worried by the trade war between America and China.

The erosion of trust is more serious. "This is a fight between friends that will only benefit actual antagonists such as North Korea," says Park Cheol-hee of Seoul National University. Scrapping the pact is also likely to put South Korea on the back foot in negotiations about how to divide the cost of hosting American troops, and reduce its standing in the eyes of the world, believes Chun In-bum, a former South Korean army general. "I'm disappointed because it makes us look guilty," he says.

The dispute is also beginning to rile ordinary people. Two-thirds of South Koreans say they support the boycott of Japanese products and would consider taking part. Four-fifths claim they would not go on holiday to Japan at the moment. Sales of Japanese beer and clothing in South Korea have collapsed since July. Airlines have cut back flights on many popular routes.

Japanese public opinion is not yet vocally anti-Korean, but a majority of Japanese voters support the government's stance. Right-wing groups are stoking anti-Korean sentiment by recycling old tropes of "untrustworthy" and "faithless" Koreans, says Ms Dudden. Visitors to Tokyo report a mood of exasperation with what many Japanese perceive as South Korean intransigence.

This makes it unlikely that the dispute will be resolved quickly. Neither side feels it can be seen to back down, says Mr Park, who thinks South Korea should take the first step towards de-escalation by reversing its decision on the intelligence-sharing pact. But Moon Jae-in, South Korea's president, who faces legislative elections in April, is struggling with a sickly economy, deadlock in his flagship policy of inter-Korean rapprochement and controversy regarding his favoured candidate for justice minister. Shinzo Abe, Japan's prime minister, is for his part keen to please his ultranationalist base. As the two allies fan the flames of nationalism. Mr Kim has ample peace and quiet to expand his arsenal.

made up more than a quarter of the 38m foreign visitors to Thailand last year, from enjoying fresh coconuts on balmy beaches. The number of Chinese holidaymakers dropped by nearly 5% in the first six months of this year compared with the same period last year.

"I think we are still holding our own," maintains Yuthasak Supasorn, the governor of the Tourism Authority of Thailand. But the strong baht means Thailand isn't as cheap as it used to be. Overall tourist numbers are slightly higher so far this year than last, but the growth is unusually meagre.

Not all the industry's problems are external. Last year the sinking of a boat in Phuket killed 47 Chinese tourists, horrifying prospective holidaymakers. Thailand's roads are also the most dangerous in Asia, despite government promises to improve them. (A report by the World Health Organisation from 2018 found that only eight other countries in the world have a higher rate of traffic deaths.) And petty crime is rampant. The head of the tourist police in Bangkok recently described the scale of pickpocketing around the Khao San road, a hostel hub, as "unbelievable".

Another factor in the slowing growth of tourism is overburdened infrastructure. Packed airports with long queues induce a sense of anything but relaxation among visitors. Even beaches are too crowded. Last year the government closed Maya Bay, the cliff-encircled Eden made famous in the film "The Beach", to allow its ecosystem to recover from the tourist onslaught of past years. The spot is not expected to reopen until 2021.

A drop in tourism will be difficult for a variety of companies. Poorly managed state enterprises may be in the worst position to endure a downturn. Thai Airways already loses money and is struggling under more than 100bn baht of debt. Even so, the transport minister has given permission for the carrier to purchase or lease 38 new aircraft.

Politicians are eager to ensure that tourism picks up again. The tourism minister believes more should be spent on marketing and incentives to attract visitors. On August 16th the government announced a stimulus package of 316bn baht to boost the economy. Among other measures, it extends a programme which provides free visas on arrival for tourists from countries including China and India—happily a country sending ever larger numbers of visitors to Thailand. It also offers 1,000 baht of spending money and a 15% rebate on hotel accommodation to domestic tourists who travel outside their home province. Yet the stimulus package may help only at the margins. In a country riven by coups and political conflict, tourism has succeeded in spite of the government, not because of it.

Tourism in Thailand

Land of nervous smiles

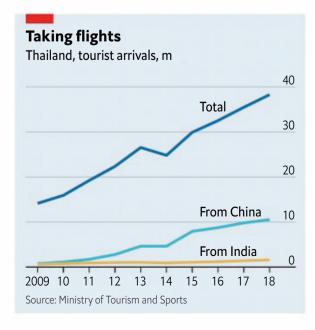
A fall in the number of Chinese tourists breeds unease

T IS NOT hard to find Talad Rot Fai, a night **I** market in Bangkok. On leaving the nearby subway station, just follow the column of Chinese tourists. They eagerly try on heart-shaped sunglasses, avocado-patterned socks and other fripperies. Yet the people manning the stalls are glum. Ton, who runs a store selling mobile-phone accessories, flicks through a ledger. On his best days last year, he says, sales came to perhaps 15,000 baht (\$485). Now they have slumped to around 6,000 baht. "It is not so good recently and it has been like this for many months already," explains Mie, who sells shoes nearby. She complains that Chinese visitors rarely buy her trainers. When they do, she says, they drive a hard bargain.

Thais face tough times. Figures released this month show that the economy grew by a lacklustre 2.3% in the year ending in June, its slowest rate in almost five years. (Last year the economy expanded by 4.1%.) Exports are limp because of the trade war between America and China and the strength of the baht, the local currency. It has risen by more than 5% against the dollar this year, making it the best-performing currency in South-East Asia. Farmers, meanwhile, are cursing the feeblest monsoon in

a decade. The country's central bank, evidently worried about the weakness of the economy, recently cut its benchmark interest rate by a quarter of a percentage point, to 1.5%.

Tourism is another source of concern. The industry generates more than a fifth of GDP. It has grown by leaps and bounds in recent years (see chart). But China's slowdown and the weakness of its currency seem to be discouraging its citizens, who





Bird life in New Zealand

Cheep dates

Efforts to conserve a pudgy parrot are finally being rewarded

THE KAKAPO, a cuddly bird that lives in I New Zealand, is not designed for survival. Weighing up to 4kg, it is the world's fattest and least flighty parrot. It mates only when the rimu tree is in fruit, which happens every few years. Like other weird and wonderful creatures of the antipodes, it evolved in the absence of land-based predators, so instead of soaring above the trees it waddles haplessly across the dry forest floor below. When it stumbles across something that might kill it, it has the lamentable habit of standing still.

Such oddities turned the kakapo into fast food for human settlers—and for the cats, rats and possums they brought with them. It seemed extinct by the 1970s, until scientists stumbled on two undiscovered populations in the country's south. These survivors were eventually moved to small predator-free islands, where the Department of Conservation has spent decades trying to get them to breed.

Its patience may finally be rewarded. The rimu was in fruit this year, and more than 80 chicks hatched after a bumper crop, making this the best breeding season on record. Many have survived into adolescence, increasing the number of adult kakapos by a third, to 200 birds.

But another threat to the kakapo is a lack of genetic diversity, because of low numbers and inbreeding. This is one reason why fewer than half of kakapo eggs hatch. By sequencing the genome of every living bird, scientists can identify closely related individuals and prevent more inbreeding by putting them on different islands. Well-matched birds cannot be forced to mate, but artificial insemination is also proving effective. Every bird is fitted with a transmitter to track its slightest movement. If a female mates with an "unsuitable" male, the process can be "overridden" with another bird's semen. Time is of the essence, so drones are being used to whizz kakapo sperm to the right place.

This helps the males whose advances are rejected by fussy females, so would not otherwise procreate. It also allows researchers to identify useful genetic traits. One male, Gulliver, was found to have unique disease-resistant genes. Andrew Digby, the programme's scientist, thinks it "could hold the survival of the species".

A bias towards male chicks has been corrected with a blunter tool: dieting. Fat females seem to produce more male offspring, so each bird's transmitter is used to unlock hoppers that dish out strictly calorie-controlled meals. Once laid, some eggs are sent away for incubation and replaced by smart fakes, which wiggle and cheep so that the mother is primed for her hatchling's return. Sickly babies are reared for months by hand.

All these efforts cost almost NZ\$2m (\$1.3m) this breeding season. Yet the kakapo's future still looks precarious. Earlier this year a fungal disease tore through the population. And tiny as the number of kakapos is, space is running out on the two islands where most of them live. New predator-free havens must soon be found.

Clean government in India

Vaulting for probity

DELHI

An anti-corruption campaign revs up

 ${f F}$ or a septuagenarian member of India's somnolent upper house, five years out of government, Palaniappan Chidambaram is a man much in demand. He served as finance minister in 2004-08 and 2012-14, and as home minister during the interim, in governments led by the Congress party. After Congress was crushed at the polls in 2014 by the Bharatiya Janata Party (вјр) led by Narendra Modi, Mr Chidambaram receded from the spotlight. On August 21st, however, an armada of satellite dishtopped TV trucks appeared at his house to watch plainclothes police officers vault over his garden walls and arrest the exminister on corruption charges.

Mr Chidambaram was one of the most powerful men in the country under the previous regime. For a time he was spoken of as a potential prime minister. In office he maintained a stately air even while bashing together backroom deals (much like his successor as finance minister, Arun Jaitley, who died on August 24th). Since his arrest he has been appearing in court almost daily to plead for bail, arguing that the Central Bureau of Investigation (CBI) has no cause to keep him in custody. At the same time his legal team is fending off the Enforcement Directorate (ED), which handles financial crimes and wants him on related charges.

Both agencies claim that Mr Chidambaram and his son, a Congress MP, accepted bribes in exchange for approving foreign investment in a media firm in 2007. They argue that he should stay in jail, although they have yet to present any evidence against him. That is unusual: even accused murderers are sometimes released on bail. His lawyers say the government's motive is revenge. As home minister, Mr Chidambaram once had the man now in the job, Amit Shah, arrested on charges of murder, extortion and kidnapping. Mr Shah, whose case was eventually dismissed, was refused bail for three months.

In Paris this week Mr Modi told an admiring crowd of expatriates that his "new India" is combating corruption like never before. Three days later the tax authority sacked 22 career bureaucrats who faced pending charges. A prime justification for Mr Modi's decision to revoke the special autonomy enjoyed by the state of Jammu & Kashmir on August 5th was that corruption in its political class had made reform impossible. Hundreds of Kashmiri politicians ▶ and activists have since been locked up.

Estranged allies of the BJP have come under the cosh, too, including two prominent figures in Hindu nationalist politics in the state of Maharashtra. But the Congress party has received the most attention. The CBI just arrested a nephew of Kamal Nath, the chief minister of the state of Madhya Pradesh, on charges of moneylaundering. The ED filed similar charges against two former Congress chief ministers on August 27th.

Congress is certainly not squeaky clean: a long "season of scams" marred its most

recent period in power and was one of the main reasons for its drubbing in 2014. But aggrieved Congress workers point out that the police do not seem to be chasing any current BJP leaders. In several instances, the legal troubles of Congress members seemed to evaporate after they defected to the ruling party. Mr Modi, claims Praveen Chakravarty, a Congress official, is not really interested in stamping out corruption, nor even in persecuting individual politicians. Instead, Mr Chakravarty insists, he is "creating a climate of fear" in an attempt to quell all criticism.

Mr Chakravarty alleges a second malign motive behind the anti-corruption campaign. He maintains that the government is ginning up a "moral crusade" to distract attention from the ailing economy. Growth has fallen to its lowest level since the Congress party's last year in office. The current finance minister, Nirmala Sitharaman, has just overhauled her first budget in an apparent panic (see Finance section). But Mr Modi won a second five-year term just months ago. He has plenty of time to repair the economy—and to fight corruption, whether selectively or not.

Banyan Wars without end

A Chinese development scheme adds an extra dimension to long-running conflicts

Two YEARS ago ethnic cleansing by the army forced 700,000 Muslim Rohingyas to flee Rakhine state, in western Myanmar, and seek sanctuary across the border in Bangladesh. On August 22nd, outside dismal refugee camps near Cox's Bazar, buses and lorries lined up for the first of many envisaged repatriations taking Rohingyas back home. But there was a hitch: not a single Rohingya came forward.

Nor will many change their minds soon. Predominantly Buddhist Myanmar denies citizenship to the persecuted Rohingyas. The word means people from Rakhine, yet the government claims they are not Burmese but "Bengali" impostors. Having been refused formal ID cards, it is impossible for many Rohingyas to prove that they used to live in Myanmar, one of the government's conditions for repatriation. Besides, what is there to go back to? Their former villages have been razed. Rohingyas who remain in Rakhine now live in camps, too.

The plight of the Rohingyas has gained notoriety, though with compassion for refugees at an international ebb, they could be stuck in the camps for years. The risk is that youngsters will be radicalised by a (so far) tiny Rohingya group committed to armed insurgency.

Would that the displacement of the Rohingyas was Myanmar's only source of ethnic conflict. Even in Rakhine state a far more violent insurgency is being fought by a group which claims to have little in common with the central government apart from a shared hatred for Rohingyas. The Arakan Army (AA) is fighting to defend the interests of the Buddhist Rakhine (the ethnic group that gave the state its name) in a country so often run on behalf of its Burman majority. This year the AA has launched attacks

on police posts, killing their occupants and making off with weapons. The armed forces have responded with ground offensives and even warplanes. The conflict has entered towns and cut important roads and waterways. Few international aid groups are allowed into northern Rakhine to help civilians. For months the authorities have imposed an information blackout by shutting down the internet.

As for the unruly states of Kachin in the north and Shan in the north-east, where ethnic insurgencies have rumbled on for decades, last December the army chief, General Min Aung Hlaing, declared a temporary "ceasefire for eternal peace". If it was a gambit to deal with the Rakhine insurgency, it has miscarried. In August a bunch of insurgent groups calling itself the Northern Alliance Brotherhood launched bold and bloody attacks on police posts and bridges in Shan state and even an elite military academy in Myanmar's heartland near Mandalay. Among the groups taking part was the AA, operating far from its home base.

The lessons for a "peace process" that





has become an industry, sucking in millions of dollars from international donors and involving no end of foreign experts, are not salutary. The efforts of the country's putative leader, Aung San Suu Kyi, have been undermined both by the army and by distrust among ethnic groups of her National League for Democracy. Meanwhile, the army's own Nationwide Ceasefire Agreement of 2015 excludes the biggest militias. Years of broken promises to ethnic groups have not helped.

It is a hugely complex mosaic. Ethnic groups with grievances towards an overweening army and state live in overlapping territories. Ethnicities and identities often commingle and change, a process spurred by social media, migration and urbanisation. The economic rackets in both army- and rebel-held areas are predatory and extractive, involving drugs, jade, timber and humantrafficking. The dynamics, as Thant Myint-U, a historian, has put it, are less like Syria today than Chicago in 1926.

Persuading Myanmar's myriad ethnic groups to lay down arms with promises of equitable development will be fiendishly hard. Yet now comes a new dimension: pressure from China to hasten plans, stretching from Shan state to Rakhine, for a China-Myanmar Economic Corridor of roads, railways, pipelines and a port. China wants an outlet to the Bay of Bengal. It claims the investment will be a boon for Myanmar, incentivising peace and development. Yet the corridor runs right through the country's most restive—and inequitableareas. And so the northern group's August attacks may prove a harbinger. Far from helping extinguish Myanmar's conflicts, Chinese money may simply spray fuel on the fire.



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Gambling

Rien ne va plus

SHANGHAI

The Chinese government runs the world's second-largest state lottery business. That helps explain why it is cracking down on gambling

There was no violence and there were no victims, unless you count the crickets, which rushed at each other, mandibles agape, for a few seconds. But that did not stop the police raiding the barn on the outskirts of Shanghai, abruptly halting the cricket-fighting tournament, dispersing the spectators and arresting the organisers, all for the crime of gambling. Over the previous five nights, 1m yuan (\$140,000) had changed hands. So zealous have China's anti-gambling squads become that not even battling bugs escape their attention.

Gambling has been outlawed since the Communists took power in 1949. Mainlanders keen for a flutter must travel to Macau's extravagant casinos or to Hong Kong's jockey clubs. Those who stay put have just two legal outlets for a punt: the state-run Welfare Lottery and the Sports Lottery, set up in 1987 and 1994 respectively. Tickets can be bought at corner shops for as little as 2 yuan; jackpots are capped at 10m yuan. It was only in 1985 that the government made it legal to play (but not bet on) mah jong.

The well-loved game has recently been hit by a fresh interdiction, ensnaring poker too, this time online. Since a state directive last year, apps for playing either game have been culled by the tens of thousands. And to curb non-digital gambling, police last year began to use drones to detect pop-up casinos set up in the woods or on mountainsides. The law threatens as much as a decade behind bars for those who run gambling dens, and three years for patrons.

Betting is an obvious target in the crack-down on corruption led by Xi Jinping, the country's leader. State media have said primly that officials "must resolutely stop" playing mah jong. Long-mooted plans to allow horse-racing and lotteries in the island province of Hainan are languishing. Even state-sanctioned lotteries have landed in hot water. In 2015 an investigation in 18 provinces found that local administrators had siphoned 17bn yuan from them. Late last year 14 officials running the Welfare Lottery were punished for corruption. The government denied rumours that 136bn yuan had been misappropriated.

Bet-shop boys

In July a state-backed report denounced Suncity, Macau's biggest operator of gambling tours, whose clients include highrollers from the mainland. It alleged that the firm was facilitating online gambling, which is illegal even in Macau; Suncity denied the accusation. The report said that the practice had caused "great harm to China's social-economic order".

The report claimed that the annual amount wagered by Suncity's mainland clients in the online casinos it operates from South-East Asia was over 1trn yuan, "equivalent to nearly twice the annual income of China's lottery". In other words, big sums are being diverted from state coffers and flowing abroad instead. China praised Cambodia for its decision in August to ban online gambling, and urged the Philippines to do the same for a pastime it called "a most dangerous tumour in modern society detested by people all across the world". It is nervous about the many Chinese who have moved there to set up gambling websites since the Philippines began issuing online gaming licences in 2016.

A Communist-Party-run lotto may sound drab. But last year the Sports and Welfare lotteries combined raked in 511bn yuan in ticket sales, nearly as much as America's various state lotteries earned between them. Since Mr Xi took office in 2013, sales have almost doubled (see chart on next page). By revenue, Chinese lotteries are on course to overtake America's this year, to become the world's biggest.

Lotteries matter to the state for a number of reasons. The first is their contribution to social welfare. Only half of the ticket revenues are devoted to prize money, leaving more than a third for favoured causes (the rest goes on administration). The government publishes an annual list of recipients, such as public sports facilities, the

▶ Red Cross and programmes to help the elderly and poor. Players who win over 10,000 yuan must hand over a fifth of their winnings to the state in taxes.

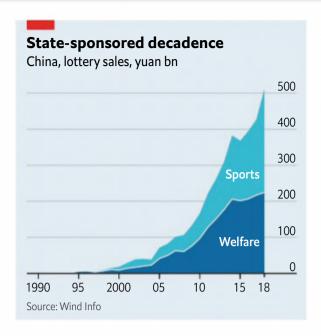
There is also a widespread belief that lotteries help eradicate other forms of gambling. As Wang Xuehong, an academic who advises the Ministry of Finance, puts it, "The government does not want to be held responsible if anything goes wrong." It therefore tries to make sure there is just one regulated outlet for gambling. One strand of its efforts to supervise lotteries more closely, says Ms Wang, was a pause imposed four years ago on online ticket sales, in the wake of the embezzlement scandals. Last summer it reinstated that ban. The promotion of state lotteries by television celebrities and through smartphones has also been quashed under Mr Xi.

The anti-gambling campaign may have curbed some illegal betting. Hans Steinmüller of the London School of Economics, who has studied rural gambling, suspects it has had an impact on small-stakes mah jong parlours frequented by housewives and the retired. It has become "very sensitive" for local officials to be seen to be involved with these, he says. Still, many villagers continue to place bets with local bookies on the numbers that will win Hong Kong's lottery. In winter peasant farmers while away the day playing popular card games, including dou dizhu ("struggle against the landlord") and zha jinhua ("bash the golden flower"), for money.

The law is "flexible" on whether to prosecute such games, says Ms Wang. A few years ago the police said that they would penalise players staking more than 500 yuan. In reality regulators play a cat-andmouse game with gamblers and app developers, says Mr Steinmüller, as semi-legal options pop up that are not covered by gambling regulations. Yaoji Poker, the world's largest maker of playing cards, says rural sales are robust. Still, last year it bought an online-gaming startup that survived the purge. It is now looking for ways to attract players to its virtual dou dizhu, among other card games, without falling foul of the crackdown.

Ms Wang estimates that, all told, the money spent on unofficial gambling is at least five times that wagered on the state lottery. The International Centre for Sport Security, a Qatar-based outfit, reckoned in 2016 that illegal sports gambling in China alone attracts \$600bn a year—of a global illegal market worth between \$750bn and \$1trn. In the hope of luring these punters, the state lotteries have jazzed up their offerings. The Sports Lottery, for instance, offers virtual car-racing and football games.

China's tech titans are tempting their fortunes. AGTech, which runs four-fifths of the state's lottery terminals, was bought in 2016 by Alibaba, an e-commerce giant. It re-



cently received a contract to develop augmented-reality products. Tencent has a stake in China Lotsynergy, which builds "video lottery terminals" for the Welfare Lottery. These closely resemble slot machines, but involve betting on which random numbers the terminals will generate. They have become among the lottery's most popular products. On a recent Friday afternoon one such lottery hall in central Shanghai was packed, though mostly with older customers.

But the hopes of private firms seem at variance with state aims. John Sun, the boss of AGTech, has grumbled that the lotteries could double their returns if they reopened online sales. Officials recently announced that they were slowing down a popular "fast-paced" lottery-ticket game from ten-minute playing intervals to 20, because of worries about money-laundering. Any bets that legal gambling will flourish in China must surely have long odds. ■

Freedom of speech

Ghost at the feast

The government bans a think-tank that was critical of its policies

or researchers devoted to the rule of $oldsymbol{\Gamma}$ law, the end was fitting. Drawing on patchwork regulations that appear to violate the Chinese constitution, local authorities in Beijing at last found a pretext to ban the Unirule Institute of Economics, that rarest of things in China, an independent think-tank known for criticising the government. For years Unirule had faced pressure, including evictions from multiple offices, to quiet down, and yet had managed to go on functioning. But it saw no way around the ban, issued last month, and so on August 26th announced that it would stop all activities.

Founded in 1993, Unirule always resided on the fringes of Chinese policy discussions, bringing together a collection of liberal economists who were strong believers in free markets. It published a series of books about institutional reform, including on how to slim down state-owned firms. It delved into topics such as the design of China's health-care system and land-ownership rules. It also convened forums every two weeks; its last, the 600th, was a theoretical discussion about network effects in economics. A steady stream of eminent economists and senior officials came through Unirule's doors over the years, eager to hear its perspectives, so different from those propagated by rightthinking state-affiliated institutions.

Unirule's scholars tried to avoid landmines. For instance, they refrained from criticising Xi Jinping, China's president, by name. But their dislike of China's state model always made them vulnerable. As far back as 2004 Unirule lost the support of a government agency that had sponsored it, forcing it to reorganise as the research unit of a consultancy. One of its founders, Mao Yushi, earned admirers abroad: the Cato Institute, an American think-tank, awarded him a prize in 2012 for his advocacy of a more open political system in China. At home, though, he faced attacks. Some bloggers branded him a traitor.

Over the past few years, as Mr Xi has tightened his grip, Unirule has been increasingly boxed in. Its website was shut down, although it later reopened, hosted abroad. In the past its members could publish articles in more liberal newspapers such as Southern Weekly; these days their submissions are rejected. Their accounts on Chinese social-media platforms such as WeChat are frequently blocked. The authorities have also stepped up harassment of the institute. Last year its landlord briefly welded steel bars across the door to its office, a cramped converted apartment, while staff were inside.

Sheng Hong, Unirule's director, maintained his stubborn belief in rules-based governance even as his think-tank met its end. The ban, he says, is a violation of article 35 of China's constitution, which promises freedom of speech and assembly. But he is under no illusion about what truly lies behind Unirule's woes. "Leaders today don't believe that different voices are good for society and good for government," he says. "That will really come to hurt China."

Tellingly, though, he was still more guarded than scholars outside China. "Xi's tolerance for independent voices and criticism is absolutely zero. It's non-existent," laments Minxin Pei of Claremont McKenna College in California. "Forty years after the Cultural Revolution, this is absolutely the worst period." It is a wonder that Unirule survived as long as it did.

Chaguan | Getting a grip

How China might bring Hong Kong to heel without sending troops from the mainland



A TTHE PEAK of Kublai Khan's empire-building career, his reputation for ferocity was such that Mongol armies conquered some cities with handwritten notes, wrapped around arrows and fired over the walls. A typical letter urged inhabitants to submit at once to avoid a siege that was sure to end in mass slaughter. Vanquished local rulers, if lucky, might be granted a princely death, sewn into a sack and then trampled by horses.

Though China's Communist Party probably dislikes comparisons to a Mongol horde, its leaders are trying similar tactics in their confrontation with Hong Kong. Videos have been released showing Chinese soldiers practising riot suppression and paramilitary police massing just across the border from Hong Kong. Officials have declared that 12 weeks of pro-democracy marches and anti-government protests, many of them vast and peaceful but some of them small and violent, amount to a "colour revolution" with elements of "terrorism". Well-briefed Hong Kong tycoons have hinted at a deadline for displays of defiance by the territory to end: October 1st, when the 70th anniversary of the People's Republic of China will be marked in Beijing with a grand parade. On August 25th the state news agency, Xinhua, reported on a gathering of officials to study speeches by Deng Xiaoping, the leader who devised the "one country, two systems" model, a promise to preserve Hong Kong's Western-style freedoms after British rule ended in 1997. That pledge of autonomy is quite compatible with sending troops to crack skulls, Xinhua reported: Deng himself stipulated that if Hong Kong drifted into turmoil, the central government should intervene.

Nobody should doubt that, if they sense Hong Kong sliding out of control, China's leaders would use violence to preserve their authority, even if that would spark massive civil disobedience, tank Hong Kong's stock- and property markets, and risk pushing American politicians, notably in Congress, from suspicion of China into a full-blown cold war. Yet, like Mongol missives zinging over city walls, the government's threats are at once serious and a stratagem to frighten Hong Kongers into disowning the protesters and suing for peace. For sending in troops would be an admission of failure.

Privately, some informed figures in Beijing play down the idea that October 1st is a deadline for ending the impasse, murmuring that Hong Kong, a tiny place of 7m people, cannot overshadow celebrations by a motherland of 1.4bn citizens. That raises a question: if China is signalling that it is at once implacable but somewhat patient, what do party leaders have in mind for Hong Kong?

Multiple, overlapping campaigns are likely to enforce loyalty to China. One campaign is visibly under way within that part of Hong Kong that resembles an oligarchy. Chinese officials have scolded tycoons for allowing society to become so unequal and unaffordable. A best-case scenario would see curbs on magnates' rent-seeking. Less happily, officials have told company bosses to suppress dissent among their employees or quit, as happened to the chief executive of Hong Kong's flagship airline, Cathay Pacific.

Less visible, but just as important, is a looming purge within the bit of Hong Kong that resembles a technocracy: the world of professionals who, for better or worse, have helped to run Hong Kong since colonial times, in the absence of full democracy. With youngsters dominating so many protests, Hong Kong's schools and university campuses will be early targets for scrutiny. Ominously, a prominent pro-mainland politician talks of educators who "hate China" and teach the same to their students.

Hong Kong has already seen attempts to marginalise pro-democracy voices in civil society for more than a decade. Now professionals are braced for a second purge, targeting pro-business conservatives who side with the government 80% or 90% of the time, but who—notably as the current protests began in opposition to a proposed extradition law that would have exposed Hong Kongers to the mainland's criminal justice system—have voiced qualms or urged the authorities to make concessions. Such conservatives have long dominated such bodies as the Law Society or the Institute of Engineers, which in turn help fill umpteen disciplinary panels and advisory committees that make Hong Kong tick. Others sit in Hong Kong's Legislative Council (LegCo), often representing "functional constituencies" consisting of a few thousand members of this or that industry or profession.

Better Red than expert

Mainland institutions that once shunned the spotlight, notably the central government's Liaison Office, are increasingly open in their lobbying. Dennis Kwok, a pro-democracy politician and barrister who represents the legal constituency in LegCo, notes that particular controversy surrounds elections within professional bodies that allow for proxy voting. Junior members of law firms are routinely told to hand over proxy votes to partners, charges Mr Kwok. Then at election time, firms "get calls from clients, or from the Bank of China", urging block-voting for candidates favoured by the Liaison Office. Time and again, China-friendly "Reds" are driving out old-school conservatives, says Mr Kwok. The authorities in Beijing "want people who are absolutely loyal".

Several professionals describe how architects, lawyers, engineers and the like are urged to join study tours of the mainland. Lectures and visits to Chinese patriotic sites allow the Liaison Office and its allies to scout for potential recruits. Later, reunions are organised back in Hong Kong, creating networks. Loyalists can expect lucrative projects and offers of work on the mainland.

Such patronage politics lacks the drama of troops on the streets. It will still disgust many Hong Kongers, for the city's political culture—as millions of marchers have made clear—includes a respect for individual rights and accountable government wholly alien to the bossy, collectivist, croneyish autocrats in Beijing. Alas, as Kublai Khan knew, not all conquests require invasion.

Middle East & Africa



Israel v Iran

The plots thicken

IERUSALEM

New fronts open up in a festering conflict, as Israel braces for an attack

N EXPLOSION AND subsequent fire in $oldsymbol{A}$ the early hours of August 25th in Beirut's Dahiye neighbourhood led to fevered speculation. Were they caused by two quadcopter drones, one of which was captured in a shaky video moments before? Were the drones Israeli or Iranian? Was the intended target a media office of Hizbullah, as the Lebanese militia suggested? Or was the target Iranian-supplied equipment to improve the guidance systems of Hizbullah missiles, as anonymous "intelligence services" claimed? One thing seems sure: the episode is part of a broadening of the battlefields between Israel and Iran.

Lebanon was one of the earliest frontlines. Iran helped found Hizbullah there in 1985 to fight the Israeli army, which had invaded its northern neighbour. More recently the conflict has expanded to Iraq. A series of explosions there has been ascribed to Israel. "Iran doesn't have immunity anywhere," said Binyamin Netanyahu, Israel's prime minister, neither confirming

nor denving responsibility. Israel accuses Iran of spreading missile and attack-drone technology. The sites targeted in Iraq are bases of Iranian-backed militias which may have been storing Iranian missiles.

The explosion in Beirut came just hours after an Israeli air strike near Damascus, where a team of Iranian and Hizbullah operatives were said to have been preparing to launch drones against Israel, apparently in retaliation for the attacks in Iraq. This time Mr Netanyahu was quick to acknowledge responsibility. (Lebanon's state media claimed that Israel also struck the base of a Palestinian organisation aligned with

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Iran and Hizbullah near the Lebanon-Syria border on August 26th.)

The world's attention, meanwhile, was on diplomacy. France's president, Emmanuel Macron, engineered a surprise visit by Iran's foreign minister, Muhammad Javad Zarif, to the G7 summit in Biarritz. Mr Macron has been trying to salvage the nuclear deal signed by Iran and six world powers in 2015. The agreement limits Iran's nuclear programme in exchange for the partial lifting of sanctions. President Donald Trump withdrew from it last year and embarked on a policy of "maximum pressure" to cripple Iran's economy.

Mr Macron dangled the prospect of a summit between Mr Trump and his Iranian counterpart, Hassan Rouhani. Mr Trump seemed tempted by the idea. So did Mr Rouhani, at first. "If I know that by meeting someone, the problem of my country will be solved, I will not hesitate," he said in a speech. But, under pressure from hardliners, he later backed away, saying that there can be no meeting unless America first lifts its sanctions on Iran.

Israel is keen for America to maintain pressure on Iran. It worries about the strategy of regional expansion championed by Iran's Revolutionary Guard Corps and supported by the country's supreme leader, Ali Khamenei. In recent weeks Israeli officials have warned that this strategy now includes a full rapprochement with Hamas, >> b the Palestinian Islamist movement in Gaza. Ties between them were cut off in the early years of the Syrian uprising when Iran backed Bashar al-Assad's regime, which was butchering Hamas's Sunni coreligionists. With the war in Syria all but over, normal service has been resumed. Iranian support for Hamas is reckoned to be as much as \$100m a year.

But the Iranian network may have become overextended and easier for rival espionage agencies to penetrate. Israel has carried out hundreds of air strikes on Iranian targets in Syria. Senior Israeli officers claim they have succeeded in preventing Iran from establishing missile bases there.

Until recently Israel maintained a policy of "opaqueness" regarding its strikes against Iranian targets. Mr Netanyahu, however, has taken to extolling Israel's intelligence-gathering and operational successes in surprising detail, as well as openly saying it carried out the latest air strike in Syria. Some of his critics in Israel's security and political establishments are uncomfortable with this. They see a link between his sudden transparency and Israel's parliamentary election due on September 17th. Mr Netanyahu is currently defence minister as well as prime minister; successful strikes increase his popularity. His tactics are also causing unease in Washington, where sources in the Pentagon have briefed the media that Israel is behind the explosions in Iraq. The Americans fear this could destabilise the Iraqi government.

Like Iran, Israel too may have over-reached. The incident in Beirut is seen as a breach of the unofficial "red lines" with Hizbullah. Since the war of 2006, in which the two sides fought each other to a stale-mate while Israel destroyed much of Lebanon's civil infrastructure, they have not carried out offensive operations against each other on Lebanese territory. Hizbullah's leader, Hassan Nasrallah, has publicly warned Israel to "wait for our response which may take place at any time on the border and beyond the border".

Such talk is usually cheap in the Middle East, but Mr Nasrallah's threats are taken seriously. Israel has closed roads and airspace on its northern border in anticipation of an attack. Still, neither side wants to see a major escalation. Hizbullah is not just an Iranian proxy but also a Lebanese political party with a stake in maintaining calm. Mr Netanyahu wants to preserve his tough image, but is anxious not to upset Israeli voters on the eve of elections.

With luck, such calculations will work to contain a dramatic escalation of hostilities. But the conflict between Israel and Iran is widening. That is one more reason—on top of the need to contain Iran's nuclear ambitions—to hope that there is more to Mr Macron's diplomatic efforts than G7 summit showmanship.

Algeria

Democracy delayed

CAIRC

The army and the people continue to face off in Algeria

A ruler for 20 years seems unable to pick a new one. By now, many Algerians thought they would have a new president. After months of protests brought down President Abdelaziz Bouteflika in April, an election was set for July. That deadline came and went, though, with no replacement in sight. Demonstrators, angry about both stalled politics and a stalling economy, still take to the streets each week. The army, which holds de facto power, tolerates them. But nothing else has changed: the status quo has prevailed through a long, languid summer.

After giving Mr Bouteflika a final push, the army set out to dismantle the power base he built over the previous two decades. Wealthy businessmen like Ali Haddad, who made a fortune from state contracts, were carted off to jail. So were the president's brother, two former spy chiefs and other powerful behind-the-scenes figures known as *le pouvoir*.

That was a good start. But the transition to democracy has not gone much further. The opposition feared that the election that was supposed to have happened in July would be rigged by the army. Almost no one bothered to register, save for two unknown candidates, one of them a veterinarian. A six-member panel of academics and politi-



Still shouting

cians was then set up by the interim president, Abdelkader Bensalah (whose term expired in July). Tasked with writing a new transition plan, they started by asking for the release of jailed protesters, an end to police violence and greater freedom for the press and dissenters. The army chief, Ahmed Gaid Salah, rejected their terms.

The Arab world is littered with failed revolutions. Even where the army did side with protesters, as in Egypt, it later turned on them and violently restored autocratic rule. That has not happened yet in Algeria—a modest success, in the eyes of opposition activists. But the army is slowly ratcheting up the pressure on its critics. It continues to round them up on spurious charges. Dozens have been arrested for waving the Amazigh (or Berber) flag at demonstrations. Independent news websites often find themselves blocked. The government briefly shut down YouTube in August after a former defence minister released a video on the site urging soldiers to oust General Salah.

One of the main complaints about Mr Bouteflika's long rule was a sluggish economy. Algeria is one of Africa's largest oil and gas producers, but corruption and inefficient subsidies have squandered much of its wealth. Endless bureaucracy deterred foreign investment. Young people make up most of the population. One in four are jobless. Low oil prices have pinched the budget. Foreign reserves, though still a sizeable \$65bn, are barely a third of what they were five years ago.

The current political turmoil is not helping. The economy, which grew by a modest 2.3% in 2018, will probably slow down this year. Rounding up Mr Bouteflika's corrupt allies was the right thing to do, but it also brought short-term pain. Fertial, a fertiliser company linked to Mr Haddad, is struggling to pay wages. Sonatrach, a state energy giant, had been in talks with foreign oil majors to attract new investment. With the government unable to pass a necessary energy law, though, those talks are on hold.

Algeria has not seen the kind of violence that followed Sudan's recent uprising, to say nothing of the horrors in Libya or Syria. But it looks stuck at a difficult impasse. The opposition wants a freely elected government that does not include the army. The army, which long feared that Mr Bouteflika was trying to sideline it, has power again and does not wish to relinquish it.

General Salah occasionally slips into the familiar language of autocrats, slandering the opposition as "traitors" bent on undermining the state. The latter part is true: Algerians want to tear down a repressive state that failed to govern well for decades. The general can either go along with them, or go the way of other strongmen. ■

African airlines

Blue-sky thinking

ENTEBBE

Most African airlines lose money. Why are governments so keen on them?

N AIRLINE IS a way of showcasing a Apeople, says Jenifer Bamuturaki, commercial director of Uganda Airlines, which made its first commercial flight on August 28th. Passengers can tuck into katogo, a popular banana dish, served with a warm Ugandan welcome. The airline will soon fly to seven regional destinations, such as Nairobi and Mogadishu, on four 76-seater planes. It has also placed orders for two wide-body Airbus A330-800s, which could one day reach London and Guangzhou.

Uganda has had a national airline before. It started out shipping whisky for President Idi Amin in the 1970s and collapsed in 2001. Now Uganda is returning to the air, and it is not alone. Neighbouring Tanzania, which is reviving its national carrier, has bought eight new planes and is considering flights to London. Ethiopian Airlines, the regional leader, is entering into joint ventures across the continent: it helped resurrect Chad's national airline last year and has plans to do the same in Ghana and Zambia. In the past decade new airlines have taken to the skies in countries such as Senegal and Ivory Coast.

African governments are not in it for the money. The International Air Transport Association (IATA), a trade group, forecasts that carriers on the continent will lose \$300m this year, or \$3.51 per passenger. Planes fly with more empty seats than in any other region of the world. High taxes, expensive fuel and old aircraft add to costs. South African Airways survives on government bail-outs. In July Kenya's parliament voted to fully nationalise Kenya Airways as part of a plan to rescue it from debt.

Joseph Muvawala, who heads the National Planning Authority in Uganda, says that governments see airlines as an investment in infrastructure. Technocrats hope that Uganda's new airline will boost exports of fish and cut flowers, while pulling in tourist dollars, and will drive down high ticket prices on routes served by established carriers. Even if the airlines are unprofitable, the argument goes, the economy will gain.

Such is the theory. In practice, airlines are bound up with ideas of national prestige. They stir a fuzzy feeling of patriotism in middle-class flyers (who get less excited about, say, rural roads). They can also become targets for political meddling. Some governments are pushing ahead with stateowned carriers even where the market is

Sensing the end

A different explanation for Congo's suffering

THERE IS A reason that men with ma-L chetes keep killing people in Congo and that Ebola has infected close to 3,000 people there. These are signs that the end is nigh, claims Reverend Eddy Kybantu of the Kimbanguist church, a branch of Christianity. Simon Kimbangu, who founded the church in 1921, said Congo would endure pestilence, poverty and war shortly before the end of time—and salvation for believers. "Papa Kimbangu is preparing us, he knows it's not long," says Mr Kybantu.

Such dismal beliefs do not put off Kimbanguists. They make up about 10% of Congo's 85m-100m people. The church says it has 22m members worldwide. Today it is run by the founder's grandson, Simon Kimbangu Kiangani, who lives in the hilltop town of Nkamba—or "New Ierusalem", as Kimbanguists call it. The younger Mr Kimbangu, like his grandfather, is believed to be the human form of the Holy Spirit, able to cure the sick, raise the dead and see the future.

Kimbanguists adhere to an ascetic lifestyle. Sex before marriage is banned, as are alcohol, tobacco and homosexuality. But this isn't simple puritanism. Kimbanguists are also forbidden from sleeping naked, in case God calls on them at night. Pork is prohibited because pigs are vessels for evil spirits. Kimbanguists must pray eight times a day, fast twice a week and attend a nine-hour church service every Sunday.

The elder Kimbangu was sent by God "to save the black man", says Seros Muyisa, a believer. But the saviour's timing wasn't great. When thousands of people



All over but the praying

flocked to Nkamba to catch a glimpse of Kimbangu performing miracles, the Belgians, who controlled Congo at the time, felt threatened. He was found guilty of undermining public security and died in prison 30 years later.

At a Kimbanguist service in Goma the congregation sits barefoot, wearing immaculate green and white uniforms. The colours symbolise hope and peace. Your correspondent is handed a green scarf, to cover her hair, and a wraparound skirt, because women are not supposed to wear trousers to church. A pastor stands at a green pulpit, booming out prayers through a microphone. A brass band plays at regular intervals. The apocalypse may be coming, but all seems remarkably calm.

well served by private players, notes Raphael Kuuchi of IATA. Ghana's politicians are talking of a new airline, even though a private operator flies to seven destinations from Accra.

Only in Ethiopia has a national airline been an undoubted success. Managers have been left to get on with their jobs, even though the business is state-run. By joining up with Ethiopian Airlines, governments elsewhere hope to learn from its expertise. But they cannot import its other advantages, such as Ethiopia's strategic location as a gateway for Asian traffic. As Ethiopian Airlines spreads its wings, ever more journeys will be funnelled through Addis Ababa airport, which already welcomes more than 10m passengers a year.

The gleaming ranks of planes on the tar-

mac in Addis Ababa embody the dream of national carriers-and hint at a future which transcends them. The most efficient way to connect Africa is through a handful of regional hubs; the fastest way to increase flight numbers is by opening national markets to continental competition. Big players like Ethiopian Airlines are the obvious winners from that process, leaving little room for minnows.

Yet patriotic illusions persist. The Ugandan government is protecting its infant airline and has not signed up to the Single African Air Transport Market, which would liberalise regional aviation. Even the president says the ideal option would be to create an "East African Airways" with neighbouring countries. Politics stops that idea from taking off.

Botswana

A diamond in the rough

SANKUYO

Rare turbulence in one of Africa's most successful states

LEPHANTS EXCITE most children," says Timex Moalosi, the chief of Sankuyo, in northern Botswana. "But not ours." Since the country's former president, Ian Khama (pictured, left), suspended game-hunting in 2014, pachyderms have besieged the village, stomping crops and scaring kids. The destruction upset residents, as did the loss of income from selling permits to gun-wielding tourists. So when Mokgweetsi Masisi, Botswana's current president (right), reversed the ban in May, Sankuyo rejoiced.

Others were unhappy. For Mr Khama, the decision was seemingly the straw that broke the elephant's back. The ex-president said he should not have anointed the "immature" Mr Masisi in 2018. In May Mr Khama left the Botswana Democratic Party (BDP), which has ruled since independence in 1966, and endorsed a new party, the Botswana Patriotic Front (BPF). The BPF is loosely allied to the main opposition coalition, the Umbrella for Democratic Change (UDC). Elections are in October.

At first glance it is a personal feud. Mr Masisi has ditched flagship policies of Mr Khama's, like the hunting ban. He has cut his predecessor's privileges, such as flying on official aircraft. He has dismissed Mr Khama's allies, including Isaac Kgosi, the intelligence chief. It is rumoured that Mr Masisi broke a promise to appoint Mr Khama's younger brother, Tshekedi, as vice-president. But for all the elements of soap opera, the drama is deeply serious. Botswana, arguably Africa's most successful state, is in unprecedented flux.

When it became independent it was one of the world's poorest countries. The southern African state, almost the size of France, had 7.5 miles of paved roads; 22 citizens had degrees. In the parliament of the outgoing colonial power, Britain, a speaker warned of "the appalling difficulties which will confront this young republic".

Botswana proved its doubters wrong. It has held regular elections, avoided civil war and developed into one of the richest countries in sub-Saharan Africa. Its GDP per person is \$18,650, higher than South Africa's (\$13,870) and similar to countries such as China, Costa Rica and Serbia. Botswana, writes one historian, "stands out as a unique example" in Africa.

How to explain its success? Its small population (2.25m) and a shared culture help. But it has more people than Equatori-

al Guinea, a kleptocratic petro-state, and is more diverse than people assume. Today academics focus on its institutions. If Zimbabwe fascinates economists for all the wrong reasons, Botswana interests political scientists for all the right ones.

It has largely avoided the "resource curse" that has led mineral-rich African states to corruption and conflict. After diamonds were found in 1967 in Botswana the government enacted laws to share the proceeds and spend them on infrastructure and education. The partnership between the government and De Beers, a diamond company, predates independence; neither has taken the other to court. Botswana's is a story of "well-managed good luck", says Keith Jefferis, a consultant.

Institutions do not, however, emerge from thin air. They reflect political cultures. Botswana drew on fairly pluralistic precolonial institutions, such as the *kgotla*, or council. It had an elite that subscribed to the rule of law. This was partly out of self-interest: property rights suited the cattle-owning nobility. But there were also unusually enlightened leaders. Sir Seretse Khama, Botswana's first president and Ian's father, was the "paramount chief" in the area where diamonds were found. But he passed laws preserving mineral rights for the nation, not his chieftaincy.

In some eyes Ian Khama's moves repu-

diate his father's legacy. Mr Khama is also the "paramount chief" of the Bangwato, who populate the country's central district. Unlike his father, who stressed that chiefs and politicians must not mix their roles, the ex-president is using his tribal authority for electoral gain. "He is eroding our norms," says one businessman. Mr Khama may consider that worth it. One-third of Botswana's 57 parliamentary seats are in his district. All but one are held by the BDP, which has 37 MPS in total. If Mr Khama gets supporters to ditch the ruling party, he could be kingmaker in a coalition.

That worries some Batswana. As president, Mr Khama built up the country's spy agencies and surrounded himself with securocrats, who appointed allies to top jobs, such as head of the main anti-corruption body. Human-rights groups accuse the authorities of intimidating journalists and NGOS. "The space for civil society has shrunk," says Alice Mogwe, a lawyer.

Mr Masisi says he was once a "bootlicker", but is now his own man. So far, that seems to mean making rash populist pledges in order to shore up the BDP's support. The repeal of the hunting ban has impressed rural voters, but hurt tourism bookings nationwide. A proposal to build electric cars in Botswana is unrealistic.

The election campaign does not bode well for Botswana's reputation for sound policy. That matters as the country tries to reduce its dependence on diamonds, which make up roughly the same share of exports today (73%) as they did in 1992 (71%). Botswana still has enviable institutions. But there is a sense among Batswana that what made their country special is at risk. "Botswana's exceptionalism?" ponders David Sebudubudu of the University of Botswana. "That's history now."



Khama, chameleon



French diplomacy

Back on the scene

PARIS

Emmanuel Macron reclaims France's international role

A T THE START of this year, a fretful Emmanuel Macron grounded his presidential plane and cleared his diary in order to focus on civil disorder at home. For two months, as he tried to defuse the *gilets jaunes* (yellow jackets) protests, the French president left Europe only once, shunned global gatherings and ceded the stage to Angela Merkel. Mr Macron's hopes of stepping into the German chancellor's shoes as Europe's leader looked then to be over.

Six months later, the turnaround is startling. For three days starting on August 24th Mr Macron presided over the G7 summit in the seaside resort of Biarritz, an event many expected to be wrecked by conflict and theatrics. Instead, the French host managed to avert disaster, keep America's Donald Trump happy, ease trans-Atlantic tensions over a French tech tax and win a pledge from Mr Trump to talk to Iran's President Hassan Rouhani. He also mobilised a bit of aid for fires in the Amazon, though that fell through in a spat with Jair Bolsonaro, Brazil's president. Mr Trump declared the summit to be "truly successful",

claimed that "nobody wanted to leave" and called Mr Macron a "spectacular leader".

The most tantalising outcome was Mr Macron's announcement that a meeting between the American and Iranian presidents could take place in the "coming weeks". French diplomats have been working for months on ways to ease tensions with Iran and preserve the principles of the nuclear deal that America signed in 2015, before Mr Trump withdrew and hit Iran with sanctions. On August 25th Mr Macron pulled off what looked suspiciously like a stunt when he invited Muhammad Javad Zarif, Iran's foreign minister, to Biarritz for bilateral meetings. Yet a day later, there was Mr Trump, standing beside the French

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president, acknowledging that "if the circumstances were right" he would "certainly agree" to a meeting with Mr Rouhani.

In the end, nothing came of it. Iran said it wanted sanctions lifted first. And Mr Macron has learned the hard way that efforts to charm and cajole Mr Trump into better behaviour are usually in vain. Last year the American president withdrew from the Iran nuclear deal shortly after Mr Macron visited Washington, hoping to persuade him otherwise.

Indeed Mr Macron's broader diplomatic policy of dialogue with all carries evident risks. His parallel efforts with Russia's Vladimir Putin, whom he invited to the presidential fort on the Mediterranean shortly before the G7 summit, have so far yielded little. The French president has long argued that such leaders are more dangerous when isolated, and is trying instead to mix firmness and flattery. In a speech in Paris on August 27th he called it a "strategic error" for Europe to shun Russia, as that pushes it towards China. In the short run Mr Macron hopes to revive peace talks between Russia and Ukraine, supervised by France and Germany. In the long run, he told reporters before the G7 summit, he thinks that a better-behaved Russia should be allowed back into the G8.

Ultimately, France remains a mid-sized power, albeit one with a nuclear deterrent. So Mr Macron's diplomatic space to pursue all these ambitions is limited. This is why the French president spends so much time

▶ pushing ideas to strengthen what he calls "European sovereignty", or its ability to assert its independence as a strategic and economic bloc. It is also why he sees the diplomatic role he can realistically play as primarily that of a "mediating power".

As it happens, Mr Macron may have an unusual opportunity to build on the leadership he displayed in Biarritz. One reason is that, two years after his election, the French president has built up a global address book and got the measure of leaders such as Mr Trump. In Biarritz Mr Macron had an impromptu two-hour seafront lunch à deux with the American president, peeling him away from his hawkish advisers. "Lunch with Emmanuel was the best meeting we have yet had," Mr Trump gushed afterwards on Twitter. In a joint press conference the usually verbose French president was careful to use short words, and appear respectful. "Macron is very clear about their differences," says Benjamin Haddad, of the Atlantic Council, a think-tank in Washington: "But the G7 outcome reflects the work that he has been doing, investing in that relationship for the past two years, which is now paying off."

A second is the leadership gap in Europe. America has grown used to looking to Mrs Merkel. Yet the chancellor has been weakened by her party's electoral difficulties, along with the prospect of recession in Germany. Brexit, meanwhile, is occupying all of Britain's diplomatic bandwidth. Mr Macron, who keeps a copy of Charles de Gaulle's memoirs on his desk, is eager to occupy the space. To that end, he has helped manoeuvre France-friendly nominees into top European jobs, including Ursula von der Leyen, the incoming European Commission president, and Christine Lagarde at the European Central Bank.

A final factor is France's relative economic resilience. French GDP is expected to grow by 1.3% this year, compared with 0.5% in Germany. Unemployment is still 8.5%, but that is its lowest level in a decade. France is less export-dependent than Germany and so less vulnerable to trade turbulence. And it has benefited from the fiscal boost Mr Macron injected late last year in response to the *gilets jaunes* protests. The president's poll ratings have now recovered to where they were a year ago.

The French, with their universalist aspirations, are unusually sensitive to how well their leaders do abroad. Mr Macron's G7 performance was roundly applauded at home. The summit, wrote Le Monde, was an "unquestionable success". Deals may yet come unstuck. Talks may not materialise. Disappointments are inevitable. But Biarritz suggested that Mr Macron is growing into a role as a European leader who is prepared to take risks, push new ideas, and try to use the multilateral system to ease tensions and defend the liberal order.

German politics

Autumn of the coalition

POTSDAM AND WILDAU

State elections in Germany's east will test the creaking government

It is election season in Brandenburg. Under a generous Friday-evening sun, the crowd in Wildau, a small commuter town south of Berlin, thump the tables in approval as Dietmar Woidke, the state's centre-left premier, vows to take the fight to the far-right Alternative for Germany party (Afd). Regina Bartsch, a retired engineer in the audience, voices her support. She has voted for other parties in the past, she says, but this time will plump for Mr Woidke's Social Democrats (SPD) to keep the Afd from coming first. "That's the most important thing."

An election in a state like Brandenburg, population 2.5m, would usually struggle to catch the nation's attention. The campaign has been dominated by issues like house prices and transport links to Berlin. Yet the outcome of three elections in eastern Germany—in Brandenburg and Saxony on September 1st and Thuringia on October 27th—will resonate nationwide.

There are two reasons for this. The first is that Germany's fragmenting party system could open the way for the AfD to come first in one or more of the three polls. The party's rightward shift in recent years has earned it a solid block of support across eastern Germany, where it stokes grievances against refugees, climate policy and "Wessi" arrogance. Its leader in Brandenburg, Andreas Kalbitz, who has a history of dalliance with neo-Nazi organisations, is the brains behind the Flügel ("wing"), an ultra-right group slowly taking over the AfD from within. The AfD is shunned by every other party, so it has no hope of entering coalitions. But its first victory in a state election would be a watershed for Ger-

Rising alternative Germany, state-election polling* Selected parties, % **Brandenburg** Saxony 40 40 CDU SPD 30 30 CDU AfD 20 20 Left Left SPD AfD 10 10 Greens Greens FDP FDP 2015 17 19 2015 Source: National polls *Poll of polls many. "We will be closely observed to see if we can overcome this," says Jörg Steinbach, Brandenburg's economy minister.

Mr Woidke, who leads a coalition with Die Linke, a left-wing party, has belatedly tried to present the Brandenburg election as a straight fight between his party and the Afp. The tactic may be working: the SPD and Afp are now neck-and-neck in polls. In Saxony the drama may come after the election. Michael Kretschmer, the premier, who has fought a strong campaign, is odds-on to lead the CDU to first place. But he has ruled out coalition talks with either the AfD or Die Linke. That may force him to seek an unwieldy, left-leaning coalition of three or even four parties after the vote, infuriating his party's conservative base. Many think it is time to remove the cordon sanitaire around the Afp, however much that would irritate the CDU's national leadership. Mr Kalbitz's antennae, naturally, are up. After Angela Merkel is gone, he says, "it's just a question of time" before the CDU agrees to work with the Afp. The dam will break first in the east, he adds.

The second reason to watch the state elections is for the national fallout. Germany's "grand coalition" between the CDU (plus its Bavarian sister party) and the SPD has long been in intensive care. It is ailed by quarrels over taxes, pensions and climate policy. In the past year both parties have seen leaders resign after poor stateelection results. Disasters in Brandenburg and Saxony would sharpen the pain. In particular, for the SPD to lose power in Brandenburg, a state it has run for 30 years, "could be the straw that breaks the camel's back," says Jochen Franzke, a political scientist at the University of Potsdam. Nationally the party is quarrelsome and deeply unpopular; it now sits behind the AfD and the Greens in opinion polls. Many of its restive members long to quit government and lick their wounds in opposition.

At a party congress in December the SPD must decide whether to do just that. The question will therefore hover over the party's leadership contest, which starts in earnest in September. Winning in Brandenburg would help continuity candidates like Olaf Scholz, Germany's vice-chancellor and finance minister, who changed his mind about running when the thinness of the field became embarrassing. Mr Woidke, a Scholz supporter, calls the discussion over staying in government "superfluous". But some of Mr Scholz's rivals are already urging a walkout. Poor election results will help them make their case.

The CDU, meanwhile, has begun to lose its way as Mrs Merkel, who will leave office before the next election, steps away from front-line politics. Annegret Kramp-Karrenbauer, who took over the party leadership from the chancellor last December, stumbles from one gaffe to another, most

recently hurting the CDU's election campaigns by condemning a prominent rightwing member popular in the east. Her missteps mean she is no longer a shoo-in to run as the party's candidate for chancellor at the next election. Should the CDU do poorly this weekend, it is Ms Kramp-Karrenbauer who will take the blame rather than Mrs Merkel, who has removed herself from the election fray. The new party leader's rivals are circling.

The gloom in Berlin also infects the local contests. The national SPD's weakness is "of course a burden", admits Mr Woidke. In fact, he and Mr Kretschmer have good economic stories to tell in their own states. But it is hard to gain purchase in such a febrile political atmosphere. After many years of stability under Mrs Merkel, there is a whiff of change in the air.

Corruption in Slovakia

Murky messages

Texts linked to a murder spread fear in political circles

THE BRUTAL murders of Jan Kuciak, an $oldsymbol{1}$ investigative journalist, and his fiancée in February 2018 quickly turned Slovakia's politics upside-down. Tens of thousands of Slovaks took to the streets, suspecting the killings were linked to political corruption. "We just thought our politicians' behaviour was fishy," says Jan Galik, a 31-year-old IT specialist who helped found "For a Decent Slovakia", one of the main groups behind the demonstrations. The protests forced police to mount a serious investigation and ultimately drove the former prime minister, Robert Fico, to resign.

Over the past month, the fishy smell has grown ever stronger. Slovak newspapers have been publishing excerpts from hundreds of pages of instant messages supposedly leaked from a police report on Marian Kocner, a businessman charged with ordering the murders. The messages purport to show Mr Kocner assiduously trying to help Mr Fico's Smer-sp party stay in power. "Otherwise, we will all end up in jail," reads one message to a long-time associate. Others refer to meetings with "Squarehead" (Mr Fico's nickname on satirical websites).

Another message boasts of having breakfast in the Maldives shortly after the murders with Bela Bugar, chairman of Smer-sp's junior coalition partner, Most-Hid. Addressed to a woman who also faces charges connected to the murders, it promises to tell Mr Bugar "what I would do in his place". Most-Hid has been criticised for refusing to pull out of the coalition, thus

Not fallen yet

The Five Star Movement finds a new coalition

IUSEPPE CONTE is poised to boldly go where no Italian technocrat has gone before. Independent prime ministers in Italy either bow out at the end of their governments or get shoved aside by the voters if they try to hang on. But on August 29th President Sergio Mattarella asked Mr Conte to form a second coalition, this time teaming the anti-establishment Five Star Movement (M5S) with the centre-left Democratic Party (PD).

Mr Conte has spent 14 months heading an all-populist government that yoked the Five Stars to the hard-right Northern League. The League's leader, Matteo Salvini, ill-advisedly pulled the rug this month, thinking it was under his allies' feet, when in fact it was under his own. The M5S has around a third of the seats in parliament, and can command a majority with the help of the PD and independent lawmakers.

In his resignation speech on August 20th, the popular Mr Conte excoriated the League leader to his face, calling him disloyal and irresponsible. The former university law teacher's performance endeared him to the Five Stars, to the point that they made his continuance in office a condition for a deal with the PD.

A second Conte government will please officials in Brussels. They feared that Mr Salvini's plans for drastic tax cuts, in a country already saddled with a debt equivalent to 134% of GDP, could panic the markets and jeopardise the euro. It will also delight Donald Trump, who tweeted his support for his "highly respected" buddy, "Giuseppi" (sic).

But there are snags. The M5s intends to seek its members' approval in an online ballot. If they vote against the alliance, it will probably force a general election. Italy can ill afford that. It could take until November to hold the vote, and parliament has to approve a budget by year's end. That will be tricky: €23bn (\$25bn) in deficit cuts are needed to meet EU limits. Otherwise, value-added-tax rates will have to be raised.

Moreover, in over a week of negotiation, the Five Stars and PD seemed to have agreed on little more than the prime minister's name. The M5S's founder, Beppe Grillo, suggested the cabinet might include other technocrats.

Perhaps most important, the two parties have sharply different cultures. Though most Five Star activists lean left, they disdain the liberal elite and see the PD as its embodiment. That was not a problem with the League, though it backed some policies they disliked. The fate of Italy's new government may show which is the stronger bond—ideological affinity or a populist temperament.



Still on the line

keeping Smer-sp in power.

Mr Bugar says his party's actions have nothing to do with Mr Kocner, whom he calls "evil". As for Mr Fico, he denies that the meetings to which the messages refer took place. Mr Kocner rejects the charge that he was involved in the murder, while his lawyer notes that it is hard to prove his client sent the messages (though he does not explicitly deny it).

Some pundits suggest Mr Kocner may have boasted of meetings that never happened, to impress the people he was corresponding with. Prosecutors confirm that they have Mr Kocner's messages, but not

that those published are genuine. Still, they seem to take at least some of the information in them seriously. In one message, Mr Kocner refers to an official at the ministry of justice as his "monkey". Last week the police seized that official's mobile phone.

For now, clean-government forces have the upper hand in Slovakia. In June an environmental and anti-corruption campaigner, Zuzana Caputova, took office as president. But the country has a long way to go. "For a Decent Slovakia" plans to take to the streets again in September. "We want to remind people that the fight for freedom is a never-ending process," says Mr Galik.

Charlemagne | Air Europe

A complicated continent, viewed from above



Even in Europe, a continent of welfare states famed for their gloriously long holidays, the summer must eventually end. This week, as they trickle back from Mediterranean beaches and Alpine campgrounds, Europeans are preparing for a fateful autumn. The risk of a recession looms. Eurosceptic populists are likely to win elections in Poland, and perhaps in Italy. Britain is heading for a hard or no-deal Brexit. From trade wars to migrant crises, the outside world looks threatening. Still, gazing out of their aeroplane windows, returning holidaymakers may notice some of the things that hold their curious little continent together.

For one thing, they are physically connected. In Africa or South-East Asia, infrastructure often peters out at borders. Yet in Europe motorways, railway lines and waterways criss-cross the continent. Peering down into deep Balkan valleys, one can see how absurd local ethnic rivalries and hatreds are; they carve up a continuous landscape of rocky coastlines and dusty roads that can obviously succeed only as an integrated region.

Europe is an old continent. Forts and castles dot the landscape; cities are built around pedestrian cores rather than grids from the motor age. (Where highways are linear, it may be not because they are modern but because they follow the dead-straight lines of Roman roads, as with parts of the A2 in Britain and the A1 in Italy.) Many cityscapes in central Europe follow the medieval German layout of a castle on a hill, with a lower town around a market square spreading outwards to a ring-road on the line of an old wall. That pattern can be seen flying over Leipzig or Nuremberg, and also over Wroclaw in Poland, Riga in Latvia or Prague in the Czech Republic—a reminder of the blurred lines between German, Slav and Baltic spheres in this part of Europe. Sometimes one can wake up from a mid-flight snooze and not know which country is below, just that one is unmistakably over Europe.

Yet differences are also visible from above. The rationalist postwar reconstruction of the West German state, essential to understanding Germany today, is seen in the orderly lines of fields and woods produced by the *Flurbereinigung* (land-reform consolidations) in the 1950s. By contrast, Britain's chaotic but organic state is reflected in its rambling, patchwork countryside. Madrid, sprawling but stranded in the middle of the dry Spanish *meseta*, makes sense only as the capital of a mighty empire that valued central control—in a way that marks Spain's politics today. Road and rail-way patterns reveal much, too. France's long tradition of dirigiste centralisation is evident in the hub-and-spoke radiation of its arteries from Paris, whereas in Germany and the Netherlands they are polycentric. Austria-Hungary, long dead on political maps, lives on in the way that railways in much of south-eastern Europe converge on Vienna.

Flat regions, like the Fens in Britain and Scania in Sweden, have huge farms. Sometimes an indicator of historical economic inequality, these can also signal a starker left-right political divide. Hilly or mountainous regions with small livestock holdings, like Ireland and the Basque country, often tend towards more communitarian political traditions. For a symbol of the enduring differences between the former eastern and western parts of Germany, look no further than Berlin at night: sodium-powered street lamps bathe the former east in an orange glow, where fluorescent lamps in the west burn almost white. In Belgium, by contrast, night-time projects unity. Differences between Flanders and Wallonia disappear as an unusually powerfully illuminated highway network, a federal responsibility, makes the outline of this fractured state visible even from space.

To fly over Europe is to witness many of the policy challenges awaiting leaders on their return from holidays. At night, darkness envelops the emptying countrysides of rural Spain, southern Italy, Greece and Bulgaria. Meanwhile, even in times of trade wars and tariffs, the prosperous Rhine and Rotterdam glow with the lights of barges and ships carrying German exports into the world. Forest fires, floods and scorched fields speak of Europe's vulnerability to global warming. Then there are security threats. Historical Baltic and Polish fears of Russian expansionism make sense from above. The countries have no natural barriers to their east, just tankfriendly plains. The Mediterranean, too, seems less of an impediment from above, with container ships and refugee dinghies crossing what is increasingly a common Euro-African space. On the island of Ireland, in contrast, the problem comes from what cannot be seen: the invisible Northern Irish border, which would soon become visible—and perhaps a focus for violence—in the event of a no-deal Brexit.

The view from 12,000 metres

From above, you can also see what Europe, acting together, can achieve. The return of forests across swathes of the continent thanks to enlightened environmental policies; wind turbines and solar-power installations cutting carbon emissions; former communist countries woven back into the rest of the continent; new transport links and economic development in places that long languished in poverty.

For politicians, journalists or ordinary travellers who want to really understand a place and its people, there is no substitute for shoe leather. You do not know anywhere until you have walked it. But for those who do fly—and millions do, with some European airports reporting record passenger levels—you can learn a lot at high altitude, too. The continent is a patchwork of different histories, cultures and political traditions, but one where borders are utterly inadequate as tools of organisation. Common responsibilities and problems, histories and futures spill across those borders and demand common action. This autumn the challenge of seeing Europe as a single space, the way it looks from a plane, seems greater than ever. But it is also more essential.



Brexit tactics

Prime minister v Parliament

As MPS plan to block a no-deal Brexit, the government plans to send them home

The pressure is rising in the battle between Boris Johnson, who is determined to lead Britain out of the European Union with or without a deal on October 31st, and Parliament, where a majority of MPS want to stop a no-deal Brexit. This week opposition parties agreed that, when the Commons returns on September 3rd, they will try to hijack its agenda to pass a law calling for another extension of the Brexit deadline. But a day later Mr Johnson trumped them by announcing a long suspension of Parliament, from September 11th to October 14th, when a Queen's Speech will start a new session.

The prime minister claimed this was a normal way for a new government to set out its plans on crime, health and so on. Yet his main goal is the cynical one of shortening the time for MPS to stop no-deal. At almost five weeks, it will be Parliament's longest suspension before a Queen's Speech since 1945. The response was apoplectic. Jeremy Corbyn, Labour's leader, labelled the move a "smash and grab on our democracy". The Commons Speaker, John Bercow,

called it a "constitutional outrage". Even many Tories were unhappy. Ruth Davidson, the party's popular leader in Scotland and a long-standing critic of Mr Johnson, quit the next day.

The oddity is that a week earlier Mr Johnson was speaking of progress towards a Brexit deal. He had junked his vow not even to talk to fellow Europeans until they dropped the Irish backstop, an insurance policy to avert a hard border in Ireland by keeping the entire United Kingdom in a

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customs union with the EU. Instead, after meeting Germany's Angela Merkel and France's Emmanuel Macron, he offered to propose an alternative to the backstop within 30 days. Upsetting hardline Brexiteers, he also said he would not seek other changes to the withdrawal agreement negotiated by Theresa May, his predecessor.

EU leaders listened politely. Mujtaba Rahman of the Eurasia Group consultancy says that, though sceptical of Mr Johnson's unspecified alternatives, they may be ready to make small changes to the backstop to reduce its scope or limit it, as first planned, to Northern Ireland. But they also stand behind Ireland's Leo Varadkar, who insists on keeping the backstop. They believe the withdrawal agreement struck with Mrs May goes as far as feasible to meet British interests without damaging the EU's single market. And they are not about to surrender to Mr Johnson's threats of nodeal, any more than they were in 2015 when Greece threatened to quit the euro.

One conclusion from these events must be that the risk of no-deal is rising fast. Two months ago Mr Johnson talked of it being "a-million-to-one against". Now he says it is "touch and go". In political terms, no-deal has appeal to Mr Johnson, as the best chance of fending off Nigel Farage's Brexit Party while trying to blame Brussels and Remainer "collaborators" for the mess. On the continent, resignation to no-deal is driven not just by an unwillingness to sacrifice Ireland but also by the belief that it will

damage Britain far more than the EU.

The impact on the British economy, which is already teetering near recession, could indeed be severe. The government's leaked "Operation Yellowhammer" analysis talks of possible shortages of fresh food, medicine and petrol, disruption to ports and the risk of civil unrest, especially in Northern Ireland, where trade across the border could be severely hampered. Manufacturers fret about the effect on just-intime supply chains of tariffs and non-tariff barriers. Farmers and fishers are worried about duties on sheep, beef and fish exports. Service businesses and the NHS talk of recruitment problems.

Brexiteers dismiss this as another "Project Fear", like the prophecies of doom before the June 2016 referendum which turned out to be too gloomy. They concede that there could be bumps in the road. But they also claim that no-deal would end uncertainty for businesses, be harmoniously managed by all sides and lead quickly to a new free-trade deal with the EU.

As Charles Grant of the Centre for European Reform, a think-tank, notes, the chaos around no-deal would in fact maximise the uncertainty for businesses. Far from being harmonious, it would be acrimonious, especially since Mr Johnson says he would not pay the full £39bn (\$48bn) Brexit bill accepted by Mrs May. And an early trade deal looks far-fetched. The EU would insist on the Brexit bill, protection of EU citizens' rights and an Irish backstop as prerequisites. Any talks would be on a different legal basis from Article 50, which governs the current negotiations, requiring a fresh negotiating mandate, the unanimous approval of EU governments and ratification by national and regional parliaments.

Given this, most MPS are understandably against no-deal. But can they stop it happening? Next week they will return to work after days of feverish exchanges over what to do. They are helped by the fact that Mr Bercow seems determined to exploit all his power as Speaker to give MPS a say, and that Mr Johnson has a Commons majority of just one. Yet they know that no-deal is the default option in the absence of other action and that, thanks to Mr Johnson's suspension of Parliament, time is short. Many concede that no-deal Brexiteers are better organised and more ruthless than their opponents.

Maddy Thimont Jack of the Institute for Government, another think-tank, reckons MPS have just enough time to legislate, if they remain united. The plan is to ask Mr Bercow for an emergency debate under standing order 24 and use this to follow the precedent of the Cooper-Letwin bill that was passed in March. Back then, MPS took control of the Commons agenda for a day to bring in the bill, which required the prime minister to request an extension of the

National governments

Of gnus and other animals

All you need to k-know about governments of national unity

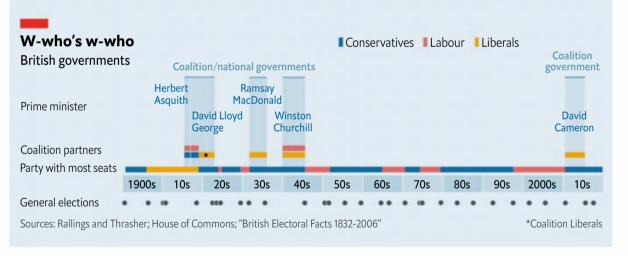
A LL PARTIES agree their first choice of route to try to stop a no-deal Brexit should be legislation. Yet after Boris Johnson's decision to suspend Parliament for almost five weeks, some MPS want to have in reserve a vote of no confidence. Such a vote could lead to a government of national unity (gnu) backed by a cross-party majority of MPS. This "letterwriting government", under a caretaker prime minister, might invite the EU to extend the Brexit deadline of October 31st to allow time for a general election or another referendum.

Yet the obstacles to a gnu are large. Proposing a vote of no confidence is not the same as winning one. Even winning one is complicated by the 2011 Fixed-term Parliaments Act, which allows 14 days for another government to secure confidence before an election must be called. Mr Johnson would remain prime minister during this period, and might fix the date for an election after October 31st, allowing no-deal by default.

But the biggest roadblock is who should lead a gnu. As opposition leader, Labour's Jeremy Corbyn insists he should be prime minister. Yet as he learnt this week, he will not easily win the support of other opposition parties, let alone Tory rebels. Jo Swinson, the Liberal Democrat leader, argues that any gnu should be led by a neutral grandee, such as the Conservatives' Ken Clarke or Labour's Harriet Harman. But Labour will not back this idea if Mr Corbyn is not on board.

Andrew Blick of King's College, London, says history shows that Mr Corbyn is wrong to claim that only the leader of the opposition can become prime minister. In 1916 David Lloyd George ousted Herbert Asquith to form a national government that lasted until 1922, only to see Labour later displace his party. In 1931 the Tories joined a national government under the Labour prime minister, Ramsay MacDonald, but he was then disowned by his own party. In 1940 the Labour opposition told Neville Chamberlain, the Tory prime minister, that it would join a national government only if it was led by Winston Churchill, who won the war but lost the 1945 election.

Gnus are common beasts in other European countries. But as Benjamin Disraeli said, "England does not love coalitions", an aphorism confirmed by the recent one under David Cameron. And there is a big flaw in all talk of governments of national unity. What Brexit reveals is a total lack of national unity.

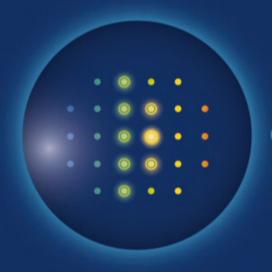


original Brexit deadline of March 29th. MPS might also need to suspend standing order 48, which says only a minister may propose acts costing public money.

Ms Thimont Jack notes that the March bill became law in less than five days. But that was partly because Mrs May chose not to obstruct it. Even if a similar bill passes the Commons in a single day, as then, it is hard to break a filibuster in the Lords, where the timetable for debate is less easily curtailed. Another problem is that any law can require Mr Johnson only to ask for an extension. He might do so on terms that allow him to refuse any offer from the EU,

though Brussels is keen to avoid any blame for a no-deal Brexit.

These uncertainties make some MPS keen to consider a vote of no confidence in Mr Johnson's government. But that, too, is fraught with difficulties (see box). So are such options as trying to revoke the Article 50 Brexit application, for which there is much less support in Parliament. The harsh truth is that, although majorities of both MPS and voters are against a no-deal Brexit, an idea not even floated by Brexiteers during the referendum campaign, the timetable makes it tricky to stop, however much Parliament tries.



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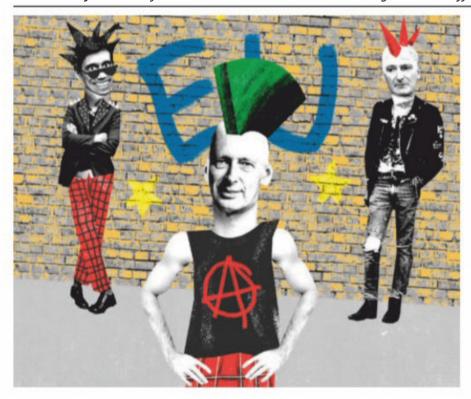
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Bagehot | The new Tory rebels

An unlikely bunch of Conservatives are bent on taking no-deal off the table



The Rebel boot is on the other foot. For years the most prominent Tory troublemakers were Eurosceptics, who were willing to do anything to get Britain out of the European Union. Now the Eurosceptics have captured the government and the most prominent rebels are Euro-moderates, who are willing to do anything to prevent Britain from leaving the EU without a deal.

The insurgents are about 40 strong, though not all will vote in the same way at the same time. They are a looser alliance than the old rebels who, in the form of the European Research Group, had their own whips and party line. But Boris Johnson's increasingly hardline policies have stiffened their spines. The alliance contains a collection of Tory grandees, including five former cabinet ministers, and a smaller group of escapees, such as Sir Oliver Letwin and Guto Bebb, who have decided to stand down at the next election. Ruth Davidson's resignation as leader of the Scottish Conservatives has weakened Toryism north of the border and provided the rebels with another example of the cost of Mr Johnson's policies.

The alliance contains some of the oddest rebels ever assembled in politics. Philip Hammond, the closest thing the alliance has got to a leader, joined the Conservative Party when he was still at school and spent the past nine years as transport secretary, foreign secretary and chancellor of the exchequer, before quitting in the last days of Theresa May's government. His understated manner and fondness for economic orthodoxy earned him the nickname "spreadsheet Phil" (though he is much more entertaining in private than his public persona suggests). When he voted against the government on the Northern Ireland bill last month it was the first time he had broken with his party in 22 years, which is not something that could be said of many Brexiteers.

In his essay of 1919 on "Politics as a Vocation", Max Weber made a distinction between the "ethic of responsibility" and the "ethic of conviction". The ethic of responsibility is all about pragmatism—doing what you can to keep the show on the road—whereas the ethic of conviction is all about moral purity. Mr Hammond is the embodiment of the first, just as Dominic Cummings, Mr Johnson's chief of staff and, according to his critics, unelected deputy prime minister, is the embodiment of the second.

David Gauke is a solicitor by profession who ended up as Lord

Chancellor. Dominic Grieve is another lawyer—a QC, no less—who served as attorney-general. Greg Clark is a former management consultant who was a quietly effective secretary of state for business. The only member of the alliance who has the whiff of the rebel about him is Rory Stewart, who spent years wandering around dangerous bits of the world as a latter-day Lawrence of Arabia. But Mr Stewart is also a worshipper of British institutions, whose CV includes working as a tutor to Princes William and Harry and serving in the army and the Foreign Office.

These odd rebels bring a formidable range of skills to their mission. As a former foreign secretary and chancellor, Mr Hammond has a network of contacts both in Britain and the wider EU. He also knows as much as anybody about the potential impact of a no-deal Brexit on business. Mr Gauke is one of the most popular MPS in Parliament—"clever", "subtle" and "humorous" are a few of the adjectives that fellow members shower on him. Sir Oliver and Mr Grieve are both veterans of the "May wars" to prevent the government from steamrolling Parliament and have created a store of templates and strategies. Mr Grieve also has close relations with Sir Keir Starmer, Labour's Brexit spokesman. Mr Stewart single-handedly lit up the recent Tory leadership campaign with his improvised walkabouts (which he has recently resumed) and excited a new generation of young people about Conservatism. "Rory is a bit of a messiah," says an MP who has known him for years, "but at least messiahs have a way of making converts."

The rebels should be under no illusion about how difficult their job is. This is not a normal government. It is dominated by brutal ideologues who will use any smear ("traitor", "collaborator", "fifth-columnist") to defeat their opponents. On August 28th Mr Johnson made the extraordinary move of asking the queen to suspend Parliament from September 11th to October 14th, in an attempt to reduce the number of days that MPs have to prevent a no-deal exit on October 31st—a move that Mr Hammond described as a "constitutional outrage" and "profoundly undemocratic".

But the rebels have two important things on their side. The most obvious is numbers. Suspending Parliament is a sign of Mr Johnson's weakness, not his strength. The prime minister has a working majority of only one. The bulk of MPs are opposed to a nodeal Brexit. And Parliament has a good record of winning its battles with the executive. Mrs May lost three times, despite throwing all the government's time and resources for two years behind getting her deal through. The second thing on the rebels' side is fear. Several senior members of Mr Johnson's government are privately terrified that his "do or die" tactics may sink the economy and destroy the Conservative Party for a generation. As Brexit day approaches and the pound sinks, bankruptcies rise, shortages loom and civil disorder resumes in Northern Ireland, the people who crack may not be the Europeans but some unexpected Johnson loyalists.

In search of a cause

The rebels' deeper problem is what happens to them after October 31st. The Eurosceptics reshaped British politics because they had a single aim and unflinching determination. The Euro-moderates are united on little other than preventing no-deal. Some want a second referendum to overturn Brexit, some want a version of Mrs May's deal, and some may even want a long-term realignment of politics which would consign the Brexiteers to a party of their own. The alliance could easily fracture as rapidly as it has formed. It is worryingly easy to lose control of a party to the men and women of conviction. It is much more difficult to win it back.

International



Cannabis

Going to pot

A global revolution in attitudes towards cannabis is under way

THE DOCTOR was blunt with Hannah Deacon, the mother of an epileptic boy. He told her that she would "never" get a prescription on the National Health Service (NHS) for medicine based on tetrahydrocannabinol (THC), the psychoactive ingredient in cannabis. The British government, too, was unhelpful, maintaining in February 2018 that cannabis had no medical value—a position that it had held for over 50 years, even as the country grew and exported cannabis for medicinal use. Yet within months, it had made a u-turn, accepting that Cannabis sativa had medical uses. Eight months after Ms Deacon made her first public plea for it, her son, Alfie, got THC-based medicine on the NHS.

Legislatures across the planet have been having similar changes of heart. This may presage broader legalisation. History suggests that when medical cannabis is permitted this is often the prelude to broader recreational access.

People have exploited *C. sativa* for thousands of years and its medicinal use can be traced as far back at least as 400AD. But, like

other recreational drugs, it started to face restrictions during the first half of the 20th century. Fear-mongering was common. A turning-point came in the 1900s when John Warnock, a British expatriate doctor in Egypt, suggested that cannabis was responsible for a large amount of the insanity and crime in the country. When the League of Nations met in 1924 to discuss narcotics such as opium and heroin, his "evidence" of the dangers of cannabis was influential. But his methodology was dubious. Data were gathered only from patients in the Egyptian Department of Lunacy. He spoke no Arabic, and an important way to determine if patients had been users was to note their "excited" denials when asked if they had tried the drug.

Reefer madness

Then in the 1930s America was afflicted with a moral panic, as cannabis was accused of inciting violence among Mexican immigrants and of corrupting America's children. When the international system of drug control, the Single Convention on

Narcotic Drugs, was set up in 1961 at the United Nations, the use of cannabis in traditional medicine was ignored. It was treated as having limited or no therapeutic use, and as being a dangerous drug, like heroin, requiring the strictest controls.

Within the plant are chemicals called cannabinoids, similar to molecules produced by the human body, known as endocannabinoids. A wide network of receptors in the human brain and body respond to the plant and human versions of these molecules. The body's endocannabinoid system is involved in regulating everything from pain to mood, appetite, stress, sleep and memory. So far, 144 different cannabinoids have been found in *C. sativa*—most of them barely understood—and new properties are being discovered all the time.

The best known are THC, the ingredient that gets you high, and cannabidiol (CBD), which does not and which is increasingly used as a food additive and supplement. Drug treaties have severely impeded research into cannabis. But over the years evidence from clinical trials and elsewhere has shown its efficacy in treating a range of conditions, such as muscle pain in multiple sclerosis, nausea induced by chemotherapy, treatment-resistant epilepsy and chronic pain in adults.

Helpful both in alleviating pain and in giving pleasure, pot has been wildly popular in the decades since the Single Convention and the drug-control treaties that followed it. It is the world's most widely

produced in almost every country on Earth. The UN's estimates of global drug-taking put the number of users at 188m (out of a total of 271m taking illegal drugs).

Cannabis is not completely free of dangers. An overdose is unlikely, perhaps impossible, but one in ten do become addicted. And at high doses, with high-strength strains or long-term use, there is a risk of psychosis. In adolescents there is a risk of impaired brain development. But, given how much pot is smoked for fun, it is remarkable how little harm it does. And more and more countries—over 30 so far—have legalised medical cannabis (see map). In North and South America, medical use has tended to be followed by acceptance of its recreational use. Some European countries have liberalised their laws for both sorts of purpose. But Germany, France and Britain have moved to medical pot first.

Allowing medical cannabis forces governments to build regulatory structures to control the legal supply to patients. Once this happens, it seems easier for societies to accept the idea of recreational use. When grandma starts smoking pot for her arthritis, the drug has entered the mainstream.

Other arguments are also persuasive in the push for full legalisation, such as racial disparities in prosecutions, the social and judicial costs of criminalising so many users, and the profits and taxes a legal industry might generate. But that patients are suffering seems to carry more political weight than arguments from liberalisers. Perhaps nervous politicians from a generation that grew up taking drugs find wheel-chairs offer convenient cover.

In America 33 states allow medical use, and 11 have legalised the recreational kind. Nationally, most of the population favours federal legalisation. By 2024 medical cannabis will be legal in all states, and recreational use will be found in almost half, predict Arcview Market Research and BDS Analytics, firms that monitor the cannabis business. Medical use is spreading weed-like across Latin America, as opposition

wanes. Medical use is already found in Argentina, Colombia, Mexico, Chile, Peru, Jamaica and Uruguay.

Some governments and health insurers will cover cannabis prescriptions. Almost 16.000 German patients receive medical cannabis-mostly for chronic pain and spasticity, and some, improbably, for attention-deficit disorder. In 2017 the leading insurer approved two-thirds of requests and spent \$2.7m on pot. This year the European Parliament passed a (non-binding) vote to improve access to medical pot. Even the World Health Organisation wants cannabis treated in a less restrictive way that would acknowledge its medical utility and make it easier to conduct research. Most striking of all is the arrival of medical cannabis in countries that seemed highly unlikely to relax drug laws, including South Korea, Thailand and Zimbabwe.

In the countries that accept medical use, ease of access varies. International drug treaties technically permit medical cannabis. But the body that monitors international compliance with drug treaties, the International Narcotics Control Board (INCB), maintains a tone of almost perpetual annoyance in its reports, arguing medical-cannabis schemes are poorly regulated and allow leakage of the drug to recreational users.

Uruguay paved the way when it legalised cannabis in 2013. But it is the reform in Canada, a G7 member, that has done most to heighten international tension over cannabis's legal status. Last year it fully legalised the drug. Part of its rationale was that a regulated legal trade would curb the black market and protect young people, who were buying it there. Canada's change has caused fierce fights within the UN in Vienna, according to Martin Jelsma of the Transnational Institute, a think-tank. The country now stands accused of undermining the drug-control system. Bill Blair, a minister responsible for organised-crime reduction, acknowledges that Canada is non-compliant. "But", he says, "it is a very principled approach."

Attitudes towards the drug are softening around the world. But many important countries, most notably Russia and China, remain implacably opposed to reform. The lack of a global consensus prevents the rewriting of the drug treaties. Divisions are also found within the UN itself. The Human Rights Council and the Special Rapporteur on extrajudicial killings are critical of the human-rights violations that come with harsh national policies to suppress drug use, and the WHO wants a shift in the status quo. The INCB and the UN Office of Drug Control oppose change.

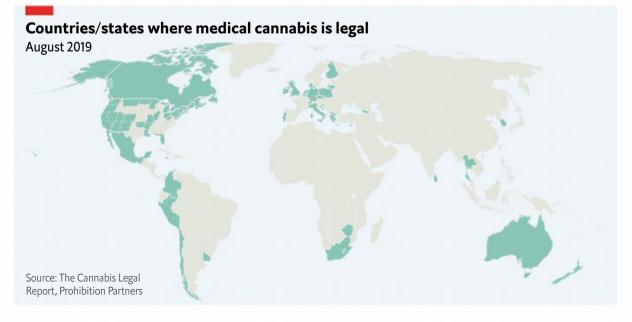
It may be true that licensing medical marijuana tends to lead to a broader liberalisation. But those resisting this are swimming against the current. Mexico will probably legalise this year; Luxembourg is hot on its heels and likely to become the first EU country to legalise recreational cannabis; and New Zealand is planning a referendum on the issue. It is only a matter of time before international drug treaties will come to be seen as fundamentally broken. Some worry that international law more generally will be undermined by all this rule-breaking. Mr Blair is reluctant to be drawn on how Canada might help resolve the issue.

Joint approaches

It could withdraw from the convention. But the Canadian government has already ruled this out. When Bolivia wanted to legalise the chewing of coca leaves, it withdrew from the convention and rejoined with a "reservation". A possibility that intrigues international-policy wonks is for Canada and other law-breakers to form an "interse" (between themselves) agreement, allowing them to modify existing drugtreaty provisions. For this to be an option, Canada will probably want to wait until the club of outlaws is bigger.

In Britain medicinal cannabis is legal but still very hard to get without an expensive private prescription. (Alfie was lucky.) The dilemma is that cannabis sits in an unusual medical no-man's-land: neither licensed for most of the uses for which people want it, nor tested to the standards that patients usually expect from medicines. Despite this, many countries are finding ways to push forward. France, for example, is moving ahead with a large-scale clinical trial of the medical uses of cannabis.

The drug's ambiguous legal status as a medicine will persist for years. A long history of prejudice has thwarted research and deprived millions of patients access to therapies that might help them. The work of creating regulated and approved medicines should be well advanced, but is only just beginning. Ironically, it may be that only when cannabis is legal for recreational use will a fuller picture emerge of the benefits it offers and the risks it poses.



Business



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Pharmaceuticals

Opioids Inc in the dock

NEW YORK

Companies accused of fuelling America's opioid crisis face a legal reckoning

N 2015 RICHARD SACKLER, from the bil-**▲**lionaire family that controls Purdue Pharma, was deposed in a case related to his company's alleged use—which it stoutly denies—of deceptive marketing to understate the addictive potential of OxyContin, its powerful opioid painkiller. The transcript of that testimony was unearthed this February, fuelling outrage over Purdue's role in America's growing opioid epidemic. On August 27th the video of Dr Sackler defending his firm's flogging of OxyContin and other opioids finally emerged. This time, though, public fury was soothed by events of the previous day in Oklahoma. Judge Thad Balkman found Johnson & Johnson (J&J) guilty of creating a "temporary public nuisance" by contributing to the opioid epidemic which has claimed the lives of some 6,000 Oklahomans since 2000. He ordered it to pay \$572m towards a plan to abate the crisis.

Critics of the opioid-pushers cheered. As long ago as 2004, Purdue settled a case alleging inappropriate marketing of Oxy-Contin with regulators in West Virginia for \$10m, without admitting guilt. Since then, observes Elizabeth Burch of the University of Georgia Law School, nearly all such cases have been settled, with details of the litigation remaining under seal. The landmark trial in Oklahoma, which began in May, has already revealed the industry's unsavoury practices. The prosecutors' victory throws open the floodgates to strong legal action



and potentially massive financial penalties. It could do to Opioids Inc what lawsuits over cigarettes did to Big Tobacco. And the pain may extend beyond drugmakers to distributors and retailers involved in the opioid trade.

Oklahoma's attorney-general spent months locked in a fierce battle with J&J in a state court over its responsibility for the local opioid crisis. Yet victory for the prosecutors seemed unlikely—which is why J&J punted on a trial instead of settling with the state like Purdue and Teva, an Israeli generic-drug manufacturer, which paid out \$270m and \$85m, respectively. Some scholars were sceptical of the prosecution's novel interpretation of what counts as a public nuisance, a misdeed typically associated with polluters or owners of brothels. Moreover, J&J accounted for only a tiny share of opioid sales in the state.

Judge Balkman's verdict therefore came as a surprise to many. It may discourage other companies accused of complicity in the crisis from taking a chance in the courtroom, predicts David Maris of Wells Fargo, a bank. The first test of this hypothesis will be a federal case in Ohio, which is due to go to trial in October. It brings together claims from around 2,000 local governments and Native-American tribes. They are gunning for manufacturers such as J&J and Purdue, as well as lesser-known but much bigger opioid producers such as SpecGx and Actavis Pharma (see chart). But they are also going after big distributors and retailers, including upstanding household names like >> Altria and Philip Morris International

Smoke alarm

Big Tobacco wants to get bigger

DECADE AGO Altria, which makes ${f A}$ Marlboros, span off its non-American business, Philip Morris International (PMI). The split was driven partly by Altria's share price, which had been languishing below its sum-of-parts value, but also by regulatory hounding of Big Tobacco over its role in causing cancer. When British American Tobacco made a bid for Reynolds American, maker of Camels, in 2016, Bonnie Herzog, an analyst at Wells Fargo, a bank, urged PMI to reunite with its former parent. It took longer than expected. But on August 27th the two said they were in talks to merge. Their combined market value just before the announcement was \$210bn.

Ms Herzog still thinks the merger makes sense, given the benefits of scale and geographical reach in what she calls the "global arms race" for "reduced-risk" products, which use fewer harmful chemicals. Last year Altria spent \$12.8bn on 35% of Juul Labs, a maker of popular high-nicotine vaporisers. It paid \$1.8bn for 45% of Cronos Group, a cannabis company from Canada (which, along with some American states, has legalised

▶ Walmart and Walgreens. All the companies deny wrongdoing.

Mr Maris's theory was bolstered a day after the Oklahoma verdict, when news reports surfaced of a dramatic deal in the works involving Purdue, the federal judge supervising the case in Ohio, and the plaintiffs in that case, as well as various state attorneys-general. The company appears willing to cough up between \$10bn and \$12bn, with \$3bn or more coming from the Sackler family, as part of a bankruptcy transaction that would see the firm reconstituted as a public trust. If the reports are correct, the new trust would continue to produce both opioids and (perversely) drugs to counter their addictive effects. The Sacklers would lose control of their company; any future profits would go to the plaintiffs.

All this should alarm the peddlers of the pills. Analysts differ on just how worried they ought to be. Tom Claps, a legal expert at Susquehanna Financial Group, an investment firm, calculates that the industry faces a legal risk of perhaps \$37bn from ongoing cases. Patrick Trucchio of Berenberg, a German investment bank, thinks that distributors alone could face legal liabilities of \$40bn. Across the entire opioid supply chain, Mr Trucchio reckons, the bill

pot). PMI has spent \$6bn since 2008 to develop IQOS, a smoke-free device which heats tobacco and is expected to represent 40% of its sales by 2025, up from 14% last year. In April it won approval from the Food and Drug Administration (FDA) to sell IQOS in America, starting next month (under an existing licensing agreement with Altria).

Worldwide cigarette sales fell by 4.5% in 2018, to \$714bn, and may continue to decline. The FDA's proposed rules on nicotine content, to make smokes "minimally addictive", could cut profits of American tobacco firms by half, say analysts at Morgan Stanley, a bank. By contrast, e-cigarette revenues may grow by more than 8% annually over the next five years, from \$11bn today, according to Mordor Intelligence, a research firm.

For all that, merging with Altria may expose PMI to regulatory risks from Juul, whose controversial devices are a worrying hit with teenagers. Altria could also be a drag on PMI's profitability, which has exceeded its parent's since the split. PMI's share price fell by 7.8% on the news. The deal may yet go up in smoke.

could run to a whopping \$150bn.

That is the worst-case scenario. For the time being, investors seem calm. J&J's share price ticked up on news of the award, a fraction of the \$17bn the prosecutors had demanded. It could pay the \$572m penalty nine times over from its latest quarterly net profit alone. Its high-powered lawyers, who groused that the state prosecutors' legal theory was a "radical departure" from long-standing case law, vowed to appeal against the ruling, all the way up to the Supreme Court if necessary. Even if upheld, it may carry no weight beyond Oklahoma's borders. Most states espouse a commonlaw understanding of public nuisance that is much narrower than the relevant statute in Oklahoma, notes Richard Ausness of the University of Kentucky Law School. There may be echoes of this argument in future legal cases, says Ms Burch. But nothing about the Oklahoma decision predetermines outcomes elsewhere.

Other legal theories against drugmakers and distributors have yet to be tested in court. After this week's development, they may not get a chance. Andrew Pollis of Case Western Reserve University School of Law thinks the rest of the firms may fall in line behind Purdue. "Settlement feels impossible," he says. "But trial is unthinkable."

Investing in technology

Softly, softly

PARIS

The European Union wants its own Vision Fund

How Much does it cost to bend the future to one's will? Give or take \$100bn, reckons Masayoshi Son, boss of SoftBank. That is the size of the Japanese conglomerate's Vision Fund, which holds stakes in modish technology companies including WeWork and Uber. Mr Son is raising a new, similarly gargantuan pot. Now the EU wants one, too. On August 22nd news filtered out of a proposal to create a €100bn (\$111bn) fund to back European firms in "strategically important" industries.

Its proposed name and high-tech focus notwithstanding, the European Future Fund would hark back to decades past. Politicians across the old continent once believed themselves blessed with the gift of picking corporate winners. That 1970s experiment did not end well: "national champions" backed with taxpayers' money were kept on life support with yet more of it.

Concerns about Europe falling behind in technology, too, are old hat. In the early 2000s France and Germany were so worried about Google that they lavishly funded Quaero, a made-in-Europe search engine. A few years and tens of millions of euros later, the project was quietly deleted.

But frustration among politicians about the dearth of a European Google, Amazon or Alibaba lives on. So they are minded to try again—this time seeking to create "European champions", not national ones. Industries now deemed in need of politicians' wisdom to thrive—one plausible reading of "strategic"—include batteries and anything related to artificial intelligence (though the French in particular apply the term loosely, once blocking the takeover of Danone, a yogurt-maker, over



▶ ill-defined strategic concerns).

The Brussels machinery could once be trusted to dampen fervour for such industrial policy. In February the European Commission, the Eu's executive arm, blocked a merger of the rail arms of Siemens, a German engineering giant, and Alstom of France on competition grounds, putting paid to Franco-German dreams of a continental titan.

Now the mood among Eurocrats is shifting. Margrethe Vestager, the bloc's respected competition chief, who repeatedly kiboshed political efforts to mollycoddle favoured industries, is probably on her way out (of her current job; she will almost certainly stay in Brussels). Historically a French hobby-horse, *dirigisme* has found favour with German policymakers. Ursula von der Leyen, a German who will take over as commission president on November 1st, has spoken in the past of the need for Europe to "update our industrial policy". Politicians of most stripes want to erect a Fortress Europe to defend companies from bullying by Trumpian America and assault by state-backed Chinese groups.

The mooted fund is far from investing

its first euro. Ms von der Leyen has distanced herself from the idea. Soon after *Politico*, a news outlet, reported the proposal, the commission described it as "draft internal brainstorming". Maybe. It seems pretty thorough in some respects, like how it might be funded (public money bolstered by private-sector investors) and ways it could "support" companies by taking direct stakes in them. In others, less so. Most notably missing is a list of promising high-tech candidates for the pot's largesse. To bend the arc of progress European politicians need to grab onto something.

Bartleby Juggling act

There is no magic formula for management success

A IRPORT BOOKSHOPS teem with guides that promise to teach executives the secrets of success. Read this tome, follow this philosophy, change your habits and you, too, can be a management titan. As a moment's reflection on business history demonstrates, there is no sure-fire route to glory. Instead, running a company is a permanent exercise in juggling tradeoffs. What is the right course of action may vary at different times, and in different industries.

Take, for example, the pace of expansion. The fashion is for "upscaling"—creating a business model that can dominate its niche within a few years. This model's turbocharged version, "blitzscaling", is beloved of venture capitalists who dream of recreating the "network effects" that fuelled the rise of Google and Facebook. That is, in part, because most venture investments fail and a few big successes are needed to make up for all the duds.

From the point of view of the entrepreneur, however, upscaling may well be a mistake. For a start, not all businesses are subject to network effects. Second, by expanding too fast, companies risk losing control of product quality and messing up their management structure. Building a business is like running a marathon, and few people win a long-distance race by setting off like Usain Bolt. The first Walmart store was opened in 1962 and it took another six years before the retail chain expanded outside its home state of Arkansas.

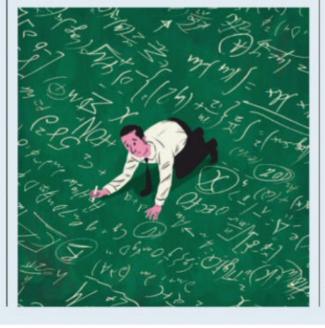
The fashion for upscaling means that companies are encouraged to get their product to market as quickly as possible. The theory is that customers get a roughand-ready prototype at the start, which is improved over time. This may work for smartphone apps, which are easy to

update, but not for most other products, where a reputation for shoddiness may be impossible to shake off.

In his book on financial frauds, "Lying for Money", Dan Davies, a former financial regulator, explains how companies must balance the goals of cost, quality and customer satisfaction. Focus too narrowly on cost and the quality of goods may suffer; concentrate on quality and costs will rise. Try to ensure both and the business may become so obsessed with its own production processes that it ignores customer needs.

Another trade-off is between centralisation and delegation. Early Victorian businesses resembled the army: generals (executives) handing down instructions to non-commissioned officers (foremen and overseers) who in turn directed the foot soldiers (workers). This hierarchical structure was devised for a world in which employees were required to follow a clear set of instructions.

As businesses became more sophisticated in the 20th century, organisations became much more elaborate. Companies



were split into divisions by geography and product type. Middle managers took charge of functions such as marketing and finance. Eventually, though, businesses started to view these structures as expensive and overly bureaucratic.

In the past 20 years or so management layers have been stripped away. A flat structure, with delegated decision-making, seemed more appropriate for a service-based economy. The idea of "agile" management, in which workers are frequently reassigned to multidisciplinary teams, is all the rage.

But this trend can likewise go too far. When power is dispersed, the result can be a confused mess. Some firms may conclude they are better off under centralised command.

The last trade-off is between focus and diversification. The relegation of General Electric from the Dow Jones industrial average last year seemed like another nail in the coffin of the industrial conglomerate. Institutional investors can diversify their portfolios by investing in a range of sectors; they do not need a conglomerate to do it for them. Yet cash-rich tech giants are similarly buying promising startups, often with no obvious relation to their core business (think of Google's purchase of Nest, which makes thermostats).

At some point the growth prospects of even the best products falter. For businesses to survive, they must find new things or services to sell. Choosing the right time to expand and diversify, and the right organisational structure to do it, is a matter of judgment. That judgment, and the flexibility to change plans, is what makes a good manager. It cannot be reduced to an in-flight read.

Economist.com/blogs/bartleby

Orsted

Tailwinds

ESBIERG

The once-dirty energy company behind the global boom in offshore windpower

Thirty kilometres off the coast of Denmark, in the dark, churning North Sea, 91 white turbines slice through the air. The Scandinavian country is the birthplace of the offshore-wind industry. In 1991 the world's first such electricity generators were erected there and, 11 years later, the first large-scale offshore wind farm, built with the help of a freighter previously employed to ferry bananas. On a recent gusty day, dangling above the waves, mechanics abseiled down the 40-metre-long blades for routine maintenance.

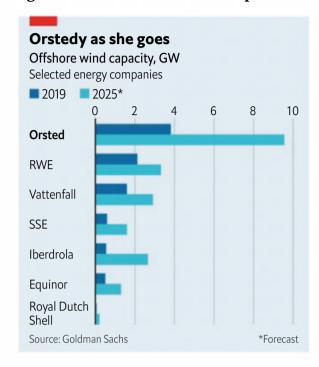
Such sights are rare in most of the world; offshore wind generates just 2% of global renewable power. In Denmark they are humdrum. Behind it all is a company that few know and fewer can pronounce.

Seven years ago Orsted ("ur-sted") was DONG Energy, Denmark's state-owned hotch-potch of coal and natural-gas plants, a few wind farms, oil production and more. Today the utility is the world's biggest offshore-wind developer, with a third of the market outside China. In 2018 offshore wind accounted for about 90% of Orsted's gross operating profit and 80% of capital employed. As fossil-fuel-dependent rivals grapple with concerns about climate change, Orsted has transformed itself into a darling of environmentalists and investors alike. Its share price has doubled in the past two years. Around the world the Danish success story is being studied closely.

Orsted's strategic shift was spurred by



Not at all quixotic



crisis. When Henrik Poulsen became DONG's boss in 2012, gas and coal power plants were ailing. The division which drilled for oil and gas operated in dwindling North Sea fields. "The one business where we had some true differentiation", Mr Poulsen recalls thinking, "was wind."

He set about shedding fossil-fuel assets and in 2013 sold an 18% stake to Goldman Sachs, a bank, for \$1.2bn to help finance investment in wind. DONG's initial public offering in 2016 was that year's second-biggest anywhere. Denmark's government retained control through a 50.1% stake. But in other ways, the company had changed. To emphasise the metamorphosis, it renamed itself after Hans Christian Orsted, the Danish discoverer of electromagnetism. (Plus, as its advert at the time quipped, "when you hear 'DONG' your first thought isn't green energy.")

The bet on offshore wind is paying off. Although it remains a pricier way to generate electricity than onshore wind or solar power, its costs, at €62 (\$69) per megawatthour in Europe, are less than half what they were in 2012. Unlike solar panels, it works at night. Unlike wind turbines on land, it raises few NIMBYist hackles. Bernstein, a research firm, forecasts that the offshore-wind market will grow at 17% a year to 2030, about twice as fast as onshore wind.

The Danish firm got a head start by winning early contracts in Britain, which was offering rich subsidies. Britain's introduction of auctions in 2014 made companies more cost-conscious. Like rival wind developers, Orsted now uses bigger turbines,

which are cheaper to build and maintain than a larger number of small ones (and uses purpose-built vessels, not banana freighters). But its focus on wind lets it seek out potential projects years before its generalist rivals, says Deepa Venkateswaran of Bernstein. The decision to manage projects closely and rely less on contractors helps contain costs. Data from 1,150 turbines across Europe help further optimise operations and allow the firm to design new projects more efficiently, adds Peter Bisztyga of Bank of America Merrill Lynch. Orsted expects a return on capital employed to average 10% in the next few years, about what big oil companies manage.

It may be a creature of northern Europe, with dilled cucumber snacks at its Scandinavian-chic offices, but the company has global ambitions, surveying the world's open water as hungrily as a property magnate would Manhattan lots. Mr Poulsen thinks Orsted's worldwide capacity will nearly triple by 2025. It has already secured the right to build 3.8 gigawatts along American and Taiwanese coasts, with local partners. It is starting to invest in onshore wind and solar, which will remain larger markets than offshore wind.

Not everything has gone smoothly. The sale to Goldman was so controversial it helped fell Denmark's prime minister (in October 2017 Goldman said it would sell all its remaining shares). Amid uncertainty about the effects of America's shale boom, it took until 2017 for Orsted to offload its oil-and-gas business. Although the firm plans to phase out coal by 2023, it still runs some fossil-fuel power stations. Hans Christian's descendants sued (unsuccessfully) over the name. Denmark's government has objected to Mr Poulsen's effort to sell a power-distribution business, which would boost payouts for shareholders.

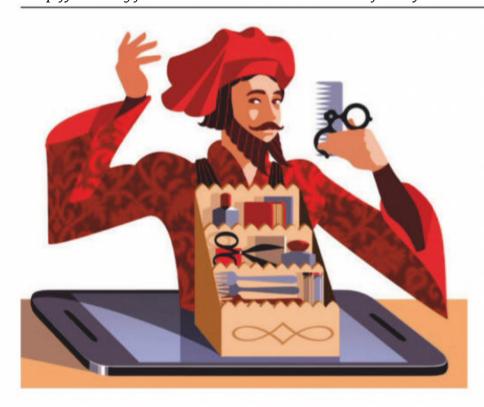
Global expansion brings new risks. Wind farms are now of a scale that, when a problem occurs, as it did when an outage at an Orsted wind farm off the coast of Yorkshire contributed to a blackout in Britain on August 9th, the world notices. Governments may unexpectedly change their terms, as Taiwan's did this year.

Most important, Orsted faces stiffer competition. Equinor and Royal Dutch Shell, two European energy giants with six and 32 times its revenues, respectively, want to set offshore turbines atwirl. RWE, a German power company that is now the Danes' closest rival, is buying the renewables assets of two other utilities. Macquarie, a bank, is among the heavyweights taking stakes in wind farms, providing capital that fuels more competition.

Analysts reckon that Orsted can hold its own even against the likes of Shell, which it recently beat in American tenders. If not for Denmark's controlling stake, the oil giant might well be trying to buy it.

Schumpeter | The return of the merchant class

Shopify is doing for sellers what Amazon has done for buyers



FOR A CLASS of businessman that has been out of fashion for hundreds of years, the word merchant still has a ring to it. It conjures up medieval Europe, with its mercers, skinners, haberdashers, guilds and gold-buttoned liveries. It brings to mind ambitious venturers, bankrolling crusades and conquests, opening up spice routes and making history—for good and ill. It runs through literature and art, from Chaucer to Shakespeare to Holbein. Then it practically vanishes, first under the iron wheels of industrialisation in the 19th century, then crushed by consumer culture in the 20th. Until recently, the few merchants left sold only grain—or doom. Then came the e-commerce era. At last, merchants are staging a comeback.

Many of today's e-merchants sell in a digital marketplace, akin to a medieval town square. That mostly means Amazon, which handles almost half of American online sales on behalf of 1.9m suppliers. Its reputation for providing support to sellers is iffy. But it compensates by offering them an endless stream of customers, including 100m Prime subscribers who buy frequently and enjoy free, speedy delivery. That persuades sellers to put up with a lot.

Some online retailers, however, prefer to strike out on their own, like the craftsmen of old. They are developing "microbrands" they peddle themselves, handling payment, delivery and other customer relationships. But they can use assistance, of the sort that the guilds of yore offered their predecessors. Enter Shopify, a Canadian software firm whose value has rocketed by 180% in the past year, to \$45bn, eclipsing eBay, a better-known veteran of ecommerce. It is a mite compared with Amazon, valued at \$87obn. Nonetheless, the Seattle-based giant has reason to look over its shoulder at the upstart tearaway in Ottawa. For Amazon excels at making consumers cheerful. Shopify, by contrast, is focused squarely on its merchants.

The company came about by accident. Its boss, Tobi Lütke, epitomised the new breed of digital merchants when he set out, with friends, to build an online snowboard shop, Snowdevil, in 2004. At the time, selling online meant one of a few things. You could spend a small fortune, either on developing your own sales channel or paying someone like IBM to build one for you, which only deeppocketed firms could afford. Alternatively, you could rely on Ama-

zon, sacrifice part of your margins and, with your product being delivered in Amazon's boxes, cede control over your relations with the customer. Worse still, you risked being elbowed out if it created its own version of your wares.

Instead, Mr Lütke built his own platform. Within two years he had switched from selling snowboards to software. In the process Shopify glided stealthily into the e-commerce big leagues without going head to head with Amazon, as Walmart, Target and other big retailers have done, sometimes with soul-sapping results. Its success has put further strain on bricks-and-mortar shops, which were already dying in droves.

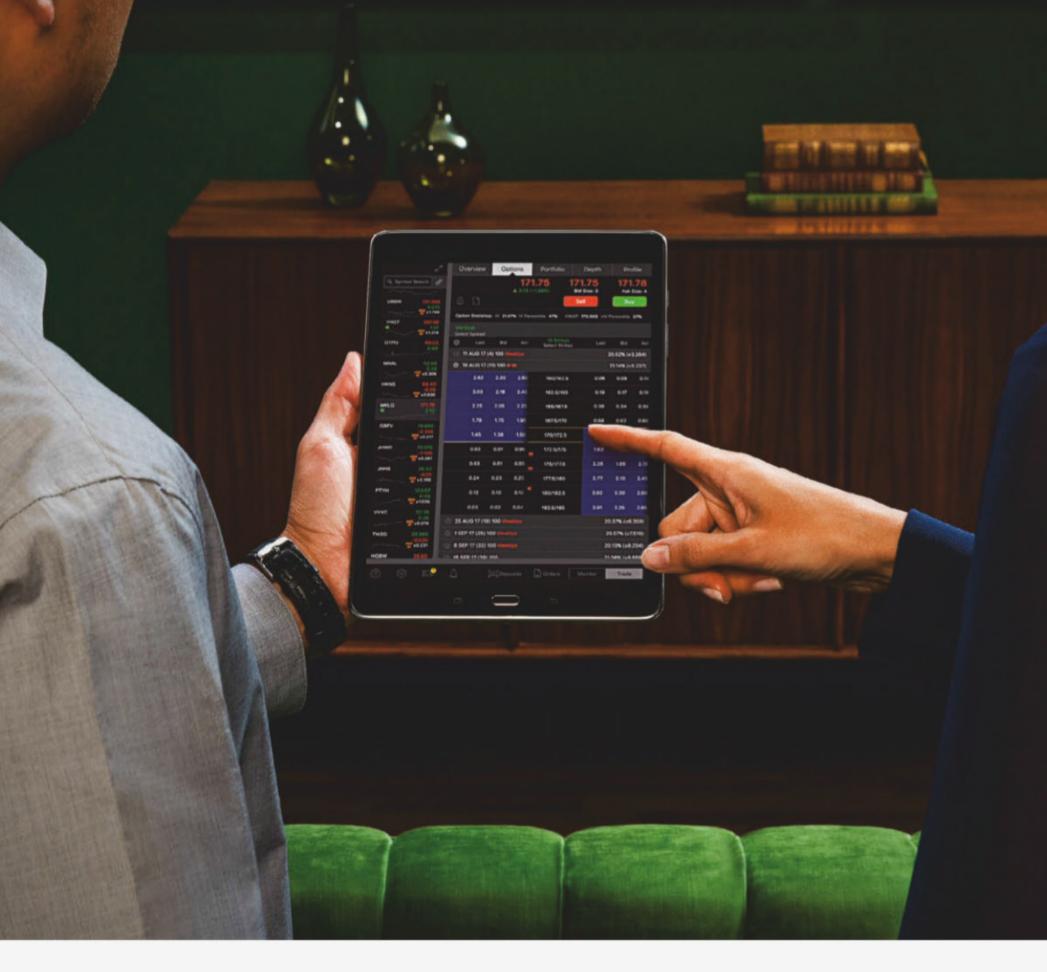
Unlike Amazon, Shopify keeps out of the relationship between merchants and their customers. To the buyers, it is invisible. To the sellers, who flogged \$41bn-worth of stuff on its platform last year, it can be indispensable. They range from fashionistas of the Kardashian clan, mattress sellers, gym-wear specialists and Canadian marijuana growers to venerable brands such as Lay's potato chips (owned by PepsiCo). Some have grown with Shopify from scratch to selling billions of dollars of merchandise. No wonder Mr Lütke shares a Schumpetarian reverence for entrepreneurs.

Shopify's "software as a service" business is cheap to scale up. It says it is America's third-largest online retailer by volume of goods sold after Amazon and eBay. It generates high margins and recurring revenue from merchants, who pay a monthly fee for the software, based on their sales. On top of that, Shopify collects fees for helping run each stage of their e-commerce business, from designing an online store and advertising on social-media sites such as Instagram to processing payments and arranging logistics. This is the fastest-growing part of its business, though it is less profitable than selling software subscriptions.

As it expands, Shopify is using its clout to secure better terms for advertising on social media, financing and payments for its clients. It is also adapting as e-commerce rapidly changes. To reach more shoppers, e-merchants are building bricks-and-mortar stores. They are using e-commerce to buy from wholesalers. Shopify has used small acquisitions, like a recent purchase of Handshake, a platform for business-to-business e-commerce, to keep up with these trends. In June it said it would offer merchants warehousing and shipping in America using third-party firms that guarantee two-day delivery. This is partly in order to prevent customers from migrating to Amazon Prime. For the most part, it has wisely avoided throwing down the gauntlet directly to Amazon.

The Hanseatic e-League

A longer-term challenge is to overcome its focus on the Englishspeaking world, where about three-quarters of its clients are based. As with the merchants of old, the biggest opportunities lie in faraway lands, especially Asia. To get a toehold, Shopify has enabled 17 languages on its platform besides English, including several Asian ones. But it faces stiff competition. Asia's biggest markets are already in the grip of giants such as Alibaba in China, Amazon and Walmart in India, and local firms in South-East Asia. In poorer countries trust in e-commerce remains fragile, making it hard to sell directly to consumers. Yet as Harley Finkelstein, Shopify's chief operating officer, notes, in the early days of e-commerce, when people recoiled at handing over their credit-card details, trust was lacking in the West, too. In their heyday members of the merchant class were considered grubby hucksters—at least by Europe's medieval nobility and clergy. That did not stop them then. And, if you take Mr Lütke's word for it, it won't stop them now. ■



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Finance & economics



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India's economy

Meagre fare

DELHI

Narendra Modi's government is scrambling to spice up growth

FOR DECADES Kwality restaurant has served spiced chickpeas and fried flatbreads to traditionalists and tourists amid the colonnades of central Delhi. One prominent fan was Arun Jaitley, a former finance minister and foodie, who would drop in for an impromptu lunch when parliament was disrupted. It is fitting, therefore, that Kwality's wood-panelled shelves hold bound copies of *Excise Law Times*, a journal about some of the country's Byzantine taxes.

When Mr Jaitley died on August 24th after a long period of ill-health, the great and good from across India's fierce political divides joined in praising his intellect and civility. But the economy he presided over for most of Narendra Modi's first term as prime minister has shown no such sense of decorum. Figures due on August 30th are expected to show growth of less than 6% year-on-year for the second quarter in a row. India has not had such a poor run since early 2013 (see chart on next page), during a period of policy paralysis that helped destroy the previous government.

In the years since, economists have waited with growing exasperation for investment spending to stage a decisive recovery. The capital-expenditure cycle has always been about to turn, without ever quite doing so. And now consumer spending has faltered. Car sales plummeted by over 30% in the year to July, the fastest drop in 19 years. Nor were small-ticket items spared. Parle, the country's largest biscuitmaker, has warned that it may have to lay off up to 10,000 people thanks to poor demand. Its rival, Britannia, complains that rural consumers are hesitating to buy even a five-rupee (\$0.07) packet of biscuits.

During Mr Modi's first term, investors also waited anxiously for India's banks to recover from the reckless lending of the boom years before 2012. But just as their non-performing assets began to fall (from over 11% of the total in March 2018 to 9.3% a year later), trouble befell another group of lenders, non-bank financial companies (NBFCS). These raise money from the capital markets, among other sources, and lend

it to households and companies ill-served by deposit-taking banks.

A year ago Infrastructure Leasing and Financial Services, a sprawling, strongly rated NBFC with 348 subsidiaries, defaulted. That spread alarm through the financial system. Other lenders found it harder to roll over the short-term debt with which they had financed their rapid growth. Dewan Housing Finance Corporation, which lent to homebuyers and property developers, defaulted in June, complaining that it could not raise fresh funding after its credit rating fell. "Illiquidity is turning into insolvency," said Rajiv Kumar, head of NITI Aayog, a government think-tank, at a recent conference. "The entire financial sector is in a churn and nobody is trusting anybody else."

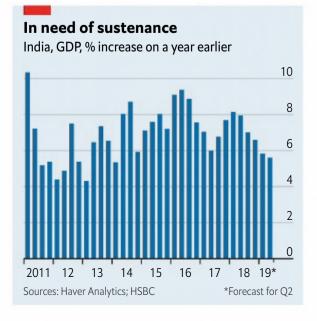
This financial churn has exacerbated the economic slowdown. Notably, it has interrupted the flow of credit to carbuyers. But some economists think the problems run deeper. Goldman Sachs, for example, traces the deceleration back to the start of 2018 or even earlier. Mr Jaitley's signature achievement as finance minister may bear part of the blame. His negotiating nous helped secure the introduction of the Goods and Services Tax, a levy on consumption, in 2017 (forcing a companion journal to Excise Law Times to change its name to GST Law Times). Intended as a radical tax simplification, it has proved complex and cumbersome in practice. The bis->> Let cuit-makers blame it for putting off customers. Small companies complain about long waits for refunds of the GST they pay on their inputs.

The government has been slow to acknowledge the severity of the slowdown. The July budget, which imposed a higher tax (or "enhanced surcharge") on foreign investors, was not calculated to revive animal spirits. When the stockmarket subsequently dropped, Nirmala Sitharaman, Mr Jaitley's successor as finance minister, said she did not let it "affect her calms".

Perhaps sensing that this lack of alarm was having the opposite effect on everyone else, the government has unveiled a plethora of measures intended to revive the economy. It relaxed a local-sourcing requirement for foreign retail brands like Apple and IKEA. It unenhanced the foreign-investor surcharge and removed an "angel tax" on the funds raised by startup firms. It will try to revive the car industry by buying more vehicles for its departments. It will urge public-sector enterprises to pay suppliers more punctually and cough up GST refunds within 30 days.

To help non-bank lenders, it will enable them to offload more of their assets by guaranteeing a greater quantity of loans that are bundled into securities and sold. Its National Housing Bank will give extra support to illiquid housing lenders. Aided by the handover of 1.7trn rupees (\$24bn) in profits and excess capital from the central bank (see next story), it will also hasten to inject a previously announced sum of 700bn rupees of fresh capital into public-sector banks. That would, according to \$&P Global Ratings, be "sufficient for now".

The response was piecemeal, lacking a grand plan, strategic vision or large-scale mobilisation of public money. But for now, corporate India will settle for a government that has belatedly seen fit to respond to its complaints. In terms Mr Jaitley might have appreciated, this was not a slow-cooked feast that anyone would savour, but a *thali*, a platter of mixed dishes, offered in the hope of keeping everyone going.



The RBI's reserves

Ravaged Bank of India?

DELHI

Central-bank capital matters only because people think it does

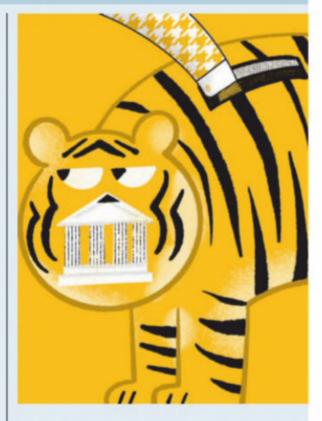
Most central banks occupy impressive premises in expensive parts of town. Few begrudge them this perk. Nice digs seem only fitting for the guardians of the nation's currency, giving them a reassuring air of gravitas and permanence. But is grand architecture necessary for central banks to perform their functions? Is there any economic justification for it? The honest answer is no.

What is true of central-bank architecture is also true of central-bank capital. Most such institutions have reassuring balance-sheets. Their assets, which usually comprise safe government securities, comfortably exceed their liabilities, which are chiefly the banknotes they issue and the deposits held with them by commercial banks. The assets of the Reserve Bank of India (RBI), for example, exceed its liabilities by over 9trn rupees (\$125bn), of which about 2.7trn rupees is ready to hand.

This balance-sheet is a source of pride, allowing the institution to feel financially independent. Thus when Narendra Modi's government began to argue that it was too lavishly capitalised, the RBI was displeased. And when the finance ministry concluded last year that it should give some of its excess capital to the government, which was keen to shore up public-sector commercial banks, the RBI resisted. The tussle was one reason why Urjit Patel, then its governor, resigned.

The central bank asked Bimal Jalan, a former governor, to consider the issue further. This week his committee recommended that the RBI reduce its risk buffer to 5.5-6.5% of its balance-sheet. Now under more pliant leadership, it promptly reduced the buffer to the bottom of that range, enabling it to hand over 526bn rupees in addition to a bumper dividend of over 1.2trn rupees. Rahul Gandhi, an opposition leader, accused the government of stealing from the RBI. A former minister said the institution had been left no room to intervene in a crisis. Another critic said Mr Modi had "converted the R in RBI from 'Reserve' to 'Ravaged'".

Lost amid this political controversy was the deeper economic question of whether central banks need capital at all. They cannot go bust. Their liabilities are the money they issue. But that money is simply a promise to pay money. Their creditors already hold the thing they are



owed. Central banks' assets are also peculiar. The principal one is their licence to print money that people will accept in exchange for real resources. This right to earn seigniorage, as it is called, is worth a lot, even if their moneyprinting is constrained by the need to keep inflation in check.

Mr Jalan's committee argues that central banks do need strong financial positions to carry out their business. But its justifications mostly boil down to perceptions: central-bank capital matters because people think it does. That can include central bankers. If a central bank fears negative equity, it may sacrifice other macroeconomic goals to protect its financial position. But if this phobia distorts their work, perhaps they should work harder to shed their fear.

Several central banks have functioned well for years with liabilities that greatly exceed their assets. Often they have accumulated large stocks of foreignexchange reserves, which fall in value relative to their domestic currency when it appreciates. In these cases, then, the central bank suffers capital losses because of growing, not diminishing, confidence in its money. Take the Bank of Thailand (BOT). It says emphatically in its financial statements that its "accumulated loss has no impact on the continued operation of the BOT". And indeed inflation in Thailand is less than 1%. Perhaps it helps that the BOT's handsome premises are valued at over \$200m.

Trade

Fog of war

WASHINGTON, DC

Donald Trump's trade battles show no signs of ending

THINK IT was necessary," said President Donald Trump of the "rough patch" the world economy has been going through as a consequence of his shake-up of the global trade regime. His comments came on August 26th, towards the end of the G7 meeting of rich-world leaders in Biarritz, France, and a particularly bumpy series of trade announcements. There is still plenty of turbulence ahead.

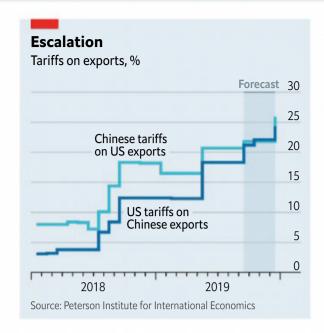
The drama started on August 23rd, when the Chinese government announced its plans for retaliation in response to an earlier tranche of American tariffs. China's average tariff on imports from America (weighted to match America's global exports in 2017) will rise from 20.7% to 21.8% on September 1st, and to 25.9% on December 15th (see chart), by which time 69% of America's exports to China will be affected.

Aircraft, integrated circuits and pharmaceuticals were spared, perhaps in recognition that tariffs on those would hurt China more. But previously announced tariffs on cars and car parts that had been suspended as a goodwill gesture are now to come into force in December.

Hours later, Mr Trump hit back, accusing China of being "politically motivated" (as if he was not). He announced countertariffs of an extra five percentage points on over \$500bn of imports from China. By the end of the year American tariffs on Chinese goods, on a weighted average, will be 24.3%, up from 3.1% before Mr Trump's trade conflict began. Ominously, he tweeted a reference to the International Emergency Economic Powers Act of 1977, saying he could use it to go much further. As its name suggests, this law grants the president sweeping powers. Bill Clinton used it in 1997 to ban all transactions, including trade, with Sudan.

America's stockmarket reeled. Chinese officials boasted that they now had the upper hand, citing the sell-off as evidence that America's trade war was a type of self-harm. But the Chinese government seemed desirous of limiting the fallout. Domestic media barely mentioned a tweet by Mr Trump in which he called the Chinese president, Xi Jinping, an "enemy".

Over the next couple of days Mr Trump softened his rhetoric, emphasising "meaningful talks" with China. He trumpeted progress towards a trade deal with Japan, which negotiators hope to seal in September. Robert Lighthizer, the United States



Trade Representative, said it would cover industrial tariffs, digital trade and agriculture. The element that seemed to excite Mr Trump most was a Japanese promise to encourage firms to buy American corn.

Trade tensions with the European Union also eased a little. A French tax on digi-

tal services, imposed in July, had triggered an investigation into whether American businesses were being unduly burdened. Mr Trump had threatened retaliatory tariffs on French wine. But officials hashed out a deal to avoid tit-for-tat measures, in which the French reiterated that they would remove the tax once a multilateral equivalent had been agreed and was in place, and added that they would refund companies any difference between the unilateral measure and any eventual replacement.

Mr Trump is likely to take away from his hectic week the message that he has more leverage to reshape trade than his critics claim. Details of what was agreed during the G7 weekend are scant, but it seems that the Japanese and French both gave ground under the threat of American tariffs. It would be wrong, though, to infer that the Chinese will also do so, not least because what America is demanding of them is vastly greater. Moreover, for all Mr Trump's sporadic boasts of being dealmaker-inchief, his truces tend to be temporary.

Blue-collar workers

Reflecting back

SHANGHA

An American documentary about labour rights strikes a chord in China

The comments came in thick and fast on Douban, a social network popular with film buffs and bookworms. More appeared on Weibo, a microblogging website, where the hashtag #American-Factory has gained more than 16m views. The documentary of that name, by a film-making couple from Ohio, was released on August 21st on Netflix. The American firm's streaming service is not available in China, but pirated copies of the film have proliferated. Strikingly, it has drawn praise—even as the Sino-American trade war stokes nationalist feelings within China.

That reception is partly a testament to the faultlessly balanced take of "American Factory", shaped by 1,200 hours of rare footage. Much was shot inside a plant in Dayton, Ohio, which was taken over in 2014 by Fuyao, a Chinese glassmaking giant that supplies the global car industry. In 2008 General Motors had closed its complex there, so for jobless local people Fuyao's arrival was a miracle. Before long, however, Stakhanovite bosses clashed with a restive and outspoken factory floor. The film is a parable of modern manufacturing, showing the strengths and weaknesses of each country. For Chinese viewers, the failings of theirs hit home.

"It was hard to watch," wrote a user on Douban. "Who does not know that Chinese efficiency is driven by depriving workers living at the bottom of society of their health, safety and dignity?" Another comment came from the city of Fuqing, Fuyao's base, to which American managers are taken to be trained in Chinese factory-floor culture (they are alarmed to see workers crouched on mountains of shards, sorting them for recycling, and bewildered by the militaristic morning roll-calls and 12-hour shifts). "The scariest thing is that we have grown used to this," wrote the native of Fuqing, pondering whether to feel pride or sorrow at management methods like Fuyao's.

Young Chinese have begun to resist them. Earlier this year engineers in the cut-throat technology industry led a rare online labour movement to protest against the "996" regime (a de facto work schedule of 9am to 9pm, six days a week, often without extra pay for those extra hours). Last year students and activists joined protests by factory workers at Jasic, a maker of welding machinery in Shenzhen.

Their gripes were poor working conditions and firings after some had tried to unionise—something that in America Fuyao fought tooth and nail, and successfully, to block. "American Factory" depicts a collision between two working cultures. But worries about the plight of blue-collar workers unite them.

China's economy

The other inversion

SHANGHAI

Officials are calm as growth slows. Are they complacent?

Half A Decade ago, if you had asked economists which number—five or seven—described China's GDP and which its currency, most would have answered this way: growth will remain strong at around 7% annually, and the currency will strengthen until it takes just five yuan and change to buy a dollar. One measure of the impact of Donald Trump's trade war on China is the inversion of these digits. As American tariffs bite, economic forecasters think that Chinese growth next year will slow to five-point-something percent. The yuan, for its part, has slumped to more than seven per dollar.

Mr Trump has crowed about the success of his tactics. "China has taken a very hard hit," he said on August 26th at a news conference after the G7 summit in France. "They want to make a deal very badly." But a more accurate reading of China's policy stance is one of surprising calm in the face of the economic slowdown and, by extension, of stiffer resolve in the trade dispute.

The toll of tariffs on China's economy is becoming more visible. Although exports to America account for just a small share of overall GDP, the uncertainty has bruised corporate confidence. Investment spending is on track to increase this year at its weakest pace in at least two decades. Factory prices have veered into deflation, a bad sign for industrial profits. Economists at Morgan Stanley, a bank, now forecast that Chinese growth will fall to 5.8% next year; previously they had expected 6.3%.

In the past, whenever growth looked set to slow sharply, Chinese companies could count on a stimulus package to revive it. But this time officials have been much more restrained in their response, partly because of concern about adding to China's hefty debt burden. On August 26th the central bank had a chance to lower funding costs for banks, but it refrained, bucking the global trend towards lower rates. On August 27th the State Council, or cabinet, issued an underwhelming 20-point plan to promote consumption. Some analysts had been hoping for targeted tax cuts or subsidies; instead, it made small-bore promises. such as more 24-hour convenience stores.

The Chinese government's lack of panic about the economic outlook should give Mr Trump pause. "Its leadership now looks committed to a strategy of toughing out trade tensions," says Andrew Batson of Gavekal, a research firm. It helps that China

has procured insurance in letting its exchange rate decline to 7.1 yuan per dollar, the weakest since 2008, offsetting some of the drag from tariffs.

But some think the calm is verging on complacency. Not only has China's government refrained from stimulus, but it has become more hawkish about the property sector, the engine of its economy. In line with President Xi Jinping's oft-repeated warning that investors should not speculate on housing, regulators have curtailed lending to developers and sworn off cutting mortgage rates. "We would view stabilising growth by choking credit to the property sector as analogous to performing cardiac surgery without blood pumps, oxygen and anaesthesia," says Lu Ting, an economist with Nomura, a bank. In other words, things could get ugly. ■

Ebola in Congo

Sick notes

KAMPALA

The World Bank's pandemic bonds are not helping the fight against Ebola

THE EBOLA outbreak in west Africa in 2014-16 was the worst in history, with nearly 30,000 cases and a death toll of more than 11,000. It exposed a flaw in funding mechanisms to tackle such health emergencies: by the time money arrives the disease has already spread. So to speed things up the World Bank created "pandemic



No clean bill of health

bonds", a type of insurance scheme. In 2017 they were sold to private investors, who would lose their money if any of six deadly pandemics hit. In the event of Ebola, up to \$150m would be released to affected countries' governments, and agencies such as the World Health Organisation, to be used to fight the outbreak.

Last year Ebola struck the Democratic Republic of Congo. It has already killed nearly 2,000 people. But the scheme has not paid out. The 386-page bond prospectus contains a clause making payout conditional on the disease spreading to a second country, with at least 20 people dying there. Ebola has indeed spread, to neighbouring Uganda. But it has killed just three people there, with no new cases since June.

Investors, including pension funds and asset managers, had bought \$320m of the bonds in a deal that was heavily oversubscribed. The notes covering Ebola give them an annual coupon of 11.5 percentage points above LIBOR, a benchmark interest rate. The World Bank, with contributions from Japan and Germany, has already spent \$87m on coupon payments, swap premiums and fees. Unless the outbreak worsens, investors will get their money back when the bonds mature next year.

If the insurance had been designed to cover all severe outbreaks it would have been "prohibitively expensive", says Mukesh Chawla, who co-ordinates the World Bank's pandemic emergency-financing facility. As well as the bond proceeds, the institution holds a smaller pot of money, which can be disbursed at the discretion of experts. It has already allocated \$50m from this to tackling the Ebola outbreak, alongside \$350m from other sources.

It is inevitably hard to design insurance for rare events. Indeed, says Andrew Farlow of Oxford University, it may be impossible to set triggers so that the bonds deliver when needed, at the same time as providing the returns that investors demand. Before the World Bank issued its bonds, consultants ran a computer simulation of half a million outbreaks of filoviruses (a group of viruses that includes Ebola). But pandemics are even harder to model than natural disasters such as hurricanes, for which a market in "catastrophe bonds" is well established.

In all insurance contracts the cost of cover exceeds the expected payout (otherwise insurers would go bust). For pandemic bonds and related swaps this risk premium is about \$17m a year. That money would be better spent on public-health systems and surveillance to try to catch outbreaks earlier, says Olga Jonas, a fellow at the Harvard Global Health Institute who has previously worked on risk-financing at the World Bank. In Uganda, vigilance stopped Ebola from spreading. That saved lives, as well as investors' millions.

Germany's negative interest rates

Dear prudence

Politicians hope championing savers and chiding banks will win votes

Save our savings, Frau Merkel!" begged Bild, a German tabloid, on August 26th. Articles blaming the European Central Bank (ECB) for keeping interest rates low, and seeking reassurances from banks that thrifty Germans will be spared Strafzinsen, or negative "penalty rates", are proliferating. One in Die Welt in July feared that ECB stimulus would lead to the "ultimate expropriation" of the German saver.

German hostility to low interest rates is hardly surprising. The value of thrift has deep roots in the national psyche, going back to the Reformation. Households have €2.4trn (\$2.6trn) stashed in bank deposits, almost as much as those in France and Italy combined. Last year they squirrelled away a tenth of their disposable income, twice the savings rate of Britons.

With markets pricing in a further cut at the ECB's policy meeting on September 12th, the opposition in Germany is getting louder. Politicians spy a bandwagon. On August 21st Markus Söder, Bavaria's premier, said his party would propose legislation to ban negative interest rates on retail deposits of less than €100,000. Olaf Scholz, the federal finance minister, has asked officials to look into the practicalities.

The ECB and its German critics have clashed before. Indeed, a lawsuit claiming that the bank's quantitative-easing scheme overstepped its legal mandate is making its way through Germany's constitutional court. But it is unusual for the finance ministry to tread on monetary-policy turf. It seems particularly so as Germany's economy teeters on the brink of recession.

With unemployment at a record low and wages rising, though, Germans feel little need for stimulus just vet, says Marcel Fratzscher, the head of DIW, a think-tank. He sees the politicians' proposals as "purely populist". Regional elections are looming, so it pays to curry favour with savers.

And for all the sound and fury, negative rates for retail depositors appear some way off. The central bank's deposit rate is -0.4%, meaning that rather than paying interest on the reserves kept with it by lenders, it charges to hold them. Some banks have passed those negative rates on to corporate clients, and a smaller fraction have done so to wealthy retail clients, many of whom appear reluctant to move their money elsewhere, even when squeezed. But Vítor Constâncio, a former ECB official, told Der Spiegel he doubted whether banks would

Covered

The Pfandbrief turns 250

N 1769 THE noble landowners of Sile $oldsymbol{1}$ sia—then in Prussia, now in Poland– were short of cash. War and plummeting farm output had left their mark. On August 29th the king stepped in. Frederick the Great issued an order establishing a Landschaft, or landowners' co-operative. That allowed the hard-up nobles to issue, in 1770, the first Pfandbrief: a tradable bond, secured on individual properties and the assets of the whole Landschaft. The first investors, write Fritz Engelhard of Barclays, a bank, and Friederike Sattler of Goethe University in Frankfurt in a book* marking the Pfandbrief's 250th birthday, included merchants, royal houses and the churches.

The *Pfandbrief*, or covered bond, became a mainstay of German finance, in particular the mortgage market. Over



He made it easier in Silesia

time the landowners' individual liability to bondholders ended. They were liable to their Landschaften, which in turn were liable to investors. In the 19th century *Pfandbriefe* came to be issued by specialised mortgage banks, which backed the bonds with housing loans. In the late 1800s building, banks and bonds boomed. Banks inevitably lent too freely and some investors lost money. A legal overhaul of *Pfandbriefe* ensued in 1899.

These days 82 German banks issue Pfandbriefe, up from 40-odd in 2005, when the market was loosened. Last year €50.4bn-worth (\$59.5bn) of bonds were issued, according to the Association of German Pfandbrief Banks (VDP), up a bit from 2017. Of these, €43.2bn were backed by mortgages, a 17% jump. Public-sector bonds made up the rest, but these have dwindled in recent years. In the first half of 2019, €34.9bn of *Pfandbriefe* were sold. Over €365bn-worth are outstanding, €237bn mortgage-backed. That is around 12% of the entire German bond market (government bonds make up half).

Several other countries, chiefly in Europe but also in Asia, have their own covered bonds. (Denmark's market is the world's biggest, at around €400bn.) Unlike most American mortgages, the underlying loans stay on issuing banks' balance-sheets. That, plus strict collateralisation rules and safeguards for bondholders if banks go bust, makes covered bonds safer bets than American mortgage-backed securities, according to the bonds' boosters. A European Union directive this year set out a common framework, as part of the EU's efforts to create a single capital market. That may increase the attractions of Frederick's ancient instrument.

offer negative interest rates for ordinary retail depositors. That might be because those customers are bigger flight risks.

Banks themselves detest negative rates, which reduce the amount they can earn from interest. The Association of German Banks (BDB) says lenders in Germany paid €2.3bn to the ECB last year, equivalent to nearly a tenth of profits for 2017. But it is also horrified by the prospect of the government setting a floor on retail interest rates. That could restrict banks' room for manoeuvre and, the BDB warns, cause financial disruption. (The ECB is considering

other ways to ease the squeeze on banks' interest margins, such as exempting some reserves from negative rates.)

The backlash may indicate that the ECB should be wary of the costs of cutting rates further. The risk is that depositors stash their savings under mattresses rather than in banks. Even so, the ECB can reasonably feel irked by the stance of German officials. As Mr Constâncio pointed out, the root cause of low interest rates in the euro area is an excess of saving over spending. Germans' obsession with frugality bears much of the blame.

^{* &}quot;Der Pfandbrief 1769-2019". Franz Steiner Verlag.

Brookfield Asset Management

Tower grab

NEW YORK

How a dowdy Canadian firm grew to take on Wall Street's private-equity titans

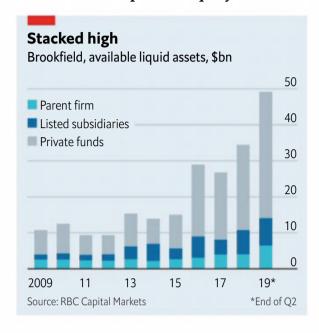
ON THE 67TH floor of One Manhattan West, a new glass tower in the island's drab south-west, construction managers survey the skyline. They are about to sign off on a feat of engineering. The 303-metre skyscraper is the tallest part of a \$5bn office, retail and residential project covering an area the size of 100 football fields. Resting on a huge concrete slab covering active rail tracks, the weight is carried by a column sitting on the sturdiest parts. The first tenants are due to move in within weeks.

One Manhattan West is the culmination of a decades-long bet by Brookfield Asset Management. The Canadian firm bought the land in 1996 as part of its swoop on Olympia and York, a bankrupt builder. The towers are an apt metaphor for its success in alternative asset management, investing in the likes of property, infrastructure and private equity. With \$388bn under management (debt included), it rivals Wall Street giants like Blackstone and Carlyle. Insiders reckon it can grow further.

Most buy-out giants were founded in recent decades by investment bankers. Brookfield, by contrast, started with São Paulo's tramway and power lines in 1899 and spent most of its history operating infrastructure and property projects in the Americas. By 1990 it was a conglomerate of "somewhat disparate assets", says Neil Downey of RBC Capital Markets, a bank, spanning beer, baseball, forests, mines and more. After it struggled during the recession of the early 1990s a team of executives that included Bruce Flatt, now the boss, narrowed the focus.

A decade later Brookfield started to invest third-party money. In the mid-2000s it began to raise private funds for property, infrastructure, private equity and renewables. It then listed its public funds on the New York Stock Exchange (it is listed in Amsterdam, New York and Toronto). The strategy took time to reap rewards. "Going into the financial crisis, it was a strong company. But it was relatively small," says David Hodes of Hodes Weill, a firm that helps funds find investors. Some investors were confused by its complex structure, with the parent firm, listed vehicles and private funds all hunting for deals.

But the crisis proved a boon. After several peers collapsed under debt built up during the boom years, Brookfield could draw on private and public capital to pick up the pieces. Experienced at turnarounds, it



snapped up at a discount projects others thought too troubled. It was also lucky with timing, Mr Flatt says. As central banks' bond-buying sprees hammered returns on the safest assets, the sorts of tangible, cashgenerating projects that Brookfield runs became popular with cautious investors like insurers and pension funds.

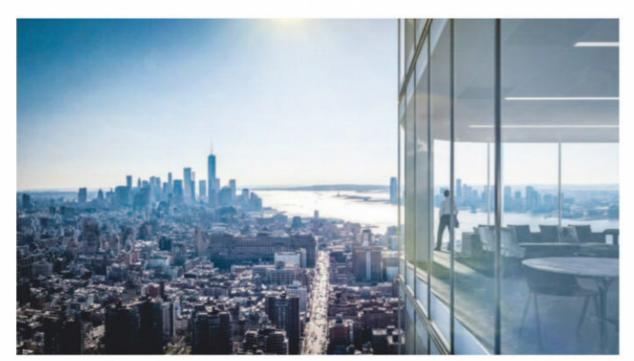
Investing other people's money is now its biggest business. It earns fees on \$164bn of third-party capital, four times as much as it invests from its balance-sheet. Sohrab Movahedi of BMO, a bank, reckons that will rise to \$276bn by 2021. More than 700 institutions back its private funds. Its investments span more than 30 countries and punctuate skylines in financial capitals including London, Sydney and Toronto. The retail space it owns would fill two New York

Midtowns. It runs 37 ports and more than 10,000km of rail tracks. Its renewables plants produce twice as much clean energy as green-minded Denmark.

Another recession could provide another boost. It has ample liquidity (see chart). Completion of its \$4.7bn acquisition of Oaktree Capital, a credit-investment firm, is imminent. That will cement its position as a one-stop shop for alternative assets, at a time when investors are seeking to consolidate their holdings. When growth fades it will be able to seek high rewards by buying the debt of ailing businesses, Oaktree's speciality. "When people panic they sell things too cheap," says Howard Marks, Oaktree's co-founder. "And when the environment settles down, prices tend to recover. It's a good way to make a living."

Could Brookfield be getting greedy? Like other buy-out firms, it is raising record amounts, leading some to worry that capital is coming in too fast to be spent without mistakes. And though Mr Flatt argues that Brookfield's size means it can gobble up assets that many rivals would find indigestible, there is the matter of eventually exiting these mega-projects, says Lincoln Webb of British Columbia Investment Management Corporation, a client of Brookfield's infrastructure franchise. Just as few can buy mega-projects, there might be limited takers when it comes to sell, should that coincide with poor conditions for initial public offerings.

Yet by private-equity standards Brookfield's funds have long durations, and the largest are nowhere near maturity. Its access to public equity also means it can be patient, as it was for the years it held the disused plot that is now home to One Manhattan West. And institutional investors in its funds with long-term liabilities may be keen to team up for the cash-yielding assets it will want to divest. As economic clouds gather, Brookfield's horizons look enviably clear.



I can see clearly now

Free exchange | Meeting of minds

President Donald Trump has helped bring the world's central bankers together



A S THE ANNUAL meeting of central bankers and economists at Jackson Hole, a mountain resort in Wyoming, began on August 23rd, two participants made a bet. Would President Donald Trump tweet about the opening remarks of Jerome Powell, the chairman of the Federal Reserve, within 45 minutes? In the event, it took the president 57 minutes. That night the victor enjoyed his winnings—a glass of whiskey—in the bar.

Mr Trump's words made the conference theme, "challenges for monetary policy", uncomfortably timely. He called Mr Powell an "enemy" and promised to ramp up trade tensions with China. Then he announced increases in tariff rates on over \$500bn of Chinese imports. But even as stockmarkets reeled, the conference continued serenely. Indeed, Mr Trump even brought the assembled economists and monetary policymakers closer together.

Most obviously, they were united in grumbling about the impact of his trade policy on the global economy. Philip Lowe, the governor of the Reserve Bank of Australia, said that business uncertainty was turning political shocks into economic ones. Mark Carney, the governor of the Bank of England, said that trade tensions had raised risk premiums, thus tightening financial conditions. The president's twitter tirade could lead to greater policy convergence, too. Mr Powell said that the Fed's doveish shift had helped secure a positive outlook for inflation and employment. As recently as December it was raising rates away from those set by other central banks; now it is moving downwards with them.

Participants also seemed united in scepticism that monetary policy could entirely offset the trade war's ill effects. It could help with confidence, said Mr Powell, but could not create a "settled rulebook for international trade". Mr Lowe questioned how much modest interest-rate cuts would stimulate investment, and noted that countries could not all pep up their economies with currency depreciation, as "we trade with one another, not with Mars".

The academic presentations revealed another point of sympathy. Mr Trump is a powerful force outside the Fed's control—one it cannot fully offset. In claiming to put America first, he complicates the Fed's task of keeping America's economy on an even keel. That difficulty is paralleled by how the Fed, in turn, complicates monetary policy in the rest of the world.

Mr Trump's power is expressed via social media. The Fed's is exerted via the dollar, which has become more important globally in the decade since the financial crisis. America accounts for just 15% of global GDP and 10% of global trade, yet the greenback is used for half of global trade invoicing, two-thirds of emerging-market external debt and two-thirds of official foreign-exchange reserves.

Fed policy thus has far-reaching effects. Participants at Jackson Hole referred to the work of Gita Gopinath of the IMF, which showed that the dollar's dominance in trade invoicing may stop economies from adjusting to external shocks by as much as traditional models suggest. They also heard about the findings of Arvind Krishnamurthy and Hanno Lustig of Stanford University, showing that when the Fed raises interest rates, the premium for buying the world's safest asset—dollar-denominated American government debt—rises too. That, they think, is because the Fed is, in effect, signalling that a reduction in supply is imminent. Wenxin Du of the University of Chicago suggested that the premium could also reflect limits on global banks' ability to lend in dollars, and that tighter Fed policy could exacerbate those constraints.

That discussion built on earlier work by another participant, Hélène Rey of London Business School, who has argued that when the Fed raises interest rates financial conditions tighten in the rest of the world. Sebnem Kalemli-Ozcan of the University of Maryland explained how emerging markets could be hit as, when the Fed raises rates, some money moves from emerging markets towards America. Investors then worry that emerging markets might run into problems, which makes them look riskier and worsens capital flight. Central banks, she added, would be unable to shield their economies fully from the consequences. In theory they could lean against the wind, raising rates to encourage investors to stay. But the tightening required tends to be so extreme that it would throttle the domestic economy. Though allowing the exchange rate to adjust instead also brings pain, it is the less bad option.

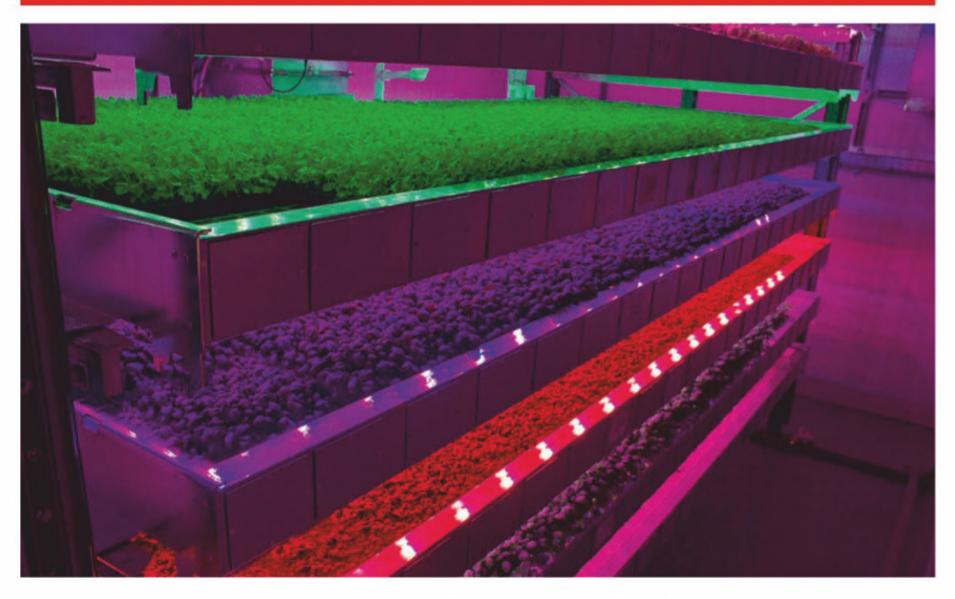
The assembled central bankers uttered a chorus of complaints about the forces making their lives harder. Amir Yaron, the governor of the Bank of Israel, spoke of keeping interest rates very low for the past three years, but still seeing foreign capital slosh in as the Fed tightened, because investors regarded Israel as an emerging-market haven. The Fed's moves were offset only partially by Israel's monetary policy, he said. Participants from advanced economies also grumbled: Mr Carney called the dollar "domineering".

Sauce for the central banker

In some ways, then, the Fed's struggles to cope with the consequences of Mr Trump's words and deeds echo the experiences of its counterparts in other countries, for which it is the Fed itself that is the unruly, unbiddable external force. But in other ways the comparison is unfair. The Fed is, after all, seeking to create the conditions for America's economy to thrive. The more it succeeds, the better for everyone else. And sometimes it considers the spillover effects of its actions. Its decision in July to cut interest rates was motivated in part by concerns over "weak global growth".

On August 27th Bill Dudley, a former president of the New York Fed, suggested in an opinion piece for Bloomberg that the Fed should not ease monetary policy in response to the trade war in case it emboldened Mr Trump's protectionism and boosted his chances of re-election. It responded with a statement slapping down any idea that it had such political motives. America's monetary policymakers certainly create problems for their counterparts elsewhere. But, unlike Mr Trump, they are not trying to.

Science & technology



Horticulture

Growing brighter

INVERGOWRIE

New ways to make vertical farming stack up

ROM THE outside it looks like a tall, metal-clad barn. But step in, through a large airlock designed to keep out the bugs, and a kaleidoscopic scene emerges. A central aisle is flanked by two pairs of towers. Each tower is stacked with a dozen or so trays on which are growing strawberries, kale, red lettuce and coriander. And each tray is bathed in vibrant light of different colours, mostly hues of blue and magenta. Douglas Elder, who is in charge of this artificial Eden, taps some instructions into an app on his mobile phone and, with a short whirr of machinery, a tray of lush, green basil slides out for his inspection.

Mr Elder is product manager for Intelligent Growth Solutions (IGS), a "vertical farming" company based at Invergowrie, near Dundee, in Scotland. Each of the ninemetre-high towers in the demonstration unit that he runs occupies barely 40 square metres. But by stacking the trays one on top of another an individual tower provides up to 350 square metres of growing area. Using his phone again, Mr Elder changes the col-

ours and brightness of the 1,000 lightemitting diodes (LEDS) strung out above each tray. The app can also control the temperature, humidity and ventilation, and the hydroponic system that supplies the plants, growing on various non-soil substrates, with water and nutrients. Armed with his trusty phone, Mr Elder says he can run the farm almost single-handedly.

Plant power

Vertical farming of this sort is not, of itself, a new idea. The term goes back to 1915, though it took a century for the first commercial vertical farms to be built. But the business is now taking off. SoftBank, a Japanese firm, Google's former boss Eric Schmidt and Amazon's founder Jeff Bezos have between them ploughed more than

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\$200m into Plenty, a vertical-farming company based in San Francisco. And in June Ocado, a British online grocery, splashed out £17m (\$21.3m) on vertical-farming businesses to grow fresh produce within its automated distribution depots.

The interest of investors is growing just as technology promises to turn vertical-farming operations into efficient "plant factories". The high-tech LEDs in IGS's demonstration unit are optimised so that nary a photon is wasted. The hydroponics, and the recycling that supports them, mean the only water lost from the system is that which ends up as part of one of the plants themselves. And towers mean the system is modular, and so can be scaled up. Most of the systems which IGS hopes to start delivering to customers early next year will consist of ten or more towers.

Some people, however, remain sceptical about how much vertical farms have to offer that good-old-fashioned greenhouses do not. Vertical farms are certainly more compact—a bonus in places like cities where land is expensive. Since sales of fresh produce to the urban masses are often touted as one of vertical farming's biggest opportunities, that is important. But a greenhouse gets its light, and much of its heat, free, courtesy of the sun. And modern greenhouses can also use solar-powered supplementary LED lighting to extend their growing seasons and hydroponic systems to save water, says Viraji Puri, co-founder

▶ of Gotham Greens, an urban-farming company that operates greenhouses on the roofs of buildings in New York and Chicago. As for food miles, they could not get any shorter for Gotham Greens's rooftop greenhouse in Brooklyn, which supplies the Whole Foods Market located downstairs.

The biggest drawback of vertical farming is the high cost of the electricity required to run the large number of LEDS. This has meant that production has been commercially viable for high-value, perishable produce only, such as salad leaves and herbs. That, nevertheless, is a market not to be sniffed at. But for a broader range of produce, it can prove too expensive. In 2014 Louis Albright, an emeritus professor of biological and environmental engineering at Cornell University in America, calculated that a loaf of bread made from wheat grown in a vertical farm would be priced at about \$23.

Blue is the colour

One way of saving electricity is to use LEDS that generate only the colours that plants require, instead of the full spectrum of plain white light. Plants are green because their leaves contain chlorophyll, a pigment that reflects the green light in the middle of the spectrum while absorbing and using for photosynthesis the blue and red wavelengths at either end of it.

The vertical farm at Invergowrie takes this idea further. It uses LEDs that are highly tuneable. Although the lights produce mostly blue and red wavelengths, researchers now know that other colours play an important role at various stages of a plant's development, says David Farquhar, IGS's chief executive. A dose of green at an appropriate moment produces a higher yield. A timely spot of infrared can improve the quality of foliage. The lights can also produce various blue/red mixes.

To operate these LEDs efficiently, the company has developed a low-voltage power-distribution system. This, says Mr Farquhar, can cut energy costs to about half of those incurred by existing vertical farms. As a result, all four towers can produce 15-25 tonnes a year of herbs, salad leaves, fruit and vegetables. This, the company claims, is between two and three times more than a conventional greenhouse with an equivalent but horizontal growing area, and equipped with supplementary lighting and heating, could manage. And the system can grow all this produce at a similar cost-per-kilogram.

One of the jobs of the Invergowrie unit is to develop lighting regimes tailored to individual crops. Another is to develop algorithms to control, in an equally bespoke way, the climatic conditions preferred by different crops. The idea is to design cropspecific weather "recipes" in order to boost the yield and quality of whatever varieties

are grown in the vertical farm. All the processes involved are engineered to be efficient. Irrigation, for instance, relies on captured rainwater. This is cleaned and recycled, but only 5% gets used up by each harvest—and most of that as the water-content in the plants themselves. Ventilation is also a closed loop, harvesting surplus heat from the LEDs while managing humidity and oxygen levels.

By reducing running costs, the system should make it profitable to grow a wider variety of produce vertically. The firm has already succeeded with some root vegetables, such as radishes and baby turnips. Bulk field crops, such as wheat and rice, may never make sense for a vertical farm, and larger, heavier vegetables would be tricky to raise. This means full-grown potatoes are probably off the menu, at least with existing technology.

Seed potatoes, though, are a good candidate, says Colin Campbell, head of the James Hutton Institute, a plant-science research centre backed by the Scottish government. It is based next door to IGS and works with the company. Many fields around the world. Dr Campbell observes. are suffering a growing burden of pests and disease, such as potato-cyst nematode. In the controlled environment of a vertical farm, from which both pests and diseases can be excluded, seed potatoes could be propagated more efficiently than in the big, bad outdoor world. This would give them a head start when they were planted out in fields.

The institute's researchers are also looking at plant varieties that might do particularly well indoors, including old varieties passed over in the search for crops which can withstand the rigours of intensive farming systems. By dipping into the institute's gene banks, Dr Campbell thinks it may find some long-forgotten fruits and vegetables that would thrive in the security of a vertical farm.

All this could go down well with foodies, and unlock new and forgotten flavours. Shoppers might even find some exotic varieties growing in supermarket aisles. In Berlin a company called Infarm provides remotely controlled shelved growing cabinets for shops, warehouses and restaurants. Herbs and salad leaves, including exotics such as Genovese basil and Peruvian mint, are resupplied with seedlings from the company's nursery as the mature plants are picked.

Vertical farming then will not feed the world, but it will help provide more fresh produce to more people. It may even be that, as vertical-farming systems improve further, miniature versions will be designed for people to put in their kitchens—thus proving that there is nothing new under either the sun or the LED. Such things used once to be called window boxes.

What is a brain?

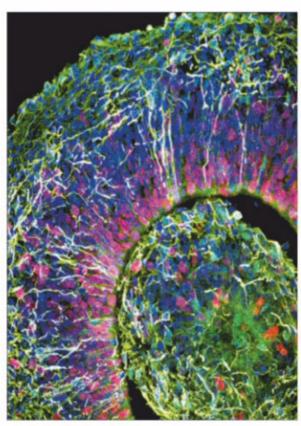
Synchronicity

Cerebral organoids are becoming more brainlike

T WHAT POINT does a mass of nerve A cells growing in a laboratory Petri dish become a brain? That question was first raised seriously in 2013 by the work of Madeline Lancaster, a developmental biologist at the Medical Research Council's Laboratory of Molecular Biology, in Cambridge, Britain. That year Dr Lancaster and her colleagues grew the first human-derived "cerebral organoid". They did so using pluripotent human stem cells, which are cells that have the potential to develop into any type of tissue in the human body. The researchers coaxed these cells into becoming nervous tissue that organised itself, albeit crudely, as structures which had some of the cell types and anatomical features of embryonic human brains.

The twitch

Since then, Dr Lancaster's work has advanced by leaps and bounds. In March, for example, she announced that her organoids, when they are connected to the spinal cord and back-muscle of a mouse, could make that muscle twitch. This means cerebral organoids are generating electrical impulses. And other scientists are joining the fray. One such, Alysson Muotri of the University of California, San Diego, has published this week, in *Cell Stem Cell*, a study that looks in more detail at cerebral-organoid electrical activity.



A slice of organoid

To carry out their study, Dr Muotri and his colleagues grew and examined hundreds of organoids, each a mere half-millimetre in diameter, over the course of ten months. To probe individual neurons within these they used tiny, fluid-filled pipettes that acted as electrodes small enough to maintain contact with the surface of an individual cell.

Neurons probed in this way proved electrically active, so the researchers went on to employ arrays of electrodes inserted simultaneously into different parts of an organoid to study its overall activity. They looked in detail, once a week, at each of the organoids that were chosen for examination. This revealed that, by six months of age, the electrical activity in different parts of an individual organoid had become synchronised.

Such synchronicity is also a feature of real brains, including those of preterm human infants of about the same age as Dr Muotri's organoids. It is regarded as an important part of healthy brain function. So, to check how similar natural and organoid brain waves actually are, the research team ran those waves obtained from their organoids through a computer program that had previously been trained to recognise the electrical activity generated by the brains of premature babies. This algorithm proved able to predict to within a week the ages of laboratory-grown organoids 28 or more weeks old. That suggests those organoids are indeed growing in a manner similar to natural human brains.

Brain work

If further research confirms this opinion, then for medical science that conformity with natural development could be a boon. Neuroscientists have long been held back by the differences between human brains and those of other animals—particularly the brains of rodents, the analogue most commonly employed in medical research. The purpose of the work that Dr Lancaster, Dr Muotri and others involved in the field are engaged in has always been to produce better laboratory models of neurological and psychiatric diseases, so that treatments may be developed.

And, although it may be some time in the future, there is also the possibility that organoids might one day be used as transplant material in people who have had part of their brains destroyed by strokes.

For ethicists, however, work like this raises important issues. A sub-millimetre piece of tissue, even one that displays synchronised electrical pulsing, is unlikely to have anything which a full-grown human being would recognise as consciousness. But if organoids grown from human stem cells start to get bigger than that, then the question that was posed back in 2013 becomes pressing.

Genetics and sexuality

There is no "gay gene"

But biology does in part determine sexual orientation

In 1993 A region of the human genome called xq28 was linked to male homosexuality, and the controversial notion of a "gay gene" was born. Those research findings have not been replicated. But it was never going to be that simple: decades of genetic research have shown that almost every human characteristic is a complex interplay of genes and environmental factors. A new study, published in *Science* this week, confirms that this is the case for human sexuality, too.

The study, the largest ever into this difficult topic, was conducted by an international group of scientists working with 23andMe, a personal genomics firm. It used what is called a genome-wide association study (GWAS) on 408,995 individuals in the UK Biobank, a British health resource, and 68,527 American 23andMe users—all of whom remained anonymous and consented to the study.

A GWAS involves scanning a person's DNA for tiny variations in the genetic code (simple changes in the As, Ts, Gs or Cs) that correlate with a given trait. The participants were divided on the basis of whether they answered yes or no to the question "Have you ever had sex with someone of the same sex?"—a woolly proxy for sexual orientation, even in the absence of little white lies. The figures the GWAS produced, therefore, relate only to a single act, not to whether someone identifies as gay.

The researchers found five genetic

markers that were significantly associated with a reported homosexual act by one of the participants in the study. None of those markers was on the x or y sex chromosomes and their total combined effect accounted for less than 1% of the variance. This is because the behaviour is the result of the aggregate effort of hundreds or thousands of genes, whose individual effects are infinitesimally weak. Totting up all the thousands of tested genetic variants accounted for between 8% and 25% of the variation in people's self-reported homosexual acts. These variants also overlapped with other traits, such as a smoking and an openness to new experiences.

Interestingly, only about 60% of the genetic variants identified in the study were shared by both sexes. Most behaviours show more overlap between the sexes than this, intimating that male and female homosexuality, or at least sexual adventures, may be quite different. David Curtis of University College London notes that what overlap there is "suggests that there could be specific factors affecting same-sex attraction rather than simply being attracted to males versus being attracted to females."

The riddles go on

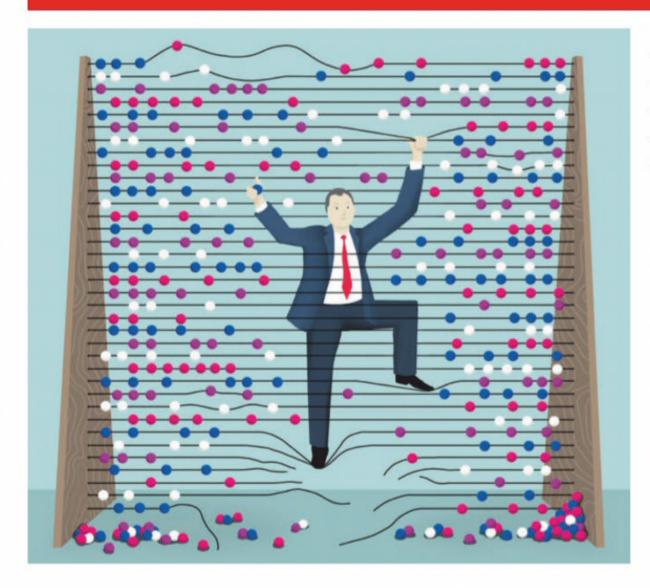
Conscious of the tricky subject matter, the scientists are at pains to anticipate any misunderstandings or backlash. They collaborated with LGBT advocacy groups throughout the study.

Yet the research only scrapes the surface of the mysterious depths of human sexuality. Unravelling these riddles will be difficult and will inevitably beget misconception and controversy. But at least this study should add weight to the view that nonheterosexual behaviour is firmly within the normal, natural spectrum of human diversity and provide a firm foundation for future work.



Just part of the spectrum

Books & arts



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Unintended consequences

The numbers guys

Economists have a lot to answer for, argues a veteran analyst

Reserve in the early 1950s. Those who were on the staff of America's central bank were relegated to the basement, at a safe remove from the corridors where real decisions were made. Economists had their uses, allowed William McChesney Martin, then the Fed's chairman. But they also had "a far greater sense of confidence in their analyses than I have found to be warranted". They were best kept down with the surplus furniture and the rats.

The world changes, and it can be hard to say why, writes Binyamin Appelbaum in "The Economists' Hour". Despite the clout of a few individuals such as John Maynard Keynes, economists as a class were once held in almost universally low esteem by serious policymakers, who saw them as trumped-up statisticians with strange views about human behaviour. But in the decades after the second world war, the profession clawed its way out of the basement and up to extraordinary influence.

The rise was made possible by charismatic intellectuals such as Milton Fried**The Economists' Hour.** By Binyamin Appelbaum. *Little, Brown; 448 pages; \$30.* To be published in Britain by Picador in January; £20

man, who in that era spotted the chance to nudge history in their preferred direction. For nearly half a century rumpled theorists held the ear of politicians around the world. Their period of triumph ended in a fog of financial crisis, economic conflict and resurgent nationalism. Mr Appelbaum aims to focus public attention on the role of economists in the miasma's descent.

His is a respected voice in American journalism. Now an editorial writer at the *New York Times*, he spent nearly a decade covering economics and economic policy in Washington. "The Economists' Hour" is a work of journalism rather than polemic. It is a well reported and researched history of the ways in which plucky economists helped rewrite policy in America and Europe and across emerging markets.

Some of the stories Mr Appelbaum tells

will be unfamiliar. He describes how economists inspired by Friedman persuaded Richard Nixon to abandon military conscription in favour of all-volunteer armed forces. The draft misused resources, they argued, by pressing into service young people whose skills might be better applied elsewhere. The Pentagon might actually save money by relying solely on volunteers, thanks to reduced turnover and thus lower training costs. Nixon had his own reasons for ending conscription. But the economists helped make up his mind.

And they managed to undercut an ageold American scepticism of big business. In the late 19th and early 20th centuries, America had reined in the behemoths built by robber barons. In the 1950s economists were second-class citizens in the antitrust division of the Department of Justice. The economists' hour changed all that.

George Stigler, a friend of Friedman and a fixture at the University of Chicago, reckoned that "competition is a tough weed, not a delicate flower", and that in practice firms would struggle to maintain and wield market power. Aaron Director, an economist sympathetic to Stigler's ideas on competition (and Friedman's brother-in-law), spent most of his career in Chicago as well, instructing law students in the emerging economic perspective on antitrust issues. He became a mentor to Richard Posner, a legal scholar and later a judge, who promoted the notion that justice in the law meant no more and no less than economic

• efficiency. They and their disciples worked to turn legal attitudes to antitrust on their head, allowing decades of corporate concentration and increasing market power.

That is not the half of it. Economists helped engineer a wave of deregulation from the 1970s to the 1990s, and provided the intellectual case for tax cuts from the 1960s to the 1980s (much of which this newspaper applauded). All this yielded many benefits: deregulating airlines, to take just one example, made flights cheaper and more accessible. But overall growth never rose as some promised. Inequality widened. Workers and communities increasingly lost out to firms.

Even the profession's triumphs deserve reconsideration, Mr Appelbaum suggests. Economists are proud of their role in the defeat of double-digit inflation in the early 1980s. Yet the recessions stoked by monetarism did immense harm. Unemployment soared, and many manufacturing towns hurt by appreciating currencies never recovered. Economists are often quick to dismiss the possibility that inflation might eventually have fallen on its own, as the effects of high oil prices and elevated defence spending abated.

Negative externalities

Could a band of social scientists really wreak so much havoc? Mr Appelbaum's book places economists at the centre of the story, but they were often mere accomplices to a broader movement of conservatives determined to reverse the encroachment of the state. Free-market economists received financial support from business leaders who were more passionate about reducing tax and regulation than about high-minded research. Joseph Coors, a beer magnate, created the Heritage Foundation as a sort of public-relations firm for capitalism. It was soon publishing economists with friendly messages. "Let's get taxes cut under any and all circumstances," Friedman wrote for the think-tank in 1978. Rather than being the tale of an academic discipline's unlikely rise to influence, Mr Appelbaum's book can be seen as an account of the easy ascent of a few ideas that appealed to the wealthy and powerful.

Still, the part played by others does not get the economists off the hook. Many (of assorted political persuasions) laboured quietly to produce valuable research. But some leading lights ignored critics, including within the profession, who warned that their clever theories did not adequately capture society's complexities. Too many were too impressed with their own intelligence to consider the unintended consequences of their policies. Too few reflected on the implications of the politics that allowed them to enact their ideas.

Often, their theories operated on the assumption that the self-interested actions

of the rich would benefit everyone, even as those self-interested rich used the same economists to pursue their own agenda. The end of the economists' hour has created room within the field for views that long struggled to get a hearing. But, in an age of nativism and protectionism, other ways of seeing the world now predominate. It may be some time before the dismal science gets a chance to set things right.



Catering empires

Storms in a teacup

Legacy: One Family, A Cup of Tea and the Company that Took on the World. By Thomas Harding. William Heinemann; 592 pages; £25

A FAMILY IS a little kingdom, Samuel Johnson noted, and in the mercantile principality of Gluckstein and Salmon, the heraldic emblem might have been a sheaf of sticks. A father hands his sons some twigs, Monte Gluckstein once told his nephew, drawing on Aesop's fable. Break one, the father orders. They do. He bundles the sticks. Now break them, he says. L'union fait la force—"Strength in unity"—was the family motto, explained Monte, third-generation scion of a catering empire.

Thomas Harding mined the traumatic history of his father's family in Germany in "The House by the Lake". In "Legacy" he explores his maternal lineage—an arc spanning five generations from immigrants to tycoons. The Glucksteins and Salmons

founded Lyons, a firm that shaped British tastes, catered for Buckingham Palace and owned a hit parade of mega-brands.

The saga was launched by the flight of a young Hebrew teacher named Lehmann Gluckstein from eastern Europe in the early 1800s, and took root in London where his son Samuel created a small cigar factory. In 1886 Monte, Samuel's heir and the family visionary, applied the lessons of tobacco manufacturing to catering. J. Lyons and Company was named after a less-Yiddische partner to put off anti-Semites. Thanks to showmanship and an instinct for popular taste, the operation expanded. Lyons fulfilled the largest catering contract in history-8m meals served at the British Empire Exposition of 1924-25. It owned the biggest hotel and ice-cream plant in Europe and the largest tea-packing facility in the world (when Lehmann was growing up, Jews were forbidden to trade in tea, sugar and coffee). It developed the first business computer.

Family always came first. As did men: the board, Mr Harding ruefully notes, never included women. They were absent, as well, from Monte's funeral in 1922. Custom cautioned that wealthy women could not "restrain their emotions".

Mature British readers will associate the Lyons name with tea shops and Corner Houses (the Starbucks of their time), from which white-aproned waitresses, known as Nippies, made it into the Oxford English Dictionary. The ingredients of success were quality, value, efficiency and food that was consistent down to the carefully calibrated jam in Swiss rolls—Henry Ford applied to comestibles.

Mr Harding's affectionate family story is deftly sandwiched in the rise and fall of empire, two world wars, and two centuries of social and political change. A refitted Lyons factory made many of the bombs dropped on Germany in the second world war. Despite the chauvinism at head office, Lyons tea shops are said to have contributed to female emancipation by providing a safe entry to social life and consumerdom. Previously, male-dominated pubs had been practically the only places for many women to order drinks.

In the end, the sticks threatened to fall apart. A younger generation caught conglomeration fever and binged on acquisitions, adding Baskin-Robbins, an American ice-cream chain, and continental meat-processors. Overreach and spectacularly bad timing—involving an oil crisis, a recession and a sinking pound—brought Lyons to the brink of insolvency. The hotels were sold and then, in 1978, the company itself. But the denouement, a delicate business complicated by lots of heirs, was managed "with care and honour", Mr Harding writes, and with "friendly relationships intact". Monte's bundle held fast.

Religion and history

The cross's shadow

Dominion. By Tom Holland. *Basic Books;* 624 pages; \$18.99. Little, Brown; £20

T was the wasps that bothered Darwin most. Brought up as a Christian, he might not have precisely subscribed to the genesis offered by Genesis but—at first—he accepted the principle that God and his works were good. Then came the *Ichneumonidae*. Slender, almost sensual in shape, the wasps seem a slight foe to stand against 2,000 years of theology. But for Darwin the sting of these parasites, which grow by eating living caterpillars from within, was intolerable: "I cannot persuade myself that a beneficent & omnipotent God would have designedly created [them]."

The wasps nibbled away Darwin's belief. Tom Holland's belief in Darwin's Christianity has, however, remained strong. In "Dominion", he argues that many of Darwin's apparently atheistic traits, from the fanaticism of his followers to his scientific awe, "derived from a much older seedbed"; ie, a Christian one. It is not just Darwin. Look closely at the motifs of almost any modern movement, from the communist hammer and sickle to the dictums of Islamic State, and you can, Mr Holland argues, discern the shadow of the cross. In many ways "Christendom...remains Christendom still."

Proving this takes Mr Holland on a sweeping narrative that runs from the fifth century BC via Luther, Voltaire and the abolition of slavery to #MeToo. The occasional purple patch is forgivable, for he is an exceptionally good storyteller with a marvellous eye for detail. He opens with an ac-

count of an ancient Persian torture in which prisoners were eaten alive by maggots. It is excellent fun.

Some of the most interesting sections are from the early centuries when God had not yet realised that He too was Christian. Resolutely monotheistic, later Christians would declare that their God was eternal and omniscient. God, alas, seems not to have known any of this. Bits of the Old Testament hint that, in its earliest stages, the Jewish religion recognised many gods. "Thou shalt have no other gods before me" insists that rivals shall not be worshipped—not that they don't exist.

Then came the greatest revolution thus far—the roads and reach of the Roman empire. It was along these that St Paul travelled, spreading the word of this now-Christian God. Time, Mr Holland says, has "dulled" people to the "utter strangeness" of Paul's message. Greco-Roman deities had tended to favour a *carpe diem* approach, and to celebrate the proud. The new creed celebrated the weak. The last were to be first and the first last; suffering was extolled; living fully in the Promised Land meant eschewing the pleasures of this one.

Yet this guarantor of deferred gratification turned out to be better at promising than following through. The Second Coming never came and the Promised Land remained elusive. Still, though the meek did not inherit the Earth, they did acquire a sense of God-given equality, while the powerful, for their part, inherited a Godgiven sense of unease. It is to these twin impulses that Mr Holland ascribes many social advances of recent centuries, from the end of slavery to LGBTQ rights.

He is right to stress Christianity's influence. For more than a millennium the debates and decisions of Europe were made in Christ's name. From the moment the Venerable Bede invented BC and AD dates, time itself turned on a Christian axis. But Mr Holland makes a bolder claim. Like it or

not, he argues, Western values are "trace-able back to Christian origins".

Whether you agree may depend on whether you want to. Mr Holland—whose own faith faded when he was a teenager—is a superb writer, but his theory has flaws. For one, he uses the word "Christianity" as though it is obvious what that means. It is not. Christianity is a broad church and the Bible is a big and incoherent book. It has furnished verses to suit those who have wanted to enslave Africans or emancipate them, save infidels or slay them.

And merely to see the form of Christianity in a movement is not to prove it is there. Correlation is not causation. Some people, after all, discern the shape of the Virgin Mary in a piece of burned toast.

Historical fiction

Road trip

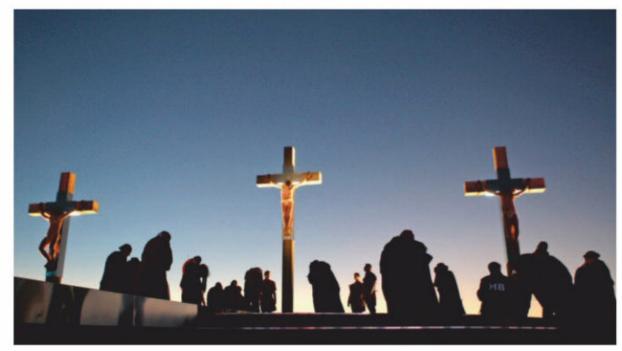
To Calais, In Ordinary Time. By James Meek. *Canongate*; 400 pages; £18.99

In a talk she gave to the Royal Society of Literature in 2010, Hilary Mantel offered some advice to would-be authors of historical fiction. "Learn to tolerate strange world views," she said:

Don't pervert the values of the past. Women in former eras were downtrodden and frequently assented to it. Generally speaking, our ancestors were not tolerant, liberal or democratic...Can you live with that?

In his sixth novel, "To Calais, In Ordinary Time", James Meek seems to have taken Ms Mantel's interdiction as a challenge. This is a book that seeks to compress the distance between past and present, seeking out reflections of contemporary concerns in the medieval world.

"To Calais..." is the story of three very different protagonists, each setting out for English-held Calais in the summer of 1348. Will Quate, a farm boy from Outen Green (a fictional Cotswold village), joins up with a group of archers heading to fight in the Hundred Years War. Lady Bernadine Corbet, an aristocratic young woman, is bewitched by "Le Roman de La Rose", a courtly poem, and fleeing a controlling father. Thomas Pitkerro, a Scottish proctor, has come to England from the papal court at Avignon to carry out a survey of the abbey at Malmesbury. The different plot lines overlap and interweave as the three characters move haltingly to Calais, while, just out of sight in France, lurks the greatest catastrophe ever to hit Western civilisation: the Black Death.



Help thou mine unbelief

Mr Meek throws ropes from the present to the past. His noblewoman is headstrong and emancipated—almost a millennial—who dreams of a storybook lover and self-harms in secret. Will is pursued by a besotted friend who plays provocatively with binary conceptions of gender. Thomas, the proctor, may live in the 14th century, but his musings carry a powerful message for stratified Brexit-era Britain:

How radically the space I traverse differs from the mental chart of those, like Will Quate, whose universe might be circumnavigated in an hour. My Europe is his Outen Green; my continent his manor.

This is a book about the power of perspective and the importance of broadening ho-

rizons. The Black Death is a kind of hold-all catastrophic metaphor: for climate change, political meltdown and moral decay.

Like all fiction, but perhaps more so, historical novels live or die by their use of language. Few attempt an accurate representation of the speech of a bygone era, seeking rather to forge their own idiom to give the reader the impression of that time. Mr Meek goes further: each protagonist speaks in a different register. Will's tale is related in a kind of Chaucer-lite; in accordance with her reading, Bernadine's narrative is French-inflected; Thomas is resolutely Latinate. This tapestry makes for a compelling story that, like all great historical fiction, is not only about the past, but says profound things about the present.

atmosphere of diaspora communities and the cultural mores of the old country, where the Orthodox church is dominated by ultra-conservatives and has a violent fringe. The reception of a Georgian-language film that deals with a gay romance has brought that divide into focus.

"And Then We Danced" drew a standing ovation at Cannes in May and has since won praise and prizes across Europe; it will be screened in London and Paris in the near future. But the Georgian authorities, who usually encourage film-making in the country's ancient, expressive tongue, have kept their distance and refused to provide any funding. In Georgia's homophobic climate, the shooting of the film—about an affair between two young male dancers—had to be semi-clandestine, says Levan Akin, a Swede of Georgian origin and the title's director.

Mr Akin calls the film a love-letter to Georgia, which he often visited as a child. Unlike many of today's young Georgians, who prefer techno to tradition, he adores the indigenous heritage. But he feels it must be liberated from its self-appointed guardians: people like the film's steely dance teacher who insists, implausibly, that there is nothing sensual about the gyrations he demands. Mr Akin was inspired to make the movie after reading in 2013 that a gay-pride event in Tbilisi had been harassed by thugs and zealots. (The hand of Russia, which occupies a chunk of the country, may lurk behind such ructions.)

Towards the film's end there is a funny, touching exchange between Merab, a dancer and the hero (pictured right), and his boozy, just-married brother David. "I'll just be another fat, drunk Georgian...and that's fine," says David. "But you, Merab, are special and that's why you must leave Georgia now." For their part, the dancer-actors who play Merab and Irakli, his partner in a fleeting, passionate relationship, are adamant that they will not emigrate. Both Levan Gelbakhiani and Bachi Valishvili (left) say they will stay and fight for a more tolerant society. "When there's a leak in your home you don't leave, you fix it," says Mr Valishvili. That is brave, given the hate mail (roughly balanced by fan mail) that they have received from compatriots.

In the main, spiky ideas—as well as people—slide backwards and forwards between Georgia and the world with an ease that would astound a Soviet time-traveller. David Papava, for example, left home in the 1990s and made a name as a director of experimental theatre in London, before returning to Tbilisi. His rendering of Aristophanes's comedy, "The Birds", took digs at the country's extravagant political class. "Some critics didn't like my work," Mr Papava recalls, "but I never felt threatened." Many censorious old habits have waned—but some endure.



Culture in the Caucasus

The dancer and the dance

A film has set up a culture clash between Georgia and its diaspora

THE BALKANS have been described as a region that produces more history than it can absorb. About Georgia—another craggy, contested place—it might be said that there is a chronic surplus of culture. Start with indigenous traditions such as epic poetry and polyphonic singing; then factor in the ability of Georgians to master cultural forms born elsewhere, including theatre and classical music.

When Georgia was pickled in Soviet aspic, those gifts were a lifeline to the world. Its theatre and film directors, with their quietly subversive messages, were revered across the Soviet Union. To Western audi-

ences, they were a reminder that not all was drab in the communist bloc. Now that Georgia is a democracy, many of its artists thrive abroad yet retain close ties to their homeland. Amid the chaos after the Soviet collapse, Luka Okros, now a 28-year-old pianist, startled his parents by showing signs of genius at the age of four. He trained in Moscow and is now based in London, interpreting Liszt, Chopin and Rachmaninov in concert halls around the world, and—like other expatriate maestros—giving at least one big recital a year in Tbilisi.

But for all the sophistication of Georgia's capital, there is still a gap between the

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68 Economic & financial indicators

Economic data

	% chan		omestic p on year ago		% chan		r prices	rate	ployment	baland		Budg balan	ce	10-yr go		nange on	Currence per \$	% change
	latest		quarter*	2019 [†]	latest		2019†	%			P, 2019 [†]		DP, 2019 [†]	latest,%	yea	r ago, bp	Aug 28th	on year ago
United States	2.3	Q2	2 2.1	2.2	1.8		2.0	3.7		-2.2		-4.7		1.5		-131	-	
China	6.2			6.2	2.8	Jul	2.8	3.6	Q2§	0.7		-4.5		2.9	§§	-49.0	7.16	-4.9
Japan	1.2			1.0	0.6	Jul	1.0	2.3	Jun	3.6		-3.0		-0.3		-38.0	106	5.0
Britain	1.2			1.1	2.1	Jul	1.9		May ^{††}	-4.1		-1.8		0.6		-78.0	0.82	-4.9
Canada	1.3	_		1.6	2.0	_	2.0	5.7		-2.5		-0.9		1.1		-120	1.33	-3.0
Euro area	1.1			1.2	1.0		1.3	7.5		2.9		-1.1		-0.7		-110	0.90	-5.6
Austria	1.4			1.3	1.4	Jul	1.7	4.5	Jun	1.9		0.1		-0.5		-109	0.90	-5.6
Belgium	1.2			1.2	1.4	Jul	1.8	5.6		0.1		-0.9		-0.3		-104	0.90	-5.6
France	1.3			1.2	1.1		1.2	8.7		-0.9		-3.3		-0.4		-106	0.90	-5.6
Germany	0.4	Q2	2 -0.3	0.8	1.7	Jul	1.6	3.1	Jun	6.5		0.7		-0.7		-110	0.90	-5.6
Greece	0.9	Q1	1 0.9	1.8	nil	Jul	0.8	17.6	Apr	-3.0		0.1		1.7		-246	0.90	-5.6
Italy	nil	Q2	2 0.1	0.1	0.4	Jul	0.9	9.7	Jun	1.9		-2.5		1.1		-214	0.90	-5.6
Netherlands	2.0	Q2	2 2.1	1.7	2.5	Jul	2.6	4.2	Jul	9.7		0.6		-0.6		-104	0.90	-5.6
Spain	2.3	Q2	2 1.9	2.2	0.5	Jul	0.9	14.0	Jun	0.6		-2.3		0.1		-126	0.90	-5.6
Czech Republic	2.8	Q1	1 2.4	2.6	2.9	Jul	2.5	2.0	Jun [‡]	0.2		0.2		1.0		-108	23.4	-6.1
Denmark	2.4	Q1	1 3.2	1.8	0.4	Jul	0.9	3.8	Jun	6.8		1.0		-0.7		-102	6.73	-5.3
Norway	2.5	Q1	1 -0.3	1.8	1.9	Jul	2.3	3.6	Jun ^{‡‡}	7.1		6.6		1.2		-57.0	9.04	-7.8
Poland	4.7			4.0	2.9	Jul	2.0	5.2	Jul§	-0.7		-2.0		1.8		-143	3.96	-8.1
Russia	0.9			1.3	4.6		4.8	4.5		7.2		2.1		7.3		-149	66.7	1.6
Sweden	1.4			1.6		Jul	1.9	6.9		4.5		0.4		-0.3		-84.0	9.72	-6.2
Switzerland	1.7			1.6	0.3	Jul	0.5	2.3	Jul	9.6		0.5		-1.0		-98.0	0.98	nil
Turkey	-2.6			-0.7		Jul	16.1		May [§]	-0.2		-2.8		16.4		-538	5.81	7.4
Australia	1.8			2.2	1.6	Q2	1.7	5.2		-0.4		0.1		0.9		-163	1.48	-8.1
Hong Kong	0.5			1.7		Jul	2.6		Jul ^{‡‡}	4.0		0.4		1.1		-115	7.85	nil
India	5.8			6.7	3.1	Jul	3.6	7.5		-1.7		-3.5		6.6		-134	71.8	-2.3
Indonesia	5.0			5.1		Jul	3.1		Q1§	-2.6		-1.9		7.3		-57.0	14,255	2.6
Malaysia				4.4	1.4		0.8		Jun§	2.5		-3.5		3.3		-74.0	4.21	-2.6
Pakistan	3.3			3.3		Jul	9.1		2018	-3.4		-7.1		13.8	†††	377	157	-21.1
Philippines	5.5			5.7	2.4		3.3		Q2§	-2.1		-2.5		4.4		-194	52.3	1.9
Singapore	0.1			0.9		Jul	0.6	2.2		15.8		-0.6		1.7		-69.0	1.39	-2.2
South Korea	2.1			1.9	0.6		0.7	3.9		4.0		0.6		1.3		-110	1,214	-8.6
Taiwan	2.4			2.4		Jul	0.5	3.7		11.4		-1.0		0.7		-17.0	31.4	-2.2
Thailand	2.3			3.3		Jul	1.2		Jun§	7.9		-2.9		1.3		-119	30.6	6.4
Argentina	-5.8			-1.3		Jul [‡]	48.7	10.1	Q1§	-2.2		-3.4		11.3		562	57.8	-45.6
Brazil	0.5			0.8	3.2		3.8	12.0		-0.9		-5.8		5.7		-389	4.15	-0.5
Chile	1.9			2.6	2.2		2.3		Jun ^{§‡‡}	-2.5		-1.3		2.7		-174	724	-9.1
Colombia	3.4			3.1	3.8		3.4		Jun§	-4.2		-2.5		6.0		-90.0	3,480	-15.1
Mexico	-0.8			0.4	3.8		3.7	3.6		-1.6		-2.5		7.0		-81.0	20.0	-5.7
Peru	1.2			3.0	2.1		2.2	4.6		-1.8		-2.0		5.6		64.0	3.39	-3.0
Egypt	5.7	_		5.5	8.7		11.8		Q2§	-1.2		-7.2		na		nil	16.6	8.0
Israel	2.3			3.3	0.5		1.2	3.7		2.5		-4.0		0.9		-102	3.53	2.5
Saudi Arabia	2.3			1.9	-1.4		-1.1	5.7		3.8		-5.6		na		nil	3.75	nil
South Africa	nil			0.8			4.6			-4.1		-4.7		8.2		-68.0	15.4	
South Africa	TIII	Q1	-3.2	0.8	4.0	Jul	4.0	29.0	QZ3	-4.1		-4./		8.2		-08.0	15.4	-8.1

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.

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		Dec 31st 2018
-		15.2
,		18.4
		16.0
,	0.0	25.7
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	• • • •	2.3
,		-0.3
7,114.7	-1.2	5.7
16,271.7	-0.2	13.6
3,365.4	-0.9	12.1
5,368.8	-1.2	13.5
11,701.0	-0.9	10.8
20,990.7	0.7	14.6
548.4	-0.4	12.4
8,747.1	0.5	2.4
54,846.5	-2.3	-4.9
1,266.7	-1.1	18.8
9,758.2	-0.9	15.8
95,908.3	0.4	5.1
6,600.8	0.4	15.6
25,615.5	-2.5	-0.9
37,451.8	1.1	3.8
6,281.6	0.5	1.4
1,589.8	-0.3	-6.0
	3,365.4 5,368.8 11,701.0 20,990.7 548.4 8,747.1 54,846.5 1,266.7 9,758.2 95,908.3 6,600.8 25,615.5 37,451.8 6,281.6	Index Aug 28th one week 2,887.9 -1.2 7,856.9 -2.0 2,893.8 0.5 1,593.8 1.3 20,479.4 -0.7 1,490.4 -0.5 7,114.7 -1.2 16,271.7 -0.2 3,365.4 -0.9 5,368.8 -1.2 11,701.0 -0.9 20,990.7 0.7 548.4 -0.4 8,747.1 0.5 54,846.5 -2.3 1,266.7 -1.1 9,758.2 -0.9 95,908.3 0.4 6,600.8 0.4 25,615.5 -2.5 37,451.8 1.1 6,281.6 0.5

Markets

		% change of				
	index Aug 28th	one week	Dec 31st 2018			
Pakistan KSE	30,637.7	-1.1	-17.3			
Singapore STI	3,056.5	-2.1	-0.4			
South Korea KOSPI	1,941.1	-1.2	-4.9			
Taiwan TWI	10,434.3	-0.9	7.3			
Thailand SET	1,616.9	-1.3	3.4			
Argentina MERV	25,458.0	-9.0	-16.0			
Brazil BVSP	98,193.5	-3.0	11.7			
Mexico IPC	40,942.0	2.2	-1.7			
Egypt EGX 30	14,595.5	1.7	12.0			
Israel TA-125	1,460.7	-2.7	9.6			
Saudi Arabia Tadawul	8,171.2	-4.0	4.4			
South Africa JSE AS	54,255.6	-0.7	2.9			
World, dev'd MSCI	2,111.9	-1.1	12.1			
Emerging markets MSCI	965.3	-1.8	nil			

US corporate bonds, spread over Treasuries								
		Dec 31st						
Basis points	latest	2018						
Investment grade	168	190						
High-yield	540	571						

Sources: Datastream from Refinitiv; Standard & Poor's Global Fixed Income Research. *Total return index.

Comm	od	ities

The Economist commodity-price index % change on								
2005=100	Aug 20th	Aug 27th*	month	year				
Dollar Index								
All Items	131.5	131.8	-2.7	-5.2				
Food	140.6	141.5	-2.5	1.1				
Industrials								
All	122.1	121.7	-3.0	-11.9				
Non-food agricultural	s 109.8	110.0	-3.6	-18.4				
Metals	127.3	126.8	-2.8	-9.2				
Sterling Index								
All items	197.2	195.3	-3.7	-0.6				
Euro Index								
All items	147.5	147.6	-2.4	nil				
Gold				- 10				
\$ per oz	1,502.3	1,539.0	7.7	27.3				
West Texas Intermediate								
\$ per barrel	56.1	54.9	-5.4	-19.8				

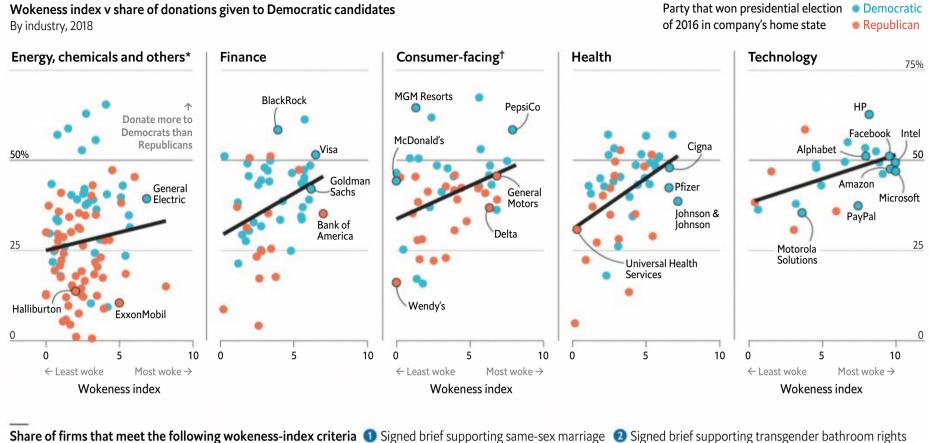
Sources: CME Group; Cotlook; Darmenn & Curl; Datastream from Refinitiv; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit **Economist.com/indicators**

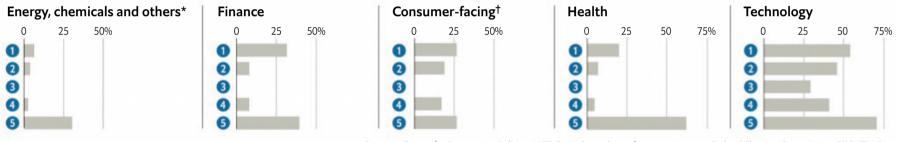
Party that won presidential election Democratic

Graphic detail Woke companies

Even socially liberal companies prefer Republicans—but not as much as their less "woke" peers do



3 Signed brief opposing Donald Trump's travel ban 🐠 Belong to group seeking to end the gender pay gap 🏮 Have employees who mostly donate to Democrats



Sources: Centre for Responsive Politics; JUST Capital; employersforpayequity.com; Federal Election Commission; SEC; The Economist *Industrial goods, utilities, oil & gas, construction, aerospace & defence, chemicals †Household goods, transport, food, retail, entertainment

Money where their mouths are

Socially liberal firms really do give more money to Democrats

APTAINS OF INDUSTRY and social-justice warriors are strange bedfellows. Yet many American companies have embraced leftist causes. In 2016 PayPal cancelled its expansion in North Carolina after the state began limiting transgender people's choice of bathroom. When Donald Trump instituted a travel ban on people from Muslim countries, 164 firms signed legal briefs opposing it. And following a mass shooting in 2018 Delta, an airline, ended discounts for members of the National Rifle Association.

Sceptics of corporate social responsibility (CSR) say that such acts are mere marketing. Firms support reforms like laxer immigration laws out of their own financial interest; and supporting causes like gay rights costs them nothing. They still prefer conservative policies on their main concerns, often taxes and regulation.

Yet in a two-party system, firms cannot order a main dish of tax cuts with criminaljustice reform on the side. Democrats back social liberalism and tighter state control of corporations; Republicans espouse the opposite. Do supposedly socially tolerant companies donate more to leftists than to candidates on the business-friendly right?

To answer this question, we built a zeroto-ten "wokeness index" to measure the social progressivism of 278 firms. We give one point each for signing legal briefs in favour of gay marriage, or opposed to the Muslim ban or transgender bathroom restrictions. We grant another point for joining a group that seeks to end the gender pay gap and for having a workforce that gives at least 60% of personal donations to Democrats. The final five points are based on CSR scores from JUST Capital, a pressure group. The wokest companies, such as Microsoft, cluster in tech; the least woke are in oil and gas.

Armed with this index, as well as data on political donations from the Centre for Responsive Politics, a research group, we sought to measure whether woke firms practise what they preach. The results offer some support for each side of the debate.

On one hand, wokeness clearly sways

political-action committees. Using a statistical model, we found that if you took a group of companies in the same industry which all gave \$100,000, and were based in states that voted similarly in the presidential election of 2016—those with ten wokeness points would have given \$12,000 more to Democrats than those with zero. (Companies tend to donate more to the party that is more popular in their home states.)

This effect varied by industry. The wokest health-care companies (such as Cigna, an insurer) gave Democrats half of their donations, compared with just a third for the least woke (like Universal Health Services, a hospital manager). The gap was smaller in industries affected by environmental regulation, such as chemicals. The wokest of these firms gave about 30% of their money to Democrats, and the least woke 25%.

However, CSR sceptics will note that even the wokest companies give priority to profits. Firms in the top quarter of our index gave 58% of their money to Republicans. Liberals can denounce Alphabet, an advocate of gay marriage, for donating to politicians who oppose it. But if Google's parent company were less woke, it might have given even more to Republicans.

Obituary Richard Booth



A saviour in ermine

Richard Booth, bookseller and King of Hay, died on August 20th, aged 80

If you were presented with a town like Hay-on-Wye—a sand-stone cluster of some 2,000 souls guarded by a Norman castle, cradled in green Welsh hills and watered by the loveliest river in Britain—and were told to revive its fading economy, you might not think of a second-hand bookshop. The entrepreneurial flame seldom burns bright there. Outside, a few shelves open to the weather tempt you with *Proceedings of the 1957 Plumbers' Convention* and "Turnips for Fun and Profit". Inside the stock is haphazard, unalphabetical, and sometimes in piles on the floor. Beside the till, an intellectual ancient in tweed jacket or cardigan, roughly according to sex, sits sunk in such slumbrous appreciation of a volume from the stock that they do not stir either to wish you good day when you enter, or say goodbye when you leave.

Richard Booth overturned all that. He swept into Hay in 1961, fresh down from Oxford, flush with inherited money from Yardley's soap and toilet water and sparkling with visionary schemes. First he bought the dilapidated old fire station in Lion Street and filled it with books. He did the same with the old cinema, then two premises on the high street, until he had opened 20, and the original shop had become, by his estimate, the biggest second-hand bookshop in the world. Many of his employees went on to start bookshops of their own, until the town had almost 40. Encouraged by this bonanza the Hay Festival of Literature started up in 1988, drawing up to 250,000 visitors for ten days every year. Little Hay was now world-famous. In 1999 the University of Strathclyde reported that, since Mr Booth and the books arrived, not only had the town boomed but, on the back of that, Wales had.

Odd, then, that Hay's saviour did not care that much for books. His father liked browsing, and as a boy he had tagged along, but those dusty tomes might have been vegetables or shoes as far as he was concerned. You could carry them about, and use them as wall-paper; he was happy to choose books for the libraries of rich Amer-

icans simply for their bindings, not for anything inside. Books were something he could sell, piling high and flogging cheap, and the more outlets he had in a place, the more people would come. So with several strong men from Hay he toured America and the English-speaking world, buying whole libraries, until his shops were so stuffed that in the 1980s, to the horror of those who did care, he was offering books as kindling at £1.50 a car-boot-load. One famous visiting writer counted 20 copies of "The Indian Dog" in the main shop. No matter; Mr Booth reasoned that any book at all might have a buyer waiting somewhere.

And books were a means to his glorious end: to make his home town stand proudly on its own two feet, freed from the shackles of the useless town council, the Welsh Tourist Board and the quangos of the Development Board for Rural Wales. Government bureaucrats had no idea how to make a town like Hay thrive. Everything they came up with—chain motels employing the slave-labour of the locals, theme parks, supermarkets selling them bad bland food—stripped away the distinctiveness of the place. Local voices went unheard. The answer was to give the town back to the talents and good sense of its citizens, and books were just the start. He already lived in the half-ruined castle, knocked about a bit by both bad King John and Owen Glyndwr, and parked his Rolls-Royce outside, so the next move came naturally. In 1977, when 20 journalists were in town—searching for the pop star Marianne Faithfull, not for him—he seceded from Britain in a Unilateral Declaration of Independence and crowned himself king.

Coverage was immense. The national press relayed his triumphal entry into the town, clad in a tin-foil crown and ermine cloak and bearing his regalia of gilded ballcock and copper piping, while the biplane of the Hay air force did a flypast and the rowing boat of the Hay navy went down the Wye, firing blanks through a drainpipe. After a three-minute speech, in which he hoped that "Hay potage" and "the Hay loaf" would become real, not theoretical, he raised the flag of independence, the green and white of Wales with the black Booth arms, to the cheers of 20,000 people.

His demeanour was royal, right down to fits of royal pique; yet he was not a monarchist. He invoked the divine right of kings only as a perfect foil to the divine right claimed by officialdom. Democracy was his real love, as his rule showed. Almost everyone in town could have a post in his government. His drinking pals from The Rose and Crown made up his cabinet; the minister for social security had been on the dole for six years. He sold titles to anyone who fancied being a duke, an earl or a Polish count. His subjects were also decorated at random: two small boys in the crowd at his coronation were knighted, and a woman was declared queen of her street, receiving a gold-dipped flower. Every month the back room at The Swan became the Royal University of Cusop Dingle, dedicated to topics cruelly ignored by the rest of academia. In this centre of learning, anyone could be a professor.

What with the books and its giddy freedom, Hay now thrived, becoming a model of revival for failing rural towns the world over, from Nebraska to South Korea. Its king was delighted by that, though he himself rose and fell, going bust at one point (he was hopeless with money), failing to win a seat in the Welsh Assembly and, by 2007, selling all his shops. He gained enemies as well as friends, and in 2009 was executed in effigy in the old Butter Market by a rival bookseller, who set up a Commonwealth.

Nor did he ever embrace the Festival, which to him was a piece of Murdochite sponsorship which brought crowds for a while but did not sustain the town month in, month out. Worse, it celebrated new books, a million words of mumbo-jumbo nonsense. He dreamed of a *polis* of creative citizens working nobly with their hands, fed by cheery peasants from the green surrounding hills who brought in ungraded eggs and home-cured bacon, unbound by fussy regulations. Whether they read or not—whether they could read or not—mattered less than that the bureaucrats were felled at last, clobbered by 20 copies of "The Indian Dog".





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