

Joe Biden's border crisis

Britain's dangerous illiberalism

Flawed logic: the EU and vaccines

Manufacturing hope in Africa

MARCH 20TH–26TH 2021

The brutal reality of dealing with China



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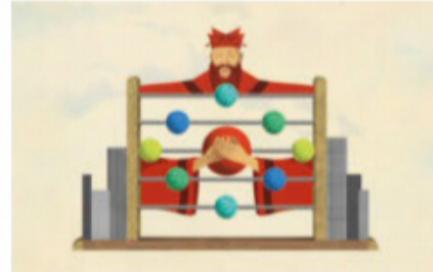
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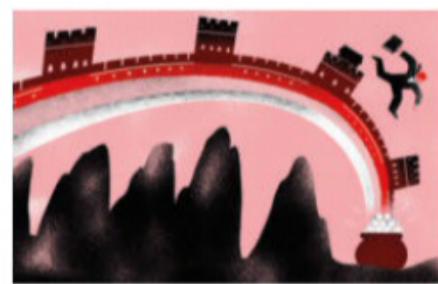
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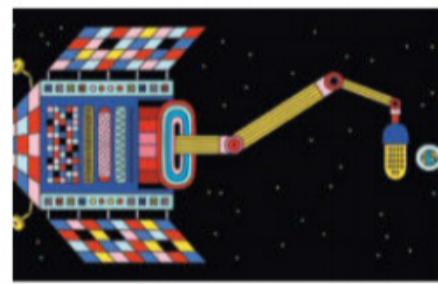
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 and an unworthy, timid ignorance
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At least 16 EU countries, including Germany, France, Italy and Spain, suspended the use of **AstraZeneca's covid-19 vaccine**, following reports that a handful of people had developed blood-clots after receiving it. Several regulators, including the World Health Organisation, said that the risks of not getting jabbed far outweighed those of getting jabbed. Experts predicted that the delay would cost lives and needlessly undermine confidence in both the AstraZeneca vaccine and vaccines more generally.

Germany's ruling Christian Democrats performed badly in two important state elections, Baden-Württemberg and Rhineland-Palatinate. The results are a blow to the party's new leader, Armin Laschet, and a sign that Germans are unimpressed by the government's handling of the covid crisis.

A general election in the **Netherlands** appears to have given Mark Rutte, the centre-right prime minister, a chance to form a new government, though assembling a coalition will be complicated. D66, a pro-European liberal party, did surprisingly well, as did the populist right.

Britain published a review of defence and foreign policy. One surprise was a reversal of the decision taken a decade ago to reduce the nuclear stockpile from 225 to 180 warheads by the mid-2020s. Britain will now increase its arsenal to 260 by the middle of the decade, the first escalation since the peak of the cold war, when Britain had over 500. Official figures about oper-

ational stockpiles and deployed warheads will no longer be published.

Police in **Bolivia** arrested Jeanine Áñez, the president of a recent interim government, and other officials, accusing them of plotting a coup against Evo Morales. Mr Morales resigned as president in November 2019 amid accusations of fraud in his re-election. The charges against Ms Áñez are probably a retribution for the similar charges her government filed against officials from Mr Morales's party.

John Magufuli, the president of **Tanzania**, died at the age of 61, after weeks of speculation that he was being treated for covid-19. Mr Magufuli had ordered his government not to vaccinate people against the virus, nor to take steps to limit its spread, insisting that God had cleansed the country of it.

Gunmen on motorcycles killed at least 58 people in northern **Niger**, near the border with Mali. Jihadists have been active in the region.

Regional forces from **Ethiopia's** Amhara state took control of parts of Tigray, which is next door. The occupation could add fuel to a civil war between the federal government and Tigray's ousted rulers. It may also increase tensions around other disputed internal borders in the country, which is a federation of ten ethnically based states.

Police in **Uganda** again arrested a popular opposition leader known by his stage name, Bobi Wine. Hundreds of people have been detained since a disputed presidential election earlier this year that was won by Yoweri Museveni, who has ruled since 1986.

A new interim government in **Libya** was sworn in, replacing two rival administrations. Its main task is to prepare the war-torn country for elections in December. Libya descended into conflict after the last nationwide elections, in 2014.

A court in **Japan** found that the government was wrong to ban same-sex marriages. But it stopped short of overturning the policy, saying instead that parliament should be given time to legislate on the matter.

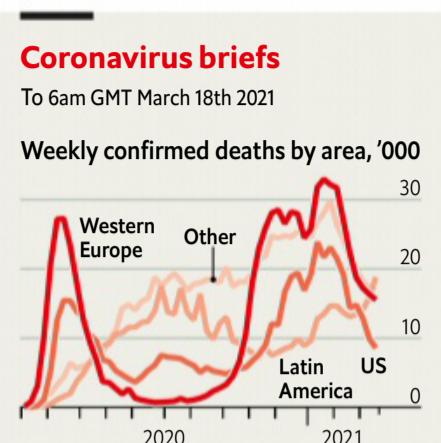
The military junta that has seized power in **Myanmar** declared martial law in the country's two biggest cities, in an effort to curb protests. Soldiers have shot dead more than 200 people. **China**, meanwhile, urged Myanmar to protect Chinese-owned factories after several were set on fire during unrest in Yangon. Anti-government protesters accuse China of supporting the military takeover, which China denies.

A gunman killed eight people at three massage parlours in Atlanta. Six of the dead were **Asian-American** women. Pundits speculated that the shooter might have had a racial motive, but he told police he was a sex addict and wanted to remove a source of temptation. Police said it was too early to draw any conclusions about the crime.

In Texas eight unauthorised immigrants were killed when their car crashed during a police chase. Migrants are once again heading in large numbers to the **US-Mexican border** and trying to enter America. Republicans blame Joe Biden's relaxation of Donald Trump's strict immigration rules.

More Democrats, including Chuck Schumer, the leader of the Senate, called on **Andrew Cuomo** to resign as governor of New York amid allegations of sexual harassment. Mr Cuomo said he would not bow to "cancel culture".

Team New Zealand won the 36th **America's Cup**. The oldest trophy in international sport featured high-tech sailing boats racing at up to 50 knots (over 90kph). New Zealand's deft handling of the pandemic allowed the contest to go ahead, but only a few teams took part, thanks to covid-19.



	This week, '000	Total '000	Per 100 people
Israel	565	9,503	109.8
Seychelles	5	88	89.6
UAE	255	6,669	67.4
Maldives	50	213	39.4
Britain	2,477	26,504	39.0
Chile	1,946	7,408	38.8
Bahrain	40	581	34.1
United States	16,496	110,738	33.1
Serbia	291	2,040	30.0
Malta	23	126	28.6

Sources: Johns Hopkins University CSSE; Our World in Data; United Nations

Schools, shops and restaurants were ordered to close across half of **Italy**, including Milan and Rome, as a new wave of cases emerged.

Britain's National Health Service warned of a crunch in vaccine supply next month, a potential setback to the country's successful inoculation programme.

Brazil's president, Jair Bolsonaro, replaced his health minister for the third time during the pandemic. Mr Bolsonaro continued to rail against lockdowns. Only around 5% of the population have been vaccinated.

The prime minister of **Papua New Guinea** said that a quarter of the population may have contracted covid-19. Neighbouring Australia, which is providing vaccines, is worried that the virus might spread across the maritime border. So are other Pacific countries, many of which have weak health services.

For our latest coverage of the virus please visit economist.com/coronavirus or download the Economist app.

Uber announced that it would comply with a recent legal ruling in Britain which found that its 70,000 or so drivers in the country are employees, not contractors. This means they will be entitled to the minimum wage, holiday pay and a pension in Britain, the first country where Uber has accepted such conditions. The status of workers in the gig economy is being reviewed in other cases around the world. Courts increasingly agree that it is the drivers who are being taken for a ride.

Will VW overthrow the king?

Competition in the electric-car market accelerated, as **Volkswagen** set out plans to standardise electrification technology across all aspects of its vehicles and to scale up production worldwide. It is also to build six battery factories in Europe alone. VW aims to deliver 1m electric or hybrid cars this year, bringing it closer to **Tesla** in sales, and eventually possibly snatching Elon Musk's crown. Tesla's CEO said this week that henceforth his job title is "technoking".

The Chinese government escalated its criticisms of the country's big **internet companies**. Xi Jinping, the president, chaired a meeting which concluded that some platforms "are growing in an inappropriate manner". In another sign that officials think the industry is too powerful, state television aired allegations of tech malpractice, including a claim that Alibaba's internet browser carried misleading ads. The browser was promptly pulled from app stores.

Baidu, China's dominant search engine, which has also aroused the ire of the country's regulators, is aiming to raise more than \$3bn from its forthcoming secondary listing of shares in Hong Kong, according to reports.

Stripe, a payments-processing platform for e-commerce websites, was valued at \$95bn after its latest round of financ-

ing. That makes the startup more valuable than Facebook and Uber when they were still unlisted firms.

Striving to make women feel safer when they use its dating app, **Tinder** said it would integrate **Garbo**, a service that checks people's backgrounds, into its platform this year. Garbo, run not for profit, was founded by Kathryn Kosmides, a former victim of abuse.



There were more signs that **air travel** in America is picking up. Figures from the Transportation Security Administration showed it had screened around 1.3m travellers a day over several days for the first time in a year. Numbers are still down by half compared with 2019. With the industry optimistic about summer bookings, the shares of America's four biggest carriers hit their highest prices in a year.

Emmanuel Faber was ousted as chairman and chief executive of **Danone**, following a campaign by activist investors unhappy at the performance of the French food company's share price. Mr Faber is one of the most vocal advocates of sustainable capitalism. When Danone changed its legal status last year to become a purpose-driven company, he declared that Milton Friedman's statue had been toppled. Following Mr Faber's overthrow, it is not so clear that Friedman's famous dictum, that the sole purpose of a company is to increase shareholder value, is in fact dead.

The **Federal Reserve** said the American economy, and inflation, will grow at a much quicker pace this year than it had forecast. At its meeting on March 11th, the **European Central Bank** committed to speed up its purchase of bonds over the next three months in response to the euro zone's insipid economic recovery and rising borrowing costs.

As it tries to catch up some of the ground it lost to Ericsson and Huawei in the roll-out of 5G, **Nokia** said it would cut up to 10,000 jobs in order to "reset" its future capabilities. The Finnish maker of network

equipment has been gradually reducing its workforce from a peak of 132,000 in 2010.

Members of the **Sackler family** increased the amount they will pay under the OxyContin settlement to \$4.3bn. The family still own Purdue Pharma, which made the addictive painkiller and needs to settle the claims against it in order to leave bankruptcy protection.

Greggs, a British purveyor of cheap-but-cheerful sandwiches and snacks, reported its first annual loss since becoming a public company in 1984. The retailer, which has bucked the trend of high-street closures through canny marketing, most notably of its vegan sausage roll, plans to bounce back from the pandemic by opening 1,000 new shops in the coming years.

Carpet burn

Changes to the official **basket of goods and services** that make up Britain's consumer-price index reflected the pandemic. In come hand sanitiser, hand weights and lounge-wear. Out go ground coffee, white-chocolate bars and Axminster and Wilton carpets, flooring that went out of fashion in the 1980s.





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Dealing with China

An epoch-defining contest between autocracy and liberal values lies ahead

LAST WEEK China slapped down democracy in Hong Kong. The imposition of tight mainland control over the territory is not just a tragedy for the 7.5m people who live there, it is also a measure of China's determination not to compromise over how it asserts its will. After the collapse of the Soviet Union in 1991, liberal values were ascendant around the world. The challenge from China will subject them to their greatest test since the early days of the cold war. What is more, as the economy of Hong Kong also shows, China is more tightly coupled with the West than communist Russia ever was. This presents the free world with an epoch-defining question: how should it best secure prosperity, lower the risk of war and protect freedom as China rises?

Hong Kong defies those looking for a simple answer. China has cut the share of directly elected legislators from 50% to as low as 22% and will require that they are vetted for "patriotism". It is the culmination of a campaign to squash liberty in the territory (see Briefing). The leaders of the protest movement are in exile, in prison or intimidated by a security law imposed on Hong Kong in 2020. Censorship is rising and Hong Kong's judiciary and regulators will face pressure to show their fealty. On March 12th the G7 group of democracies condemned China's autocratic clampdown, which is a breach of the country's treaty obligations. China's diplomats replied with bombastic denials.

You might think the death of liberalism in Asia's financial centre, which hosts \$10trn of cross-border investments, would trigger panic, capital flight and a business exodus. Instead Hong Kong is enjoying a financial boom. Share offerings have soared as China's leading companies list there (see Business section). Western firms are in the thick of it: the top underwriters are Morgan Stanley and Goldman Sachs.

Last year, the value of US dollar payments cleared in Hong Kong, a hub for the world's reserve currency, hit a record \$11trn.

The same pattern of political oppression and commercial effervescence is to be found on the mainland. In 2020 China abused human rights in Xinjiang, waged cyber-warfare, threatened its neighbours and intensified the cult of personality surrounding President Xi Jinping. Another purge is under way. Yet when they talk to shareholders about China, global firms gloss over this brutal reality: "Very happy," says Siemens; "Phenomenal," reckons Apple; and "Remarkable," says Starbucks. Mainland China attracted \$163bn of fresh multinational investment last year, more than any other country. It is opening the mainland capital markets to foreigners (see Finance section), who have invested \$900bn, in a landmark shift for global finance.

Moreover, the pull China exerts is no longer just a matter of size—although, with 18% of world GDP, it has that too. The country is also where firms discover consumer trends and innovations. It is increasingly where commodity prices and the cost of capital are set, and is becoming a source of regulations. Business is betting that, in Hong Kong and the mainland, China's thugish government is capable of self-restraint in the commercial sphere, providing contractual certainty, despite the lack of fully independent courts and free speech. Though China's best-

known tycoon, Jack Ma, has fallen from political favour, foreign investors' stakes in his empire are still worth over \$500bn.

All this is a rebuke to the West's China policy of recent decades. When Western leaders welcomed China into the world trading system in 2001, many of them believed that it would automatically become freer as it became richer. When that did not happen the Trump administration tried coercion, tariffs and sanctions. Those have failed, too—and not only in Hong Kong. America has led a three-year campaign against Huawei, a firm it accuses of spying. Of the 170 countries that use its products, only a dozen or so have banned it. Meanwhile, the number of Chinese tech firms worth over \$50bn has risen from seven to 15.

One response would be for the West to double down by seeking a full disengagement with China in an attempt to isolate it and force it to change tack. The cost would be high. China's share of world trade is three times that of the Soviet Union in 1959. Prices would rise as Western consumers were cut off from the world's factory. China makes 22% of global manufacturing exports. Western clusters that rely on China would face a shock: tech in America, cars in Germany, banking in Britain, luxury goods in France and mining in Australia. Banning China from using the dollar today could trigger a global financial crisis.

Such a price might be worth paying if an embargo were likely

to succeed. But there are many reasons to think that the West cannot penalise the Chinese Communist Party out of power. In the short run, if forced to take sides, many countries might choose China over the West. After all, China is the largest goods trading partner of 64 countries, against just 38 for America. Instead of isolating China, America and its allies could end up isolating themselves. In the long run, unlike

the oil-soaked Soviet Union, China is big, diverse and innovative enough to adapt to outside pressure. It is testing a digital currency, which could eventually rival the dollar as a way to settle trade. It aims to be self-sufficient in semiconductors.

At least an embargo would encourage China to protect human rights, some will say. Yet isolation tends to strengthen the grip of autocratic governments. Cut off from commercial, intellectual and cultural contact with the West, ordinary Chinese will be even more deprived of outside ideas and information. The day-to-day contact of 1m foreign-invested businesses in China with their customers and staff, and 40,000 Chinese firms abroad with the world, is a conduit that even China's censors struggle to contain. Students and tourists engage in millions of ordinary encounters that are not intermediated by Big Brother.

Engagement with China is the only sensible course, but how does it avoid becoming appeasement? That is the challenge facing the Biden administration, which held a summit with China as we went to press. It is at the heart of strategic reviews like the one Britain has just unveiled (see Britain section).

It starts with building up the West's defences. Institutions and supply chains must be buttressed against Chinese state interference, including universities, the cloud and energy systems. The creaking American-led infrastructure behind globali- ►



► sation—treaties, payments networks, technology standards—must be modernised to give countries an alternative to the competing system China is assembling. To keep the peace, the cost to China of military aggression must be raised, by strengthening coalitions such as the “Quad” with India, Japan and Australia, and bolstering Taiwan’s military strength.

Greater resilience allows openness and a tough stance on human rights. By articulating an alternative vision to totalitarianism, liberal governments can sustain the vigour of open societies everywhere in a confrontation that, if it is not to end in a tragic war, will last decades. It is vital to show that talk of universal values and human rights is more than a tactic to preserve

Western hegemony and keep China down. That means firms acting against enormities by, say, excluding forced labour from their supply chains. Whereas Western amorality would only make Chinese nationalism more threatening, principled advocacy of human rights sustained over many years may encourage China’s people to demand the same freedoms for themselves.

China’s rulers believe they have found a way to marry autocracy with technocracy, opacity with openness, and brutality with commercial predictability. After the suppression of Hong Kong, free societies should be more aware than ever of the challenge that presents. They now need to muster a response—and to prepare their defences for the long struggle ahead. ■

Immigration

Biden’s border crisis

The president faces a decisive test of his leadership

ON HIS FIRST day in office, President Joe Biden signed an executive action to halt construction of Donald Trump’s controversial and expensive border wall, but now he has a new wall of worry. A crisis is rapidly building on the southern border with Mexico, as hundreds of thousands of migrants seek entry into the United States, fuelled by the hope that the new president will be more welcoming than his predecessor was. In January and February the number of unaccompanied minors apprehended along the border started to surge above previous peaks. Illegal border crossings in general are soaring, amid predictions that this year they may be the highest for two decades.

For Mr Biden this poses a threat. Immigration, for years the most polarising issue in American politics and one that has become ever harder to solve, could soon dominate the agenda. To the president’s right, Republicans are on the rampage. To his left, meanwhile, progressive Democrats are out of step with wider American opinion, championing impractical demands (such as stopping deportations) while labour unions oppose sensible policies such as issuing more work visas. Mr Biden may want to avoid a confrontation with progressives, whose support he needs for other legislation. Yet he finds himself in a bind that could yet cost his party control of Congress in the mid-term elections next year.

In the short term, Mr Biden cannot change the dire circumstances that are propelling Central Americans, Mexicans and others from trying to set foot on American soil, but he can easily alter the signals he sends. His administration has at times sounded like a shy host who is too polite to kick out hungry gate-crashers. “We are not saying ‘Don’t come’. We are saying ‘Don’t come now’,” was the excessively mild recent message to potential migrants from the secretary of homeland security, Alejandro Mayorkas. On March 16th Mr Biden sought to dispel any ambiguity: “I can say quite clearly: don’t come over,” he told ABC News. He needs to do more to impose clarity and control.

That means making it plain that tolerance of legal immigration has to go hand in hand with toughness on the illegal sort. This will sometimes feel harsh. Unaccompanied minors who do not have successful asylum claims or family of legal status in America should be sent home. But there is no contradiction in

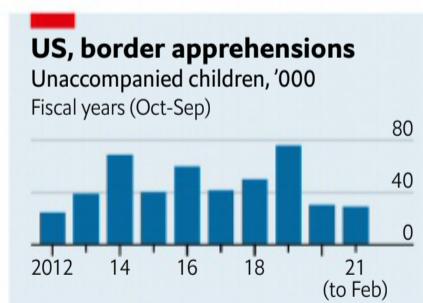
being pro-immigrant yet anti-illegal-immigration. Recent Democratic presidents have taken strong stands on enforcement, including deporting illegal immigrants, bulking up border control and building fencing on the southern border.

Mr Biden should start with manageable tasks, visiting the border to understand the scale and complexity of the challenge confronting him. He should immediately appoint permanent leaders for Customs and Border Protection and Immigration and Customs Enforcement. Their staff are overwhelmed, confused about which policies are in effect and unsure what the administration plans to do next (see United States section). Simple actions, such as directing more intelligence resources to crack down on cartels and smugglers and getting rid of the invasive brush along the banks of the Rio Grande, could have an outsize impact by making it easier for Border Patrol to do its job.

Beyond such measures Mr Biden needs to overhaul the asylum process. Because of a backlog in immigration-court cases—which today number 1.3m, about two-and-a-half times the total when Mr Trump assumed office—resolution of asylum claims takes years. Many migrants are allowed to stay in America while their cases are pending. Better to let claims be evaluated by asylum officers instead of judges. Those who want to appeal against adverse decisions could still do

so in court, but such a change would ensure resolution within months, not years. Although a grand bargain on immigration is probably impossible in today’s polarised environment, more such technocratic compromises may be feasible.

A sustainable immigration policy for the future must involve creating more ways for immigrants to enter America legally. Currently there is no queue to join if you want to come to live and work in America, which is why so many migrants are either rushing the border to claim asylum or entering illegally. The asylum system has become a backdoor substitute for a proper immigration scheme. Mr Biden would also, sensibly, like to extend citizenship to undocumented immigrants who are already living in America and to the “Dreamers” who arrived there as children. Yet hope of such reforms depends on him acting decisively. An uncomfortable showdown with noisy elements within his own party may soon be needed. ■



Covid-19 vaccination

Another shot in the foot

European countries' abundance of caution will cost lives

IT DOES NOT take much for people to lose confidence in vaccines. When a few Europeans who had received the AstraZeneca (AZ) shot for covid-19 suffered unusual blood clotting that was sometimes fatal, many countries in the European Union stopped using it. They say this shows they take safety seriously. Unfortunately, their caution is more likely to cost lives.

The suspensions began after Norway reported four cases of blood clotting in adults given the AZ vaccine. Similar reports have come from other European countries. Within days at least 16 of them, including Germany, France and Italy, had called a halt. The World Health Organisation, the European Medicines Agency (EMA) and the regulator in Britain, where the AZ vaccine has been used abundantly, urged people to keep getting jabbed.

The EMA was to issue a report on March 18th, updating this advice. It is hard to see how it could justify a change in its position. The AZ vaccine, like others, has been shown to be safe in millions of people.

Any confusion lies in the difficulty of disentangling causation from correlation. The EMA reckons that as of March 10th there had been 30 “thromboembolic events” among the 5m people in the EU who have received AZ’s vaccine. By itself, that is no more remarkable than the fact that some of them will have suddenly had relief from chronic back pain or seen their cancer go into remission. The question is whether the rates are higher than would otherwise be expected. With clots, even as evidence from specific cases needs investigating, the mass of overall data shows that the vaccines are safe.

In clinical trials 38% of those given the jab reported at least one side-effect, chiefly things like pain at the injection site, a headache or brief fever. So did 28% of those who got a dummy injection. Less than 1% of either group went on to suffer any serious illness. Of those who did, more had been given the placebo. Trial data are backed up by mass-vaccination experience in oth-

er countries. Britain has administered more than 10m doses of each of the AZ vaccine and the one made by Pfizer, an American firm. Its medicines regulator reckons that both vaccines cause between three and six reports of side-effects for every 1,000 doses delivered, almost all of which are mild.

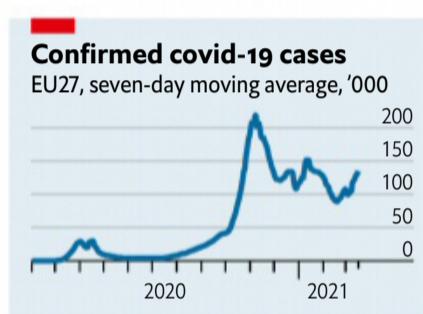
Even if it turns out to entail a minuscule risk of clotting disorders, vaccination is likely to be many, many times less dangerous than catching covid-19. People routinely undertake activities that involve a small risk of blood clots, such as flying, taking birth-control pills, smoking and eating unhealthily.

European officials have described the suspensions as temporary precautions. When the evidence is in, programmes can pick up where they left off—and the public will be reassured. That

logic is wrong on two counts. One is that, while vaccination is halted, people will contract covid-19. Precautionary regulation would have continued with vaccination while the clotting was investigated because, given the prevalence of the disease in Europe, which is growing, that would minimise death and suffering. The other mistake is that doubts caused by a temporary halt are likely to persist.

Consider other vaccines. Many rich countries inoculate children against human papillomavirus (HPV), which causes cervical cancer. After anecdotal reports of side-effects in 2013, Japan stopped recommending the HPV vaccine. No amount of evidence of the safety of the HPV vaccine has persuaded it to change its mind. As a result, according to one estimate, more than 5,000 Japanese women born between 1994 and 2007 have died.

Some European medics allege that their countries suspended their vaccination programmes partly out of EU “solidarity” or frustration with EU bureaucrats telling them how to deal with the pandemic. If so, that will rebound on them. If the death toll mounts and vaccination rates remain stubbornly low, expect recriminations to fly. And rightly so. ■



Civil liberties in Britain

A taste for cracking down

The government should bin its illiberal attempt to restrict protest

“FREEBORN ENGLISHMEN and women can no longer walk a few hundred paces down the queen’s pavement to Downing Street to protest at the closure of their local hospital,” thundered Boris Johnson in 2006. When the Tories were in opposition, Mr Johnson condemned attacks on the nation’s proud liberal traditions by the dastardly Labour government in prose weighed down with patriotic tropes.

No longer. On March 16th his government’s Police, Crime, Sentencing and Courts bill, which includes provisions that would sit comfortably in Russian or Chinese statute books, passed its second reading in the House of Commons. It increases

the maximum sentence for defacing a memorial from three months to ten years and would allow police to restrict protests if the noise they make has a “relevant impact” on people in their vicinity. Since making an impact on people nearby is the point of protests, this bill would give police excessive powers to gag demonstrations.

The clause on memorials is a clue to the government’s motivation. There has been an upsurge in protests in the past couple of years, especially by Black Lives Matter (BLM) and Extinction Rebellion (XR). BLM protests targeted statues connected with the slave trade and the empire; even Winston Churchill was daubed ►

► with paint. XR caused disruption in London with a series of spectacular protests in 2019, and the prime minister no doubt fears being upstaged by a protest group with a talent for dramatic visuals at the COP26 global climate-change conference in Glasgow in November.

That societies should take pride in their histories and want to protect their memorials, even when some of the chaps on the plinths do not look quite as heroic now as they did in their own times, is understandable. That cities should try to minimise disruption to their activities, even when demonstrators have a powerful cause, is understandable. But those interests must be balanced with others.

Freedom of expression, including the freedom of assembly, is central to a liberal democracy, and decent societies have to put up with a few inconveniences to guarantee it. That's not just because expression bolsters individual liberty, but also because governments sometimes need to hear what protesters have to say. XR has made the world take climate change more seriously. BLM has made white people think harder about racism. Most of what is now called political progress started off as protest.

The pandemic has set a dangerous precedent. Governments all over the world have used it to suppress civil liberties. Mostly, that has been in countries without the proud liberal tradition that Mr Johnson used to celebrate, but even in Britain the government appears to have got a taste for cracking down. On March 7th a nurse was fined £10,000 (\$14,000) under covid-19 legislation for organising a 40-person demonstration demanding higher pay rises for health workers. And after spending much of a year locked up by decree, freeborn Englishmen and women are less trenchant in the defence of their liberties than Mr Johnson once assumed. By two to one, they think protest should be illegal in a pandemic; and when police arrested women at a vigil for a murder victim on March 13th, a plurality thought that they were right to have banned the event.

This complacency is as dangerous as the government's illiberalism. Britons may take their freedoms for granted now, but they have had to defend them in the past and will again. That is what put Churchill—the prime minister's hero—on a plinth. Unless Mr Johnson bins this rotten bill, he will do more damage to Churchill's legacy than any paint-spraying protester. ■

Economic development

How to promote African factories

A sub-Saharan industrial revolution need not be a pipe dream

FEW BUILDINGS symbolise the rise and fall of manufacturing in South Africa better than the old General Motors plant in Gqeberha (previously Port Elizabeth). During apartheid the factory was sheltered from international competition by sanctions and tariffs. Now its vast silvered assembly halls stand bare. It was closed in 2017, an emblem of South Africa's car industry, which shed almost one in four jobs between 2009 and 2017. That is typical of a wider decline of manufacturing across the continent. In 1975-2014 manufacturing's share of GDP in sub-Saharan Africa fell from 19% to 11%.

This collapse has plenty of causes. In countries such as Zambia, firms were nationalised and run into the ground by bureaucrats. In resource-rich places such as Nigeria exports of oil or other commodities led to an overvalued local currency, making it cheaper to import things than make them. As much of the continent opened up to imports in the 1990s, manufacturers struggled to hold their own against hyper-competitive Chinese firms with the scale to drive down costs.

In 2015 Dani Rodrik, an economist at Harvard, wrote of "premature deindustrialisation" in Africa. The continent seemed to be missing out on an important means of boosting productivity and creating jobs. The ladder that hundreds of millions of Asians had climbed up out of poverty had been taken away just as Africans were putting a foot on the first rung, some feared. Since by around 2035 there will be more young people joining the workforce in Africa than in the rest of the world combined, it matters whether this idea is right.

Thankfully, newer data suggest it is not. Sub-Saharan Africa's manufacturing slump bottomed out in the 2000s. Since 2010 the number of workers in African factories has steadily risen (see Middle East & Africa section). So has factory output. Worries

about deindustrialisation now look as if they are premature.

Many African leaders are eager to promote manufacturing, partly to avoid dependence on volatile commodities and partly because their countries have found it so frustratingly hard to import medical supplies quickly enough during the pandemic. To get the best results, they should start by learning from past failures. That means avoiding nationalising companies, subsidising national champions or raising import barriers to cosset home-grown industries. Many leaders are wisely embracing a continent-wide free-trade agreement that came into force this year. It offers hope: a mattress-maker in landlocked Rwanda is more likely to grow by winning orders in next-door Congo than in far-off Japan.

Yet it is not enough for African governments to do no harm. Companies also need reliable power, educated workers and good infrastructure to improve productivity. Since hard choices are inevitable, governments should pick investments that diversify away from commodities. This would mean building ports with roads to industrial areas rather than to mines in the

middle of nowhere. Some governments are giving tax incentives to companies in a bid to break into prestigious industries like carmaking. They might do better to focus on easier targets, such as processing food for local stomachs, or making dull products like packaging for neighbouring countries.

If infrastructure and governance improve, more firms may choose to build factories in Africa to make components for global supply chains using parts from local suppliers. Industrialisation in Africa will not look the same as it did in Asia. Circumstances are different, and technology has moved on. But the notion that Africa has missed out on manufacturing seems to be mistaken. With better policies, its firms can find a path. ■



That interview

Your report on Oprah Winfrey's interview with Meghan and Harry made the assertion that "Being a royal is about serving an institution. It does not work for those who crave individual attention" ("Taking on the firm", March 13th). The queen and the Duchess of Cambridge (Kate Middleton) were held up as examples of royals who have excelled at suppressing their opinions for the sake of the household. Princess Diana and Meghan were accused of failing to understand the "job", unwilling to forgo their individuality for the greater good of the country.

It appears that *The Economist* applies these rigid expectations of selflessness only on female royals. Lest we forget, Prince Charles spectacularly failed to "subsume individual needs in those of the institution" when he had an affair with Camilla Parker Bowles. It seems that while princes can be acceptably divisive, it is up to the ladies to placate the public.

BETH SHAFFER-MCCARTHY
Naperville, Illinois

Most media missed the contradiction in the Sussexes interview with Oprah. The transcript shows that Meghan implied the notorious skin-tone question was asked about their son when she was pregnant. Harry, on the other hand, quite clearly says the conversation about "what will the kids look like" happened "right at the beginning". This makes a difference, from what might have been an attack on a mother and her unborn child, to an impolite and insensitive question in what might have been a wide-ranging chat about married life.

KIERAN SHEEDY
London

It is quite unfair to say that Queen Elizabeth "has not said a single interesting thing in public in her 70 years on the throne". I can think of several. In particular, in a message to the American people shortly after the terrorist attacks of

September 11th 2001 she said, very memorably, that grief is the price we pay for love.

BILL KNIGHT
London

The misfortune of others

I read the letter from Zsuzsanna Schiff about the lack of an English equivalent of *Schadenfreude* (Letters, March 6th). May I introduce the word *epicaricacy* to her. It is rarely used, but I hope this revelation does not destroy her faith in the "compassionate nature" of English people.

JAMES WIGMORE
Farnham, Surrey

The smuggest guys

Schumpeter was right to point out McKinsey's ethical shortcomings, which have been decades in the making (March 6th). As a junior consultant in the mid-1990s, I was lectured on the vital importance of probity, only to see Rajat Gupta, the man who led the firm at the time, locked up for insider trading. Yet dishonesty and hypocrisy aren't necessarily barriers to commercial success. McKinsey's greatest threat may instead be its increasing irrelevance. Having been subjected to more than 25 years' worth of alumni newsletters, articles and lectures, I cannot recall a single valuable idea in the fields of technology, media and education in which I work. The online world is now replete with influential networks of expertise and genuinely insightful analysts; very few of them have much to do with the big consultancies.

TIMO HANNAY
London

Schumpeter's claims about the workings of McKinsey were sensationalist and unfounded. No one is suggesting that the advice it gave to Purdue Pharma was a good idea. But McKinsey has thousands of clients across every industry and is incredibly decentralised. Many companies and governments have turned to the management consultancy during the pandemic. Its pub-

lic image may have taken a beating, but its clients still appreciate the intellectual candour of its consultants. In truth, McKinsey isn't hired when there is an easy answer, which can make it unpopular. The majority of its projects improve the lives of most people, so it is disingenuous to focus on a small number of problematic cases.

DYLAN MOORE
Redwood City, California

Populist Rome and America

You discussed experiments with universal basic income schemes ("Cheques and balances", March 6th). Arguments for such payments stretch back longer than you think, to late republican Rome. The "grain dole" was introduced as part of a massive plan of public spending championed by Gaius Gracchus, a populist, becoming a feature of Rome's increasingly violent and partisan politics.

Here was a hegemonic power, triumphant after a final military victory against its mortal foe (Carthage) but plagued by periodic foreign wars thereafter, with an increasingly corrupt Senate, ever greater disparities of wealth and poverty, acrimonious debates about the scope of citizenship, and the use of mob violence as a tool of political power. Let's hope that the current experiment in republican government manages a course correction before it suffers the same fate.

GAVIN MARSHALL
Vancouver, Canada

Come fly with me

Your recent article calling for an end to duty-free shopping at airports will win praise from absolute purists in revenue departments, but few others ("Call of duty", February 27th). Duty free will be a vital cornerstone for the post-pandemic recovery of the wider travel industry. Airports must be given every opportunity to stand on their own feet and maximise revenue. Government support, while welcome,

is no long-term answer. A diverse and integrated passenger experience, which includes duty free, will meet passenger demands and put travel hubs in the right place to survive and thrive.

SARAH BRANQUINHO
President
Duty Free World Council
Paris

My local grocery store sells my house scotch for \$14.99 plus tax. LAX duty free sells the same bottle for \$25. It may be "tax free", but it certainly produces hefty profits.

OLOF HULT
Los Angeles

Many travellers like myself are simply trying to get from A to B, and find themselves stuck for hours waiting for a delayed connection. What we need are a comfortable chair, a decent bookstore and a hamburger. What we get is row upon row of shops selling overpriced handbags, jewellery and souvenirs. If we got rid of duty free the space made available could be devoted to businesses that cater to the basic creature comforts of the passenger.

DAVID BREWER
Puslinch, Canada

Historic whiskers

"Helpful humidity" (March 6th) noted that face masks may stop the spread of viruses. It strikes me that large beards may play the same role. In hunter-gatherer societies bearded males roamed far and wide and made contact with other communities. Could it be that beards evolved as de facto masks, protecting males from airborne pathogens? Might a hairy face mask be effective at protecting humans today? Some bearded research would be interesting.

DAVID LASLEY
Dudelange, Luxembourg



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ST JOHN'S College

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PRESIDENT ANNAPOLIS, MARYLAND

St. John's College, often considered the most rigorous and contrarian liberal arts college in America, invites nominations and applications for the position of President of its Annapolis, Maryland campus. The position is expected to assume the collegewide Presidency over the college's two campuses in June, 2023. The college's Western campus is located in Santa Fe, New Mexico. This overarching search welcomes candidates capable of the deft leadership required to succeed in both positions.

St. John's College plays a vital role in American education. The third oldest college in the United States, St. John's is renowned internationally for its Program of Instruction, which anchors its community of learning in a pedagogical approach that joins Socratic inquiry and dialogue with the rigorous study of foundational and world-changing books that span 3000 years of the Western intellectual tradition; in addition, the Santa Fe campus offers a graduate exploration of the Eastern intellectual tradition.

With two beautiful campuses operating across the country in two historic capital cities, St. John's campuses enroll a combined 800 undergraduate students, as well as 125 students in the Graduate Institute. By learning through discussion in seminars, laboratories, and tutorials, members of the St. John's community are continuously immersed in a quest for a deeper understanding about the world and themselves. Students and alumni are colloquially known as "Johnnies" and pride themselves on their ability to consider antithetical ideas, to engage with civility across divides, to examine their biases, and to doggedly pursue truth.

Upon joining the college, the new President will lead the campus through an important transition period that will move the campus from great to extraordinary. To accomplish this, the President will be charged with raising retention rates while maintaining the highest standards of rigor; increasing student supports and strengthening career preparation programming; and preparing the college to successfully serve students of the future – who are increasingly diverse and often economically underprivileged. The President will also be a public face of the college's \$300M Freeing Minds campaign. In addition, he or she must be deeply committed to St. John's understanding of and commitment to the liberal arts and to the singular role that the college's Program of Instruction plays in American higher education.

To effectively lead at St. John's College, the President must meet the following goals:

- Lead St. John's College, Annapolis through an important transition period that moves the college from great to extraordinary.
- Serve as a compelling and effective advocate for the mission and value of St. John's College and its Program of Instruction, both internally and externally.
- Partner effectively within a complex management structure as Annapolis President.
- If appointed collegewide President: steward both campuses as the collegewide President, expected to begin in June, 2023.

St. John's College has retained Isaacson, Miller, a national executive search firm, to assist in this search. Screening of complete applications will begin immediately and continue until the completion of the search process. For more details, including the full position profile and to submit inquiries, nominations, referrals, and applications, please see the Isaacson, Miller website for the search: www.imsearch.com/7867 Electronic submission of materials is required.

David Bellshaw and Emily Chiswick-Patterson
Isaacson, Miller
1000 Sansome Street, Suite 300
San Francisco, CA 94111
Phone: 415.655.4900

St. John's College is an equal opportunity employer; candidates of all backgrounds are encouraged to apply.



ISAACSON, MILLER



The way it's going to be

BEIJING AND HONG KONG

China is not just shackling Hong Kong. It is set on remaking it

FOR MOST of its modern history, Hong Kong had no time for nostalgia. Little remains of the Victorian mansions or art-deco towers that once flanked its harbour. The city was built by unsentimental people in a hurry: traders and shippers and British opium peddlers turned merchant-grankees; imperial officials as tough as the granite of Victoria Peak; wave upon wave of Chinese migrants. 20th-century elites replaced domed and colonnaded landmarks with towers of concrete, glass and steel, destroying their heritage in the name of progress and profit. Only in recent years did the pace of destruction slow, as growing civic pride saw a few old sites preserved.

Today's ruling elite is bent on further demolition. Its mainland Chinese envoys and Hong Kong officials who look to Beijing for their orders have earmarked a breathtaking list of Hong Kong institutions for dismantling and replacement.

It starts with democratic elections. China's autocrats were appalled when, after months of demonstrations in 2019 against a proposed new extradition law, pro-democracy politicians won a landslide victo-

ry in elections for Hong Kong's district councils that November. The result gave Beijing reason to fear a similar drubbing in elections to the somewhat more powerful Legislative Council (Legco), set for September 2020. Those elections were duly postponed, with pro-democracy politicians barred from standing and accused of subversion for saying they would oppose the government.

On March 11th, far to the north in a smoggy Beijing, delegates to the National People's Congress, China's pliant legislature, approved sweeping changes to Hong Kong's election laws by a margin of 2,895 votes (there was one abstention). Branded "Patriots administering Hong Kong", the amendments will effectively bar avowed opponents of the Hong Kong government or critics of China's Communist Party from seeking election to anything.

Candidates for elected office are not the only ones to whom such conditions will apply. China and its local allies are demanding all public officials should pass stricter patriotism tests. Over time that will leave less room for the proudly inde-

pendent judges, some of them foreigners, who currently make Hong Kong's courts some of the most trusted in Asia. The rule of law in Hong Kong will be remodelled.

A national-security law imposed last June in response to the protests of 2019 is limiting liberties such as the freedom of speech, a free press and the right to peaceful protest. Almost 50 democratic activists were recently charged under the law for holding a primary election before running for seats in Legco. Others have been arrested for holding up banned slogans or for calling for sanctions against China.

In February officials unveiled a new patriotic curriculum to teach children "a sense of belonging to the country" and "affection for the Chinese people", a response to the pride schools in the city have taken in teaching Hong Kong children to think critically. Children as young as six will be asked to memorise offences criminalised by the national-security law, including subversion, secession, terrorism and collusion with foreign powers. Chinese officials and their local allies are convinced that years of liberal education have poisoned Hong Kong's young minds, leaving them easy prey for foreign troublemakers.

The totemic pledge that Chinese sovereignty over Hong Kong would be guided by the principle of "one country, two systems" lies in ruins. The formula, coined in the 1980s by Deng Xiaoping, China's paramount leader, spoke to Hong Kong's unique value as a gateway to a vastly richer and more advanced Western world from ►

► which China could learn, a value which justified exceptionalism. Guaranteeing that Hong Kong's capitalist way of life would continue for at least 50 years after the Union Flag was lowered was a way to keep that gateway open without seeing capital and know-how rush out through it.

The China ruled by Xi Jinping today still sees benefits in preserving Hong Kong as an international financial centre. Operating outside the mainland's strict capital controls, Hong Kong issues its own hard currency, the Hong Kong dollar, that is freely convertible against the American dollar, and offers Chinese firms access to some of the deepest pools of capital on Earth. But Hong Kong's access to Western know-how, as opposed to money, holds less interest for party chiefs.

Changing the guard

Mr Xi and others repeatedly declare that "the East is rising and the West is in decline." Successive crises, from the financial crash of 2008 to the covid-19 pandemic, have left Chinese leaders increasingly confident that their model of techno-authoritarian state capitalism is superior to the partisan squabbling, short-termism and selfish individualism they see in the democratic West. When officials talk of preserving "one country, two systems" they are talking of different Chinese systems, not paying tribute to a discarded Western one. China's rulers are not impressed when Western governments suggest that losing the hearts and minds of 7.5m Hong Kongers is a calamity. Throughout 2019, officials in Beijing growled that they served the interests of 1.4bn Chinese.

They are especially scornful of protests from America, Britain and other Western powers that the changes being imposed on Hong Kong are a betrayal of undertakings to preserve Hong Kong's way of life that it agreed to before the 1997 handover. Chinese officials and state-backed scholars call the pre-handover Sino-British Declaration a "historical document" and accuse Western critics of colonial nostalgia. To focus on China's breaking of old promises, though, is to risk missing the sheer scale of its ambitions for Hong Kong's future.

Talk to Chinese officials and state-backed scholars, as well as to pro-government politicians in Hong Kong, and they will insist that neutralising the opposition is a necessary step towards a greater goal: repairing flaws that render Hong Kong's political and economic systems structurally unsound through a wholesale remodelling of its institutions and society. What is more, they are sure that Hong Kong's role as an international financial centre will generate such profits that Western financial institutions will rush to invest, rendering the grumbling of foreign governments irrelevant.

They may well be right. Many foreign executives reject the notion that political repression is pushing global investors away. On the contrary, a surge of global capital seeking to reach Chinese markets has drawn more investment to Hong Kong over the past year. Cambridge Associates, a large investment group, said on March 8th that it would open an office in the city. The race to enter China has forced some managers to "turn money away", says a managing partner at a global law firm.

Today's Hong Kong stock exchange is utterly changed from that of the turn of the century. Then local companies dominated. Now the top traded companies are Chinese giants such as Tencent, Alibaba, Meituan and Xiaomi. There are now more than 2,000 mainland mutual funds that can invest in Hong Kong, a number which increased 268% in 2020. A wave of mainland cash has followed. Chinese investors brought net inflows of HK\$672bn into the Hong Kong market last year through an investment channel called "stock connect", 170% up on the year before. The inflows have made the city's old corporate stars irrelevant. "Fuck them," says an executive at a Chinese-state-backed investment manager. "They are a drag on the index."

The HKEX posted a 23% increase in profits for last year, boosted by a number of Chinese initial public offerings. But the fat fees associated with such successes flow mostly to Chinese groups; the financial sector's success is divorced from the rest of the city's economy. Many local companies have struggled through the past two years of protests and pandemic. Swire, a 205-year-old, British-headquartered conglomerate which was a pillar of Hong Kong's old

economy, said on March 11th that underlying profits for its property unit fell by 47% in 2020. One investment manager who was born in Hong Kong and works for a local firm says the boom in Chinese business has made him and many around him rich. Yet he sees few opportunities for the city's youth outside of working for Chinese financial-services groups.

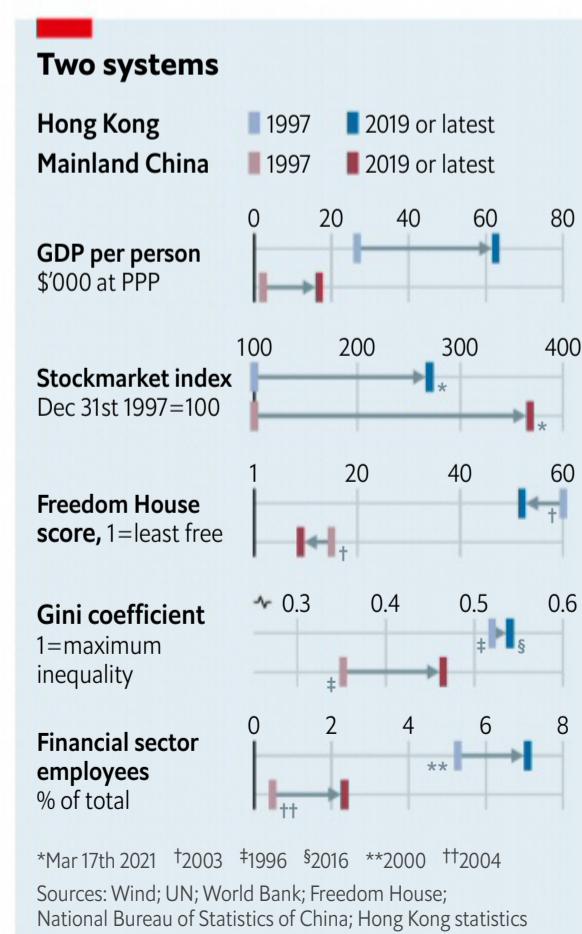
Some of the mainland-born, Western-educated bankers in the upper echelons of Hong Kong banks actively welcome the national-security law. During the protests of 2019 they feared being attacked by locals in the streets for speaking Mandarin, rather than the local tongue, Cantonese. Many are relieved to see order restored to the streets, even with an iron fist. Tougher policing does not affect Westerners, says a mainland financier. His foreign clients in Hong Kong laugh about the anxious memos they receive from bosses at home, asking about political developments. "It doesn't really affect their life, right? They're not going on the street to try to demonstrate against the government."

Class against class

Despite the success of the financial sector Beijing longs to diversify Hong Kong's economy, says the mainland financier. There are two reasons. One is an ideological distaste for high finance among party bosses who see the proper role of banks as supporting the real economy by lending to businesses that make and sell tangible products. Maintaining Hong Kong as an international financial centre is perhaps at best "a necessary evil" for Mr Xi and his close associates, says the financier—a pragmatic way to allow Chinese firms to raise foreign funds while the mainland maintains capital and currency controls.

The other reason is real concern about Hong Kong's income inequality, which is among the most extreme in the developed world, and the cruelly high costs of housing in the territory. Officials in Beijing deny all blame for an unhappy Hong Kong and are impatient with Westerners who cast Hong Kong's discontent as a clash between a freedom-loving public and despotic rulers: Marx has taught them that all politics is rooted in economic forces. Their favoured scapegoats are foreign saboteurs and a small number of Hong Kong-Chinese oligarchs who have dominated the city's property and retail sectors for generations.

Western critics focus on the blow that the new election law lands on pro-democracy parties. Chinese observers are equally interested in its changes to the Election Committee, which will give Beijing-appointed members the power to dilute the influence of the property tycoons. "It's shameful for an economy as rich as Hong Kong to have that many people living without basic human dignity in terms of hous-



▶ing conditions. And that sentiment is shared extensively in Beijing, in the leadership," says the mainland financier.

He predicts a campaign to build large amounts of public rented housing. This could be facilitated by forcing local tycoons to release some of the territory's copious undeveloped land, a resource they are accused of hoarding so as to increase the value of their property holdings by creating scarcity. Beyond that assault on Hong Kong's old-school business bosses, a wider campaign is brewing to craft a new "capitalism with Hong Kong characteristics". The ultimate target is the city's whole laissez-faire, low-tax economic model, which some officials in Beijing grumble has been elevated to an almost religious creed by local oligarchs, foreign business leaders and civil servants.

National leaders do not hide their exasperation with the low calibre of many who enter Hong Kong politics today. At the same time as the election law changes were being passed in Beijing, the central authorities sent what was widely seen as a warning along these lines in the form of a Hong Kong newspaper op-ed by Tian Feilong, a Beijing-based law professor and member of a government-backed think-tank, the Chinese Association of Hong Kong and Macau Studies. Mr Tian wrote that national leaders do not want to see rubber-stamp loyalists running the city.

In an interview in Beijing, Mr Tian expands on that thought. The central government wants to set patriotism as a "baseline", so that Hong Kong politicians can stop dwelling on questions about who is a patriot or not and begin to compete on the basis of their policies. Patriots should love their country, says Mr Tian, but only need to respect the Communist Party. The professor insists that moderate democrats, "once they have adjusted" to the new rules, are welcome to seek election to "supervise and criticise" the government as a form of loyal opposition.

It is less clear where calls for loyalty leave judges from Britain, Australia and Canada whose part-time service on Hong Kong's Court of Final Appeals is an indispensable source of international business confidence. Some pro-government lawyers describe a legal system in which commercial cases and political cases will be handled on different tracks, with more deference from judges in political cases. Mr Tian says that foreign judges will not be pushed out. But he concedes that the principle of "patriots governing Hong Kong" will create more cases that are not suitable for foreign judges and expose them to discomforting political pressure. "The rules on that", he says delicately, "may need further clarification."

As for the hundreds of thousands who joined the protest movement, Mr Tian trusts that education reforms will produce a new generation of youngsters who understand China and love it. He has blunter advice for those too old for school and stubbornly wedded to liberal values. "I think they will experience a painful psychological transition, in other words, they will have to re-educate themselves."

All the sad mercenaries

Even among some who support the government, this is a moment of painful introspection. A member of Legco elected by one of the "functional constituencies" that represent a specific business sector expresses shame at his role as a reliable vote for the government. "I'm a mercenary for the rich," he says. Other loyalists are more bullish about managed democracy, seeing a moment to bring technocrats into public office. Maria Tam Wai-Chu, a senior member of the National People's Congress from Hong Kong, points to the global technology giants which have transformed Shenzhen, the gleaming megapolis that lies just across the border from Hong Kong, and laments that: "We are so backwards here in Hong Kong." She would like to see technol-

ogy experts or business executives appointed or elected to Legco, to help the city confront the 21st century. She scoffs at foreigners who worry that those new legislators must be patriots. British MPs swear allegiance to their monarch, she notes.

Regina Ip, a law-and-order conservative and pro-establishment member of Legco, talks of Hong Kong becoming an "epistocracy", the technical term for a society governed by experts and the highly educated. At the same time, she admits, the anger and discontent seen during the protests in 2019 "has gone underground, it has not gone away". She calls for patriotic education but also social-welfare policies to generate housing and jobs for the young. "We must have more redistribution," she says.

A palpable sense of sadness hangs over the territory. Politics has divided workplaces, friends and families. If winning over a majority of Hong Kongers proves slow work, leaders in Beijing may be tempted to play social engineer and craft a more biddable Hong Kong, whether by blurring its borders with the mainland or shipping in new people. More than 1m mainlanders have moved into Hong Kong since 1997. Loyalist politicians in Hong Kong urge young people to try studying and working in the booming mainland next-door, or join the Chinese army.

Though emigration is a constant topic of conversation, an offer of a new fast track to residence in Britain was taken up by just 7,000 Hong Kongers between July 2020 and January of this year. "I think the elites won't leave because they live well and make so much money. If other people choose to leave, it won't be difficult for Beijing to find new middle-class professionals to replace them," says Mrs Ip. "China does not lack people."

The democratic world has every right to be shocked by the demolition of "One country, two systems" and to respond. America has not lost interest in Hong Kong, which is seen in Washington, DC, as a proof of China's intolerance for dissent. Last October it imposed banking and other sanctions on the chief executive and nine other mainland and Hong Kong officials accused of undermining the territory's autonomy, in breach of long-standing Chinese commitments. The territory's chief executive is now paid in cash, her home filling up with bank notes. On March 16th Joe Biden's administration imposed bank sanctions on 24 more officials. But the most dramatic steps, involving changes to American policies that treat the Hong Kong dollar as a fully convertible currency, have not been taken, not least because the resulting pain would be felt worldwide.

Western governments are not going to deter the demolition. The old Hong Kong is gone. Judge Mr Xi's China by what it builds in its place. ■





Foreign policy

White heat

Britain puts science and technology at the heart of a foreign and defence policy shake-up

THE SLOGAN “Global Britain” first gained currency in the months after the country’s vote to leave the European Union in 2016. Theresa May deployed the phrase five times when she addressed the Conservative Party conference for the first time as prime minister. Days later it was the title of Boris Johnson’s first policy speech as Mrs May’s foreign secretary. What it meant in practice, beyond an attempt to reassure Britons that Brexit would not mean autarky, remained hazy.

The idea is finally being fleshed out. On March 16th Mr Johnson’s government published “Global Britain in a Competitive Age”, a 114-page “integrated review” of the country’s foreign, security, defence and aid policy, billed as the most radical such review since the end of the cold war. In many ways, it defies expectations. The text is free of the ebullient jingoism beloved of Mr Johnson and his cabinet. Many observers had anticipated a pivot away from Europe, where Britain is locked in diplomatic trench warfare with the EU, towards the rising powers of Asia.

In fact, the vaunted “tilt” to the Indo-Pacific is relatively modest and thus refreshingly realistic, though embroidered by Mr Johnson’s visit to India next month and the imminent dispatch of an aircraft-carrier to the region. The carrier’s deployment is “our most significant peacetime deployment in 25 years”, notes Admiral Ben Key, Britain’s commander of joint operations. Britain will also seek to become a member of the CPTPP trade pact and a “dia-

logue partner” of ASEAN, a club of ten South-East Asian nations.

Looming over those efforts, and the review as a whole, is China, whose rise is described as “by far the most significant geopolitical factor in the world today”. To the disappointment of many Conservative backbench MPs, the document’s language on China is measured. It notes that China poses a “systemic challenge...to our security, prosperity and values” but warns that Britain “must remain open to Chinese trade and investment”. The review is explicit that Britain’s immediate neighbourhood, the Euro-Atlantic region, remains the priority, and “where the bulk of the UK’s security focus will remain”.

The ambitious language of the review is lent credence by a major boost to the defence budget announced in November. The full details of investments (notably, high-tech areas) and cuts (falling heavily on the army) will be published in a separate defence “command paper” due on March 22nd. What is clear is that Britain is overhauling its military posture.

Its armed forces will be spread out more widely across the world, with boosts to military facilities in Oman, Singapore and Kenya and a one-third increase in the number of defence attachés. One or two offshore patrol vessels will be permanently based in Asia, followed by a pair of Britain’s next-generation frigates later in the decade. The idea is also to use these forces more actively and unpredictably in peace-►

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► time. “We are doing things at a time and place which we would not normally have done, to see whether it evinces a reaction,” says Admiral Key, pointing to Britain’s dispatch of warships to the Arctic and paratroopers to Ukraine last year.

Yet the review’s unifying theme is neither Britain’s free-trading ambition nor its military prowess, but the government’s aspiration for the country to be recognised as a “science and technology superpower” by 2030. “Technology is going to be the most fundamental metric of national power over the next decade,” says an official involved with the review. To that end, it promises to raise economy-wide investment in research and development (R&D) from the current figure of 1.7% of GDP—well below the average for the OECD—to 2.4% by 2027, backed up with £15bn of funding for the business department.

Technology is woven throughout the review. Efforts to shape the international order will be centred on “regulatory diplomacy” to influence the norms governing “the future frontiers of cyberspace...data and space”, such as behaviour around satellites. On climate change, described as Britain’s “number one international priority”, £1bn will go to carbon capture and hydrogen technology. On security, £6.6bn is set aside for military R&D for “AI and other battle-winning technologies” and almost £700m for the intelligence agencies.

The idea is that in some areas, like 5G and future mobile networks, Britain will aim to “co-create” pivotal technology with allies, not least to push back against Chinese dominance. But in others, like quantum computing, synthetic biology and artificial intelligence, Britain must own sovereign capabilities “from discovery to large-scale manufacture and commercialisation”. That points to a shift in Britain’s political economy, towards a more active and interventionist state—a bit more French, suggests one official.

All of this is tied back to Mr Johnson’s domestic agenda to “level up” deprived areas and firm up the fraught Union: a new defence industrial strategy will promise to build ships in Scotland, armoured vehicles in Wales and satellites in Northern Ireland. A new National Cyber Force will be headquartered in the north of England.

The review has received a warm welcome among Britain’s partners in America, Europe and Asia. It is “comprehensive and well done”, says a Japanese official. “Glad to see the UK back,” remarks a French diplomat. Yet there are “unresolved tensions”, warns Peter Ricketts, a former British national security adviser. Perhaps the starker contradiction is between Britain’s surprise decision to reverse decades of cuts and expand its stockpile of nuclear weapons, without much in the way of explanation, and its support for non-proliferation

and disarmament (see next article).

And despite the review’s effusive commitment to European security, its terse treatment of the EU is notable. On March 15th the EU launched legal action against Britain over alleged breaches of the Brexit deal, amid wider acrimony over vaccines and the status of the EU mission in London. “You can’t really portray yourself as the primary mover for European security, shaping the international order, and not have a functioning relationship with the EU”, says Lord Ricketts. On every British priority, from regulation of technology to climate change, it will be hard to ignore the bloc next door. ■

Nuclear warheads

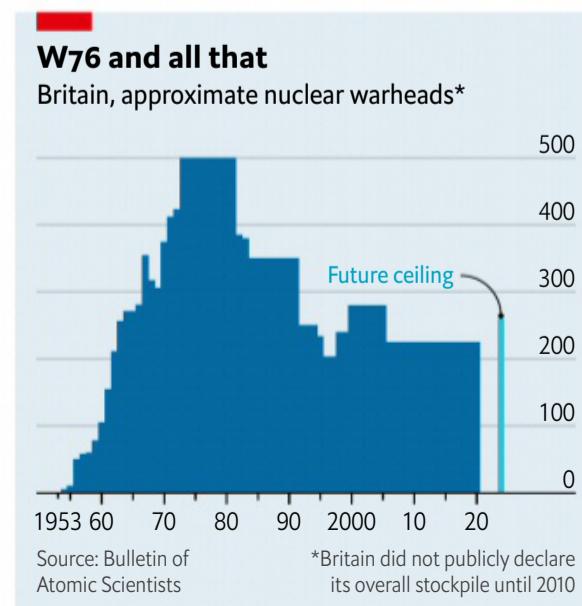
Stocking up

Britain’s decision to add nukes is a blow to non-proliferation

FOR DECADES Britain has boasted of its diminutive nuclear status. Of the five nuclear-armed powers recognised by the Nuclear Non-Proliferation Treaty (NPT), Britain’s arsenal is the smallest and the only one with a single means of delivery—submarines. Yet buried in its foreign and defence policy review on March 16th was a striking announcement: for the first time since the cold war, its stockpile will grow.

Successive British governments pruned the arsenal by more than half between the 1980s and 2000s, eager to show progress towards disarmament (see chart). In 2010 the government declared that Britain had fewer than 225 warheads, and would cut that to below 180 by the middle of this decade—a goal that was reaffirmed in 2015. That was thought sufficient to inflict unacceptable damage on Russia, the country’s main adversary.

Now, in response to “technological and



doctrinal threats”, Britain is to raise the ceiling on its stockpile to 260 warheads. It will also stop publishing figures for the numbers of missiles and warheads carried aboard each submarine, to “complicate the calculations of potential aggressors”.

In theory, more Chinese warheads or better Russian ones ought not to make any difference to Britain’s nuclear needs. Britain keeps a submarine at sea at all times, in a practice known as continuous-at-sea deterrent, or CASD. The advantage of having your nuclear weapons hidden in the ocean, rather than on land, is that they are at little risk of being taken out by enemy ones, no matter how numerous or sophisticated those might be.

So why more warheads? One possibility is that Britain is worried about future improvements in Russian or Chinese missile defences that would mean fewer warheads getting through, thus requiring more to be fired in the first place to inflict the same level of damage. Another rationale is that Britain may wish to put more than one submarine to sea in future, hedging against the risk of a breakthrough in technology for anti-submarine warfare, or ensuring that it could target Russia and China, or North Korea, at the same time.

Another explanation might be that Russia’s nuclear posture has shifted over the past decade. Heather Williams of King’s College London points out that Russia is developing dual-capable weapons—missiles that can carry conventional or nuclear warheads—and lowering its nuclear threshold, meaning that it might use lower-yield, battlefield nuclear weapons earlier in a conflict.

To retaliate by destroying Moscow would be disproportionate. But if Britain, which commits its nuclear weapons to the defence of NATO, wanted to respond in kind—the yield of its own warheads, a variant of America’s W76, can be reduced—it would want to be sure of having sufficient remaining warheads for a subsequent and larger nuclear exchange.

Whatever the precise reasoning, the timing could hardly be worse. Britain’s move has prompted bafflement among most nuclear experts. It is unlikely to do much to boost deterrence, while doing real diplomatic harm. The NPT’s five-yearly review conference is five months away and the mood is mutinous. Many non-nuclear states are furious that nuclear-armed ones are doing little to slash their arsenals. China, India, Pakistan and North Korea have all been growing their forces.

The worry is that trust in the NPT may ebb away, weakening non-proliferation efforts. In recent decades, Britain has been a “leader in nuclear disarmament”, says Dr Williams. Its decision to change course after decades of steady reductions is a sign of the wider nuclear gloom. ■

Foreign aid

Chop, chop

Why cuts are going to be so savage

SHOCK RATHER THAN awe reverberated around Britain's aid circles when a leaked government draft suggested that the government would give Yemen, site of today's worst humanitarian disaster, half of what it got last year. Other countries in dire straits that would be even more drastically short-changed include Lebanon, Libya, Somalia, South Sudan and Syria. The cuts envisaged in such places are much deeper than those required by the government's decision last year to spend 0.5% of gross national income (GNI) rather than the 0.7% enshrined in law.

In its review of foreign policy and security policy, published on March 16th, the government insists it will restore the 0.7% figure "when the fiscal situation allows". But Andrew Mitchell, a former Tory aid minister, who has vigorously opposed the cuts, says that the likelihood of this government again fulfilling the 0.7% pledge once it has been dropped is "for the birds".

One reason for the savagery of the cuts is that around two-thirds of the roughly £15bn (\$21bn) spent last year on aid has already been promised to multi-lateral agencies such as those under the umbrella of the UN, the European Union and the World Bank. Breaking such pledges is legally tricky. On top of that, the impact of covid-19 on the economy would knock about £1.5bn off the aid budget, even if it still got 0.7% of GDP. So an array of projects that Britain has been funding bilaterally, especially in Africa, must take a disproportionate share of the chop.

It is unclear how the cuts are being allocated. Aid specialists say that the recent merger of the Foreign Office with the Department for International Development has caused administrative chaos. Under the new mega-ministry, ambassadors are now in charge of dispensing the aid—and may simply be told they will have to work out how to dish it out from a smaller pocket.

Another Conservative former aid minister, Rory Stewart, who now teaches at Yale University, says the review shows that Britain is "in effect disengaging from many of our commitments in the Middle East and Africa, especially in areas of conflict". The new policy is driven, he maintains, "by Brexiteers who don't want to be involved in those kinds of countries."

Protest

No more parades

An awkward coincidence draws attention to an illiberal bill

FROM THE government's point of view, the timing could not have been worse. On March 13th, hundreds of people gathered on Clapham Common in London to mourn Sarah Everard, a marketing executive, whose murder—for which a serving police officer has been charged—sparked an outpouring of anger and solidarity among women. The Metropolitan Police, which had declined to give the vigil's organisers a permit on the grounds that it would breach lockdown rules, swooped in and arrested four people.

On March 16th, Parliament voted on the government's Police, Crime, Sentencing and Courts bill—a rag-bag of measures which includes a clampdown on the right to protest. The government had hoped the bill would slide through Parliament unobserved, but the timing turned it into the centre of a controversy. As MPs debated the bill hundreds of protesters blocked Westminster Bridge to traffic.

The curbs on protest are aimed at movements which the government, dominated by social conservatives, abhors. Priti Patel, the home secretary, has described Extinction Rebellion (XR) as "eco-crusaders turned criminals" and protests organised by Black Lives Matter (BLM) as "dreadful".

The government reckons that the Public Order Act 1986, drawn up in the era of trade-union marches, is ill-equipped to deal with these movements' tactics. At present protests can be restricted only if they are likely to cause serious damage to prop-



Vigilance in Clapham

erty or disruption to communities. XR and BLM have a talent for spectacle. BLM's supporters have removed and defaced statues. XR's members climb on top of Tube trains and occupy bridges; music often forms part of their demonstrations. In November, Britain will host the COP26 international climate conference. Boris Johnson will not want to be upstaged by eco-warriors in front of a global audience.

If the bill is enacted, the maximum penalty for causing less than £5,000 worth of damage to a statue will rise from three months in jail to ten years. Protests can be restricted if the noise they create may be grounds for restricting them if it has a "relevant impact" on, or they cause "serious unease" to people nearby. Protests by a single person can be subject to restrictions.

Critics maintain that the rules amount to the silencing of protest. "If Priti Patel was heading up homeland security in the US in 1963, Martin Luther King would be whispering his 'I Have A Dream' speech in a parking lot outside DC, rather than relaying it to millions in front of the Lincoln Memorial," says Raj Chada, a lawyer who specialises in protest law.

The proposals reveal the Conservative Party's contradictions. Many MPs have defended freedom of speech, particularly that of right-leaning academics in left-wing universities. Yet they are more ambivalent about its cousin, freedom of assembly—and so are their voters. A YouGov poll found that 43% of Britons thought the Clapham vigil should not have gone ahead; 40% thought it should have. Among Tory voters the figures were 61% to 28%. "The problem is our Conservative coalition now includes a lot of working people," says a Tory MP. "It's not that they are philosophical collectivist authoritarians, aka fascists; it's just that they are not putting up with this nonsense, and then that gets reflected in the policies." Taking a tough line on law and order has the happy by-product of sowing divisions within Labour. The party's membership tends to like protests. Its voters, a more traditional bunch, do not.

There is some disquiet. In the second-reading debate Theresa May, a former hardline home secretary and prime minister, said that freedom depends on knowing the fine line between "popular and populist". But the bill passed by a majority of 96.

Still, Britons are unlikely to put down their placards. The bill has succeeded in uniting disparate protest groups. A statement signed by 99 branches of XR, BLM and other groups pledged to "continue to unite and fight" against the government. The protests may have also made many more voters a little more aware of the importance of the liberties that the bill undermines. And will XR still descend on COP26 come November? "You bet," says an XR spokesperson. ■

Uber

Move fast and fix things

The judiciary and the market have improved the lot of Uber's workers

WHEN THE Supreme Court ruled last month that Uber drivers were workers employed by the firm rather than self-employed contractors, nobody knew how the company would react. In California, faced with a similar decision, it fought tooth and nail, and in effect got the judgment reversed through a ballot initiative. In Britain, many had expected it to ignore the court's ruling on the ground that it applied only to a small group of workers, and to conditions that no longer prevailed.

Instead, Uber made a handbrake turn, announcing on March 16th that its 70,000 drivers will be paid at least the minimum wage, get a pension and receive holiday pay. *The Economist* understands that the company will contact current and former drivers to offer them cash payments in lieu of holiday pay for the time they have worked for the firm.

The dispute reflects the messy nature of British employment rules. "Employees" gain access to the full gamut of employment-law protections; "workers" get some protections but can be dismissed at will; the self-employed are taxed more lightly but receive few legal rights. Clarifying definitions has relied on case law and usually boils down to arguments about the degree of control exercised by employers. It's a slow business: the case that ended up in the Supreme Court started five years ago in an employment tribunal.

The gig economy has driven a rise in self-employment. While many workers welcome the flexibility, others would prefer the protections that come with traditional employment, but cannot get them. The government commissioned a review of the framework by Matthew Taylor, which was published in 2017 but its call to strengthen workers' rights was ignored.

Mr Taylor, who calls the lack of progress "deeply disappointing", reckons that the government understands that change is needed but does not want to be seen to be increasing burdens on business. The Treasury, with its eyes on the revenues that could be raised by taxing the self-employed at similar rates to employees, has supported reform, but a modest attempt to equalise the tax burden in 2017 prompted fierce resistance from Tory MPs.

Now it looks as though a combination of the judiciary and the market may improve conditions in the gig economy. Uber's new package for drivers goes beyond

what many campaigners had expected. The firm hopes that its retrospective, across-the-board decision will not only see off potential new litigation but also make it a more attractive employer than rivals such as Bolt and Ola ahead of what is set to be a busy summer as the economy reopens. More legal skirmishing lies ahead over the definitions of what time should be counted for calculating minimum-wage payments. But Uber is seeking to turn a legal defeat into a strategic opportunity.

The Supreme Court ruling will encourage people in other sectors ranging from social care to construction to argue that they too are workers. That will take time, though others may follow where Uber has led. A firm that prides itself on having disrupted urban transport may now disrupt the gig economy. ■

Census

Question time

The census form reveals the obsessions of different eras

ON HIS RETURN for the 1911 census William Rigby, a plumber from Birkenhead, listed his tomcat, Tobit Crackit, as part of his household. Mr Crackit was eight years old and had spawned 16 children, all while working three jobs: "Mouse-Catcher, Soloist and Thief." Mr Rigby also noted: "All the above mentioned have Breakfast, Dinner, Tea and Supper. Eat standard bread. Drink sterilised milk. Sleep with the windows open. Wash our feet once a week etc. God Save the King." An incensed official scribbled this out.

Mr Rigby may have been driven to ridi-



Three Jedi, two lunatics and a cat

cule the census by irritation at the intrusiveness of its questions, which were nosier than previously. But the 1911 version has nothing on the 32-page form that will land on doormats across England and Wales this week asking people about, among other things, their sexuality and gender identity. All censuses are different, but all have this in common: they reflect the concerns of the governing class at the time.

In the early 19th century, population was the national obsession. Britain was at war with France, so needed more manpower, but Thomas Malthus warned that population growth would lead to starvation. From 1801 to 1831, local clergy were required to count their flocks. As the 19th century got morality, a question on illegitimacy appeared in 1831, and soon religious observance was under scrutiny. When the census revealed in 1851 that in many places there were more non-conformists than members of the Church of England there was "a real stink," says Edward Higgs, a professor of history at the University of Essex.

As epidemics raged in growing cities, public health came to the fore. Under the influence of William Farr, an epidemiologist pushing for sanitary reforms, health appeared in the 1851 census. A few decades later, concerns spread from disease of the body to those of the mind. Health questions were refined to allow officials to distinguish between "lunatics" and "imbeciles". Eugenics fed worries about the decline of the imperial race. Social Darwinists popularised the view that the high birth rate among the poor would lead the imperial race to decline, so in 1911 a question was added about how many children people had. A father in Hastings, responding to a question about his children's ailments, said they were: "quarrelsome", "stubborn", "greedy", "vain" and "noisy".

Censuses after the second world war reveal a focus on material expectations—such as, between 1951 and 1991, the availability of inside or outside toilets. Ethnicity, regarded as too sensitive a subject in 1981, was added in 1991. That took the ONS down the identity rabbit hole. Religion was added in 2001; 400,000 people identified as "Jedi". Some wanted to record their ethnicity as Cornish or Welsh, so national identity was included in 2011. And now those identities have been supplemented by gender and sexual orientation.

This new direction has taken the ONS into dangerous territory. Campaigners against gender self-identification mounted a legal challenge to its guidance to answering the apparently simple question of "what is your sex?", on the grounds that it allowed people to enter as their sex the gender identity they had chosen without a legal process. On March 17th, the ONS backed down. Censuses were easier when the biggest problem was fecund cats. ■

Voting rights

Ballot boxing

Britain's franchise was a mess. Brexit threatens more complexity

COUNCIL ELECTIONS rarely generate much excitement. Only about a third of those eligible to vote bother to do so. Yet an online rally ahead of this year's local elections in May pulled in scores of enthusiastic 20-somethings. "This is so exciting," boomed Antonia Boorman, one of the organisers. "I wish we could have some confetti." The hoopla was intended to encourage citizens of other European countries who live in Britain to register for the ballot. "At the moment you can vote," she reminded them. "It might be the last chance."

Britain's rules on political participation are, as Sir John Curtice, an elections expert at Strathclyde University, puts it, "all over the place". Some, but not all, non-resident citizens get a vote in general elections, as do some, but not all, non-citizen residents.

As is often the case in Britain, this owes more to history than to logic. Britain's empire explains the first exception to the citizenship rule. Parliament restricted the right of former imperial subjects to move to Britain following waves of immigration after the second world war, but did not alter the franchise, says Ruvi Ziegler of Reading University. As a result, citizens of any of the 53 mostly ex-colonies in the Commonwealth have the vote, so long as they are resident in Britain. Citizens of most other countries—like the 130,000-odd Americans in Britain—cannot vote.

The roughly 320,000 Irish citizens who

live in Britain also qualify. This anomaly dates back to Irish secession in 1922. When Westminster set in law the constitutional position of the Irish republic in 1949, the government decided that giving the Irish the vote was the easiest option. "I do not pretend that the solution at which we arrived is completely logical," conceded Clement Attlee, the prime minister.

Then there are non-resident citizens. British expats may vote in general elections, but only for the first 15 years they live abroad. The government accepts this time limit is arbitrary and plans to remove it.

Brexit will make things more complicated. All EU citizens have the right to vote in local and European (but not national) elections in whatever European country they live, regardless of nationality. For now this remains true for the 4m or so EU citizens in Britain, since the upcoming local elections were originally due to take place last year, when EU rules still applied for a "transition period". Things may soon become less clear. Europeans can opt to apply for British citizenship, so long as they have lived in the country for six years and been granted permanent residency, guaranteeing them a vote in general as well as local elections. But many balk at the cost, which

the Home Office has hiked from £200 in 2005 to £1,330.

Scotland and Wales, which have the power to set their own electoral rules, took the chance to simplify their franchises last year. All long-term residents, regardless of nationality, will have a vote in elections for local councillors and for the Scottish Parliament and Welsh Assembly. There are few signs that politicians at Westminster will take such a consistent approach. Having failed to persuade the EU to include reciprocal voting rights for expats in the Brexit deal, they have struck bilateral agreements guaranteeing the local-government franchise with Poland, Spain, Portugal and Luxembourg, raising the prospect that the roughly 800,000 Polish nationals in Britain might be able to choose their councillors, but not, for instance, the 300,000 or so Italians.

Cypriot and Maltese residents would get the vote anyway, as Commonwealth members, as of course would the Irish. "It's arbitrary and deeply unfair," says Maike Bohn of the 3 Million, a lobby group for EU citizens in Britain. That may be right, but the history of the franchise suggests that MPs are unlikely to go for consistency when they could plump for fudge. ■

Covid-19

Speed bump

Britain's vaccine roll-out prepares for a slow down

ON MARCH 17TH, 433,320 Britons received their first dose of covid-19 vaccine, nearly twice as many as the week before, taking the total to more than 25m, or nearly half of Britain's adult population. It is the sort of news to which Britons are now accustomed.

With the pace of vaccination expected to accelerate over the next fortnight, the government is rushing towards its target of offering first doses to all those in the top nine priority cohorts—a group of 32m, which includes all over the age of 50—by the middle of April. That would be sufficient to prevent the vast majority of deaths. Yet in a rare piece of vaccine-related bad news, it emerged that Britain may limp over the line.

On the day it hit 25m first doses, the National Health Service (NHS) wrote to officials in England warning supply would be "significantly constrained" in the week beginning March 29th, and that things would be tight for a month. Vaccination centres were told not to book in anyone younger than 50 in April.

"We're now getting into a world where second doses are going to chew into the progress we can make," notes a scientist

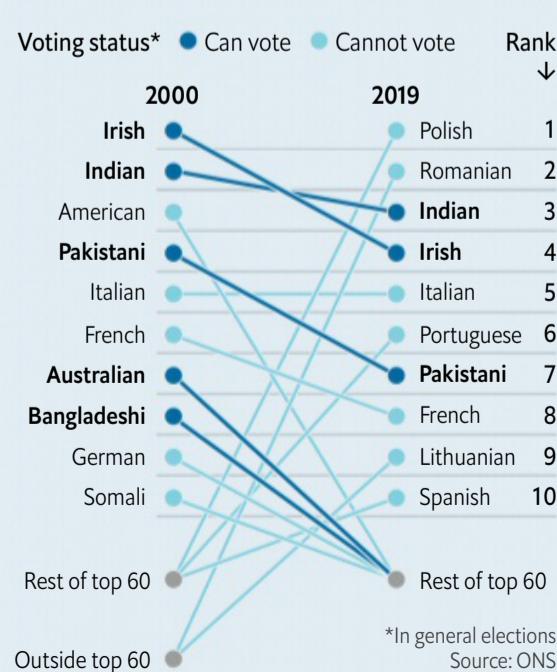
advising the government. Vaccination began on December 8th, but it was not until January that the roll-out really got going. Since the maximum gap between doses is three months, a rise in supply would have been required to keep first doses at the same pace in April.

This expected hurdle has been joined by unexpected supply problems. Britain is yet to receive doses from Moderna, and is yet to approve Novavax or Johnson & Johnson's vaccines, with their doses due later in the year. According to a senior NHS official, the plan was to use Pfizer mainly for second doses in April. The issue is that the health service will have fewer AstraZeneca doses than expected, reportedly because of a delayed consignment from India's Serum Institute.

The health department, which is now home to the taskforce in charge of supply, insists that it will nevertheless meet its target of offering all British adults a vaccine by the end of July. Ministers will be desperate that things do not slip any further, with the roll-out a rare triumph in Britain's covid-19 response. That may provide some solace to 40-somethings eager for a needle in their arm.

Polls without Poles

Britain, most common nationalities other than British



Bagehot | England speaks up

A radical new force is reshaping the country



ENGLISH NATIONALISM is the most disruptive force in British politics. Brexit would have been impossible without it. The clash between Scottish and English nationalism may well break up the country. It's also the most perplexing. The distinction between "English" and "British" has always been hazy, and now the very meaning of "Englishness" is changing before our eyes.

Its current transformation makes the nationalism on display in England perhaps the newest in the world, as well as the oldest. Historians argue that England already had a sense of national identity under the Anglo-Saxons, a millennium before the Germans and the Italians. Yet today's English nationalism is a very different beast from the classic variety that George Orwell celebrated in "England, Your England" in 1941.

Classic English nationalism was more cultural than political. Aside from the explosive problem of Ireland, Britain was an integrated country divided by class, whose constituent parts moved in mysterious harmony at election time. Today British politics is being deconstructed by competing national identities. In 2015, for the first time in the country's history, and twice thereafter, four different parties topped the polls in the state's four different territories. Classic English nationalism, moderate and self-deprecating, regarded flag-waving rallies as embarrassing. Today's nationalism is radical and angry; flags are everywhere.

Given its importance, this new force has been subjected to remarkably little scholarly analysis. Too many academics, snug in their class-based certainties, dismissed it as a compound of racism and bigotry and waited for it to disappear. "Englishness", a new book by Ailsa Henderson and Richard Wynn Jones, is an admirable exception as well as a scholarly testimony to the union's strengths: Ms Henderson teaches at Edinburgh University and Mr Wynn Jones at Cardiff. The nine big quantitative surveys of "Englishness" they have conducted since 2011 demonstrate that the number of people who describe themselves as exclusively or mainly English rather than British is growing, and that the idea of "Britishness"—once the glue that held the kingdom together—is splintering. Londoners use it to signal their cosmopolitanism; Scots to signal their unionism.

Scottish nationalism and Euroscepticism gave birth to new En-

glish nationalism. From the English perspective, the Scots have always had a good deal from the union: they get higher public spending and more MPs per head. But instead of showing gratitude for the cash, they demanded political power. Nigel Farage, former leader of the United Kingdom Independence Party, said what many Tories were thinking: that "the Scottish tail" was wagging the "English dog" and that the Scots were "getting our money" while "being horrible to us".

The 2014 Scottish referendum stoked English grievances without satisfying the Scots, and the 2015 election turned a growing political division between the two into a chasm. The Tories played relentlessly on the fear that Labour couldn't govern without the support of the Scots Nats, plastering England with posters showing a tiny Ed Miliband in Alex Salmond's top pocket. Labour, which had dominated Scottish politics for decades, was wiped out north of the border, and the nationalists entrenched in power.

Yet as Ms Henderson and Mr Wynn Jones show, there is more to English nationalism than grievance. It is certainly true that people who describe themselves as "English" first and foremost are more likely to feel "left behind"—either because they live in unfashionable corners of the country, such as seaside towns, or because they are older or less educated. But grievance is animated by a strong set of values: commitment to fair play and parliamentary democracy, and a fierce pride in England's history. The English feel that by pocketing more money than they deserve, the Scots are not playing fair; membership of the EU was wrong because Parliament is the only legitimate source of power; English history has provided "our island nation" with both a web of ties with the Anglo-sphere and a unique global economic and strategic niche.

Riding tigers

The Conservatives have used this powerful identity to grab power, and like to think that they can direct it where they will—applying the spur whenever they choose and the bridle whenever they need. But can they really? They may have harnessed English nationalism, but it has reshaped their party. Conservatives also like to comfort themselves with the thought that English nationalists are also unionists. But are they? Two-thirds of those who describe themselves as English not British say they would be happy if Northern Ireland left the union; and, though they say they want to keep Scotland, they want to keep it on their own terms—by closing Holyrood, reducing public spending to the national average, and preventing Scottish MPs from voting on English laws. A growing number support giving the Scottish nationalists what they want and giving it to them good and hard—depriving the new nation not just of use of sterling but also of passport-free travel.

The problem with English nationalism, in its newly radicalised and politicised form, is that it may be too big to be tamed. Too big geographically: England accounts for 84% of the British population (and growing) and London has more people than Scotland and Wales combined. And too big historically: England played such a central role in the creation of the modern world that ties of blood and history can be found across the world. Yet there is little appetite south of the border for breaking up the country into smaller regions. And there is even less appetite for abandoning the idea that Britain is an exceptional nation. In 1908 G.K. Chesterton wrote a poem called "The Secret People" which included the refrain "we are the people of England that never have spoken yet". Now that the people of England have started speaking they are not going to be silenced soon. ■



German politics

The sleepwalker

BERLIN

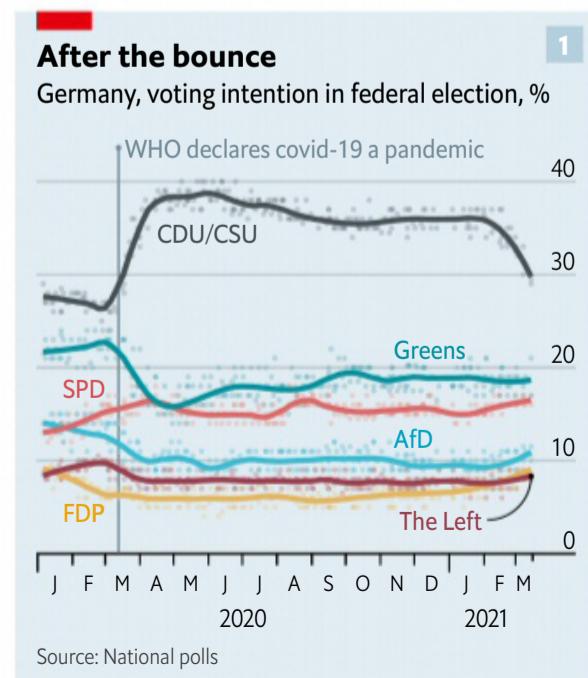
Christian Democrats are losing patience with their new leader

THE EXCUSES were plentiful as Germany's centre-right Christian Democrats (CDU) slumped to two of their worst-ever state-election defeats on March 14th. The party was up against popular incumbents in Green-led Baden-Württemberg and in Rhineland-Palatinate, run by the Social Democrats (SPD). The CDU's state chapters had chosen weak candidates. And anyway Armin Laschet (pictured), the party's leader, had said before the votes that state elections have their own character. National politics is another matter entirely.

All true. Yet there is no disguising the malaise that has descended on Germany's ruling party. Bad enough on their own, the election results contributed to a broader sense that the CDU has lost its way. Six months ahead of a general election after which Angela Merkel, the chancellor, will step down, the party that has run Germany for over 15 years is suddenly confronting the prospect that it could leave government at the same time that she does.

Long bereft of ideas, for most of the Merkel era the CDU has relied on two other qualities for its electoral appeal. One is

competence. The four governments led by Mrs Merkel brought Germany through a series of crises barely scarred. Unemployment and debt remained low, and the country's export-led growth model looked robust. The state largely passed tricky tests such as a huge influx of migrants in 2015



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► fragmentation ate away at the SPD, its traditional rival. Germany had long seemed on course for a CDU/CSU-led coalition with the Greens after September's election. But as the people have drifted away from what CDU stalwarts call "the last people's party", the notion of a government without the conservatives has gained traction. A "traffic-light" coalition of the SPD, Greens and the liberal Free Democrats (FDP)—of the sort likely to stay in office in Rhineland-Palatinate—is the talk of the day, though it remains unlikely at federal level. But once the party stops looking invincible, more voters will be tempted by alternatives.

Not much of this is directly the fault of Mr Laschet, who has been in charge of the CDU for scarcely two months. His immediate priority was to unite the wings of a party bitterly divided between his centrism and the more robust conservatism of Friedrich Merz, whom he narrowly defeated for the leadership in January. But so far Mr Laschet has signally failed to provide the leadership so many in his party crave. He was slow to respond to the corruption scandals. He brushed off complaints that he was missing in action after the state elections with a tin-eared argument that it was the job of the CDU secretary-general to respond. And though his brand of amiable moderation chimes with the public mood, he has shown no interest in offering a vision for post-Merkel Germany. "The only explanation I can see is that he doesn't have any ideas," says one despairing CDU MP. Even supporters profess exasperation.

At some point in the seven weeks between Easter and Pentecost (these are Christian Democrats, after all) Mr Laschet and Markus Söder, the CSU leader and Bavaria's premier, will decide which of them is to lead the two parties into the election. Mr Söder is a savvy politician who has built a national reputation while insisting his ambitions do not run beyond his state's borders. Yet although just 16% of CDU voters back Mr Laschet for the candidacy, even frustrated CDU MPs think their leader will

probably get the nod. Some quietly wonder why Mr Söder would want to swap a comfortable perch in Munich for the stress of leading a demoralised party into an uncertain election.

Indeed, the last campaign of the Merkel era promises to be its liveliest. The Greens, almost certain to enter government in one coalition or another, are fizzing with ideas. The FDP, enjoying a modest recovery, has finally found a distinctive voice in the pandemic. Even the long moribund SPD has rediscovered a taste for power, animated by the prospect of booting the conservatives into opposition. Traditional voter blocs have broken down. "Even if we write the best manifesto in the world, it won't be easy for us," says Katja Leikert, a CDU MP.

Yet for all its woes, the CDU/CSU is still odds-on to lead Germany's next government. Optimists tell a story of a summer campaign in which a reunified ruling party exploits a public mood buoyed by a belatedly successful vaccination campaign and a rebounding economy. Mr Laschet remains the favourite to succeed Mrs Merkel at the helm of the EU's largest country. But his chances would be that much better if he could explain why he deserves the job. ■

Dutch election

Suddenly Sigrid

AMSTERDAM

A ballot boosts both pro-EU liberals and the far right

DUTCH POLITICS are absurdly complicated. The Netherlands has a proportional representation system with no minimum threshold (most EU countries have one at 5%), ensuring a large number of parties and a constant churn of new ones. Voters are more evenly divided than ever between them. The prime minister, Mark Rutte, a brilliant and imperturbably cheerful tactician, has nonetheless managed to stay atop the heap for ten years, through three ruling coalitions. Last year he was hit with the covid-19 pandemic and with a child-benefits scandal that forced his government to resign just two months before an election. Yet there was never much doubt that when the votes were counted, he and his centre-right Liberal (VVD) party would again come in first. Preliminary results after the ballot on March 17th showed that the VVD had won 23%, well ahead of any other party.

Second place, however, was a big surprise: D66, a left-leaning, liberal pro-European party. Its leader Sigrid Kaag, the current trade minister, is a former UN diplomat who presented herself as a candidate



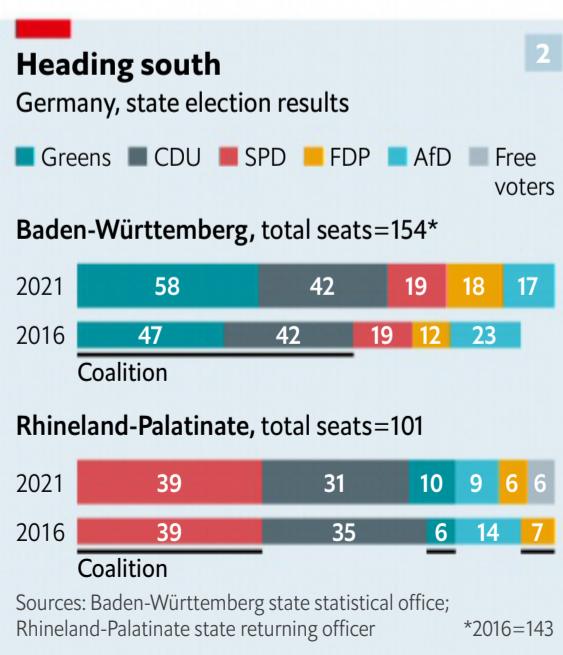
Quiet but surprising

to become the Netherlands' first female prime minister. D66 won 15%, one of the best results in its history. For his part, Mr Rutte moved towards the centre during the campaign, imitating left-wing parties' rhetoric on social policy. And with the exception of the populist right, every party emphatically backed strong climate policies. For a country that spent last summer leading Europe's "frugal" club of countries opposed to greater fiscal integration and nearly torpedoed the bloc's €750bn (\$900bn) covid-19 relief fund, the election may signal an important shift.

Mr Rutte owes his victory partly to approval of his handling of covid-19. The Netherlands has not done very well—inflection rates have been higher than in peers like Germany and Denmark, and track-and-trace and vaccination programmes have been slow. But most voters seemed not to mind, while others blamed the health minister, a Christian Democrat. During the campaign most of the opposition avoided the issue. As for the child-benefits scandal (in which the tax authority financially ruined thousands of parents over false accusations of fraud), it was not the VVD leader but the head of Labour who quit over his role in the affair.

Yet even for the teflon-coated Mr Rutte, forming a coalition will be difficult. Between 15 and 17 parties have made it into parliament, depending on the final count. Together, the VVD, D66 and the Christian Democrats have exactly half the seats. But the Christian Democrats' vote share fell to just 10%, from 13% in the previous election. Their leader, Wopke Hoekstra, currently finance minister, had been billed as a contender for Mr Rutte's job but ran a clumsy campaign with no clear theme. They may prefer a spell in opposition to rebuild their strength, making Mr Rutte's task harder.

The populist right split into more parties, but grew overall. The Party for Freedom (PVV), led by the anti-Muslim fire-



brand Geert Wilders, had hoped to finish second but settled for third with 11%. A smaller far-right party, Forum for Democracy, grew to 5%, while a new one, JA21, won 2%. All are considered untouchable by the major parties. On the left, Labour, the GreenLeft party and the far-left Socialists were pummelled, each winning 5-6%. Mr Rutte is unlikely to want more than one of them in his cabinet.

That leaves the great swirl of small-to-tiny Dutch parties. They often forecast trends that take longer to materialise in other countries. Four years ago the arrival of Forum for Democracy seemed to augur a new wave of alt-right populism, but that party fractured in November over racism and anti-semitism. The Party for the Animals, the world's first animal-rights party

to win parliamentary representation, got 4%. Identity politics is going strong: DENK, a party representing Dutch Muslims, won 2%. Meanwhile Volt, a new pan-European liberal party that runs in every country in the EU, rose in the polls in the final weeks of the campaign and won 2%.

The VVD's turn to the centre and the success of D66 suggest the next Dutch government may be a tad less parsimonious in future EU fiscal debates. But much depends on which parties join the coalition. In 2017 forming a government took over six months. Mr Rutte says the covid-19 crisis requires more urgent action, and wants speedy negotiations with D66 and the Christian Democrats. But Ms Kaag wants to bring in more parties on the left. She will be happy to take her time. ■

Pets and politics in France Future impurrfect

PARIS

Are some animals more presidential than others?

CATS AND dogs have become the new weapons in France's image-politics wars. Things began to heat up late last year when Marine Le Pen, the leader of the National Rally (formerly the National Front), revealed that she had passed an exam to become an accredited cat-breeder. Her feline fervour was already well known. Ms Le Pen considers cats to be "part of the family" and once accused a Doberman belonging to her father, Jean-Marie Le Pen, of killing one of her treasured mogs. But this latest twist looked suspiciously like part of a bid to soften the image of a leader who has sought to distance herself from her father's inflammatory far-right politics.

Just as Ms Le Pen has tried to tone down her strident style ahead of next year's French presidential election, so

have cuddly pictures of her six cats appeared with persistent regularity on her Instagram account. She has even set up a separate anonymous account, dedicated to her Bengal and Somali breeds. "I'm not interested in the money," purred Ms Le Pen; "I just want cats to be better treated." If I care for my cats, she seems to say, I would care for the country too.

Ms Le Pen's efforts have not gone unnoticed. After his election Emmanuel Macron adopted a mongrel, Nemo, from a rescue shelter. Photos of the president, better known for his "Jupiterian" governing style, petting his black mutt periodically feature on the Instagram account of the official presidential photographer, Soazig de la Moissonnière. In December Mr Macron posted on social media a video of Nemo, with a message urging the French to adopt a rescue pet, and to do so responsibly. It got over half a million views on Instagram alone.

During the Fifth Republic, a menagerie of pets has come and gone at the Elysée palace. As well as his rescue dog, Mr Macron keeps two hens (a present). Nicolas Sarkozy brought in a handful of canines. Charles de Gaulle had a Welsh Corgi, reportedly given to him by the queen, as well as a cat, although neither lived at the official residence. Before Mr Macron, no fewer than six consecutive French presidents had Labradors, turning that breed into something of a tradition. Georges Pompidou's was called Jupiter, as it happens. In short, every modern French president has owned a dog. Has Ms Le Pen picked the right pet for power?



Turkey

The banker and the president

ISTANBUL

The man who is putting the economy to rights may suffer for it

NACI AGBAL deserves a pat on the back. In only a few months as Turkey's central-bank governor, he has breathed new life into his country's currency, bolstered the bank's reputation and started to replenish its coffers.

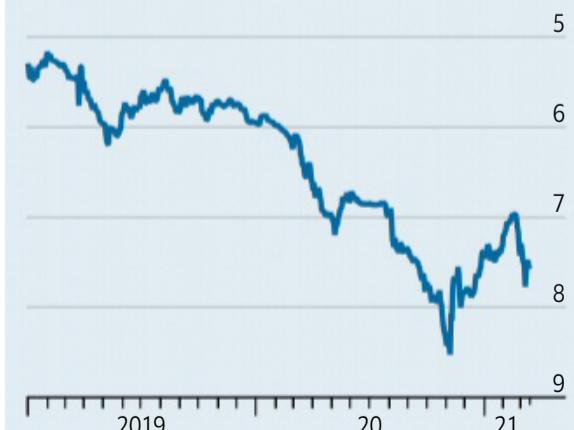
The lira had a terrible 2020, losing nearly 20% of its dollar value. Among emerging-market currencies, only the Argentine peso and the Brazilian real fared worse. This year it was by far the strongest of the bunch until late February, when a spike in US treasury yields, a possible harbinger of higher borrowing costs in America, prompted a sell-off of Turkish assets.

Mr Agbal has come up with the right remedy. When he took over last November, the former finance minister inherited a currency crisis and a central bank that had wasted an estimated \$130bn of its foreign reserves in a hare-brained defence of the lira. Since then he has raised interest rates by a cumulative 675 points, pledged to rebuild the bank's reserves, and improved communication with financial markets in Turkey and abroad. "He adopted a more predictable and transparent framework, which helped him manage expectations," says Hakan Kara, the bank's former chief economist. "The central bank has done a tremendous job restoring some of its credibility," says Piotr Matys of Rabobank, a Dutch financial-services giant.

But things are not about to get easier for Mr Agbal. The credit bonanza that helped Turkey cope with the pandemic (the economy grew by 1.8% in 2020, defying most forecasts) also put pressure on the lira and on prices. Inflation in Turkey has been creeping up for over a year. In February it

Sending a message

Turkish lira against the \$, inverted scale



Source: Refinitiv Datastream

reached 15.6%. Another interest-rate rise may now be on the cards. On March 18th, as *The Economist* went to press, the bank was expected to increase the benchmark rate by a percentage point.

Mr Agbal says he will keep policy tight to smother inflation, which he wants to bring down to 5% in under three years. But there is no telling whether he can stay the course, or even remain at his post. Turkey's president, Recep Tayyip Erdogan, who promised to give Mr Agbal a free hand when he took up his post, seems so far to have lived up to his word. But the governor continues to serve at the president's mercy.

Turkey does not have to hold a general election until 2023. But there are rumours of a possible snap vote. The louder these grow, the more pressure Mr Agbal will face to trade monetary discipline for economic growth. Mr Erdogan has already signalled his unease with the recent rate rises. Turkey's president sacked two of Mr Agbal's predecessors in less than two years. If his political future is at stake, he may not hes-

itate to ditch a third.

Just as worrying is the spectre of Berat Albayrak, who succeeded Mr Agbal as finance minister in 2018 and who resigned in a huff when his rival got the central-bank job. Mr Albayrak, who is married to one of Mr Erdogan's daughters, and who was once believed to be the second most powerful person in Turkey, has not made a single public appearance since his exit.

But he may be plotting a comeback. A recent sign came in late February, when Mr Erdogan publicly defended his son-in-law's record and the decision to use up so much of the central bank's foreign reserves during his tenure. Markets saw this as a sign that Mr Albayrak may be returning to politics. The lira suffered a mild heart attack and fell by 2% in a day.

Mr Agbal may have missed a chance by not raising rates since December. With the lira rattled again, this time by the news from America, he may now have to do it anyway. And Mr Erdogan's patience could soon start to wear thin. ■

babies in orphanages, but about surrogacy itself. They claimed that certain reproductive specialists were in fact criminal outfits, bent on stealing embryos and faking documents. They warned that surrogate children might be brought up by same-sex couples.

A government investigative committee seized medical records from reproductive clinics in Moscow. It claimed that surrogacy services could legally be provided only to single women and heterosexual couples. (There is no such rule.) The authorities threatened to prosecute single men who have hired surrogates, and to take away their children. Several gay men fled Russia to avoid losing their children and their freedom.

Many countries ban surrogacy because they fear that poor women will be exploited—that they are not capable of deciding for themselves whether the fee is worth the labour. Some activists liken surrogacy to prostitution (which they also think should be illegal). In Russia, by contrast, pro-government conservatives see the debate as an opportunity to bash gays. "If we do not engage in sexual education of our children, then the LGBT sex-instructors of NATO will do it for us," said one talk-show guest recently. (NATO, a western alliance that Russia views with suspicion, has nothing to do with sex education in schools.)

Russia's president, Vladimir Putin, often vows to defend traditional family values. It is a potent rallying cry. Last year he held a referendum to change the constitution. The main aim was to allow himself to stay in power beyond 2024, but it was bundled with dozens of populist measures, including a constitutional ban on gay marriage. "As far as 'parent number one' and 'parent number two' go...as long as I'm president this will not happen. There will be dad and mum," said Mr Putin. Voters had to say yes or no to the whole constitutional package. It passed easily. ■

Russia

Panic womb

MOSCOW

Conservatives fret that surrogate parents may be gay or foreign

RUSSIA IS ONE of the few places where commercial surrogacy is entirely legal (along with Ukraine, Georgia and some American states). Foreigners can pay a Russian woman for the use of her womb. Each year Russian surrogate mothers give birth to hundreds, perhaps thousands, of babies (estimates vary wildly). And in contrast to America, the service is cheap. Nine months of gestation plus labour can be bought for around \$20,000. But in the next few months or so, Russia's parliament looks set to ban the practice, at least if the customers are foreign. "Russia is not an incubator," says Irina Yarovaya, a deputy speaker of the Duma, Russia's parliament.

The apparent trigger for this proposed change was the death of a baby boy who was born to a surrogate mother on behalf of a Filipino family last year. The baby was nursed in a rented flat outside Moscow and died while recovering from an operation on his brain. When the police entered the flat, they found three other babies being nursed for different Filipino families. These included three-month-old twins belonging to Fredenil Hernaez Castro, a member of the Philippines' parliament.

The police decided that they had stumbled upon a trafficking ring. Doctors who worked for the fertility clinics where the

children had been born were arrested. So were a translator and a courier who had organised some of the documents. A lawyer who had made the arrangements was charged with child-trafficking but left the country before being arrested. The babies were sent to an orphanage, instead of their lawful Filipino parents.

Russian television channels launched a campaign of alarm, not about cops putting



A rest for some; arrest for others

Delivering tomorrow, today HOW MALAYSIA'S MACHINERY AND EQUIPMENT INDUSTRY IS TRANSFORMING ASEAN

The deployment of Industry 4.0 technologies and a unique combination of local and international capabilities make Malaysia a world-renowned manufacturing hub

When in 2018, the Government of Malaysia launched its Industry 4.0 policy, the nation's leaders highlighted the prominent role the country could play in the global manufacturing ecosystem. Three years on, Malaysia's Industry4WRD policy has made the country a strategic partner for global manufacturers, and a primary hub for high-tech sectors.

A key beneficiary of the nation's Industry 4.0 drive, Malaysia's machinery and equipment (M&E) sector is progressing rapidly. Increasingly, Malaysian manufacturers are benefitting from cutting-edge technologies such as the industrial internet of things (IIoT), robotics process automation, artificial intelligence, cloud and edge computing, big data analytics, and more.

M&E 4.0: THE MALAYSIA ADVANTAGE

While some Industry 4.0 technologies have been in use for several years, new developments have given the M&E sector fresh momentum. The proliferation of 5G telecommunications in the coming years will be noteworthy, enabling machines and equipment to make more timely, critical decisions, and allowing businesses to operate plants remotely with practically zero latency. In Malaysia, 5G is expected to be rolled out nationally by 2023.

country is connected to key ports and airports globally.

NON-EQUITY MODE OF INVESTMENT

For overseas MNCs seeking to partner with a local player, the nation boasts many globally best-in-class contract manufacturers. By outsourcing operations—

such as design, assembly and supply chain management—to a skilled third party, original equipment manufacturers (OEMs) and original design manufacturers (ODMs) are able to reduce costs, access new technologies, prioritise resources, and improve production time. This allows overseas partners to focus on core activities, such as quality assurance, product cost management, research and development, and customer service.

By teaming up with Malaysian contract manufacturers (MCMs), MNCs can also determine what is needed locally and actively work on that together. Such partnerships can shorten lead times, reduce production costs, and provide support for trouble shooting and maintenance.

10.1% growth

Malaysian M&E is forecasted to grow by 10.1% per year between 2018 and 2027



"Industry 4.0 lies in advances in communication and connectivity rather than technology. These technologies have the potential to improve the efficiency of businesses, and to help optimise limited resources via efficient asset management."

Dato' Azman Mahmud,
CEO, Malaysian Investment Development Authority (MIDA)

Multinational corporations (MNCs) in this field are widening their global reach to capitalise on growing demand for manufactured goods, while local players offer niche services to support overseas partners. Malaysia houses an M&E ecosystem that is enabling both entities to thrive.

HUB OF CHOICE

Malaysia's M&E industry is among the largest and strongest in South-East Asia, providing customised products to meet burgeoning demand domestically and internationally. Currently, around 120 major companies in Malaysia are capable of producing state-of-the-art machinery and equipment with industry 4.0 technologies.

Malaysia's world-class infrastructure enables M&E manufacturers to import and export with ease. Located at the heart of South-East Asia, the

PERFECT PARTNERS

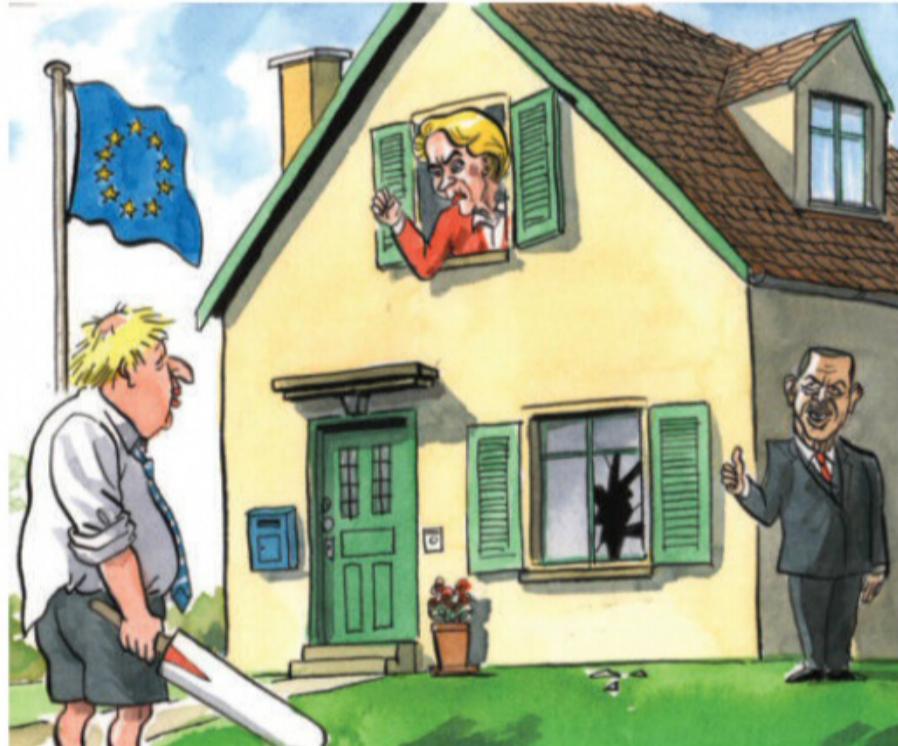
Malaysian contract manufacturers not only meet the requirements of overseas OEMs and ODMs, their facilities are high-quality and they manufacture to ISO-certified standards. These manufacturers are well informed about the global M&E industry, and have a deep understanding of local workforces. Moreover, frequent and transparent communication with overseas clients is maintained, and the highest standards of production practices are continuously upheld.

Support from the Government of Malaysia is vital in delivering on the promise of the nation's M&E sector. As the nation's investment development authority, the Malaysian Investment Development Authority (MIDA) is central to realising the goals of overseas companies wishing to capitalise on the nation's competitiveness. The wide range of services provided by MIDA includes supplying information about investment opportunities, as well as supporting companies that are seeking joint venture partners.



Charlemagne | The new Turks

Britain is the latest scrappy outsider in Brussels



LIFE IN BRUSSELS has become all too exciting for British diplomats. Before Brexit, they needed the patience to haggle over boring, intricate policy. Now they find a knack for bellicosity more useful. Since completing its departure from the EU at the start of the year, the British government has launched into scraps with its erstwhile colleagues. It began by refusing to offer ambassadorial status to the EU's man in London. It then unilaterally overrode parts of its agreement on Northern Ireland, sparking apoplexy at the European Commission, which accused it of breaking international law. As a backdrop, British MPs accuse their European peers of vaccine nationalism, after the EU brought in export controls on jabs made in the bloc. Allegations of hypocrisy and even malevolence zip between London and Brussels like a grumpy Eurostar.

On leaving the EU, Britain was always going to face a choice: should it be more like Switzerland or Turkey? Countries that are neighbours to the world's largest economic bloc must either accept its supremacy or try to fight it. Switzerland and Turkey best represent these two options. The Swiss, who have a complicated tangle of agreements with the EU, may grumble about the EU's dominance over their affairs, but ultimately accept the intrusion. Turkey has a far simpler relationship: a customs union that allows goods to move relatively freely. Yet President Recep Tayyip Erdogan's government wrestles the Europeans at any opportunity.

Britain could have gone either way. Theresa May, prime minister from 2016-19, enjoyed walking in the Alps and viewed the EU with Swiss realism. Once outside the bloc, she reckoned, Britain would still seek to influence it, roping itself into everything from foreign policy to data-protection laws in the same way that Switzerland ties itself to various EU rules. The plan was to make friends and influence people, with diligent diplomacy compensating for the loss of a seat at the table. However, Mrs May's successor, Boris Johnson, the proud descendant of an Ottoman politician, has taken a far more Turkish approach. He led Britain out of the EU and into a loose and rather shallow free-trade deal with it. He sees Europe as a sovereign rival, and his diplomats follow his lead. Private deliberation is out. Public confrontation is in. Brussels is there to be bashed, especially when it does outrageous things, like threaten to block vaccine exports to Britain.

Britain discovered its rebellious streak rather late in the day. After it voted to leave in 2016, it continued to abide by the bloc's rules. British officials diligently attended meetings on EU youth policy and the like, even while politics at home was a four-year screaming match. But now a spikier tone emits from them. During the difficult talks as a stand-still transition period came to an end on December 31st, officials wore Union Jack lanyards. They were told to be "leaders" not "mice" by David Frost, the peer leading the British side. Then and subsequently, threats to rip up already agreed deals were frequent. It is a tactic that EU officials who negotiate with Turkey will recognise, given Mr Erdogan's repeated threats to terminate an agreement with the EU over refugees. Turkey has been playing this game for a long time. Britain, by contrast, is still experimenting. "It's like a teenager questioning their identity," says a slightly patronising Eurocrat.

An element of nihilism hangs over the relationship. Neither side particularly wants or expects a deeper partnership any time soon. Britain is happy to scrap with the EU because not much is at stake. Fresh infringement proceedings, which can result in fines, carry little threat. (There are already dozens of such proceedings open against Britain.) Other sanctions are similarly blunt. The EU can withhold valuable baubles such as a decision on financial equivalence, which would allow British insurers and asset managers to operate in the EU. But British officials already put the chance of such a concession at close to zero. The threat to withdraw an offer one never intended to make is not very potent, as the Turkish government can attest. Turkey launched its application to join the EU in 1987, yet the path turned out to be a treadmill rather than a travelator. It knows its prospects of joining the bloc are non-existent and it behaves accordingly.

Toblerone to Turkish delight

In Europe geography is destiny. All parties are stuck with each other, whether or not their governments accept it. Switzerland smooths over its disagreements via constant negotiation with the EU, haggling over everything from the free movement of people to banking secrecy in a never-ending cycle of talks. Being a small landlocked country at the heart of the European continent lends itself to grumpy compromise. Turkey is in a far more awkward place. Considered not quite European by those in Brussels, it is simultaneously too small to pose a challenge but too large to push around. In short, it is in a position to which Britain can relate. This poses a conundrum to the EU, too. Unlike Switzerland, both Britain and Turkey are military partners, not just economic ones. Both are members of NATO. The EU's most pressing strategic problems, including an unstable north Africa and an interfering Russia, will be solved more easily if Turkey and Britain are onside.

Yet it may prove even harder for the EU to build a constructive relationship with Britain than with Turkey. Ultimately, the EU does not much care about the fate of Turkey as long as it remains stable. In the case of Britain and the EU, each side needs the other to struggle (even if neither side will admit this). For Europe, Britain must be demonstrably worse off as a result of leaving the bloc. In exchange for following all its strictures, the EU promises prosperity. The prospect of a large, successful economy with a different worldview just off its north-west coast is an uncomfortable one. For the British government, the pain of leaving the EU must be seen to be worth it. This is easier to claim if the EU fails to become a beacon of transnational bliss. Friction is inevitable. Those hoping for a boring relationship are out of luck. ■

**Illegal immigration**

Biden's border bind

MCALLEN, TEXAS

As the number of migrants trying to enter America rises, a humanitarian crisis could turn into a political one

THE FIRST thing you see after crossing the bridge from Reynosa, in Mexico, into Texas is a large white sign with bright red letters that spell out "BINGO". It is meant as an advertisement for a hall where people can play the game. But it also serves as a reminder of the long odds and random luck that lie in store for those making their way to America.

Hoping fortune may be on their side now that a pro-immigrant president is in the White House, a rising number of migrants are arriving. Guatemalans, Hondurans and Salvadoreans are fleeing violence, poverty and a pair of hurricanes. Mexicans are coming to escape a contracting economy. From last October through February, Customs and Border Protection (CBP), which guards America's borders, had around 400,000 encounters along the south-western border. That is the highest number during those months since 2006.

Many are children: in October-February, around 30,000 people under the age of 18 presented themselves at the border without a parent, setting off a scramble to

find beds in a system already stretched by the pandemic. A record 120,000 could arrive this year—54% more than in the previous peak year of 2019.

Plenty of those who make the treacherous crossing are not spotted or apprehended by CBP. Matt Robinson, the head of security for the East Foundation, a not-for-profit outfit that manages 215,000 acres of ranchland in South Texas (an area roughly the size of New York City), reckons he is seeing ten to 20 times more migrants illegally crossing the foundation's land than last autumn. The situation has "changed so fast, and is so upside down, I don't know if

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there's any guardrails," says Urbino "Benny" Martinez, the sheriff of Brooks County, which is 70 miles north of the border, and has the morbid distinction of being a hot-spot for migrant deaths from dehydration.

This situation poses a huge challenge for Joe Biden, who was elected partly on his promise to enact more humane immigration policies than his predecessor. A rush of migrants to the border could overwhelm an already rickety system and impede his ability to honour that promise.

America has dealt with spikes in illegal immigration before (see chart on next page), often caused by forces beyond a new president's control. "There was always going to be a surge because of a backlog under Trump," says Lee Gelernt of the American Civil Liberties Union. Last year Donald Trump in effect sealed the border from entrants by invoking Title 42, a public-health order that authorised the rapid expulsion of all border-crossers and asylum-seekers because of concerns about covid-19. This has resulted in pent-up demand.

But some migrants are arriving because Mr Biden's actions may have given the impression that America does not intend to enforce its immigration laws, and will put penitence for Mr Trump's nativist policies ahead of border security. In January the Biden administration ordered a 100-day halt to deportations of illegal immigrants already in America. (This was scuttled by a lawsuit from the state of Texas and a court ruling.) He has ended the Trump-era "re-

► main in Mexico” policy, under which would-be immigrants remain south of the border to await their immigration proceedings; some 20,000 people will soon be allowed to enter America.

His administration has left Title 42 in place, which allows it to expel more border-crossers immediately. It has chosen to accept unaccompanied minors, regardless of whether they qualify for asylum or other special consideration. Some families have sent their children ahead to America because it is their likeliest shot at gaining entry. Having railed against the Trump administration’s “zero tolerance” policy that resulted in family separation, Mr Biden is in the peculiar situation of watching some families voluntarily separate to get their children into the United States.

Rumour has it

“We’ve thrown open the border by rumour,” says Neal Wilkins, who runs the East Foundation. Sister Norma Pimentel, who heads the Catholic Charities of the Rio Grande Valley and interacts with many of the arriving families, blames “organised crime” for spreading the message that now is the time to come. Smugglers are using the change of administration to drum up business. From Central America they charge \$10,000, which includes a “coyote” to guide them through harsh terrain and three tries, if they get turned away by Border Patrol on their first two attempts. Many families are hoping to turn themselves in at the border to start the asylum process.

In recent weeks, more families have also been allowed in because of a decision by the Mexican government to stop taking back families with young children that CBP has tried to expel. Pending negative covid-19 tests (Title 42 remains in effect), they are being processed and released into the Rio Grande Valley without needing to make a claim for asylum, whereas families who have children older than seven are, in effect, barred. Those who test positive are being put up at hotels to quarantine.

Catholic Charities of the Rio Grande Valley is helping around 700 new families every day at its shelter in McAllen, opposite the bus station. Your correspondent was there as a dozen new arrivals were dropped off by Border Patrol. All had young children, some only a couple of months old. That fuels news that America’s borders are opening, which encourages others to come. Children may get the most headlines, but, says Andrew Selee, president of the Migration Policy Institute, a think-tank in Washington, “by sheer numbers, there’s a lot more parents with children than unaccompanied minors”.

The system is already buckling. America’s immigration system was designed when single people, mostly Mexican men, were trying to cross the border to find

work. In the past decade there have been three demographic shifts among border-crossers: from Mexicans to Central Americans; from single people to families and children; and from those who need no humanitarian protection to those asking for asylum. Although asylum-seekers on the southern border may be fleeing desperate circumstances, most will not meet the standard that lets them stay. But those who pass an interview proving “credible fear” are often released into the United States while their cases are pending.

The overburdened immigration-court system now has 1.3m cases, about two-and-a-half times the number when Mr Trump assumed office. Resolution takes years, and most migrants disappear into their communities while they wait. According to a study by the Department of Homeland Security, among asylum-seekers from the Northern Triangle countries of El Salvador, Guatemala and Honduras who arrived between 2014 and 2019, 28% were repatriated by early 2020. Yet the department has no record of departure for the other 72%. With only 8% being granted some sort of relief from removal, the others are either still awaiting judgments or have decided to stay indefinitely, even though they are not legally allowed to do so.

Much of the burden for helping migrants who arrive in America has long fallen on non-profit groups, especially during the previous surge in 2019 under President Trump. But covid-19 is presenting overstretched charities with additional challenges. “This time around we’re finding it a lot more difficult, because we don’t have volunteers,” says Sister Pimentel. We’re running short of hands to make it right.” The United Way of El Paso County recently asked 100 former volunteers to help, but only six said they were comfortable enough to accept, says Christina Lamour, vice-president of community impact.

This affects communities well beyond the Valley. “Even 80 miles away from the border, people are affected,” says Susan Kibbe of the South Texans’ Property Rights

Association. Some ranchers are afraid to go to parts of their land, she says, after being threatened by smugglers and cartel members. Agents who used to patrol farther north have been pulled down to the border.

On the 90-minute drive from Raymondville to Hebronville in the Rio Grande Valley, usually you would see ten Border Patrol officers and six officers from Texas’s Department of Public Safety, reckons Mr Robinson of the East Foundation. When your correspondent did the drive with him, they saw none. On any given day there could be 100 migrants hiding in the brush in Brooks County, says Mr Martinez, the sheriff, but with much of the county’s Border Patrol pulled south, the brushwork is often left undone.

Such chaos has national-security implications. Will Hurd, a former congressman, says intelligence organisations should make ending human smuggling in Central America a priority. It is not just Mexicans and Central Americans who arrive through the southern border but others from Asia, the Middle East and elsewhere, seeking to enter undetected. This month CBP has intercepted at least three groups of more than 100 migrants each, including nine Romanians. In addition to people, smugglers ferry drugs across the border. The more migrants overwhelm the system, the more this distracts from the task of cracking down on drugs. Between October and February, seizures of fentanyl rose by around 360% from a year ago.

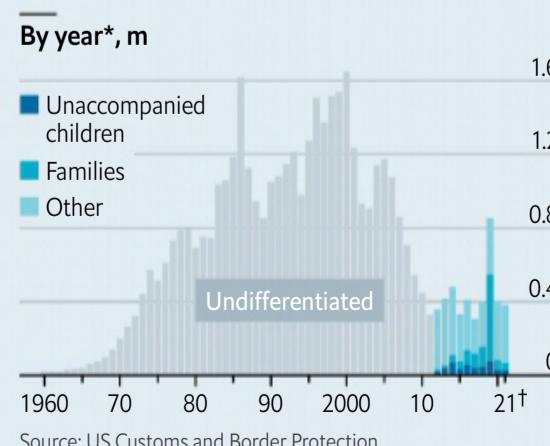
Who said what, when?

Confusion about border policy is rife. Mr Biden has yet to nominate permanent heads of CBP and Immigration and Customs Enforcement (ICE). One law-enforcement official asked your correspondent whether Title 42 was still in effect. Others are unsure whether it was the United States or Mexico that decided not to send back families with young children.

Hugo Zurita, who runs Good Neighbour Settlement House, a non-profit in Brownsville, says there needs to be “more commu-

Coming to America

United States, apprehensions of illegal immigrants at south-western border



Unaccompanied children, by year*, '000



► nication with DC and local officials. I'm not saying we need to know every detail, but we need to know what's going to happen." Studying conditions at the border first-hand would surely help. "The big problem we continue to have with government is they never seem to get down on the ground and talk to people who are here on the front lines, who live and work in the community," says Dennis Nixon, the boss of IBC, a bank, in Laredo, Texas.

Mr Biden has already ordered a review of various immigration policies, from the asylum system to how to reunify families separated under Mr Trump. He does not have much time. Already immigrant-rights groups, finding themselves with more sway than they have had in years, are agitating to end Trump-tainted Title 42.

But "if they were to lift that, you'd see the system overwhelmed even more," says Theresa Cardinal Brown of the Bipartisan Policy Centre, a think-tank. "Right now Title 42 is the only thing that is buying the administration time to put in place the immigration system it wants." There is talk of creating reception facilities that are not just for detention, so migrants can find out more about the asylum process and get information: the sort some European countries have designed for refugees. "You can rely on the shelters and non-profits for only so long," says Ms Brown.

In the coming months, Mr Biden will find himself sandwiched between two pugnacious, opposing forces. One is the left flank of his own party, which has become more strident on immigration, staking out positions such as abolishing customs and immigration enforcement and never detaining unaccompanied minors. The other is the Republicans, who have already signalled that they intend to use the border as a wedge issue to take back Congress in the 2022 mid-term elections. Unless Mr Biden can show that he is successfully grappling with the surge of migrants and reining in his own party, the border could cost Democrats seats, much as "defund the police" did in 2020.

The border troubles also pose a threat to Mr Biden's own agenda. He wants to shepherd through comprehensive immigration reform, offering illegal immigrants already in the United States a path to legal status, and he supports giving citizenship to "Dreamers", who were brought to America as young children. But those prospects dim as the surge of migrants grows. "Anything we're trying to get passed connected with immigration is potentially at greater risk, depending on current conditions at the border," says Woody Hunt, a Texan businessman, who, along with a group of business leaders, supports offering permanent status to Dreamers. For Mr Biden, the southern border is quickly becoming a moral and political quagmire. ■



Murder in Atlanta

Red lights

ATLANTA

A gruesome shooting in Atlanta leaves Asian-Americans frightened

THE STRETCH of Piedmont Road in north-east Atlanta is usually quiet and dreary. Cracked asphalt and faded street signs give the area a rundown look, and blacked-out windows suggest illicit activity. This is Atlanta's red-light district. At night, multicoloured lights flash from shopfront windows in a futile effort to brighten the atmosphere.

On the evening of March 16th the colourful signage and lights illuminated a crime scene. Police officers guarded the perimeter of two spas, on opposite sides of the street, as other officers investigated a pair of shootings that left four people dead. An hour earlier another shooting, at Young's Asian Massage in a nearby suburb, also killed four. Six of the eight dead were women of East Asian descent; the alleged shooter is a white man. Across the country, Asians and Asian-Americans wondered the same thing: was this yet another racially motivated crime against them?

Shameful episodes of anti-Asian discrimination litter American history. The Chinese Exclusion Act, signed into law in 1882, barred Chinese immigrants from citizenship until 1943. During the second world war around 120,000 Japanese Americans were put in concentration camps.

Anti-Asian sentiment has emerged again during the pandemic. The Centre for the Study of Hate and Extremism, a think-tank, found that whereas, overall, hate crimes dropped by 7% from 2019 to 2020, those against people of Asian descent rose by nearly 150%. Similarly, the Pew Research Centre, a pollster, reported in June 2020 that roughly two-fifths of Americans

said that people expressed racist views about Asians more often than before the pandemic. Many fault Donald Trump, who referred to covid-19 as the "Chinese virus", for emboldening people to act upon their prejudices.

Perpetrators often target Asian women. Stop AAPI Hate, a coalition of Asian advocacy groups, received 3,795 reports of anti-Asian incidents between March 2020 and February 2021—most of them from women. The incidents ranged from verbal harassment to being spat upon, a particularly vile act during a pandemic caused by a virus that spreads through respiratory droplets. The report contends that these are "only a fraction" of the incidents that have actually occurred.

On the afternoon of March 17th police officers said that the alleged shooter—Robert Aaron Long, a 21-year-old charged with eight counts of murder and one of aggravated assault—appeared to have been motivated by sexual addiction. Online reviews of the attacked massage parlours indicate that they may have offered sexual services. At a press conference the day after the shootings, authorities said that he had "a bad day", and saw the spas as a "temptation" that had to be eliminated.

But the possibility that his actions were fuelled by racism has not been ruled out. The House Judiciary Committee announced it will hold a hearing on anti-Asian violence on March 18th. Even as a semblance of post-pandemic normality appears on the horizon, fear continues to grip America's Asian communities. ■

Government software

Trying to get the hang of IT

LOS ANGELES

Despite many high-profile failures, government tech is slowly improving

IT HAS BEEN a bad year for government software. Early in the pandemic, unemployment-insurance systems failed, preventing many jobless from signing up for benefits. Glitchy vaccine-registration software in Pennsylvania, New Jersey and Florida slowed roll-out. Deloitte, a consultancy, was paid more than \$40m by the Centres for Disease Control to produce a buggy vaccine-data system. In February whistleblowers reported that prison-administration software was keeping inmates in Arizona locked up past their release dates.

It is not simply that the pandemic has put a strain on harried government boffins: an oft-cited report by Standish Group, an advisory firm, found that only 13% of large government software projects suc-

►ceed. The roll-out of America's online health-care marketplace became a national joke. Hackers stole the records of more than 20m federal personnel. A pricey intelligence system was so awful that paratroopers in Afghanistan begged higher-ups to switch. Such foul-ups are the rule.

Procurement is the first problem. The way government agencies buy things is so complicated that only a few big companies understand the process. Some firms continue to get state and federal contracts even after delivering error-prone systems at fantastic cost. New York chose Xerox to modernise its Medicaid-claims system even though the company had already been sued by Alaska and Texas for allegedly botching similar efforts.

Poorly written contract solicitations make things worse. Requirements are often so restrictive that many eligible firms are instantly disqualified. Contracts may contain no provision for testing. Deloitte's vaccine-management system might have benefited from more testing: it doesn't work on some web browsers, and important buttons are hidden on a smartphone.

Many agencies lack the expertise to ensure that complex software projects run smoothly. A government report found that an opaque, drawn-out hiring process was a significant barrier to getting tech talent. Agencies can be penny-wise and pound-foolish, allocating plenty of money for tech contracts but not enough for the staff required to ensure projects are a success.

Bureaucracy doesn't help. Staffers may want to take advantage of modern technology, but fear falling foul of old rules. During the pandemic, unemployment-insurance and vaccine-registration systems were crushed under the weight of traffic that would have been easily handled by cloud-computing infrastructure. Little thought goes into user experience. In 2018 the poor design of a software interface led a state employee to press the wrong button, issuing a warning that a ballistic missile was incoming to Hawaii residents, who scrambled to text goodbyes to loved ones.

Change is under way. After the failed roll-out of Healthcare.gov, the American government set up 18F, an internal technology consultancy that has created sleek new digital tools, and the US Digital Service (USDS), which deploys tech whizzes to multi-year "tours" in government. Technology Transformation Services, a unit dedicated to improving government tech, has created digital.gov, which provides resources to improve tech literacy across the government. USDS has pioneered SME-QA, a promising new way to hire software developers and other experts.

Mark Lerner, a civic-tech expert, advocates modular contracting—short, bite-sized contracts that are easy to replicate. Spreading tech know-how among con-

tracting officers can stop government from buying lemons. "We need to be building systems", says Amanda Miklik, a former USDS director of design, "to support contracting officers in being able to sniff out bullshit." And civic-tech experts agree that government must take user research seriously: the goals of new software must be well defined before contracts are awarded.

A new opportunity arose on March 10th,

when the House passed a \$1.9trn stimulus package. The bill includes \$1bn for the Technology Modernisation Fund (TMF), a vehicle intended to improve federal tech. The hefty sum, a 40-fold increase over TMF's 2020 figure, is a signal that Congress and the Biden administration take IT modernisation seriously. But unless the government improves its ways, the money could all too easily be wasted. ■

South Dakota's economy

Lives or livelihoods?

Battered by covid-19, the Mount Rushmore state roars ahead

AFTER PEAKING at nearly 15% last spring, America's unemployment rate has fallen to 6.2%. But the recovery across the country as a whole, speedier than many economists had expected, has nothing on South Dakota, a state with particularly loose covid-19 restrictions. Unemployment there has tumbled to 3.1%—as low as it was before the pandemic. South Dakota's unemployment rate is the lowest in the country (see map) and a full percentage point lower than that in North Dakota, which imposed extra restrictions in November.

South Dakota's state government has shied away from mask mandates and stay-at-home orders. Bars, restaurants and clubs are open; many geared up for a huge St Patrick's Day celebration on March 17th. At last month's Conservative Political Action Conference, a big Republican bash, Kristi Noem, South Dakota's governor, took the plaudits for having apparently done the impossible: avoid a biblical death toll from covid-19 while keeping the state open for business. South Dakota made a choice—albeit one which was not open to many other states.

It is not true that South Dakota has escaped covid-19. Fewer people have died from the virus than in most states, but few people live there. Adjusted for population, South Dakota ranks eighth among the states for most deaths from the disease, according to data from the Kaiser Family Foundation, a think-tank. The fact that it is not ranked even higher may owe more to the state's low population density and lack of travel hubs than it does to enlightened covid policy.

Many states hit comparably hard by covid-19, such as New York, have also suffered economically. South Dakota's economic strength seems genuine. The drop in the unemployment rate has been driven by growth in jobs, not by people falling out of the labour force. In the third quarter of 2020 the total value of wages and salaries in the state was where

Plain to see

Unemployment rate, January 2021, %



Source: Bureau of Labour Statistics

you would expect it to be had the pandemic never happened. *The Economist* has constructed an index of economic activity using mobility data from Google. Compared with a pre-pandemic baseline, it was 2% lower last week in South Dakota. Across all America it was 24% lower.

Parts of South Dakota's economy have suffered. Employment in leisure and hospitality has fallen by over a tenth in the past year, as fewer tourists visit the Badlands and Mount Rushmore. In some respects the state was dealt a good hand. It is more reliant than average on industries that can run with social distancing, such as manufacturing. And in the past year the federal government has boosted its headcount in South Dakota by 2%.

Nonetheless the uncomfortable reality is that South Dakota undermines an assertion that some economists and public-health types are fond of repeating: that, as far as covid-19 is concerned, there is no trade-off between lives and livelihoods. That trade-off may indeed exist, at least in the case of rural areas where the population seems to have a high appetite for risk. South Dakota's public-health response to the pandemic has been poor, but at least its economy has not also collapsed.

The black church

Haunted houses

CHICAGO

A failure to attract the young is behind the decline of the black church

PASTOR JOHN SMITH presides at the Olivet Baptist church, a towering and handsome structure in Bronzeville, on Chicago's South Side. He tells a cracking tale of the 170-year history of the city's oldest black Baptist church. Before the civil war it was part of the Underground Railroad, helping to smuggle escaped slaves to safety. In the Great Migration, a century ago, Olivet helped to attract and settle black families from the South who forged new lives in northern cities.

The newly arrived routinely made their first stop at Olivet to collect food and clothes, and to learn about finding homes and jobs. The church bloomed as "the place you could go" to meet practical and social needs, not only spiritual ones. In effect it became America's first megachurch by the late 1920s, with some 15,000 members.

Those new arrivals were registered as voters and African-Americans emerged as an influential bloc in city politics. "We have always been engaged in the struggle for the liberation of black people," says Pastor Smith. His church still promotes a "social gospel", seeking a real-world impact.

Olivet's story reflects that of the black church as a whole. In a PBS television series devoted to the story of the church nationally, broadcast in February, Henry Louis Gates junior, a prominent intellectual, called it "the seminal force in shaping the history of African-Americans". It did the most to spread literacy among black

Americans, even during slavery. The first schools and universities for African-Americans in the South, which have since grown into the historically black colleges, were founded inside churches.

One of America's first black congressmen, Richard Cain, was a minister in South Carolina, elected in 1872. Black consciousness grew in churches during the Jim Crow era, as ministers in Georgia in the 1890s declared God to be black. Many such churches were part of the civil-rights movement in the 1950s and 1960s. Raphael Warnock, who was elected in January in Georgia as the first black Democratic senator from the South, is the latest incarnation of a reverend-politician. His victory was aided heavily by church activists, especially women.

Yet the power of the church is waning. In the face of Black Lives Matter protests, it has floundered. Pastor Smith concedes he is still unsure how to respond to the street activists. Young African-Americans infuriated by police violence did not wait for a charismatic leader to come from a church, says Shayla Harris, a film-maker. Instead, "they take it on themselves".

At Olivet interest in the church has been falling for years. Today Pastor Smith counts just 250 people as members, most of them elderly. And though he has taken to live-streaming services and has ginned up Olivet's website and Facebook pages, he says that his church suffered "because it lost the young generation".

This is true across much of the black church. The PBS series dwelt on a glorious history, but touched only briefly on the church's more recent troubles. "The real question is does the church have a central role now?" says Ms Harris, who co-directed the documentary. She notes how the institution is increasingly fragmenting, it is "not a monolith", and may better be talked about as a collection of many churches. Too many of these have failed women, who cannot "shatter the stained-glass ceiling". They still fill pews and raise funds, but it is almost always "men in their 50s" who preside, complains Terri Laws, a scholar of the black church, based in Detroit.

A Pew Research Centre survey, published in February, found younger African-Americans ever less involved in churches. One in three black millennials (or younger) say they are not affiliated to any church, and around half of all black youngsters attend one rarely or never; among the oldest, only a quarter skip church. As for youngsters who still attend one, they are keener than their elders on multiracial congregations, not exclusively black ones. In time, even the idea of a black church may fade.

Lost souls

Ryan Burge, at Eastern Illinois University, tracks trends among atheists and the non-affiliated in "The Nones", a new book. He says black millennials are following a path that white and other Americans already trod, but "there is more stigma for the black community in moving away." Among young adults of all races, only 11% shunned church in the early 1980s; today the rate is nearly three times higher. Walter Fluker, at Emory University in Atlanta, says many black churches "have become haunted houses", with leaders who are far too slow to respond to matters such as police violence or debates on gay rights.

The pandemic, Mr Fluker says, brought a moment for black churches to make themselves relevant again. Conservative church leaders badly failed to respond to the AIDS crisis from the 1980s onwards, which especially afflicted African-Americans. This time round the church has seen coronavirus especially hurt black people, who have been infected, hospitalised and killed at unusually high rates.

Some churches have taken again to the idea of a social gospel. "Covid created a wonderful opportunity," says Pastor Smith, noting how Olivet tries to ease fear of vaccines by getting nurses to speak to his members. Church leaders, such as Al Sharpton, have lauded the safety of the vaccines in an effort—one that looks broadly successful—to reduce vaccine hesitancy among African-Americans. More such efforts to improve the lives of their followers would be a reminder that the churches are still a force to be reckoned with. ■



The future could look less distinguished

Lexington | Joe Biden's passage to India

America's serially underperforming relationship with India has never looked more important



AS AN INDISPENSABLE fan of George W. Bush's approach to India, Joe Biden, the then chairman of the Senate Foreign Relations Committee, said his "dream" was that by "2020 the two closest nations in the world will be India and United States." For much of the intervening time they have looked more like two English-speaking nations separated by a strategic partnership.

Mr Bush's approach to India, which involved bringing its nuclear industry into the global fold, among other opportunities for co-operation, was based on its future potential to balance China, not its feebler present. Yet he often seemed to confuse the two. "The classic opportunity for our American farmers and entrepreneurs and small businesses...is there is a 300m-person market of middle-class citizens here in India!" he marvelled. It is a sentence that, 16 years on, still exaggerates the number of Indian consumers and their government's willingness to let foreign firms near them.

Indian reticence has been a more serious speed-brake. Politically fractious and preternaturally suspicious of self-interested foreigners, India does not want to be part of anyone's strategic calculations. It took Mr Bush's counterpart, Manmohan Singh, a year and a confidence vote to get the nuclear component—a geopolitical gift-horse—through parliament. The last of four "foundational" defence agreements, precursors to the enhanced military and intelligence ties Mr Bush envisaged, was signed last October.

Yet notwithstanding the hobbling effects of these differences, rising concern about China on both sides has driven pretty steady progress. Barack Obama set aside concerns about Narendra Modi's association with communal bloodshed to work with him on climate change, while dismantling barriers to military and other technology transfer. Donald Trump set the relationship into reverse on trade, immigration and education ties, yet pushed defence and intelligence ties even harder. India's increasingly public receptiveness to that approach was apparent after America provided it with intelligence and cold-weather gear during clashes between Indian and Chinese border guards last year.

America has done less for some of its allies, a status India still recoils from, yet increasingly enjoys the benefits of. The inaugural summit of the Quadrilateral Security Dialogue, a grouping of America, Australia, India and Japan, held on March 12th, illustrat-

ed this. It also highlighted the opportunity Mr Biden will have to deepen the relationship, and how he means to try.

Formed in 2004 to manage disaster relief after a tsunami, the "Quad" was repurposed by Dick Cheney as a military club, then abandoned in 2010 because Australia and India considered it too antagonistic to China. After years of creeping Chinese aggression, that is less of a worry in both countries, hence the Trump administration—to its credit—revived the group in 2017. It has since held ministerial meetings, and a joint naval exercise in 2020, before last week's meeting signalled Mr Biden's bigger plans for it.

The Trump administration toyed with an idea that the Quad might develop into an Asian NATO, underlining its emphasis upon security co-operation. By contrast, reviving American outreach on trade, immigration, public health, climate change and so forth is Mr Biden's goal. The fact that the Quad summit concluded with the adoption of the group's most concrete agenda since the tsunami, a plan to boost vaccine production and supplies for the region, was indicative of that. The idea is for America, Japan and Australia to provide cash to help India, which already makes 60% of the world's vaccines, amp up production.

How much this might bother China, which once criticised the group as mere "sea-froth", is open to question. Yet it suggests the Biden administration is serious about its stated intention to counter China through alliances, based on shared values, and that it sees the Quad and India as central to that. The group's loose, voluntary design and adoption of an agenda that downplays China, while promoting Indian capability, also looks well-designed to bind India in. It caters to the country's past insecurities and current ambitions, a useful combination.

The administration has similar plans for the bilateral relationship. It means to sustain the momentum its predecessor set on security: Lloyd Austin, the defence secretary, will visit Delhi this week. And it believes the Trump administration's neglect of other sorts of co-operation provides a chance to make eye-catching progress. Mr Biden has already scrapped a Trump effort to restrict the number of foreign—including Indian—students.

This will not all go smoothly: the broadening of the relationship will uncover as much residual tension as opportunity. India is unlikely to become less protectionist even if America does. The recent defence co-operation is belied by India's unimpressive efforts to modernise its antiquated forces and attachment to cheap Russian kit. Its scheduled receipt of a Russian air-defence system later this year, for which it will be liable for American sanctions, is already causing headaches. A new report by the Brookings Institution, a think-tank, suggests such frictions could induce an American rethink: "A chorus of voices in Washington...have begun more vocally expressing anxieties about whether the value and sustainability of US engagement with India has been oversold."

Sino the times

There is little doubt that the relationship has been oversold in the past—including by Mr Biden. Yet his administration's early work on it has provided a context in which the inevitable frictions should be understood. In Tony Blinken at the State Department and Jake Sullivan at the National Security Council, as well as Mr Biden himself, the administration already has more experience of dealing with India than any of its predecessors. And it has made elevating US-India relations central to its plans. As China looms ever larger for both countries, the relationship has never looked more important or robust. ■



Biden and Bolsonaro

At loggerheads over the Amazon

SÃO PAULO AND WASHINGTON, DC

For the first time, US-Brazil ties depend on the rainforest

BRAZILIAN BUSINESSES rarely preach greenery. Yet last July, 20 months after Jair Bolsonaro was elected president, rampant deforestation in the Amazon roused 38 CEOs to speak up. Foreign investment was falling and trade talks were stalled. "This negative perception has an enormous potential for harm," they wrote in a letter to the government, urging Mr Bolsonaro to do something. He ignored them. The pace of deforestation, as reported in November, was 10% faster in 2020 than in 2019. Yet the president merrily slashed the budget for environmental enforcement for the third year in a row.

Now those Brazilian bosses are placing their hope in another president—one who lacks Mr Bolsonaro's populist disregard for science. Joe Biden has signalled that both his foreign and domestic policies will aim to arrest climate change. More than 60% of the remaining tree cover in the Amazon is in Brazil. Not only is the rainforest brimming with irreplaceable biodiversity; it is

also a carbon sink. Burning or chopping it down turns it into a source of carbon emissions instead. American diplomacy under Mr Biden will seek to persuade Mr Bolsonaro not to let that happen. This is perhaps the first time that a major bilateral relationship has focused on trees.

That presents both risks and opportunities for Brazil. After Mr Biden said in a debate in September that Brazil could face "economic consequences" if it doesn't "stop tearing down the rainforest", Mr Bolsonaro tweeted, "OUR SOVEREIGNTY IS NON-NEGOTIABLE." Later, he made what sounded like a threat, saying Brazil would need "gunpowder" if diplomacy should fail. Tensions have now eased somewhat. Mr Biden told John Kerry, his climate en-

voy, to make good on a campaign promise to raise, with the help of other countries, \$20bn for the Amazon. In February Mr Kerry had a call with Ernesto Araújo, Brazil's foreign minister, and Ricardo Salles, the environment minister. "We have to construct bridges," says Mr Salles.

In an interview with *The Economist* Mr Kerry said that he would not be "just dictating", but working with Brazil. He admits it won't be easy, adding that he is dealing with "an administration that has felt aggrieved in the way that it has been approached to date".

In both countries, wonks are trying to pull together a deal that the two presidents can claim as a win. In January a group of former US cabinet officials and climate negotiators published an "Amazon Protection Plan" in which funding for Amazon countries would be conditional on reducing deforestation. In Brazil CEOs and scientists calling themselves *Concertação pela Amazônia* ("Agreement for the Amazon") are lobbying for a chunk of the aid to go to sustainable development.

Until recently both countries were active participants in climate negotiations. As secretary of state in 2016, Mr Kerry signed the Paris accord on climate change. Brazil used its stewardship of the Amazon as a way to "punch above its weight", says Tom Shannon, a former US ambassador to Brazil. Between 2008 and 2019 Norway and

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► Germany donated more than \$1bn to Brazil's Amazon Fund, which aims to curb deforestation and support sustainable development. But after President Donald Trump withdrew from the Paris accord, Brazil, China and other countries appeared to use his environmental insouciance as a pretext to neglect their own commitments.

And when Mr Bolsonaro became president in 2019 "a relationship that had been between states and societies became a relationship between two guys," says Mr Shannon, referring to Mr Bolsonaro's bromance with Mr Trump. Brazil's other relationships soured. After two decades of negotiations, the EU has yet to ratify a trade deal with Mercosur, a bloc of South American nations, mostly because of Mr Bolsonaro's policies.

Brazil's private sector, by contrast, has stepped up. After a decade of ignoring the global trend to be greener, Brazilian banks, funds and firms have now started pledging to reduce their carbon emissions and to eliminate deforestation from their supply chains. The price of carbon credits in Brazil's nascent voluntary market almost tripled in 2020. Demand is increasing for shares in firms that promise stricter environmental, social and corporate-governance standards. Much of this is "green-washing", thinks Fabio Alperowitch of FAMA Investimentos, a fund that focuses on such shares. But some is not.

Seeing the wood for the trees

Mr Biden could help. The \$20bn he has pledged to raise for the Amazon could be made conditional on Brazil meeting environmental goals. So could Brazil's request to join the OECD, a club of mostly rich countries. In the past, Brazil has stymied the creation of a global carbon market by insisting that credits it sells to other countries should also count as its own emissions reductions. Such double-counting would result in a smaller cut overall. A push from the Biden administration to reject this double-counting, if successful, could boost conservation in the Amazon.

Off the record, however, many CEOs admit to being more anxious than they have let on. A deal with the Biden administration "is our only hope" of avoiding trade barriers and further reputational damage, says one. Both the EU and Britain are considering laws to punish companies that import products tied to deforestation and banks that fund them. The Democrat-controlled US Congress might follow suit if diplomacy fails, which could provoke Mr Bolsonaro to greater recalcitrance. A deal will only work if he can call it a victory.

The most effective way to do this would be to get farmers on board. Agriculture generates a fifth of Brazil's GDP and roughly half its exports. But whereas multinationals such as JBS, the world's largest

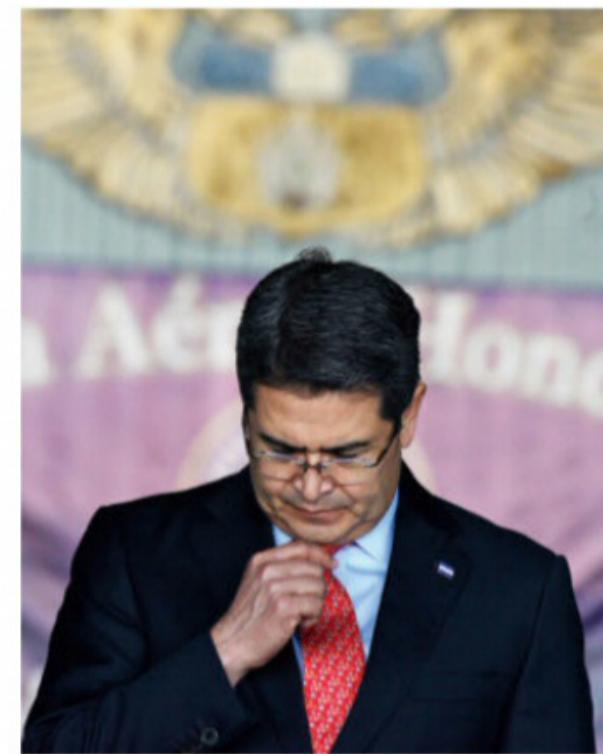
meat producer, and Cargill, a food-trader, have joined the *Concertação*, Amazonian farmers are noticeably absent. They are sick of being blamed for deforestation, and of unmet promises of cash for conservation. They think environmentalists' demand for "zero deforestation" is unreasonable. (Brazil's forest code permits farmers in the Amazon to clear trees from 20% of their land.) "Whoever wants to help Brazil should start by respecting the law, including the right to deforest," says Caio Penido, a beef lobbyist.

The biggest challenge for a US-sponsored Amazon deal would be enforcement. Norway and Germany froze their donations to the Amazon Fund in 2019 after losing faith in Mr Bolsonaro. He and Mr Biden are likely to disagree about how a new fund should be spent. The Biden administration will expect progress on reducing deforestation. But Mr Bolsonaro is reluctant to crack down on illegal logging, mining and cattle-ranching; the people who do these things are often his supporters.

Mr Biden appears more worried about climate change than his predecessors were. Mr Kerry is the first climate tsar to sit on the national security council. Even so, should Brazil fail to meet its targets, Mr Biden has few diplomatic sticks with which to whack Mr Bolsonaro. He will be wary of isolating such a big ally as Brazil. Bilateral trade is \$100bn a year; military cooperation is growing. Sanctions, if imposed, might not work. The biggest buyer of Brazilian beef and soybeans, both of which are sometimes raised on deforested land, is not the United States but China.

If Mr Bolsonaro proves intransigent, the Biden administration could work with states in the Amazon instead. The government of Mato Grosso has tried to reduce tree loss by encouraging farmers to join an environmental registry. It is also experimenting with paying farmers to clear less than 20% of their land. But bureaucracy and distrust among farmers have meant that the state has only processed permits for roughly 8% of its farmland. Creating a sustainable economy for the Amazon will take more than paying farmers not to destroy the forest, says Denis Minev of Be-mol, the region's largest department store. He wants American cash to support research into how Brazil can make money from the Amazon's biodiversity.

In April Mr Biden will host the Earth Day summit to persuade world leaders to strengthen their green commitments in the lead-up to the UN summit in November. Mr Bolsonaro says he will attend. The Wilson Centre, an American think-tank with ties to Brazil, has started bringing the wonks from each country together. Mr Kerry is aware of their proposals, says a diplomat. The real test will come once they reach Mr Bolsonaro. ■



Politics in Honduras

Over the line

A court case in New York rocks a central American president

JUAN ORLANDO HERNÁNDEZ has had a tricky few weeks. A trial in New York of Geovanny Fuentes, an alleged drug-trafficker, included accusations that JOH, as the president of Honduras is known, accepted bribes in exchange for helping cocaine reach the United States. On March 16th a witness said he saw Mr Hernández take two bribes in 2013, before he became president. A few days earlier a former cartel leader testified that he paid Mr Hernández \$250,000 for protection from arrest. In documents filed by US prosecutors, who do not name Mr Hernández but refer to details which identify the Honduran president, he was quoted as saying he wanted to "shove the drugs up the noses of the gringos". (Mr Hernández has not been charged and denies all allegations against him.)

It is not the first time Mr Hernández has been allegedly linked to narco crimes. In a trial in 2019 that convicted his brother Tony Hernández, a former lawmaker, of drug trafficking, he was mentioned and accused of taking at least \$1m from Joaquín "El Chapo" Guzmán, a notorious Mexican drug lord. (His brother is due to be sentenced on March 23rd in the United States; prosecutors are seeking life imprisonment.) But these new allegations come at a volatile time. In November voters will elect Mr Hernández's successor and 128 members of congress. Debates about corruption and drug money will dominate the campaign, thinks Lester Ramírez of the Association for a More Just Society, a non-profit. ►

Bello After the storm

A constitutional convention offers Chile a chance of a new social contract

GENERAL MANUEL BAQUEDANO is—or was—a Chilean national hero, as the military commander who defeated Peru in the war of the Pacific. For almost a century his bronze equestrian statue has towered over a plaza that marks the emotional heart of Santiago, a gathering place for football fans and demonstrators. Yet when Chile was shaken in late 2019 by an explosion of violent vandalism and peaceful mass protests, the statue became a target, the symbol of an established order held by some to have become intolerable. After it was repeatedly covered with spray paint and set on fire, in the middle of the night on March 12th troops took it away for restoration.

For conservatives its removal represented defeat by the mob for the centre-right government of Sebastián Piñera. Yet the more powerful symbol may be the empty stone plinth the soldiers left behind. Chile is embarking on a potentially constructive process of redefinition, with the election on April 10th and 11th of a convention to write a new constitution. Many hope that this will isolate *los violentos*, and forge a new social contract that creates a fairer, but still capitalist, country.

For most of the three decades since the end of the dictatorship of General Augusto Pinochet in 1990, Chile was a success. It combined a rapidly growing market economy with the rule of law. But as it got less poor, discontent grew over narrowing opportunities, segregated health and education systems, and abuses by monopolistic businesses. When anger boiled over, politicians found a way to assuage it by offering a plebiscite on setting up the convention. It was held in October. Some 78% voted yes on a turnout of 51%—the highest since voting became voluntary in 2012.

Though much amended, the existing constitution bears the original sin of being Pinochet's creation. It is often denounced, too, as a "neoliberal" document. Under its auspices, the dictatorship assigned a big role to the market in providing pensions, health care and education. Its biggest defects, however, are that it has entrenched vested interests and makes some laws too hard to change.

The constitutional exercise brings two opposing risks: of too much change or too little; of leftist populism or a failure by the right to recognise that many Chileans have lost faith in the system. There exist safeguards, especially against the first. Everything must be approved by a two-thirds majority of the convention's 155 members, which obliges negotiation and compromise. It's "a very institutionalised process", says Isabel Aninat, a law professor and former adviser to Mr Piñera. She thinks the assembly's committees will base their deliberations on the existing document, Chile's constitutional history and the charters of some other countries. Partly because of the pandemic, the coun-



try's mood is calmer than it was 18 months ago. The five parties of the right, united in a single list of candidates, are likely to get over a third of the convention's seats, while the divided far left may fare worse than it hoped.

The new charter will involve a bit more state and a bit less market. Whether or not the document is fiscally affordable will depend on the extent and detail of its probable guarantee of "social rights". Water rights, currently held privately and in perpetuity, are a sensitive issue. Many Chileans would like to see more decentralisation, and some a semi-parliamentary system. Businesses want clear limits to state intervention. Some believe that the two-thirds rule will lead to a minimalist document—which for Latin America, where constitutions tend to be prolix, would be truly revolutionary. But it is also possible that horse-trading might lead to a plethora of clauses.

In a country where politicians and institutions, from the Catholic church to the police, are discredited, the process is almost as important as the product. There are important novelties: the assembly must have broadly equal numbers of women and men, 17 seats are reserved for indigenous people and several candidates standing for independent lists are likely to be chosen (the parties have opened their lists to independents, too).

But there will be distractions. A general election is due in November. Demands for transparency may impede the closed-door sessions that would ease compromise. In the end, the most important test will be whether the convention restores trust in democratic politics and produces a feasible blueprint for change. Get it right, and Chile will once again be a model for the region.

Some of those likely to emerge as presidential candidates from primaries on March 14th, for which results are still pending, look little better. Yani Rosenthal, the likely nominee for the main opposition Liberal Party, recently finished a three-year jail term in the United States for laundering cash for the cartel from which Mr Hernández allegedly accepted bribes. Nasry Asfura, the mayor of the Honduran capital, Tegucigalpa, and the favourite for the ruling National Party, is facing a preliminary hearing for charges of abuse of authority, fraud, embezzlement of public funds, fal-

sification of documents and money-laundering. Meanwhile Libre, a left-wing party, is likely to field Xiomara Castro, the wife of Manuel Zelaya, a former president. He has also been accused of accepting bribes in the trial of Mr Fuentes. (He too denies the charges against him.)

According to Hugo Noé Pino, a former finance minister, drug money and corruption have infiltrated every level of Honduran politics. "It is not just people paying others but those linked to drug dealers and organised crime participating in elections," says Mr Ramírez. Last year Mr Her-

nández failed to revive an anti-corruption body after it investigated some lawmakers. He and his allies have a majority in congress and he holds sway over the Supreme Court and the election body.

Hondurans are getting fed up. The country of 10m can hardly afford bad governance on top of endemic violence and poverty, plus the devastation caused by the pandemic and two hurricanes last year. Many people have already fled the country, hoping to get to the United States; more are likely to follow. Those who remain deserve a better roster of politicians. ■





Israel's election

Another tight one

JERUSALEM

Binyamin Netanyahu hopes to win another term as prime minister. But several former allies threaten to knock him off his perch

After five years serving as an Israeli commando, Binyamin Netanyahu travelled to America in 1972 to study at the Massachusetts Institute of Technology. He signed up for a course in statistics. The first lecture was on pandemics. "I remembered that at the beginning [cases] go up slowly, slowly," he now tells audiences at his campaign rallies, sometimes using a whiteboard. "And suddenly it shoots up like a wall! And I knew that when it shoots up, everyone will want [vaccines]."

Mr Netanyahu, Israel's prime minister (pictured on billboard, left), then recounts how he argued with bureaucrats and insisted they buy large quantities of covid-19 vaccine early in the pandemic, no matter the cost. That strategy has paid off: Israel's vaccination rate is the highest in the world. The country is lifting lockdown measures. Mr Netanyahu hopes it will also pay off for his party, Likud, when Israelis go to the polls on March 23rd, for the fourth time in two years. But he faces stiff competition from former allies.

Around 90% of adults in Israel have either received their jabs or recovered from covid-19. At the start of the vaccination drive, in December, Mr Netanyahu told Likud members that Israelis "will in the end vote according to action taken, on results, on achievement. At the moment of truth they know who brought them the vaccines, and who is getting them out of the crisis."

So far, though, voters don't seem to care. Polls show Likud winning around 29 seats in the 120-member Knesset (Israel's parliament), about the same as in December (see chart on next page). Most Israelis still want to see the back of Mr Netanyahu, who has been in charge since 2009. Some of this has to do with his earlier handling of

the pandemic: last year he all but declared victory over the virus, only to see Israel's infection rate shoot up. But it is mostly because of his image as a divisive and dishonest leader. He has been charged with bribery, fraud and breach of trust stemming from three corruption cases.

Likud is still set to be the largest party in the Knesset, as it is now. But it takes a coalition to form a majority government; no party has ever governed alone. The polls suggest Likud and its nationalist and ultra-religious allies will come up short. Mr Netanyahu overcame this problem after the last election, a year ago, by striking a deal with the opposition Blue and White alliance. Its leader, Benny Gantz, agreed to govern with Mr Netanyahu in order to fight covid-19. A former general, Mr Gantz was meant to replace Mr Netanyahu as prime minister in November, but their partnership broke down after just six months.

Today the opposition looks quite different. Mr Gantz, who had vowed never to serve with Mr Netanyahu, has been discredited. Instead, the prime minister faces a challenge from a secular centrist and several former protégés on the right.

The centrist is Yair Lapid, a former television talk-show host, who founded the Yesh Atid party in 2012. He served as Mr Netanyahu's finance minister from 2013 to 2014, during which time his grasp of economics proved less than stellar. But he has since gained stature, not least by sticking

→ Also in this section

39 Tanzania's president dies

40 Cabo Delgado, cape of despair

40 Hope for African industry

to his guns and breaking with Blue and White, rather than serving again with Mr Netanyahu. He appeals to those who think the prime minister panders to ultra-Orthodox voters. The polls currently show Yesh Atid coming second to Likud. The question may be whether Mr Lapid can convince Mr Netanyahu's more right-wing rivals to serve under him.

One of them is Gideon Sa'ar, who was a prominent figure in Likud before splitting from the party in December. He then formed New Hope, a party that looks quite similar. The big difference, of course, is that it doesn't include Mr Netanyahu, whom Mr Sa'ar accuses of "running the country for his own personal interest". Mr Sa'ar, a lawyer, served as the prime minister's cabinet secretary, chief whip, education minister and interior minister. But his popularity within Likud roused Mr Netanyahu's suspicion and he was denied further promotion. Some see him as rather dull. After an initial surge, New Hope has been falling in the polls.

The kingmaker could be Naftali Bennett, a former software tycoon who entered politics in 2006 as Mr Netanyahu's chief of staff. He eventually fell out with the prime minister and in 2012 became leader of Jewish Home, a party that opposed Palestinian statehood and called for annexing swathes of the West Bank. Still, he held a number of ministerial posts under Mr Netanyahu and now leads Yamina, an alliance of right-wing parties that is running third in the polls. He wants to lower taxes and trim regulation in order to boost the economy. He has also called for Mr Netanyahu's departure—but refuses to rule out serving under him again.

Mr Bennett and Mr Sa'ar have promised not to serve under Mr Lapid. Might they change their minds after the election, if it meant getting rid of Mr Netanyahu? Mr Lapid believes he will be able to form a government, though he admits it would be "a

coalition from hell". Some think Avigdor Lieberman, the head of the Yisrael Beiteinu party, could act as a go-between for anti-Netanyahu forces. He is dedicated to kicking both the prime minister and the ultra-Orthodox parties, now in government, out of power. An agreement might see the party leaders rotate as prime minister.

The coalition-building calculus will depend on which parties meet the threshold of 3.25% of the vote for entering the Knesset. To boost the chances of parties that back him, Mr Netanyahu has tried to unite them, even working with avowed Jewish supremacists. Meanwhile, the opposition has fragmented. Anti-Netanyahu parties

ran on four lists a year ago. Now they have split into ten, including the mostly Arab Joint List, with which Mr Bennett and Mr Sa'ar won't work. Some parties risk falling short of the threshold. That could tip the balance in Mr Netanyahu's favour.

Even if the parties opposed to Mr Netanyahu win a majority, as they did in the two most recent elections, the prime minister may still hang on. His supporters call him "the magician", owing to his ability to beat the political odds. But he may not have to do anything. If no one can form a government, Israel will be forced to hold yet another election—and until then, Mr Netanyahu will stay in charge. ■

John Magufuli

Bulldozed by reality

Tanzania's covid-denying president dies

WHATEVER THE true cause, the death of John Magufuli, Tanzania's president, will almost certainly not be listed among the country's covid-19 statistics. That has nothing to do with the results of any tests for the virus that may have been performed in the weeks since he was last seen in public on February 27th. It has everything to do with Mr Magufuli's policy of denying the existence of an illness that has ravaged Tanzania and the ranks of its government. Many believe it has claimed the life of its president at the age of 61. His death from "heart complications" was announced on March 17th.

Officially Tanzania, with nearly 60m people, has suffered just 509 cases of covid-19 and 21 deaths from it. Or, at least, that was the case almost a year ago, when the country stopped releasing official data. At the time Mr Magufuli said he did not trust his country's statistics because the national laboratory was "releasing positive, positive, positive results".

Instead of urging Tanzanians to wear face-masks or keep their distance from each other, Mr Magufuli insisted that God had swept the virus from their country. Even as neighbouring ones began to vaccinate, Mr Magufuli instructed his officials to hold off on giving jabs because he doubted they would work.

Nothing seemed to faze him, not even the mounting deaths—of Catholic priests and nuns, a former governor of the central bank, and the vice-president of Zanzibar, a semi-autonomous archipelago. In February Mr Magufuli ordered his ailing finance minister, Philip Mpango, out of his hospital bed and into a press conference. Between gasps for breath, Mr Mpango insisted he was in robust health. A few days later Mr Magufuli himself

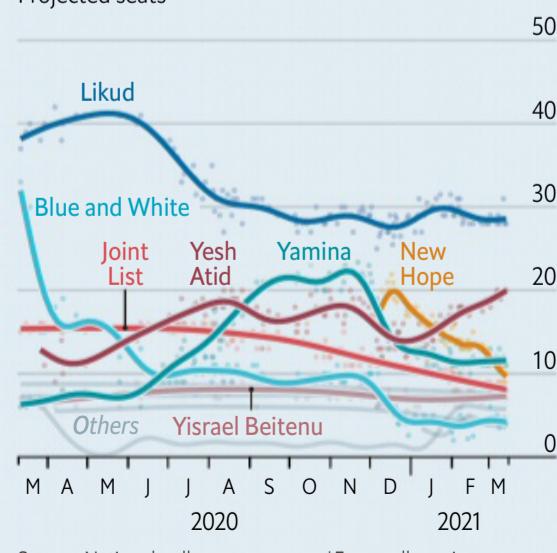
disappeared from view. Opposition leaders said he was taken in secret for treatment to neighbouring Kenya. He is to be replaced by Samia Suluhu, the vice-president, a Zanzibari.

Mr Magufuli will probably be remembered best for his covid denialism, but history should judge him as harshly for the damage he inflicted on Tanzania's fledgling democracy. Though the country has been ruled by a single party, known by its initials CCM, since 1977, it has held multiparty elections since 1994 and had been moving steadily towards opening up its economy and its politics. Ahead of the presidential election in 2015 a deadlock between CCM's main factions over its choice of candidate led them to pick an outsider who was nobody's favourite: Mr Magufuli. Many in the party thought the man known as "the bulldozer" was slow-witted and pliable. "He was like Forrest Gump," says a prominent member of his cabinet.

Yet almost immediately after winning the election, he revealed a steely authoritarianism. A leading opposition politician was shot in the sleepy capital, Dodoma. Activists and journalists began disappearing, while bodies began washing up on the shores of Coco Beach in Dar es Salaam, the commercial capital. In elections last year Mr Magufuli claimed to have won 84% of the vote, up from 58% in 2015. Opposition candidates dismissed the result as rigged. His party won enough seats for Mr Magufuli to abolish term limits and cling to power beyond 2025, if he wished. Many Tanzanians worried that he might. Without him Tanzania has a chance of renewing its democracy—and of trying to fight back against the virus.

The state of the race

Israel, parliamentary election, 2021
Projected seats*



Source: National polls

Cabo Delgado

Mozambique and the war on terror

JOHANNESBURG

America designates an insurgency with local roots as part of Islamic State

SINCE A CONFLICT began in 2017 in Cabo Delgado, a province in north-eastern Mozambique, about 2,700 people have died, nearly 670,000 have fled their homes and more than 900,000 are short of food. No one disputes the scale of the horror. But an argument rages as to what motivates the insurgents: jihadism or local grievances? The answer is probably both.

The rebels are usually known as Ansar al-Sunna (or al-Shabab, like the unrelated Somali group). They evolved from a radical Muslim sect and have links throughout east Africa. They have found Cabo Delgado a fertile recruiting ground. The province is politically neglected and its residents are locked out of economic opportunities by a network of powerful crooks, politicians and businessmen.

On March 10th the American government linked the insurgency to the jihadists of Islamic State (IS or ISIS), relabelling the group "ISIS-Mozambique" and its members as "designated global terrorists". As a result, anyone who deals with them risks running afoul of American law. The State Department also named the group's leader as Abu Yasir Hassan, a Tanzanian aged about 40. It claimed to have evidence linking the Mozambican outfit to the core leadership of IS in Syria and Iraq. The designation reflects growing international concern about the jihadist threat in Mozambique, and fears that the government is out of its depth.

Last year was especially bloody, with 433 attacks by jihadists. This was more than in the two previous years combined, reckons Cabo Ligado, a monitoring service. Some 80% of clinics are shut, says an expe-

rienced aid worker. "In my 26 years with UNHCR I have seldom seen so many scared looks," says Valentin Tapsoba of the UN's refugee agency. On March 2nd Amnesty International, a global watchdog, detailed what it described as "war crimes". The insurgents, its report said, have carried out "horrific" abuses, including abductions and beheadings.

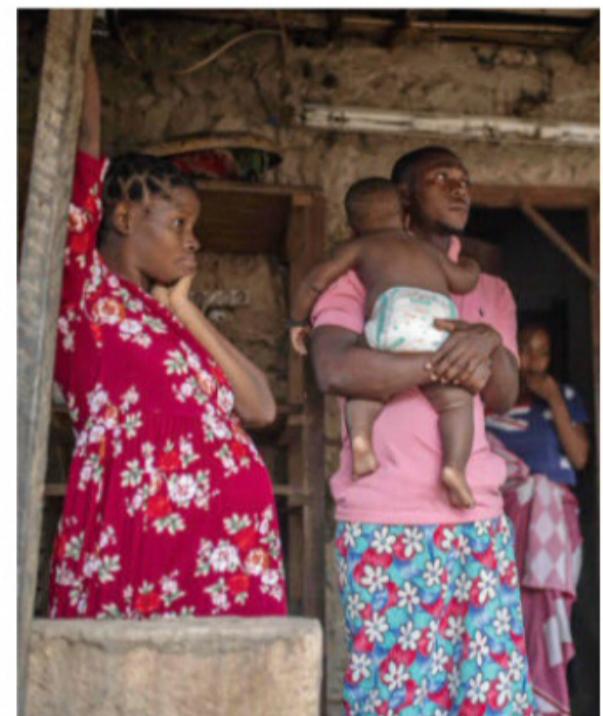
Amnesty also pointed the finger at the government. It claimed that the army and police have been involved in extra-judicial killings and torture. It accused Dyck Advisory Group, South African-based mercenaries employed by the government, of firing guns and dropping hand grenades into crowds. The company said it will hire outside lawyers to look into its activities.

In recent months President Filipe Nyusi has tried to get a grip on the situation. In November Mozambique and Tanzania said they would work more closely to stem the flow of fighters across their border. In January Mr Nyusi appointed a new army chief to head operations, but he died of covid-19 in February. On March 11th the president fired his army and air-force chiefs, as well as several other senior officers. The security forces have also armed various anti-jihadist militias. Who is in charge remains something of a mystery.

Mr Nyusi may feel he is running out of time. He wants the proceeds of the huge gas projects off the coast of Cabo Delgado to flow before his tenure is due to end in 2024. That will be touch and go. Exxon-Mobil, an American energy giant, has postponed a decision on whether to invest \$30bn in its project. Total, a French oil company, withdrew staff after insurgents came close to its base of operations at the turn of the year. It wants to see a 25km security cordon before they get back to work.

The vacuum is worrying other governments. South Africa "stands ready" to help with intelligence-sharing, naval support or military training, suggested Naledi Pandor, its foreign minister, in September. Portugal and France, as well as the European Union, have offered help. American special forces will be training troops for the next two months. Various mercenary firms are trying to muscle in.

Even as men with guns prepare to go into Cabo Delgado, independent witnesses are being kept out. The government has pressed the Bishop of Pemba into leaving the regional capital, and expelled Tom



Searching for safety

Bowker, a British journalist. It has denied visas to UN staff. These moves suggest that it is worried about what outsiders may find, from further possible war crimes to the corrupt and dysfunctional governance that has fuelled the insurgency. ■

African industry

Manufacturing hope

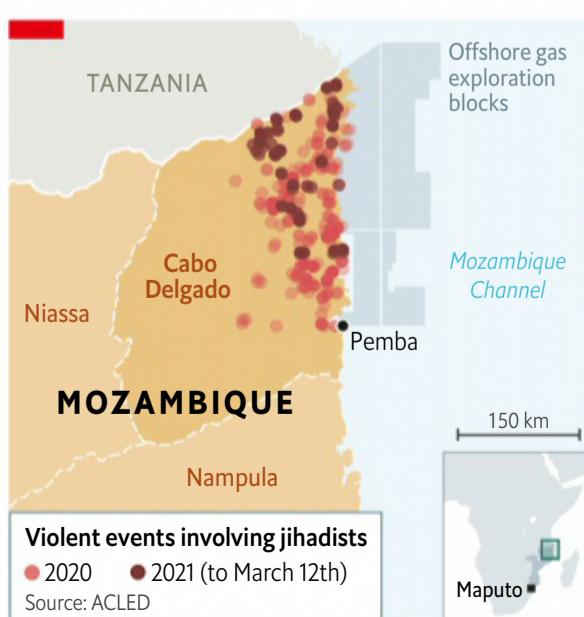
DAKAR

New research suggests African industry is doing better than expected

"THE FUTURE is here," says Ibrahima Sarr, pointing to the factories he runs in Senegal. After working and studying for 18 years in Europe he returned home to help spark a manufacturing revolution. Now he is with Africa Development Solutions, a Malian conglomerate, managing plants that make electric bikes, pipes and, soon, clothing.

Mr Sarr is not alone in his optimism for manufacturing in Africa. The Diamniadio industrial park he looks out over is the centrepiece of Senegal's ambitious industrialisation plan. Elsewhere in the region, Ghana has attracted car-assembly plants from Nissan and Volkswagen. Ethiopia, too, has bet heavily on manufacturing.

And the idea of making things is capturing the imagination of young Africans such as Yusuf Bilesanmi, who invented a cheap ventilator that can treat patients with covid-19 even in hospitals without electricity. His device has been shortlisted for the Royal Academy of Engineering's Africa Prize. He wants to produce it in Nigeria after seeing how the pandemic disrupted the supply of medical gear to Africa. Doing so will also allow him to create jobs ►



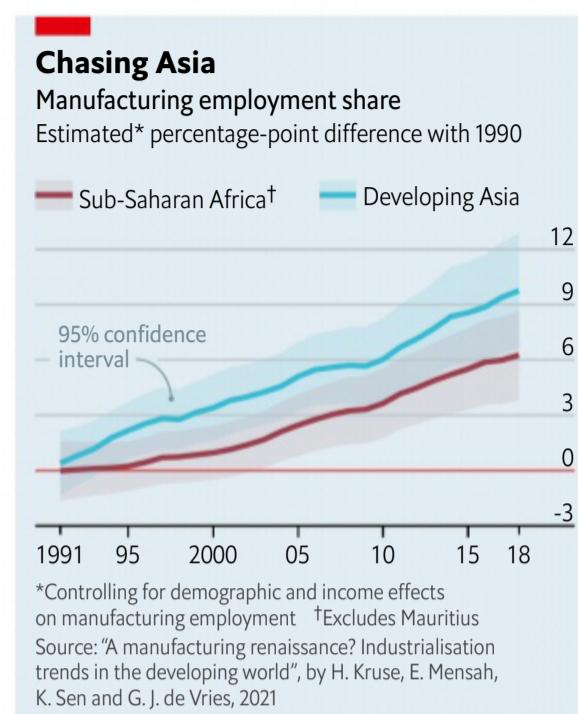
▶ and distribute it more quickly.

This optimism cuts against established wisdom. In 2015 Dani Rodrik of Harvard University published an influential paper showing that employment in manufacturing, and manufacturing's share of GDP, were falling in sub-Saharan Africa. This "premature deindustrialisation" was deeply worrying. Factories transformed countries like South Korea and China into economic stars. Yet Mr Rodrik's work suggested this elevator out of poverty was stalling. (Disclosure: Mr Rodrik wrote a favourable blurb for a book on an unrelated topic by the author of this article.)

However, a handful of new studies suggests things are looking up. Start with a recent paper by Hagen Kruse, of the University of Groningen, and others. It reckons that the share of people working in manufacturing in sub-Saharan Africa has risen from 7.2% of the total in 2010 to 8.4%. Though starting at a lower level, that growth looks remarkably Asian, especially after adjusting for income and population (see chart). A long decline in manufacturing's share of GDP has bottomed out, and it is now about 11%. Output is up by 91% in real terms since 2000. Given numbers such as these, talk of deindustrialisation in Africa is "silly", says Margaret McMillan of Tufts University. The World Bank, in a recent brief, says unequivocally that "industrialisation remains viable in sub-Saharan Africa." Even Mr Rodrik is more hopeful, suggesting that in many African countries the share of workers in manufacturing could reach 20%. That would be more than double current levels, but not quite the peaks seen in Europe, when up to a third of the workforce was in manufacturing.

There are still huge hurdles. Among the biggest is that the rise in factory employment has not been matched by expected improvements in productivity. Some reasons may be found by looking at which firms have improved, and which have not. In Tanzania and Ethiopia most of the new factory jobs were created by small, inefficient companies. Although a few big manufacturers have boosted productivity, they have not been hiring much, according to a new paper by, among others, Xinshen Diao and Mia Ellis of the International Food Policy Research Institute, a think-tank based in Washington.

One reason for the productivity gap may be that big African firms are tied into global value chains. In order to sell to companies in rich countries they have to use the latest machines to meet the highest standards. That may be helping them learn how to compete on global markets. But, in



part because fancy machines require fewer workers, it is not yet creating the millions of jobs needed every year by the world's youngest and fastest-growing population.

Even so, there are several paths African countries can take in order both to create many more jobs and to become more productive (which would make their people richer). The first is for big, productive players to increase their share of the market. That would boost productivity overall, but might slow hiring. Yet if they can go on to compete successfully in export markets, they could soon be producing so much that hiring picks up, too. Competing internationally will not be easy. Wages in most parts of Africa (with some exceptions, such as Ethiopia) are still higher than in the poorest countries in Asia. So are living costs, not least because potholed roads make it expensive to move food from farms to urban markets. Governments could help attract investment from already successful foreign firms that are looking for places to build new factories by fixing infrastructure, snipping red tape and im-

proving schools.

These sorts of investments, as well as initiatives to improve access to loans, could help small firms to shape up, and new ones to start up. One model to emulate could be Vietnam, where firms have increased their productivity and expanded their workforce more quickly than those in Africa. Its small manufacturers invest even more intensively in machinery than its bigger ones, and are highly productive.

Not every country can create its own version of Germany's Mittelstand, with medium-sized firms that sell to the world. But they could have a throng of mid-sized companies supplying the big exporters that are competing in global markets. Governments can help by easing bottlenecks at borders to encourage trade within Africa. Eastern Congo may not be a tempting market for firms in China, but it is a big prize for food processors in next-door Rwanda. The World Bank reckons the new continent-wide free-trade area that came into force this year could more than double intra-African trade in manufactured products by 2035. This could help combine improvements in both productivity and employment, because firms selling to less competitive regional markets need not use the very latest machines. Given that most African countries have a lot of workers and not much capital, that would be a better fit.

The pandemic has been tough on manufacturers in Africa. At another garment factory in Diamniadio, orders from America have collapsed. Yet much like manufacturing in Africa, the factory is more resilient than it appears: it has switched to making face masks. Since Mr Sarr returned to Senegal, the pandemic has only strengthened his determination to encourage industry in Africa. Covid-19 exposed Africa's "extreme dependence" on imports and its vulnerability to shocks in supply chains around the world. "He who makes," he says, "has the power." ■



Nothing to sneeze at



The coup in Myanmar

Blood money

YANGON

Economic pressure is unlikely to force the junta to retreat

KILLING UNARMED protesters does not seem to daunt Myanmar's army. Since its commander launched a coup on February 1st, it has killed more than 200 of its fellow citizens. Many of the victims were shot in the head by snipers as they demonstrated against the putsch. Others were shot at random as soldiers rampaged through neighbourhoods thought to be supportive of the protesters. Residents are fleeing Hlaingthaya, an industrial district of the country's main city, Yangon, after the army responded to arson attacks on factories in an especially brutal manner.

The protesters have not given up. This week, despite a complete shutdown of all mobile-internet services and the declaration of martial law in parts of Yangon and the country's second city, Mandalay, they continued to demonstrate. But given the intransigence of the Tatmadaw, as the armed forces are known, many are pinning their hopes on a subtler form of resistance, on display in supermarkets and corner stores around the country. Refrigerator

shelves once packed with cans of Myanmar Beer are now emptied of them, because the brew is made by a company that is partly owned by the army. Other products linked to the Tatmadaw, including a popular brand of cigarettes and a big mobile-phone network, are also being shunned. These boycotts, along with efforts by striking civil servants to disrupt the business of government, aim to force the junta to retreat by cutting off its money supply.

There are some signs that the junta is short of cash. Days after the coup, the central bank attempted to bring home \$1bn it

holds at the Federal Reserve Bank in New York. American authorities blocked the transaction. On February 15th the government sought to sell 200bn kyats (\$142m) of five-year bonds. It received just one bid, for 1.7bn kyats' worth, at a higher interest rate than normal.

The IMF puts the government's reserves of foreign currency at \$6.7bn, including the \$1bn marooned in New York. That buys less than five months of imports. Myanmar purchases almost all its fuel and cooking oil abroad, among other crucial staples. Prices for these goods are rising, and the kyat is depreciating. Foreign investment, which helped bring in hard currency, has evaporated amid the turmoil. The recent arson attacks, which were aimed at Chinese firms, are likely to put off the few investors who are not deterred by the Tatmadaw's conduct.

Foreign exchange is not the only potential weak spot. Even before the coup and the associated economic upheaval, the World Bank was projecting a budget deficit of 8.1% of GDP this year. Since then, the civil-disobedience movement has brought the economy to a near-standstill. Myanma Economic Holdings Limited (MEHL), the main army-controlled conglomerate and one of the targets of the boycott movement, is the country's second-biggest taxpayer. A subsidiary, Myawaddy Bank, is the fifth-biggest. The growing budget deficit will become harder to finance, in turn, if ➤

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► the failed bond auction is any guide.

For any normal government, these alarming statistics would dictate a change of course. But the junta, alas, is not a normal government. It knows it will continue to receive a minimum income in foreign exchange from exports of natural resources, especially oil and gas, which account for a bigger share of government revenue than tax does. The Tatmadaw has long been involved in the illicit extraction and smuggling of gems and timber in remote regions. It is also thought to provide protection to drug gangs that make methamphetamine, in particular, in Myanmar's lawless borderlands. It is not even above extorting money from its own members. Soldiers interviewed in 2018 by Gerard McCarthy of the National University of Singapore reported being ordered to spend anywhere between a tenth and a quarter of their salary on shares in MEHL. The junta will presumably redouble such fundraising efforts if need be.

The Tatmadaw is also unlikely to worry too much about mismanaging the economy. Given that it does not mind shooting its own citizens, it will hardly shrink from cutting already threadbare public services. Or it may order the central bank to print money, whatever the consequences for inflation. It is already gleefully profiteering from the dislocation caused by the protests. An employee at a customs-clearance company told *Frontier*, a local magazine, that, owing to the civil-disobedience movement, almost the only container trucks operating were those owned by MEHL. Those trucks are now charging 80,000 kyat a trip, eight times the typical rate in normal times.

Ruthlessness is not a perfect substitute for competence, however. There is a chance that the chaos enveloping the economy becomes so all-encompassing that the army cannot keep even the parts that matter to it moving. There are some signs that this possibility worries the junta. It has convened a committee to work out ways to lessen dependence on imported fuel. It is becoming increasingly shrill about the continuing closure of the many banks where workers have walked off the job, issuing repeated orders for them to reopen, to little avail. Some 200 employees of the central bank, meanwhile, have been suspended for absenteeism.

Whether all this will prompt a change of course from the Tatmadaw is uncertain, but it will certainly do huge damage to the economy. That, in turn, will do far more harm to ordinary Burmese than to the junta and its cronies. And it will remind them of another reason, in addition to the army's brutality, why they so dislike military rule: in its previous stints in power, the Tatmadaw has repeatedly run the economy into the ground. ■

Gay marriage in Japan

Inching forward

TOKYO

A court endorses gay marriage, but the government remains opposed

ON VALENTINE'S DAY in 2019, 13 same-sex couples filed lawsuits in four cities across Japan. Their case was simple: they argued that their partnerships were no different from those of heterosexual couples, and that the government's refusal to recognise gay marriage violated the constitution's promise of equal treatment for all. This week a district court in Hokkaido, the northernmost of Japan's main islands, came down on the side of the three couples who sued there, the first such ruling by a Japanese court. It is, as a sign held by supporters outside the courtroom proclaimed, "a big step forward for marriage equality".

Yet it is also, for the time being, only a symbolic one. The three-judge panel declared that preventing the couples from marrying contradicted Article 14 of the constitution, which forbids discrimination on the basis of race, creed, sex, social status or family origin. Yet it also refused to award damages to the plaintiffs, arguing that public opinion was evolving quickly, and that the government should be given time to legislate on the matter.

Neither the constitution nor any laws explicitly ban same-sex marriages. Some local governments issue documents certifying same-sex partnerships, which can simplify hunts for flats and visits to partners in hospital. But the national government does not acknowledge these, depriving gay couples of certain benefits of mar-

riage. That leaves Japan out of step not only with other rich countries—it is the only G7 member that does not recognise same-sex unions—but also with its former colony, Taiwan, which in 2019 became the first Asian country to legalise gay marriage.

The plaintiffs say they will appeal against the refusal of compensation. In the meantime, campaigners plan to use the lower court's finding to bolster suits in other cities. More favourable rulings could increase pressure on parliament to act.

Most voters would welcome that. A poll in 2018 found that nearly 80% of people aged between 20 and 59 approved of same-sex marriage; the share rose to nearly 90% among those in their 20s. Since two wards in Tokyo became the first local authorities to issue same-sex partnership certificates in 2015, 72 more have followed, home to a third of the population.

Many business leaders see gay marriage as an economic as well as moral issue. As the American Chamber of Commerce in Japan noted last year, given the shrinking labour force, "Japanese companies cannot afford to lose in the global competition for the brightest talent." Nearly 150 companies belong to a "Business for Marriage Equality" campaign, among them blue-chip firms such as Fujitsu and Panasonic.

But the ruling Liberal Democratic Party (LDP) remains opposed to gay marriage. Its old-fashioned views on matters of sexual equality extend to married couples, whom it continues to bar from retaining separate surnames. Just 9% of LDP candidates for the upper house of parliament in 2019 backed gay marriage. Last month the prime minister, Suga Yoshihide, defended the government for supporting "the foundations of the family in this country". But banning people from forming families is a peculiar form of support. ■



Northern rights

Covid-19 in Papua New Guinea

Mourning sickness

WELLINGTON

An outbreak of unknown proportions alarms neighbouring countries

AL ACROSS Papua New Guinea, people have been gathering by their thousands at *haus krai* events (wakes, in the local pidgin) for Sir Michael Somare, their first prime minister. In a country divided by rugged topography, around 800 distinct languages and a weak state, he was a unifying figure. But even as grief has swept the nation in the three weeks since his death, so has covid-19. In fact, the commemorations may be contributing to the outbreak.

Official statistics suggest that the pandemic has inflicted no more harm on the 9m people of Papua New Guinea than it has on the 5m people of New Zealand, with barely 2,000 recorded cases and a few dozen deaths. But more than half of those cases have come in the past month. Moreover, PNG, as the country is known, has one of the lowest testing rates in the world. Health authorities in the Australian state of Queensland, who recently processed 500 swabs from PNG, found that half were positive—an alarmingly high proportion. The prime minister, James Marape, says the surge in cases is “staggering” and that a quarter of the population may be infected.

The centre of the outbreak is the capital, Port Moresby, but cases have been reported in 19 of PNG’s 22 provinces. The disease may have spread from the Indonesian part of the island of New Guinea, which has recently suffered a surge in cases of its own. Two provinces near the Indonesian border, Western and West Sepik, have the most known infections after Port Moresby. But covid-19 is being reported in even the most remote and inaccessible regions, including in the jagged highlands and at the opposite end of the country from Indonesia, on the islands of New Britain, New Ireland and Bougainville.

PNG is poorly equipped to deal with the outbreak. The median age is only 22, which helps a lot. But many locals suffer from other illnesses that increase their covid risk, such as diabetes and tuberculosis. The country has only 500 doctors, fewer than 4,000 nurses and no more than 5,000 hospital beds. At least 60 staff at the biggest hospital, Port Moresby General, have tested positive.

The outbreak is causing alarm not just within PNG, but in neighbouring Australia. The Torres Strait islands of northern Queensland are separated from New Guinea by a channel of just 4km. An emergency was declared last week at a hospital in

the city of Cairns in northern Queensland, in part owing to a spate of infections detected among Australian workers returning from a mine in PNG.

Australia, at least, has the resources to curb infections. It plans to start a vaccination drive in the Torres Strait islands next week. It is also sending doctors and donating vaccines to PNG. But PNG has another porous maritime border to the east, with the Solomon Islands. That country’s 650,000 people have made it through the pandemic with just a few imported cases and no local transmission. But they are probably even less equipped than PNG to deal with an outbreak. ■

Children in Kashmir

A two-year break

DELHI

India’s government puts nationalism before education

LIKE PARENTS across the world in the time of covid-19, it was with a mixture of relief and worry that Afroza Zahoor sent her children back to school earlier this month. Yet for all that Zehab (age 14) and Zaiban (ten) resembled students everywhere, clambering aboard the school bus with masked faces and hand-sanitiser tucked in pockets, their circumstances were very different.

In the Kashmir Valley, a green upland whose 7m people have borne the brunt of a decades-long struggle between India, which administers the region, and Pakistan, which claims it, schools have been closed not just for the 12 months of the

pandemic, but for all but a handful of days—Ms Zahoor counts them off on her fingers—over the past two school years. On August 5th 2019 India’s national government abruptly ended Kashmir’s semi-autonomous status, demoting it from a state to a territory and taking direct control of its government. In anticipation of protests, all schools and universities were sealed. Internet service was severed. Curfews, power cuts, a curb on the size of gatherings and security sweeps, including searches and roadblocks, disrupted home-schooling, too. Then, just as those strictures started relaxing last February, covid-19 struck and schools shut again.

Across the rest of India, teachers switched to delivering lessons over the internet. Kashmir’s mobile-phone networks, through which most residents access the internet, did sputter back to life. For security reasons, however, they were limited to slow, 2G service. Some schools found work-arounds, such as delivering schoolwork on flash drives. Yet not only schoolchildren, but college students sent home to Kashmir from other parts of India, struggled and often failed to keep up. “Here, online learning is no learning actually,” says Mushtaq Wani of Srinagar, the main city in the valley. “Usually, the lessons strain through the phone in the form of a broken, unconnected jumble of words.”

The 590-day closure, says Mrs Zahoor, has made this period worse for education than even the 1990s, when a long-running conflict between Indian forces and insurgents backed by Pakistan left tens of thousands dead. Other parents and teachers agree. So do numbers from a national survey released by the government in January, assessing the quality of learning in public schools. It ranked Kashmir at the bottom, worse than any other region. ►



Education has wilted

Poor results are not the only problem. Child psychiatrists say many pupils are struggling to cope with attending school at all, having lost social skills and the ability to concentrate. Parents, too, have suffered. The past two years have seen a surge in requests for help with aggressive children. "It was a dribble and now it is a stream," says Nasir Geelani, a psychologist who conducted a small survey of locals in Srinagar last year. Some 62% expressed anxiety about their circumstances and 72% said they felt a lack of purpose in life.

Schools themselves have suffered from the back-to-back lockdowns, which put an estimated 500,000 people out of work. One in five of the valley's 13,500 schools are private, and a local association that represents them says 30 have already gone out of business, with more expected to follow. One school-owner says revenue dropped by 88% in 2020.

Yet enrolment in public schools is not rising as a result of the problems at private ones. Instead, the number of pupils fell by 175,000 last year, a precipitous decline for a system that serves some 2m children. (Only 19,000 dropped out in 2018.) Shista Nisar says she had to pull her two sons out of a government school after her husband's work as a long-distance driver dried up, and they could no longer afford even its minimal fees. Her family was lucky. She found work as a cleaner, making \$41 a month, and an uncle eventually agreed to cover the boys' schooling. Anecdotal accounts suggest many other dropouts have been forced into menial labour.

Even for the better-off, dreams have been crushed. An estimated 2,000 Kashmiris travel abroad to study every year, a figure that fell to zero in 2020. Maryam Mir completed school in 2019, hoping to apply for a scholarship at a European university. She missed the deadlines because of the internet blockade. After having to fly to Delhi simply to communicate with prospective universities, she has had to settle for an online course. She is relatively lucky. Hundreds of Kashmiris planning to study medicine in Bangladesh have had to give up, because its rules require students to take up their places in the year they are admitted, with no allowance for army-imposed curfews, communications blackouts or pandemics.

Despite the belated reopening of schools, there is little hope for a return to normal. This is not just because the national vaccination drive appears to be proceeding more slowly than a second wave of covid-19. The interests of Kashmiris continue to be subordinated to the government's nationalist grandstanding. It recently decreed, for instance, that schools must put up noticeboards decorated in the colours of the national flag—an obvious priority after two years of lost teaching. ■



Sexual abuse in Australian politics

Chambers of secrets

SYDNEY

Allegations of rape and misogyny in parliament are stirring outrage

IT STARTED WHEN a former government employee, Brittany Higgins, said she had been raped in Australia's parliament. She alleges that in 2019 a colleague brought her back to a minister's office after a night out drinking. She passed out, she says, and regained consciousness to find that "all of a sudden he was on top of me". Ms Higgins has quit her job and complained to the police. After she came forward last month, three other women said they had been sexually assaulted by the same man.

Things got worse when an allegation was levelled at the attorney-general, Christian Porter. He is accused of raping a woman in 1988, when both of them were teenagers. She contacted the police last year, but took her own life before giving formal testimony, so the case was closed.

Mr Porter strenuously denies the allegations. He is suing the Australian Broadcasting Corporation for defamation. It broke the story but did not name him; it was he who identified himself as the accused minister. The prime minister, Scott Morrison, is standing by his lawyer-in-chief, saying that if there is no evidence of a crime, then he should not face further questioning in parliament.

The allegations have triggered outrage. On March 15th thousands of protesters congregated in cities across the country, demanding an end to sexual violence. In Sydney, where police tried to cap the rally at 1,500 people, more than six times as

many thronged the city centre, chanting, "Enough is enough". Among the crowd in Perth was the attorney-general's ex-wife.

"Parliament is still very much a boys' club," says Sarah Hanson-Young, a Green senator. Less than a third of MPs are women, putting Australia 50th in a global ranking of female representation. It ranked much more highly 20 years ago.

The Liberal party, the bigger partner in the ruling coalition, is particularly laddish. Since the 1990s Labor, the main opposition, has used quotas to guarantee that women are selected to contest winnable seats. The Liberals have declined to follow suit, saying that every candidate must compete on his or her own merits. Less than a quarter of its MPs are women, compared with almost half of Labor's. In 2011 Australia's only female prime minister, Julia Gillard, accused the Liberals' leader at the time, Tony Abbott, of misogyny after he gave a speech in front of banners calling her a "bitch" and a "witch". (He says he hadn't noticed the signs.)

Fresh allegations are pouring forth on all sides. A Liberal senator received an email accusing a Labor MP of rape; it has been forwarded to the police. In a Facebook group, female Labor staffers are documenting cases of men aggressively propositioning or physically intimidating them. A Liberal MP, Nicolle Flint, told parliament that she had been harassed by Labor supporters. In the run-up to the previous election ►

Banyan Himalayan upheaval

China and India take opposite approaches to a crisis in Nepal

DIRT-POOR, landlocked and squeezed between two overweening neighbours, Nepal needs political stability more than most countries. Yet only turmoil has reigned since the prime minister, Khadga Prasad Sharma Oli, dissolved Parliament in December.

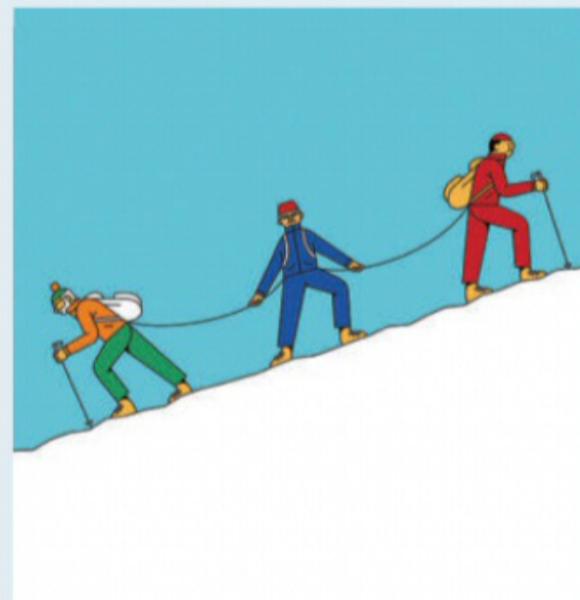
Mr Oli took that step amid feuding with his arch-rival in the ruling Nepal Communist Party (NCP), Pushpa Kamal Dahal, a former guerrilla known as Prachanda ("the fierce one"). The party was formed in 2018 through a merger of Mr Oli's Communist Party of Nepal (Unified Marxist-Leninist) and Prachanda's Communist Party of Nepal (Maoist Centre). Prachanda seems to have expected a stint in charge. Yet Mr Oli enjoyed being prime minister too much to hand over to him, so Prachanda's partisans joined calls for a no-confidence motion that Mr Oli was likely to lose. The dissolution aimed to avert that.

In February, however, the Supreme Court ruled the move unconstitutional and ordered that parliament was to be reinstated—leaving Mr Oli's position shakier still. Then, in early March, in a ruling guaranteed to shatter any remaining comity within the NCP, it declared the party's name invalid. (The judges said it had already been registered by yet another left-wing party.) The NCP has in effect split back in two.

The differences are not ideological. Prachanda long ago abandoned Maoist revolution, signing up to representative government following the abolition of the monarchy in 2008. He backed a new constitution in 2015 that promised to devolve power to the provinces. Mr Oli was once inspired by leftist revolutionaries in India and spent 14 years in jail for his part in the murders of landlords. Today he embodies the conserva-

tism of the big landowners and the elites of Kathmandu, the upland capital. He has withheld much of the constitution's promised devolution, especially from the lowland Terai region. He espouses a kind of Hindu nationalism, declaring that the god Rama was born in Nepal rather than in the city of Ayodhya in India, as most Indian Hindus believe. Mr Oli's friendship with China is an expedient response to past meddling by India's government, rather than an expression of solidarity with the Chinese Communist Party.

What happens next is hard to say. Mr Oli hopes for the support of the second-biggest opposition party, Janata Samajbadi Party Nepal. It may co-operate, but only if it secures the release of one of its MPs, who is serving a sentence for his part in the deaths of seven policemen during violent protests in Terai in 2015. As for Prachanda, he hopes to persuade several Unified Marxist-Leninist MPs to cross to his camp; but in a Monty Pythonesque twist they insist his party drop its Maoist tag. The biggest opposition party, Nepali Congress, is biding its time. Its veteran



leader, Sher Bahadur Deuba, might ally with either Mr Oli or Mr Dahal—provided he becomes prime minister.

The uncertainty unsettles Nepal's giant neighbours. Yet India, for once, is not interfering, says Amish Raj Mulmi, author of "All Roads Lead North", a history of Nepal's relations with India and China. As the historical hegemon and Nepal's biggest trade partner, India has a habit of meddling. In 2015 its prime minister, Narendra Modi, backed the people of the Terai in their complaints that the new constitution gave them less representation than they had been promised. He cut off Nepal's supply of fuel, nearly all of which comes from India. The brusque move pushed Nepal further into China's arms. India has learned its lesson: it recently sent its army chief on a conciliatory trip to Kathmandu.

Under President Xi Jinping, meanwhile, China has become meddler-in-chief. Its promises of big investments in electricity, roads, telecoms and a railway make Nepalis worry about a growing dependency. China has pressed Nepal to rein in the Tibetan exiles living there, while Chinese undercover agents have organised the deportation of dozens of Chinese nationals. China's selfless Communist Party has even trained Nepali cadres in Xi Jinping Thought.

Above all, senior Chinese officials have thrust themselves between the ruling party's warring factions. Some Nepalese denounce that as an unconscionable intervention—and a mockery of China's much-ballyhooed tenet of non-interference. To Mr Mulmi, however, it reflects clumsiness: China has "put all its eggs" in the basket of the NCP and is now scrambling to stop them being scrambled. By contrast, by doing little, India is handling the crisis more deftly.

▶ graffiti with the words "skank" and "prostitute" were scrawled on the wall of her campaign's offices. Meanwhile Julie Bishop, the Liberals' former deputy leader, says that a group of colleagues calling themselves "the big swinging dicks" tried to thwart her career.

One reason that Canberra, the capital, is so lecherous, everyone seems to agree, is that it is a boozy bubble: few politicians live there with their families. Even by Aussie standards its drinking culture is notorious. Abusers have grown bold because they have rarely been taken to task. More-

over, "Australia views itself as a nation of larrikins", or happy-go-lucky scamps, suggests Emma Dawson, a former Labor adviser. Those who complain about mistreatment are told it is part of the rough-and-tumble of politics. "You have to decide every day whether to call it out, or shut up and put up with it," says Ms Hanson-Young. She sued a senator from a minor party for libel after he told her during a debate to "stop shagging men".

But women have become more willing to denounce abuses. "These men need to know that we will no longer keep their se-

crets," warns the Labor group. Few are happy with the government's handling of the recent allegations. Ms Higgins says she was made to feel like a "political problem" when she told the minister she worked for, Linda Reynolds, that she had been assaulted. Ms Reynolds has had to apologise for calling her a "lying cow". The case has sparked an independent inquiry into the parliamentary culture. But Mr Morrison declined to come meet the protesters who had gathered outside parliament on March 15th. The organisers, he suggested, could come to him. ■





Disability

The unseen

SHENZHEN

Long ostracised, disabled people are demanding more help

FEW PEOPLE relish a visit to the dentist. For those who are autistic, it can involve unusual torment—some people with the condition have extremely sensitive mouths. Most of China's autistic people avoid going. But bad teeth can also make them miserable. So last year the Shenzhen Autism Society, an NGO in the southern Chinese city, launched an attempt to make dental treatment less scary for some.

The programme has helped about 45 autistic people aged between four and 40 to conquer their fears. Participants have been encouraged to engage in pleasurable distractions while waiting, and to spend time getting comfortable in the dentist's chair before procedures begin. With younger ones, their parents' mouths are sometimes examined first. One nervous father summoned up the courage to undergo a treatment that his son needed, too. Watching this encouraged the autistic boy to allow the same to be done to him.

In China, such grassroots efforts to improve the lives of the disabled are rare. But NGOs—though severely restricted by the government in many other spheres—are being allowed to do more in this one. Their involvement is badly needed. The government is also doing more to help. Yet it does not recognise as disabled many of those who would be officially regarded as such in rich countries. In 2011, when China's most recent available census data were published, over 85m people—about one in 16—were classified as disabled (including 21m who were deaf and 13m blind.) That compares with one in five in Britain and one in eight in America. Unlike in the West, China's definition of disabled does not cover those with chronic illnesses. It also excludes many people who have use of their limbs, but struggle with routine tasks.

Of those who meet the census definition of disabled, far fewer than half have the government certificates that are need-

ed to obtain disability support such as reduced medical fees and tax breaks. And even among people with the required documentation, only 12m (around one-third) last year received the living allowance to which the disabled with low incomes are entitled. That is striking given that many of the 85m people counted as disabled are poor. Three in four live in rural areas.

Under Mao, people tried to treat mentally disabled people by reading to them from the chairman's works. Later, when the government decreed that couples could have only one child, parents of a disabled child were allowed a second baby—implying that a disabled life had less value. (The two-child policy introduced in 2015 also makes such an exception.)

But among officials and the public, prejudice is fading. In 1988 the government set up the China Disabled People's Federation (CDPF), a charity. It boasted star power: until 2008 its head was Deng Pufang, the paraplegic son of Deng Xiaoping, the late Chinese leader and initiator of the one-child policy. The younger Mr Deng broke his back during the Cultural Revolution after he fell from a window while being tormented by Red Guards. Working alongside him at the CDPF were others injured during those years of mob violence.

The federation encouraged the adoption in 1990 of China's first law on protect- ►

►ing disabled people. The bill said they should enjoy "equal and full participation in society and their share of its material and cultural wealth". The CDPF also campaigned successfully against the then-common use by officials of the word *canfei* to mean disabled (its two characters mean "disabled" and "useless"). It promoted the less pejorative term, *canji* (*ji* denotes a medical condition).

Improvements are evident. In 2008 less than two-thirds of disabled children aged six to 14 were being educated. Last year 95% were. In 2012 a quarter of working-age Chinese certified as disabled had jobs. By 2018 this rate had doubled. In 2008, just before hosting the Paralympic games, China ratified the UN Convention on the Rights of Persons with Disabilities. Japan did so in 2014 and America still has not.

In education, two particular developments have been celebrated by campaigners for disability rights. The first was the adoption in 2015 of a regulation allowing disabled students to take the *gaokao*, or university-entrance exam, with "reasonable" adjustments including test papers in Braille and extra time to finish. Two years later this dispensation was also applied to those taking the *zhongkao*, the exam for senior secondary-schools. In 2018 the parents of a pupil with cerebral palsy won a case against the education bureau of Xiamen, the coastal city where he lives. The court ruled that the bureau had been wrong to deny some of his requests for special dispensations in the *zhongkao*.

The second development was a decision in 2017 to encourage mainstream schools to accept disabled students. This ended a long-standing policy of segregating them. But the impact of these measures has been limited. Of 9m people admitted to mainstream universities in 2019, just 12,000 were disabled, or one in 750. By contrast, one in five students in America report having a disability.

Universities can still exclude candidates for many subjects for medical reasons. For instance, the visually impaired may not study agronomy, law or medicine. A partially deaf student cannot study journalism or diplomacy. Schools for the disabled take some autistic children. But half are not in school at all. Parents of non-disabled children often object to desegregation. In 2018 a kindergarten in Guangzhou, near Shenzhen, was reportedly pressed by officials to expel an autistic child following allegations, disputed by teachers, that he had hit other children. Soon after, the mother killed herself and her son.

In employment, huge barriers also remain. Firms with more than 30 staff are required to give at least 1.5% of their positions to the disabled. But they worry that hiring them could harm their image. A survey in 2011 by the CDPF revealed that more

than 90% of companies preferred to pay a fine. After bigger fines were imposed on more profitable firms in 2015, some companies began adding disabled people to their payrolls—paying basic wages and making social-security contributions but giving them no work. This illegal practice has been facilitated by agencies that demand high fees from disabled clients who get the sinecures.

The public sector sets a poor example. In 2011 Yirenping, an advocacy group in Beijing, found that only 0.4% of civil-service jobs went to disabled people. (In Britain's civil service, about 10% call themselves disabled.) As in education, they are often barred by medical requirements. But in 2017 a woman with monocular vision sued an education bureau in Zhejiang province for refusing her a teaching licence because of her disability. She won the case last year, on her third attempt. In 2018 hearing-impaired teachers in Sichuan complained about being barred from teaching at a school for the deaf (they had failed an oral exam). Soon after the province began experimenting with the use of sign language in tests. In a few disputes, local branches of the CDPF have begun to help negotiate on behalf of plaintiffs.

Broader horizons

Blind people in China are still often shunted into jobs as masseurs or piano tuners. Recently, however, the CDPF has been encouraging them to try other work. It has publicised the case of Ma Yingqin, a visually-impaired 26-year-old in Shanghai, who has set up a business that employs blind people to record audio books. This year she plans to start a podcast in which blind guests chat to her about their lives. The federation has also drawn attention to Sun Chenlu, a paralysed beauty vlogger who live-streams from her wheelchair (her account has 26,000 followers). Opportuni-

ties for the mentally disabled, though, are very rare. Cao Jun set up a car-washing business in Shenzhen in 2015 to employ such people, his son among them. His idea has been replicated in two dozen cities with the support of NGOs or local offices of the CDPF. "My aim is to get rid of the donation box," says Mr Cao. He returns all tips.

Cities have been trying to make public spaces more accessible to the disabled. Beijing did so with great fanfare in 2008, the year of the Paralympics, spending 600m yuan (\$88m at the time) on the project. But Li Dihua, an academic in Beijing, takes students on field trips around the capital in wheelchairs to help them understand why they see so few disabled people on the streets. He shows them tactile paths for the blind that are broken by manhole covers or blocked by trees, bus stops or roadside magazine stalls. Han Qing, a disabled-rights campaigner in the central city of Zhengzhou, says sticking to paths would "almost certainly cause you to fall". In 2019 a disabled activist died while inspecting barrier-free facilities in Dali, a southern city, after his wheelchair fell into an underground car park. Chen Xiaoping, another campaigner, died in January while manoeuvring her wheelchair by a pedestrian crossing in Shenzhen.

Only in the past decade have some cities begun allowing the blind to take guide dogs onto metros (Shanghai did so in 2014, see picture). But only about 200 blind people have them—training dogs is costly. This month Chinese media have reported on a woman in Shanghai who was harassed by neighbours for letting her guide dog urinate in her residential compound. One threatened to poison the animal.

Such incidents prompt more public hand-wringing than in the past, and some officials take note. Shenzhen wants to show it can be a model. In 2019 it became the first city to set a target date for becoming barrier-free: 2035. It offers China's most generous handouts for disabled children—up to 50,000 yuan (\$7,700) a year until they reach 18. Most cities stop paying when a child is seven. But Shenzhen still denies local household-registration, or *hukou*, to disabled migrants. Without it they cannot enjoy subsidised public services, or receive all of their disability benefits.

Still, Shenzhen's officials are becoming more open to advice. And disabled people there are becoming more assertive, says Xin Junhui, the head of a lawyers' group in the city that offers free services to them. More are using city hotlines to complain about inadequate facilities for the disabled, often with success. And despite the crushing of many NGOs under Xi Jinping, China's leader, those helping the disabled are growing in strength, says Amica Ho of the University of Hong Kong. They have their work cut out. ■



A rare sight in China



Global happiness

It might seem crazy

SÃO PAULO AND SEOUL

The pandemic has changed the shape of global happiness

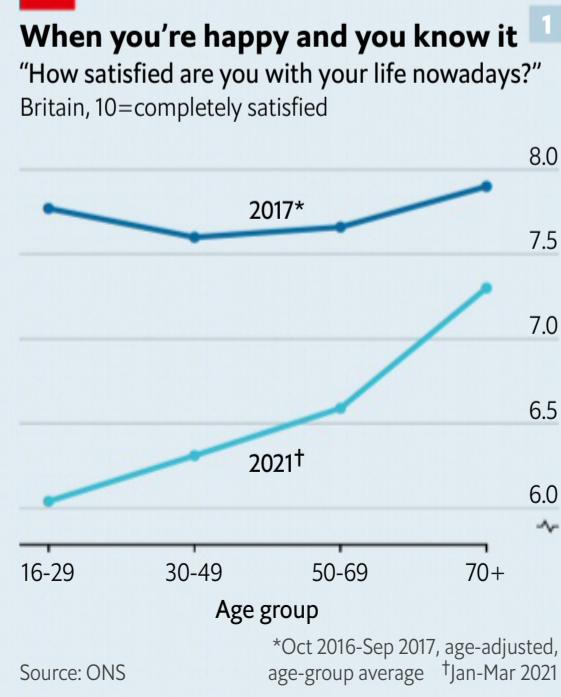
THE COVID-19 pandemic has done nothing good for the mood of Park Hae-young, an undergraduate at Seoul National University. She spent much of last year worrying about the disease, and her chances of spreading it: "I was terrified of becoming the person to cause a huge outbreak." Her freedom has been drastically curtailed. The government determines whether she can see friends or attend classes, leaving her frustrated and unable to make plans. She is beginning to worry about finding a job after she graduates.

Politicians and officials frequently talk about how covid-19 affects public health and the economy. But for most people those are abstract considerations. What they experience each day are moods—the sense of being anxious and sad, or, if they are lucky, cheerful and optimistic. To mark World Happiness Day on March 20th, researchers linked to the UN Sustainable Development Solutions Network have tried to pin down these moods and examine how the pandemic has changed them.

Gallup, a pollster, asks the same questions in scores of countries. The most re-

vealing one tells people to imagine a ladder, with steps numbered nought to ten. The top rung represents the best life you could have, the bottom rung represents the worst. What rung are you on now?

People's responses to that question,



known as a Cantril ladder, suggest (rather surprisingly) that the world was about as happy in the teeth of an awful pandemic as it was before the coronavirus struck. The average score across 95 countries, not population-weighted, crept up insignificantly from 5.81 in 2017-19 to 5.85 in 2020. But the pattern of life satisfaction has changed. Covid-19 has made old people more cheerful. A few countries have had some of the happiness squeezed out of them; others have amassed more of it.

Covid-19 threatens the old far more than the young, with the risk of death after contracting the disease doubling for every eight years of life. Yet the old have cheered up. Globally, between 2017-19 and 2020 happiness was boosted by 0.22 points on the Cantril ladder among people over the age of 60. Celina Beatriz Gazeti dos Santos, a 64-year-old psychologist in São Paulo, ticks off a list of things that might dampen her mood—the pandemic, widespread corruption, a dislikeable government, others' misery. Yet she proclaims herself increasingly happy and optimistic all the same.

In Britain, a country with excellent happiness data, everyone has slipped, but some more than others (see chart 1). There, and in other rich countries, the age profile of happiness before the pandemic struck was roughly U-shaped when plotted on a graph. People began their adult lives in a cheerful state. They became glummer in middle age. Then, after about the age of 50, they started to become happier again. If they made it to a very advanced age, how- ►

ever, they fell back into the doldrums.

Today the pattern is an upward slope. The young are less satisfied than the middle-aged, who are less satisfied than the old. That might be put down to Britain's vaccination programme, which has targeted the old first. But the pattern has barely changed over the past year. Months before Britons became familiar with what some call "the Pfizer" and "the AstraZeneca", something had shifted.

Video-conferencing software has enabled many old people to stay in touch with their families—sometimes better than before the pandemic. In countries that locked down, they have the pleasure of knowing that society made sacrifices to protect them. And as John Helliwell, an economist at the University of British Columbia who wrote part of the World Happiness Report points out, the old feel healthier. Globally, 36% of men over the age of 60 said they had a health problem last year, down from an average of 46% in the three years before. Among women, the share with health problems fell from 51% to 42%. Old people probably are not actually healthier. Rather, covid-19 has changed the yardstick. They feel healthier because they have dodged a disease that could kill them.

Meanwhile the young have had a rough year. Many lost their jobs—in America the unemployment rate for people aged 20 to 24 shot up from 6.3% in February 2020 to 25.6% two months later (it fell back to 9.6% last month). In some rich countries young women have had a particularly hard time. They often work in sectors, such as hospitality, which have been shut down. When schools close, many are lumbered with more than their fair share of child care.

They also have busy social lives. Having lots of friends seems, counter-intuitively, to have made the pandemic harder. One study of Britain by Ben Etheridge and Lisa Spantig, both at the University of Essex, found that women with at least four close friends slumped more than anyone during the spring 2020 lockdown. "People who are used to seeing lots of friends really suffered—and women and younger people have more friends," says Xiaowei Xu of the Institute for Fiscal Studies.

Some countries have fared better than others (see chart 2). Whereas Britons' happiness slumped in 2020, Germany rose from being the 15th happiest country in the world to the seventh happiest. Britain has endured long lockdowns and an excess-death rate of 190 per 100,000 people since the start of the pandemic. Germany's excess-death rate is just 77 per 100,000. For most of last year Germany fought covid-19 much better than most of Europe, although it has gone on to fluff the vaccination end-game—leading *Bild*, a tabloid newspaper, to declare in February: "Liebe Briten, we beneiden you" (dear Britain, we envy you).

Strikingly, the countries that were at the top of the happiness chart before the pandemic remain there. The three highest-ranking countries in 2020—Finland, Iceland and Denmark—were among the top four in 2017-19. All three have dealt well with covid-19, and have excess-death rates below 21 per 100,000. Iceland has a negative rate. It helps to be a remote island.

The most intriguing suggestion in the World Happiness Report is that some links between covid-19 and happiness operate in both directions. The authors do not suggest that happiness helps countries resist covid-19. Rather, they argue that one of the things that sustains national happiness also makes places better at dealing with pandemics. That thing is trust. Polls by Gallup show that many of the places that have coped best with covid-19, such as the Nordic countries and New Zealand, have widespread faith in institutions and strangers. Large majorities of their inhabitants believe that a neighbour would return a wallet if they found it.

Countries have failed to see off covid-19 for many obvious reasons. Some are poor;

others are poorly led. They lack recent experience with diseases such as SARS. They cannot police their borders. But Jeffrey Sachs, an economist at Columbia University, suggests another reason: politicians and officials in many rich European and American countries decided they could not ask too much of the public. A combination of individualism and less-than-solid institutional trust meant they felt unable to insist on quarantines or mask-wearing until the situation grew desperate.

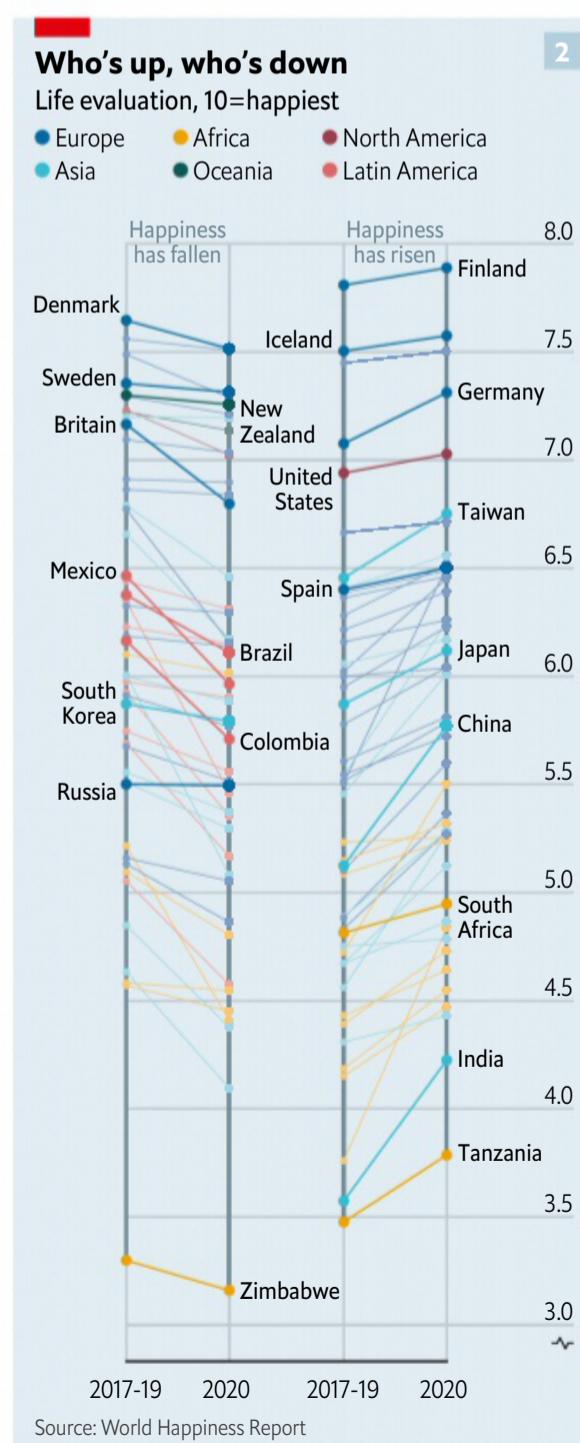
People who don't need people

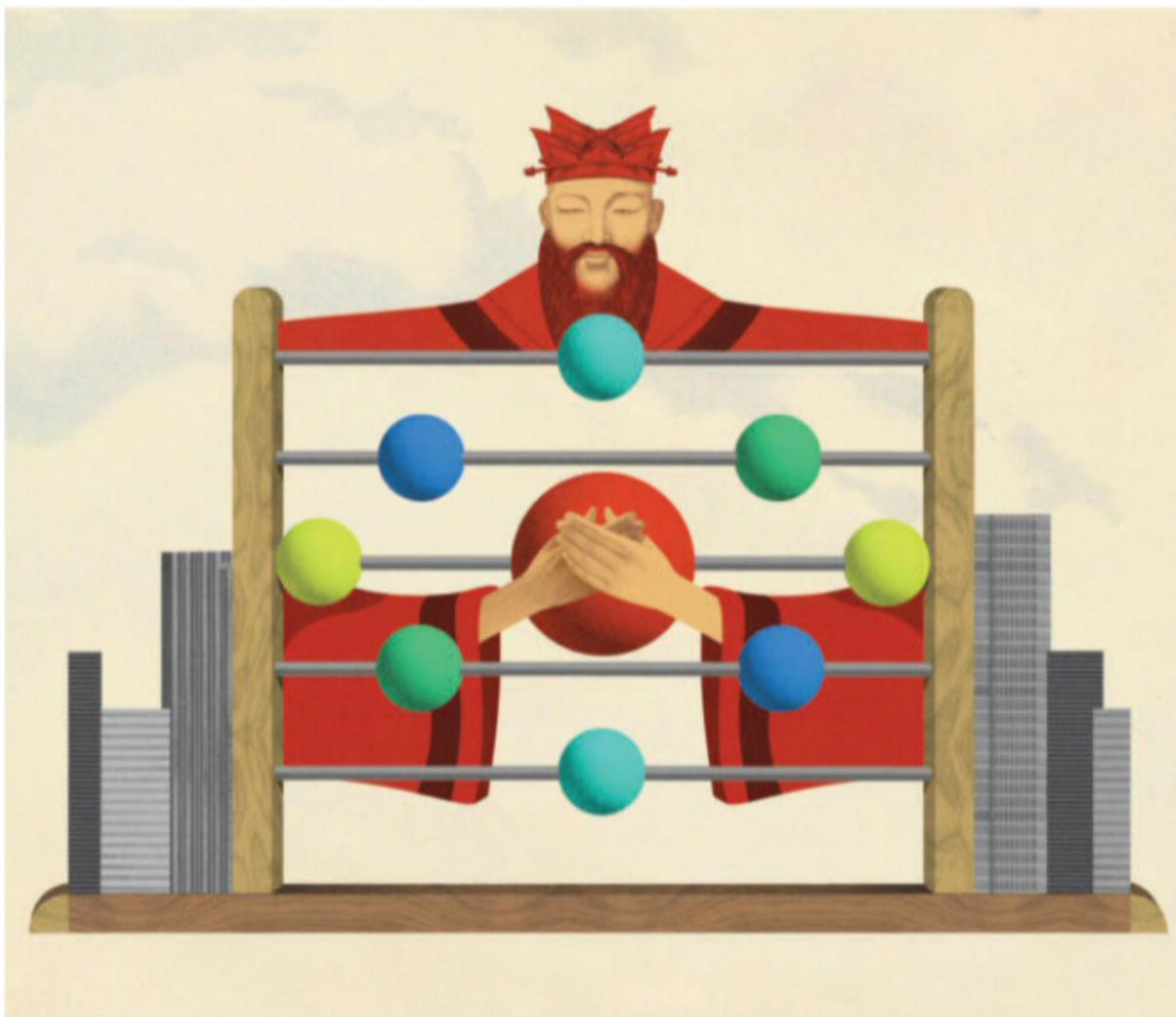
If that is right, it might help explain a broad regional change: the falling happiness of Latin America and the rising happiness of East Asia. Argentina, Brazil, Colombia and Mexico all became less happy in 2020; China, Japan and Taiwan became happier, although South Korea slipped a bit. It is as though Latin American countries had the wrong kind of happiness before 2020, says Mr Helliwell—a happiness sustained by people's close social connections, not by high levels of social trust. A global poll in 2019 found that only 52% of people in Latin America and the Caribbean thought a neighbour would return a wallet; just 41% thought a cop would. That is the lowest share of any region.

The pervasive lack of trust made it harder for Latin American countries to tackle covid-19 in a comprehensive way. People can and do keep their distance from each other, but that is emotionally tough in countries where people are normally so sociable. Mexicans have been deprived of their leisurely Friday lunches and Sunday family gatherings (though some carry on anyway). "The pandemic has changed a lot," laments Edmilson de Souza Santos, a builder in Barueri, a São Paulo suburb. "You have to stop living your life."

There remains a big national puzzle. America responded poorly to covid-19 and has suffered more than 500,000 excess deaths. Yet the Gallup poll detects a slight rise in Americans' happiness level in 2020. A panel survey by the University of Southern California shows that mental stress and anxiety shot up in America last March and April, but then subsided. Two subsequent waves of infection and death appeared not to disturb them further.

Many American states have had rather lackadaisical lockdowns, at least for adults—for schoolchildren restrictions can seem unbending. That could have kept people's spirits up. Abi Adams-Prassl of Oxford University and other researchers found that the first wave of lockdowns, last spring, lowered women's moods. It could also be that extreme partisanship helps. Many Americans have spent the past year in an alternate information universe in which covid-19 is just like flu. It is hard to get too worked up about fake news. ■





Japanese business

Analects and abacus

TOKYO

Japan's system of stakeholder capitalism is stubbornly resistant to change

SHIBUSAWA EIICHI is having a moment. A 19th-century industrialist known as the “father of Japanese capitalism”, he helped found more than 500 firms, including Japan’s first modern bank. His life story has been turned into a hit new drama on NHK, Japan’s national broadcaster, and his likeness will grace a new ¥10,000 bill. “The change of the times is calling him back,” says Shibusawa’s great-great-grandson, Shibusawa Ken, who heads an asset manager in Tokyo. “There is a rethink about capitalism happening.”

Shibusawa’s business philosophy, “the Analects and the abacus”, is in vogue. Echoing the 17th-century Edo-era precept of *sampo-yoshi*, or “three-way good”—namely for buyers, sellers and society—Shibusawa fused Confucianism’s collectivist morality with market logic. Business should, Shibusawa believed, pursue private gain but in a way that benefits the public. If this sounds familiar, it is because “it is exactly stakeholder capitalism”, says Mimura Akio, head of the Japan Chamber of Commerce and Industry (JCCI), a business federation founded by Shibusawa.

The idea that companies should be guided by a social purpose and serve a broader range of interests beyond maximising shareholder returns is gaining adherents across the rich world. Japan is a rare big economy to have tried it at scale. It has become a rich country with low unemployment, comparatively little inequality and high social cohesion. But the system has also fostered corporate decadence and low growth. It is a case study of the trade-offs involved—and how they are changing. At Keidanren, Japan’s big business lobby, “no one denies” that corporations should create value beyond pure profit, says the group’s chairman, Nakanishi Hiroaki. Instead, the discussion is about “how to define” those broader, fuzzier values for today’s more complex society.

Japanese executives are no more culturally predisposed to be cuddly than American ones are to be prickly. Before the second world war the economy saw brutal merger-and-acquisition activity, brittle labour relations and dispersed ownership. It was only afterwards that corporate Japan started to rediscover its inner Shibusawa.

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Industrial policy supported businesses, while the private sector became part of the safety net, offering job security, often for life. A high-quality, stable labour force and strong ties with suppliers proved a successful mix in manufacturing, and enabled Japan’s economy to catch up with Western ones. “The workers wouldn’t strike and employers wouldn’t fire, and it worked out pretty well for everyone,” says Steven Vogel of the University of California, Berkeley.

Firms still maintain long-term relations with suppliers and customers even if this does not obviously benefit the bottom line. Boards and executive suites are dominated by long-time company insiders, who act less as representatives of shareholders than as heads of a family. Networks of cross-shareholdings, whereby friendly firms hold stakes in each other, help shield them from outside pressure.

This social contract can be a blessing when crisis strikes. During the pandemic Japan’s unemployment rate peaked at 3.1%, in part a function of a shrinking labour force, but also of employers’ loyalty to core workers. CEOs are paid far less than peers in the West. That may have helped Japan avoid the destructive populism that has arisen in America and other Western countries, thinks Hori Yoshito, founder of GLOBIS, a business school in Tokyo.

The old system’s drawbacks have also become more apparent. As Japan’s growth began to slow in the 1990s, the price was paid by a growing precariat. Firms reluctant to let full-time workers go have been ➤

► hiring more people on short-term contracts with few of the protections afforded to salarymen. The share of “non-regular” workers has grown from 20% in 1990 to nearly 40% today. They are more likely to be young and female.

A lack of accountability has let executives grow complacent. Since the 1980s the influence of banks, which imposed discipline and oversight on management by controlling access to capital, has steadily waned. More capital now comes from foreign and institutional investors who have few ways of holding management to account. Instead of reinvesting profits or returning money to shareholders, managers hoard cash, ostensibly for a rainy day (see chart). If Shibusawa were alive he would be urging Japanese bosses “to take more risk”, says the younger Mr Shibusawa.

Japan needs a dynamic private sector to compensate for its shrinking and ageing workforce. Realising this, Abe Shinzo, prime minister from 2012 to 2020, made corporate governance central to his economic reforms. A stewardship code introduced in 2014 encouraged institutional investors to push executives to improve returns. A corporate-governance code implemented the following year pressed firms to bring in more outside directors to shake up boards. “In the US the issue is constraining the risk appetite of the CEOs,” explains a senior government official. “In Japan it’s

poking the risk-averse CEOs”.

The reforms have had some effect. Over 95% of firms listed in the first section of the Tokyo Stock Exchange, a grouping of mostly large firms, now have two or more independent directors, up from 22% in 2014. The share with nomination and compensation committees, which advise on selecting and paying directors and executives, has gone from less than one in five in 2015 to three in five today. As a result, bosses pay more attention to financial performance and shareholder demands. Returns and cost of equity are “very much on their minds”, says Arthur Mitchell, a long-standing outside director. Although they remain stingier than their American counterparts when it comes to shareholder payouts, they are less so than before.

Return on equity for the MSCI Japan index reached over 10% in 2018 for the first time since before the global financial crisis. But other measures of profitability, such as return on assets, have not budged. Mostly, the disparity between top performers and stragglers has grown wider, says Nicholas Benes, who helped draft the governance code: “It’s a stock picker’s market”.

Merger and acquisition activity has ramped up, too. Legal poison pills against takeovers have become rarer: just 10% of listed firms had them in 2020, down from nearly 25% a decade earlier. Unsolicited offers for rivals are no longer taboo, notes Ni-

inami Takeshi, boss of Suntory, a drinks behemoth, and government adviser. Japan saw five hostile bids in 2019—few by American standards, but the most in Japan since 2006. Some have succeeded, such as the purchase last year by Nitori, a home-goods chain, of Shimachu, a smaller rival.

Steps in the right direction

This month Japan’s Financial Services Agency is expected to toughen the governance code further, such as by demanding that firms bring in more and better outside directors. The Tokyo Stock Exchange is finalising plans to streamline its listings with membership of the top tier perhaps contingent on better governance. Shareholders have become more vocal. ISS, a firm which advises investors on shareholder votes, now suggests voting against directors of companies with 20% or more of their net assets in cross-shareholdings. At an extraordinary general meeting this week, shareholders of Toshiba, a conglomerate, gave the go-ahead for an independent investigation called for by an activist fund. It suspects the firm’s management pressured investors to protect the CEO at last year’s annual shareholders meeting.

Yet shareholders remain one voice among many—and still not a terribly loud one. Independent directors are in the majority on the board of only 6% of large listed firms. Before covid-19 hit, more than half of companies in the Topix index still had a net cash position, compared with just 14% of the firms in America’s S&P 500 index. Lifers still dominate. More than 90% of top managers at big listed firms are internal promotions, reckons Miyajima Hideaki of Waseda University. Cross-shareholdings still account for 32% of Japan’s market capitalisation, according to Morgan Stanley, an investment bank. That means that in many cases, “management is not really worried about the voice of the shareholders,” laments Murakami Aya, the CEO of C&I Holdings, an activist investor.

“In Japan, the traditional influence of workers and suppliers is not going anywhere,” says Mr Mimura of the JCCI. Japan has long been evolving a “hybrid form of governance” that seeks to balance shareholders’ focus on performance and management’s concern for stakeholders, argues Mr Miyajima. Meanwhile, the list of stakeholders that companies must consider is lengthening. Many investors, particularly foreign ones, are pushing firms to pay more attention to things like the environment and diversity, which Japan Inc has traditionally ignored. Gender equality is preached increasingly often, but still rarely practised. Women occupy just 15% of managerial positions and 11% of board seats.

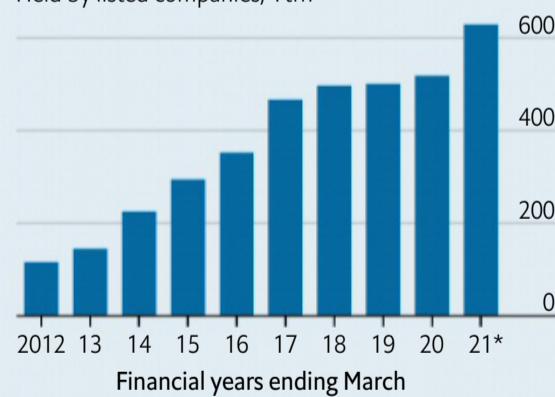
Expectations about career paths are in flux. For some young Japanese, being treated well no longer means eternal job stabil-

Land of the rising stakeholder

Japan

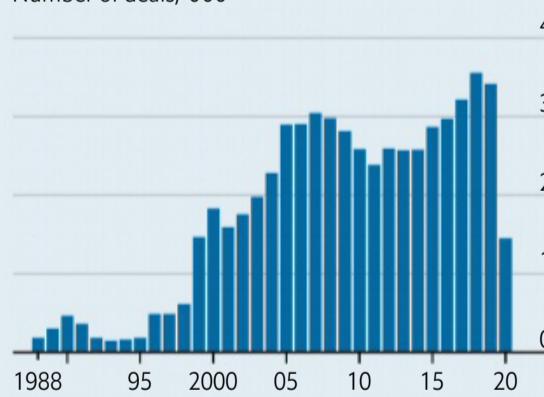
Cash and equivalents

Held by listed companies, ¥trn



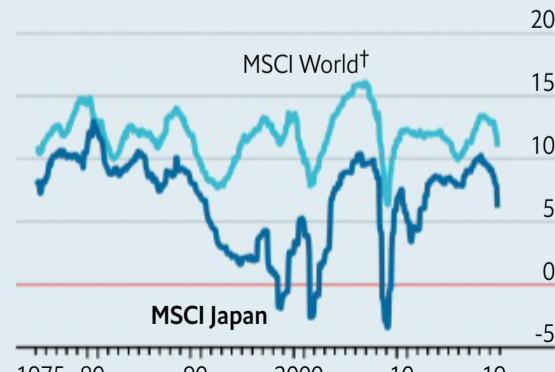
Mergers and acquisitions

Number of deals, '000



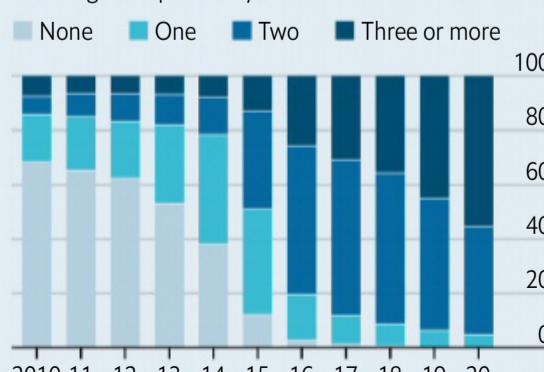
Return on equity

%



Independent outside directors[#]

% of large companies, by number of directors



Sources: Institute for Mergers, Acquisitions and Alliances; Bloomberg; Morgan Stanley; Japan Association of Corporate Directors

*To December 31st 2020

[#]At August 1st

ADVERTISEMENT

Shaping the distribution grids of the future, accelerators of the energy transition

Nowadays, power distribution networks are changing in fundamental ways and are taking on a much more central role in energy systems. This shift is driven by the mainstreaming of decentralized, smaller scale renewable generation alongside the spread of distributed energy resources such as residential or commercial and industrial (C&I) rooftop photovoltaics (PV), home batteries as well as electric vehicles. Over the coming decades, electricity distribution grids will become the primary entry point into the power system for many new actors such as demand-side aggregators, charging point operators and prosumers, leading to more open and participatory networks. Moreover, according to Bloomberg New Energy Finance (BNEF)¹, the size of new power plants will be six times smaller by 2050 compared to today, moving the average size of European facilities from 562 MW to 32 MW.

Nevertheless, in order to ensure an increasingly reliable service within this evolving scenario, distribution network operators need to become true orchestrators of energy systems at local level and deploy investment programs aimed at making grids more robust and reliable, also through innovative technologies enhancing network automation and control capabilities. Moreover, if we really want to transition towards a more productive, efficient and environmental-conscious world, the distribution grids need to embrace new sustainability principles, encouraging the use of electricity as the simplest and most natural choice for all citizens to contribute to a net-zero future.

Enel is the largest private group to own and operate power distribution networks in the world, providing grid connection to over 74 million end users and distributing electricity across more than 2.2 million kilometers of power lines spread throughout eight countries. With the ambition to unify the management of all our networks around the world, we are developing a new global operating model for our grids, pursuing an innovative platform organization. At the same time, we are redesigning a large portion of our operations leveraging on digitalization and strengthening our computational capabilities in order to process increasingly larger volumes of data. All of these elements are key for our growth strategy, which spans over 2021-2023 with a vision to 2030.

In 2021-2030, the Enel Group will deploy around 60 billion euros of cumulated investments in distribution networks. Approximately 70% of this expenditure will be devoted to further improve quality as well as resilience and more than 20% will be invested in connections, which benefit from the growing demand driven by urbanization and electrification of energy consumption. At the same time, around 10% will be devoted to further digitalize the infrastructure. Geographically, around 60% of Group investments in networks for 2021-2030 will address Europe.

At the operational level, the above investments will enable us to reach approximately 77 million end users in 2023, delivering 512 TWh of electricity, with a projection to reach about 90 million end users by 2030.

While these actions might seem like business as usual, the way in which electricity will be delivered across our networks is going to change significantly in the coming decades. According to the current policy targets, the International Energy Agency (IEA)², estimates that global renewable capacity will represent 58% of total installed capacity by 2040, increasing by almost three times from the 2.7 TW reached in 2019.

As a consequence of the above transformation, in Europe the share of generation capacity directly connected to distribution grids is expected to grow from the current 24% to 67% in 2050, according to BNEF³, turning electricity grids into the real bedrock of the energy transition.

Towards this aim, Enel is leveraging on **Grid Futurability®**, which is the transformation of conventional distribution networks into Smart Grids that couple the use of traditional equipment with innovative digital solutions. As a global player, serving both rural areas and some of the largest megacities on the planet, we are on the pathway to develop an integrated and unique operating model in order to manage the transformation of the traditional distribution business model and the evolution of power grids into **resilient, participatory and sustainable** platforms.

Grids will need to be more **resilient** in order to provide a reliable service in terms of quality and continuity, as more and more stakeholders will depend on electricity in the future and taking into account the impact of climate change and the implied extreme operating conditions. As Enel Global Infrastructure and Networks, we are committed to continuously innovate our assets and processes in order to enhance the reliability of our infrastructure. Making the grids more robust, deploying telecontrol and advanced sensors, building new digital substations, streamlining of emergency response are just some of the initiatives enabling improved resilience.



Antonio Cammisecra,
CEO Enel Global
Infrastructure and Networks

Second, we need to ensure that electricity networks develop into inclusive and **participatory** platforms, fostering the engagement and interaction of all stakeholders, unlocking new opportunities in terms of innovative business models, services and shared value. Leveraging on our digital technologies and distinctive intellectual property value, we are opening a new era of grids where all stakeholders can operate on level ground, optimizing services and business solutions, technologies and processes. Therefore, the new role of a distribution system operator (DSO) as an “orchestrator” of the different players interacting in the energy scenario becomes the main element of a new, flexible system.

Third, being a **sustainable** infrastructure operator is not only about connecting more and **more** renewable producers to the grid, but also about **adopting** a holistic approach that involves the entire **energy** ecosystem towards the achievement of the UN Sustainable Development Goals (SDGs). Our vision for sustainable grids includes specific initiatives where we are extending the useful life of our grid components and, instead of discarding them, we are reintroducing these components within our supply chain or in the supply chains of other sectors in order to process new products. Within a circular economy approach, we are introducing as many sustainable and recyclable raw materials as possible, with the aim to maximize their economic value and reduce their environmental impact, as well as CO₂ emissions from our assets. Moreover, at Enel we are working to secure energy access to all by expanding our grids and even developing off-grid connections to new rural clients in the geographies where we are present.

In line with the Enel Group strategy presented during the Capital Markets Day in November 2020, we are enhancing the impact of Grid Futurability® in the energy transition by combining our unique expertise in managing regulated power distribution grids with third parties' financial resources, with the aim to innovate the way value is created. Differently from the traditional “Ownership” model, in which Enel is the sole or majority shareholder of the acquired company, in our new “Stewardship” business model, we acquire minority shareholdings and support value creation by providing our management capability, leveraging on our global scale and purchasing power, digital technologies and platforms. In this scenario, we aim to implement Grid Futurability® in urban or rural contexts anywhere in the world, expanding our global presence and accelerating the energy transition by distributing electricity in a sustainable, affordable way.

1. Source: BNEF New Energy Outlook 2020
2. Source: IEA World Energy Outlook 2020: Stated Policies Scenario
3. Source: BNEF New Energy Outlook 2020



It's not a fair game



Cyber criminals will use AI
to supercharge their moves.

New technological innovations are helping drive
stealthier, faster and more effective cyber-attacks,
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ity. They want better pay, flexible work conditions and less monotonous jobs. Keidanren, Japan's business lobby, has recommended that its members move away from lifetime employment and towards merit-based promotion and compensation. Workers' contributions should no longer be measured by the hours they put in, but by the value they add, says Mr Nakanishi, who has pushed the practice at Hitachi, the electronics conglomerate he heads.

In many ways, says Mr Mimura, Japanese and American capitalism appear to be moving toward each other. "America needs more shareholderism. Japan needs more shareholderism," observes Takenaka Heizo, a former government minister. As Mr Shibusawa points out, his forefather's idea was "the Analects and the abacus, not the Analects or the abacus". ■



Eni trial

Free to go

Acquittal for Eni's CEO and others accused in an oily bribery case

AS FIRST AN engineer and later an executive climbing the ranks of Eni, Claudio Descalzi (pictured above) worked in difficult environments, from Libya to the Republic of Congo. However, the most inhospitable terrain he has had to navigate as chief executive of the Italian oil giant was in a Milan courtroom—as a defendant in a mammoth corruption trial related to a Nigerian oil deal. On March 17th the ordeal ended with the acquittal of the man who has led the Italian energy firm for seven years. Had Mr Descalzi been convicted, he could have faced eight years in jail.

All the other defendants were also found not guilty. Among them were Eni itself, its partner in the deal, Royal Dutch

Shell, several of the firms' current and former executives, and a former Nigerian oil minister. Prosecutors must now decide whether to appeal against what was probably the most important corruption-related verdict in the history of the oil industry.

The case concerned a \$1.3bn deal struck in 2011, in which Eni and Shell jointly bought the rights to exploit a big oil block, known as OPL 245, off Nigeria's coast. Prosecutors had alleged that the purchase was sealed with hundreds of millions of dollars of bribes for Nigerian officials. They also accused some Eni managers of seeking and possibly receiving kickbacks.

Two middlemen were convicted for corruption related to the transaction in a separate Italian trial in 2018. The judge in that case concluded that the block's buyers must have known that a large part of their payment would go to a firm controlled by the former oil minister that previously owned the rights to exploit it. But Eni, Shell and the accused executives consistently denied paying bribes or taking bungs, and insisted their deal, structured as a purchase from the government, was legal.

Should the prosecutors appeal, a final decision could be years away. The case is already three years old. Elsewhere, too, this is not the end of the story. Subsidiaries of Eni and Shell face charges in Nigeria, which they deny. Its government said after the verdict it was disappointed and would "continue to hold those responsible for the OPL 245 fraud accountable". Shell disclosed in 2019 that Dutch prosecutors were readying criminal charges. None has been laid yet but investigations continue.

Eni, meanwhile, is part of an investigation in one of the case's more bizarre subplots. In 2019 a Sicilian prosecutor and a former external lawyer for Eni were both jailed. The prosecutor was found to have accepted €30,000 (\$36,000) to open an investigation, and the lawyer to have fed him false information to fuel it. The information included details of an alleged plot to destabilise Eni, supposedly involving two board members who had questioned the company's response to the OPL 245-related corruption allegations. Eni has disclosed it is under investigation for "inducement not to make statements or to make false statements to the judicial authority". The Italian press has reported that Mr Descalzi has been named as a suspect in a related investigation into attempts to interfere with the OPL 245 case. Eni says this is false, that Mr Descalzi is not a suspect and that the firm is "an offended party" in the case.

Whatever Eni's continuing legal travails, this verdict lifts a cloud that has been hanging over its boss for years. The Italian government, which owns 30% of the firm's stock, did not wait for the ruling to show its confidence in him: last year it reappointed him for a third term, which runs to 2023. ■

Baidu

Searching for the next big thing

BEIJING

China's biggest search engine turns to personal transport to drive profits

ROBIN LI SMILED when asked at a corporate shindig in 2014 to reflect on his path to becoming, at the time, China's richest man. "I'm just lucky," he insisted. Mr Li, co-founder and boss of Baidu, a Beijing-based search engine, may have been trying to project modesty. But his words could also have been taken literally. Thanks to government censorship, Google is inaccessible in mainland China. That leaves Baidu as the unrivalled leader in Chinese search. Slowing advertising revenues, however, are now taking it down a different road.

Baidu's search dominance is indisputable. Its average of 538m monthly active users last year was nearly six times the combined total of the next three domestic rivals. Baidu's share price has tripled in a year, taking its market capitalisation to \$93bn. Riding this wave of investor enthusiasm, it has filed for a secondary listing in Hong Kong, with trading set to begin on March 23rd. The firm is expected to raise around \$4bn. But the steep rise in Baidu's valuation might seem unwarranted. Advertising, the main source of revenue, has suffered as the pandemic forced Chinese businesses to cut marketing budgets. Adverts on Baidu's main search service brought in 66.3bn yuan (\$9.6bn) in 2020, 5% less than the year before.

Even as China's economy recovers advertising is unlikely to propel Baidu's growth as powerfully as before. In recent years the supply of digital ad space in China has multiplied, depressing prices. Businesses can now choose from an array of platforms on which to hawk their wares—►



Picturing the future

▶ from addictive video apps like Kuaishou to e-commerce upstarts like Pinduoduo.

Baidu's bosses appear to recognise as much. The firm is rapidly diversifying. Last November it agreed to buy YY Live, a video-sharing and live-streaming app, for \$3.6bn, in a bid to boost its presence in online entertainment and compete with the likes of Kuaishou. Baidu is also investing heavily in cloud services to keep up with Alibaba and Tencent, two bigger Chinese tech rivals. But arguably the boldest push is what the company calls "intelligent driving".

This business contributes hardly any

revenues today but holds "huge long-term monetisation potential", according to Baidu's new prospectus. The business has three prongs. The first is the establishment of a nationwide fleet of robotaxis powered by Apollo, Baidu's in-house self-driving technology. The firm is already operating self-driving taxis in three Chinese cities, including part of Beijing. Rides are currently free but Baidu hints that it may soon start charging. It has international ambitions, too. In January it received permission to test self-driving cars in California.

Baidu also plans to mass-produce elec-

tric vehicles (EVs). In January it formed a new venture with Geely, a Chinese carmaker, to bring to market "intelligent" (if not fully autonomous) EVs within three years. By 2035 China's government wants every other new car sold to be an EV. The third prong allows Baidu to earn immediate revenues by selling services to Chinese carmakers, such as high-definition maps and automated-parking technology, which it has already sold to ten firms. Baidu is already a late entrant to China's crowded personal-mobility industry. For now, at least, investors are on for the ride. ■

Bartleby Winning personality

The divide between introverts and extroverts

THE MODERN manager has to play the role of coach in charge of their team. And that requires an understanding of the different personality types they may be managing, and indeed the role their own personality may play in the way they manage.

Karl Moore, an associate professor at McGill University in Canada, has written two recent articles on the role of different personality types in business. One of the most common divides is between introverts and extroverts. Mr Moore estimates that around 40% of the population are introverts, 40% are extroverts and 20% are "ambiverts" who can display both characteristics.

It is easy to assume that the extroverts are most likely to go far in business. An academic study* found that extroverts were 25% more likely to be in a high-earning job than those who were less outgoing. The chain of causation is not clear. It is possible that working in a high-paid job makes people more confident and outgoing, although personality traits tend to develop early in life.

The study also found that the children of professionals were more likely to be extrovert. It could simply be that children who grow up in more prosperous homes are less likely to face the kind of stressful events that undermine self-confidence. People with higher self-confidence may apply for more prestigious jobs and may be more likely to believe that their efforts will be rewarded; those with a negative self-image may feel it is not worth trying too hard.

So introverts should not give up hope of climbing the greasy pole. A study in 2017 found that introverts were slightly more likely than extroverts to surpass the expectations of boards and investors when appointed as chief executive.

Ambiverts can be good salespeople because they are able to listen to their clients and understand their needs but also have the energy to sell their firms' goods and services. Mr Moore thinks that successful executives have to become ambiverts at times in order to succeed. Introverts must try to show enthusiasm, or make a stirring speech, when the situation calls for it. And extroverts need to shut up and listen to their teams—not least because when the boss speaks first, subordinates will be reluctant to disagree.

Bartleby (who is an introvert but doesn't like to talk about it much) thinks that the key is not to be too far out on the scale in either direction. An extreme introvert risks seeming too remote to manage a team, and may lack the ability to inspire. But an extreme extrovert can simply overwhelm the business, with other managers unable to constrain them. Perhaps becoming an entrepreneur, or founding a successful firm, requires a significant degree of self-confidence but nobody can get every decision right, and there comes a time when a founder needs

the expertise of other people.

By the same token, managers need to think about the different personality types when conducting meetings. It is easy for meetings to be dominated by extroverts, who have a tendency to speak the loudest and most often. Introverts may never contribute to the discussion. In his book, "Running Meetings That Make Things Happen", Jon Baker says that one answer is to circulate materials well in advance. Introverts, he writes, "don't debate something as effectively if they're still learning about it. If you want the views of the more detail-conscious members in your team, give them time to absorb the information."

Mr Baker also suggests that managers should encourage introverts to contribute to the discussion by asking specific questions of them in their area of expertise. Another approach is to ask people to write down their ideas rather than contribute verbally. In theory, this approach should improve the quality of the discussion; after all, if the views of the introverts aren't valuable, why have they been invited to the meeting?

What makes life tricky for managers is that people don't have labels on their foreheads stating which kind of personality type they are. Sometimes people make it obvious (like the old joke "How do you tell if people went to Harvard?" "They'll soon tell you"). But that means managers have to spend time chatting to, and observing, their team members before deciding how best to get them motivated and inspired. Managers need to be less like Henry Ford, and more like Sigmund Freud.



* "A winning personality: The effects of background on personality and earnings", by Robert de Vries and Jason Rentfrow

Leonardo Del Vecchio

2025 vision

MILAN

What Italy's richest tycoon plans for his late 80s

MOST OCTOGENARIANS would, given the opportunity, rush to the sun lounger in Monaco. It was widely assumed that Leonardo Del Vecchio, Italy's richest man, would do just that. He turns 86 in May and some years ago moved his principal residence to the principality. His four marriages and six offspring have produced a gaggle of grandchildren to play with. On March 12th his corporate baby, EssilorLuxottica, reported a strong rebound in sales of the posh spectacles it makes in the second half of 2020. Its market capitalisation is once again above €60bn (\$72bn) and near the all-time high it reached in early 2020, before the pandemic dented demand for pricey accessories. What better time to slip on a pair of Ray-Bans (which his firm produces) and bask by the pool?

Mr Del Vecchio's idea of *la dolce vita*, it appears, is rather less passive. It is also ambitious—and not just with respect to his company, over which he maintains an iron grip and which he wants to thrust into the digital age. As a supplemental senior activity, the tycoon is also trying to shake up Italian high finance.

Mr Del Vecchio is certainly not short of the audacity and grit required to pull off both endeavours. He spent part of his childhood in an orphanage because his widowed mother could not afford to feed him, and built Luxottica from a shack in Italy's Dolomite mountains into a global titan. Although he speaks no English, he chose to list his firm in New York, to gain access to America's deep capital markets, brands such as Ray-Ban and Oakley, as well as a place to sell them (Sunglass Hut, which Luxottica bought in 2001). Instead of taking it easy at 80, he returned to the company in 2014 after a decade-long hiatus to mastermind the merger with Essilor, a giant French lensmaker, and its move from the New York and Milan bourses to Paris.

Now, after what he told the Italian press on March 6th were three "intense years" of getting to know Essilor's management, the billionaire's grip on the company has become stronger than ever. In February he put forward a list of new nominees to the company's board. It would install a close aide, Francesco Milleri, as chief executive and prominent Italians handpicked by Mr Del Vecchio as independent directors. The tycoon himself would remain as chairman. Hubert Sagnières, his deputy who



Seeing the big picture

had previously chaired Essilor's board, would retire, marking the end of a turf battle the Frenchman had waged against Mr Del Vecchio. The slate must still be approved by shareholders at the company's annual meeting in May. With Mr Del Vecchio's family holding company, Delfin, owning 32% of the shares, the outcome looks preordained.

So does doubling down on Mr Del Vecchio's bet on technology. During the covid-19 pandemic EssilorLuxottica has begun building a new e-commerce hub in Sedico, a town in the foothills of the Dolomites, next to a factory that churns out its frames and lenses. Its direct online sales to consumers, which one former eyewear executive calls "the last big margin", grew by 40% in 2020, to €1.2bn.

This year the company plans to launch smart Ray-Bans, developed together with Facebook. These connected specs, which display information about the outside world to the wearer, promise to be both smarter and more stylish than Google Glass, an earlier collaboration with Silicon Valley from which Luxottica walked away after Mr Del Vecchio declared: "it would embarrass me going around with that on my face".

Although Mr Milleri's nomination as CEO raised eyebrows given his lack of experience in consumer goods, his previous job

running his own management and information-technology consultancy makes him a reasonable choice to lead the company. Thanks to his closeness to Mr Del Vecchio, he is said to know the company inside out. Most important, he has the founder's full confidence. That is critical given that the elderly tycoon is not going anywhere. Trim and upright, he could pass for someone 20 years younger. Managers recall that the first question Mr Del Vecchio asks on his regular visits to the factory floor is, "What do you have to show me that is new?"

As if thrusting his empire into the digital age were not challenging enough, Mr Del Vecchio's side hustle may be more ambitious still. In the past few years he has been preparing the ground for a shake-up of Italian high finance. He has, through Delfin, long owned a stake of around 4.8% in Generali, Italy's biggest insurer, and nearly 2% of UniCredit, its biggest bank. In the past year his holding company has also built a 13% stake in Mediobanca, becoming the single largest shareholder in the Italian investment bank (which in turn owns 13% of Generali's shares). Europe's banking regulator has given Mr Del Vecchio approval to increase his ownership of Mediobanca to nearly 20%.

Mr Del Vecchio's interest in Generali can in part be explained by the growing role that insurers will play in paying for glasses as ageing populations' eyesight deteriorates. Milan's financial-rumour mill is rife with chatter about the shareholder value that might be generated if Mediobanca spun off its Generali stake, or if either the investment bank or UniCredit merged with the insurer. Mr Del Vecchio himself has said that Delfin's Mediobanca stake is a long-term investment and that he does not intend to gain control of the firm or sway its management. One person close to him says that his plans will become clearer when his stake does rise closer to 20%. Others familiar with his thinking say that he is genuinely concerned about the fate of corporate Italy and would like his legacy to extend beyond EssilorLuxottica.

Focus on the future

And what of the fate of his company once he has departed? A succession plan in case of his death or incapacitation has been agreed with his six children and his current wife. This ensures that each child would each inherit a 12.5% stake in the family holding company, with Mrs Del Vecchio getting 25%. All must agree to any strategic changes to Delfin's holdings—and so, by extension, to EssilorLuxottica. The need for consensus may make the sort of transformational deals Mr Del Vecchio has pursued harder to pull off. No wonder the tycoon is trying to make more of them while he still can. ■

Schumpeter | America's 5G shock

Verizon and AT&T face a blaring wake-up call



FOR AN UPBEAT commentary on America's telecoms market speak to Jonathan Chaplin of New Street Research, a boutique firm of financial analysts. He extols the virtues of the industry, at least compared with its "boring as hell" European counterpart. He relishes the returns and cash that it generates, much of which come pouring out in the form of dividends. Yet for a more sober assessment, you can also listen to the four-week-old baby nestled in Mr Chaplin's arms. As the conversation with his father starts, Eiger ("after the mountain") is restless and vocal. By the time the conversation turns to Verizon and AT&T, the industry's two lumbering behemoths, the boy is soundly asleep.

The two firms have long had that effect on people—and on each other. For companies at what is supposed to be the beating heart of the wireless revolution, "dumb and dumber", as the former boss of T-Mobile, their bitter rival, mockingly dubbed them, make a snooze-inducing pair.

That is why their huge bets on superfast 5G spectrum in a recent auction (\$52.9bn by Verizon, and \$27.4bn by AT&T) has generated a lot of buzz. The c-Band radio frequencies they bought, clustered between 3-4GHz, offer mobile connectivity about ten times quicker than 4G. The auction has turned America's "race for 5G" from sloganeering into the real thing. Yet for all their money-slinging, neither firm appears able to stem the advance of T-Mobile. Moreover, they remain at risk of more profound disruption, both from scrappy new competitors and big tech.

Their complacency was on display as all three companies unveiled their 5G strategies on consecutive days from March 10th to 12th. The body language was as revealing as the prepared remarks. Hans Vestburg, the Swedish boss of Verizon, wore a double-breasted suit as if to reiterate that his firm remains the industry's pro-business, high-margin *crème de la crème*, claiming he was "thrilled" to have come out on top in the richest auction in the industry's history. AT&T's dressed-down John Stankey took a more subdued approach, appearing less excited about 5G than his growth plans for HBO Max, the firm's streaming service on which he has staked most of his future.

Mike Sievert, boss of T-Mobile, who took over from lion-maned John Legere last year, displayed some of his predecessor's cocki-

ness, albeit behind a Tigger-like grin. Yet he has earned it. Thanks to 2.5GHz radio-frequency spectrum obtained from T-Mobile's merger with Sprint last year, as well as a small chunk acquired in the c-Band auction, the company will have substantially greater 5G coverage than both Verizon and AT&T, and may be up to two years ahead of them in deploying it to vast numbers of customers. As Mr Chaplin says, the advantage T-Mobile enjoys in the 5G era may be akin to that which Verizon and AT&T had through previous wireless iterations up to and including 4G. He expects it to last for at least the next five years.

T-Mobile has been one of the great turnaround stories in American business and again it has upgraded its forecasts. Though it borrowed aggressively to acquire Sprint, it claims that higher-than-expected cost savings from the combination will help it fund its 5G expansion plans, as well as enabling it to return up to \$60bn to shareholders in 2023-25. Verizon and AT&T have less flexibility. The c-Band auction has increased balance-sheet strains on both firms (making them, ignominiously, America's two biggest borrowers in the corporate-bond market), while their hefty dividends provide further drag. Between them they need to spend an extra \$16bn-18bn to deploy the spectrum they acquired at auction. AT&T in particular appears to be constrained in its 5G ambitions unless it can flog more of its WarnerMedia assets—or cut the dividend.

Further breathing down their necks is Dish, a satellite provider that promises to build a new 5G network from scratch in America starting this year. It will deploy OpenRAN technology, a non-proprietary architecture that combines off-the-shelf telecoms hardware with lots of computer code, enabling a do-it-yourself approach. It will cost at least \$10bn, part of which Dish saved by sitting out the c-Band auction. But Mr Chaplin reckons that once its network is built, it will cost substantially less to operate than those of Verizon and AT&T, eventually giving it an opportunity to undercut them. He calls this the "Dish bomb". It is still years away. But it is coming.

When it explodes, neither Verizon nor AT&T will be able to claim that they have been caught unawares. For years, the firms have talked about the seismic implications of 5G, though mostly as a marketing ploy to disguise their own declining growth, rather than as an urgent call to action. Some sceptics still doubt that customers want the high speeds that it offers. But they are fewer in number these days. The covid-19 pandemic has highlighted how vital connectivity has become in everything from working from home to home-schooling, downloading and uploading videos and shopping. This extends to wireless communication.

Up the North Face

But it is businesses, rather than consumers, where the excitement is most immediately palpable. Besides the potential of 5G for tele-surgery, self-driving cars, robotics and so on, other uses of artificial intelligence—video surveillance employing facial recognition, for instance—require instantaneous data processing. For this, companies will need local data centres connected via super-fast 5G as well as remote clouds for storing data. Verizon and AT&T, whose corporate relationships remain important parts of their businesses, realise this. But so do cloud providers like Amazon, Microsoft and Google, who are not keen to cede control of the data-handling business. If these tech giants muscle into telecoms, the race for 5G may quickly become supersonic. By then, a less-little Eiger will no doubt find it scintillating. Whether Verizon and AT&T will relish the experience is another matter. ■



China's financial opening

Over the great wall

HONG KONG AND SHANGHAI

Chinese markets shake off their casino reputation. Can foreigners actually win?

IN A WORLD where internet memes can explain market swings, China is second to none. Early in March, with mainland equities down by 15% in two weeks—their steepest fall in years—a video circulated on Weibo, a microblogging site, of a sheep stuck in a fence on a hill and a hiker climbing up to free it. The description of the video, in its meme incarnation, was “the national team comes to rescue me”. The national team is shorthand for big state firms that are believed to stabilise the market by buying shares when they plunge.

This video, though, had a twist. The hiker frees the sheep, only for it to lose its footing and tumble down the hill. Talk of the national team’s rescue mission had spread for a few days, but equities continued to tumble, wiping out all gains made since late last year.

At last, on March 9th, the national team really did arrive. State media reported that large state-owned insurers had bought stocks. Coincidentally or not, that heralded the market bottom. For casual observers of Chinese finance it all fit a familiar pattern: stocks careening from boom to bust,

propelled by day traders and rumours, and the government eventually restoring calm.

But to those inside the market, the story was in fact more novel. The decline in Chinese shares neatly paralleled the decline in the NASDAQ, America’s tech-heavy stock index. Guan Qingyou, a prominent Chinese economist, argued that the underlying trigger was nervousness about infla-

tion in America. A resulting jump in American bond yields had sparked risk aversion globally and hit China hard. Foreign investors, who had helped fuel China’s equity rally last year, retreated. Reacting to the same signals, big domestic fund managers also rushed to pare their holdings.

The sell-off, in other words, furnished evidence about two important areas of progress in China’s capital markets: they are both more professional and more interwoven with global finance than before. At the same time, incessant talk about the national team was a reminder of the idiosyncrasies of finance in a state-dominated economy—idiosyncrasies that matter ever more to the rest of the world.

Just five years ago no analysis of finance in China was complete without a detailed look at shadow banking. Formal banks were too strictly controlled to satisfy borrowing needs in the fast-growing economy. Stock and bond markets were underdeveloped. So between the cracks, lightly regulated institutions cropped up, willing to lend to anyone with collateral—especially property developers and miners.

Banks, despite their conservative exterior, had a big hand in shadow financing. They got around caps on deposit rates by funnelling savings into opaque “wealth-management products”, a chunk of which flowed through the shadow firms. Some of these products offered yields of over 10%. Yet they enjoyed informal guarantees from the state-owned banks, making investors think that they were as safe as deposits. ►

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The shadow-banking industry grew to 28.5% of banks' total assets in 2016.

Around that time a series of messy defaults alerted regulators to the dangers. They began a campaign to unwind the shadow financing. They forced trust companies to hold more capital. They stopped banks from offering guarantees on wealth products. And they opened the door to a new professional fund industry, pressing banks to launch formal wealth-management subsidiaries, rather like asset-management groups in developed markets.

Banks are barred from investing in equities but the new divisions face no such rules. They cannot, however, offer guarantees. Contracts specify that in a downturn investors will face losses. Some banks' wealth units manage their own funds; others team up with outside managers. Much of the money flows into the stockmarket.

The ubiquity of mobile payments has given ordinary people another route to funds. With a few taps users of Alipay or WeChat Pay can choose from hundreds of products. China's 100m or so retail punters have long believed that they can beat professional investors. But that sentiment has shifted over the past two years and many are now buying into mutual funds at record pace, says Desiree Wang of JPMorgan Asset Management. Much as retail investors have been vocal on social media about the performance of individual stocks, they now debate, laud and criticise the performance of the country's top fund managers.

Funds are also becoming more sophisticated. Since the global financial crisis a stream of Chinese nationals has returned to Hong Kong and Shanghai from London and New York, bringing a new set of skills, says Louis Luo of Aberdeen Standard Investments, an asset manager. Funds once limited to plain-vanilla active management have brought in specialists to launch quantitative and absolute-return funds.

These trends have been magnified at China's big mutual funds. Three of the largest mutual-fund companies—China Asset Management, E-Fund and Southern

Asset Management—have each surpassed 1trn yuan in assets under management. The rate of growth at mutual funds and at the banks' wealth-management arms is projected to take professionally managed assets in China from around 96trn yuan (\$14.7trn) in 2020 to 244trn yuan in 2029, or near the current size of the asset-management industry in America.

Part of that is a hedge-fund industry with Chinese characteristics. Regulators forbid the short-selling of individual stocks. But scores of big investment managers have emerged, with portfolios that encompass global and domestic assets as well as private and public markets. Operations at China's hedge funds are increasingly similar to those in global financial centres, says Gokul Laroia of Morgan Stanley, a bank. The biggest is Hillhouse Capital Management, run by Zhang Lei, with about \$70bn under management. Some are based offshore with a focus on China like Himalaya Capital, run in Seattle by Li Lu, once seen as a potential successor to Warren Buffett. Investors in China pay close attention to their decisions. When it was revealed last year that Mr Li had upped his stake in Postal Savings Bank of China, scores followed his lead. Shares in the bank, long derided as a stodgy state lender, have doubled in price since October.

Hello, world

Professional fund management is now approaching a tipping point. Retail investors still make up about 80% of average daily trading volume in the stockmarket; in America, even with the much ballyhooed rise in day trading, they account for just about a quarter. Yet institutional investors' holdings as a share of China's market capitalisation have increased from 30% in 2012 to about 50%. At this pace, says an executive at a Chinese asset manager, institutions' share of daily trading volume could hit 50% in the next five years. For foreign firms, the professionalisation of the markets could present an opening. Nothing in China comes easily, though.

For years many officials in China feared that wily Western "wolves" would gobble up the banking market. But Xu Zhong, a senior banking official, observed in 2019 that the problem was in fact the opposite. "We are not open enough," he said. This hindered development; competition was needed to help local firms improve. He added a rhetorical flourish of the kind that wins debates in Beijing: the lack of opening goes against President Xi Jinping's doctrine that China must be confident in its system. China, he concluded, should be bolder.

Mr Xu's line of reasoning has so far prevailed. There are two separate but related openings that are now drawing Chinese and global finance more closely together. The first is the opening of China's capital



markets to foreign investors. Funds allocated to China have risen rapidly since 2018. The inclusion of many onshore stocks into global indices, such as MSCI's flagship emerging-markets index, has led to tens of billions of dollars in passive fund allocation a year. There has also been a rush into the country's sovereign and policy-bank bonds, a tempting alternative to ultra-low-yielding bonds elsewhere.

There is still tremendous scope for growth. In the onshore stockmarket foreigners hold nearly 5% of Chinese shares; by comparison, foreigners own about 25% of American shares. Foreigners own just 3% of Chinese bonds, versus about 30% of the American market, and are overwhelmingly concentrated in government bonds. Corporate debt is still seen as too murky.

One obvious concern for foreign investors is whether they can get their money into and, crucially, out of, China. Doing so is now easier. Hong Kong's stock-connect programme, which allows trading in Chinese stocks, has fuelled a 40-fold increase in daily cross-border trading volumes in China since 2015. Repatriating profits through a qualified institutional-investor scheme used to take up to six months. Now it takes a few days. The real test will come if markets crash, as they did in 2015. Then, the government made it hard for foreigners to take funds out of the country.

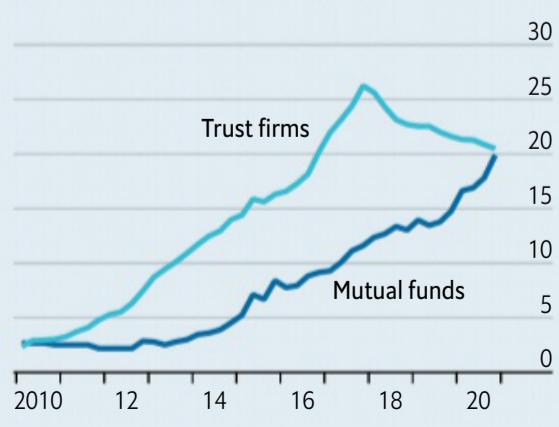
The second dimension of China's opening is to foreign institutions. Investment banks long touted China's potential yet were granted only glacial increases in their onshore presence. Things are speeding up, thanks in no small part to the deterioration in relations between America and China. Wall Street banks, the thinking in Beijing goes, are powerful lobbyists in Washington. Goldman Sachs, which set up its joint venture in China in 2004, is applying to take over 100% of its onshore investment bank. A number of other foreign banks, including Morgan Stanley and UBS, are expanding their domestic businesses.

The optimistic case is that these investments will, in time, pay dividends. The oft-

Light and shadows

China, assets under management

Yuan, trn



Source: Wind

repeated line from foreign financiers is that China is a long-term, strategic project. When SMIC, a semiconductor group, listed in Shanghai in July, it raised \$6.6bn, the largest offering in China since 2010. "That really got people wanting to do more work on initial public offerings (IPOS) and look beyond just secondary trading," says Christina Ma, head of greater China equities at Goldman Sachs. To be a full-service investment bank, a patchwork of licences is needed: for wealth management, underwriting and trading, to name a few. Some firms are putting them together. The disadvantages of being a foreign operator in the Chinese market are disappearing, says Eugene Qian, the chairman of UBS Securities.

The pessimistic view is that China is, and always will be, the market of the future. The head of a foreign bank in Shanghai describes China's regulatory demands as a "purity test". To obtain licences to operate, banks must have teams of underwriters and risk officers in place, all with the right qualifications. That drives up staffing costs before any revenue is earned. Vanguard, an American asset manager, recently halted plans to launch its own mutual-fund unit in China, citing the time it would take to build up a big presence.

Firms that do make inroads in China may face other headaches. HSBC was long the most successful foreign commercial bank in China. Now it is caught between Beijing and America after being entangled in a dispute over Huawei, a Chinese telecoms giant. Banks will need to be skilful at managing both their relations with China's government and their portfolios to stand any chance of success.

The giant IPO of Ant, a fintech group, would have been a monument to the power of China's capital markets. Instead, it became a monument to the power of its government. Officials halted it in November, less than 48 hours before trading was due to begin in Shanghai and Hong Kong. Heavy-handed regulatory actions are the most obvious way in which the state exercises control over markets. But there are also two more subtle points of influence.

First, even as the government has pulled back from day-to-day economic management, state-run firms cast a shadow over everyday business. State-owned investment banks may be less capable than foreign upstarts. But most big firms that turn to the capital markets know to give most of their business to state players.

The state is also an investment force to be reckoned with. Government-guided funds, which channel cash to companies in priority sectors such as chipmaking, have amassed about 9trn yuan in capital, and are growing quickly, according to China Venture, a research firm. "If they choose to compete in a certain area, you know you can't outbid them," says the head of a big

private Chinese investment company.

Second, the state sets rigid parameters around its markets. This is felt most acutely in foreign-exchange trading because of China's careful management of the yuan. Though it is now easier for investors to move money across borders, they still face a host of rules once in China. If foreign firms, for example, do well trading equities, they typically must take their profits out of the country before reallocating money to bonds. Moreover, there are few currency-hedging tools in the onshore market, a hindrance for big investors. Offshore hedging is possible but expensive.

A stately manner

Over the past few months, the strength of currency inflows into China—via both its trade surplus and inbound financial investments—implied that the yuan should have appreciated strongly. The head of a currency desk at a foreign bank in Shanghai says the central bank, acting through proxies, appeared to restrain it. "Whenever the yuan rose to 6.45 [against the dollar], big Chinese banks came in to stop it," he says. Without an open capital account, all prices in China's markets end up skewed. Stocks in Shanghai and Shenzhen trade at a premium of roughly 30% over stocks in the same companies listed in Hong Kong.

Few dare to go against the state. The China head of a global hedge fund reports that one unusual aspect of the mainland is that securities regulators conduct random inspections, turning up without warning and demanding answers to probing questions. "They would only do that in New York if you're under arrest," he says.

Yet the controls around China's markets can exert a pull of their own. Whereas China trails America in the size of its stock and bond markets, it is, by one measure, ahead in commodity futures. The number of contracts traded last year on its main exchanges (in Dalian, Shanghai and Zhengzhou) was six times higher than on Ameri-

ca's CME Group's exchanges. In terms of value they were roughly equivalent.

It is not just that China has the biggest appetite for commodities, from copper to iron ore. It is also home to some of the world's most liquid commodity exchanges. Smaller contract sizes make it easier for small companies to get involved in trading. And the very limits that Chinese investors face on investing offshore make commodity exchanges attractive. "There may be more contracts on foreign exchanges but not many have truly excellent liquidity. In China most contracts are liquid, giving investors lots of opportunities," says Sunny Fang of Orient Futures, one of China's biggest futures brokerages.

Commodity futures also show how China's markets shape global markets. Last April the price of oil futures in America collapsed below zero as demand evaporated and storage filled up. In China, though, futures stayed at around \$30 a barrel, with investors lapping them up. That attracted shipments to China and helped restore global oil prices to a more normal level.

"The information from Chinese futures is very clear. This is what the world's biggest consumers are paying for commodities," says John Browning of Bands Financial, a Shanghai-based futures brokerage. Whether in China or Texas, oil is oil, and prices should converge.

The information from China's stock and bond markets is more abstract. It tells you about the health and direction of the economy—no small thing given China's weight in the world. Yet interpreting it is not simple. Portfolio managers at Chinese investment groups have learned Western-style stock analysis but they also understand the Chinese regulatory environment, which can be crucial to performance, says Xu Yicheng of China International Capital Corporation, an investment bank. It is a divide that global firms and investors increasingly think they can, and need to, straddle. ■



Treasury markets

Overflowing

America's banking system has too much cash. The consequences are bizarre

WHEN BOND markets seized up in the spring of 2020 the problem was a shortage of cash. A global dash for dollars caused bond yields, which move inversely to prices, to spike. It sent the greenback soaring in currency markets. And it caused trading in Treasuries, usually the world's most liquid market, almost to dry up. Today the opposite problem looms: a surfeit of money. It stems from the Federal Reserve's response to last year's crisis. The central bank calmed markets by buying vast quantities of bonds with newly created cash, and has continued its purchases, at a current pace of at least \$120bn a month. The abundance of dollars is causing headaches for banks and investors.

A central bank buying a bond for cash sounds like a simple swap of asset for asset. In fact it often swells the banking system. When the Fed buys assets in the secondary market, say from a pension fund, it cannot pay the fund with the electronic money it creates, because only banks can hold these so-called "reserves". Instead, the fund gets a newly created deposit at its bank, and the bank gets the newly created reserve at the Fed. The bank ends up bigger, with a new liability and a new asset. The same thing also happens when a bank buys freshly issued debt at a Treasury auction, then sells it to the Fed. When the government spends the funds it has raised, such as by sending cheques to households or paying its staff, the banking system grows.

With both mechanisms at work in the pandemic, the Fed's assets and deposits at banks have shot up in tandem (see chart). The balance-sheet of JPMorgan Chase, America's biggest bank, grew from \$2.7trn to \$3.4trn in 2020 as deposits rose by 35%.

Cash will keep pouring in. Since last spring the Treasury has issued more debt than it has needed to fund its enormous emergency stimulus in 2020. As a result the "Treasury general account" (TGA)—the government's current (or checking) account at the Fed—grew from about \$350bn in early 2020 to about \$1.3trn on March 11th. But much of this money will soon be spent on President Biden's new stimulus programme, which includes cheques of \$1,400 to most Americans. The Treasury has signalled that the TGA balance will fall to \$500bn by the end of June. And current law, passed the last time America's debt ceiling was lifted, requires the balance to fall to about \$120bn by August. Any run-

down in the account means still more deposits and reserves for banks, in addition to those infused by the Fed.

The abundance of cash has two main effects. The first is that it has caused interest rates in the federal-funds market, in which banks lend reserves to one another overnight, to drift down. The Fed aims to keep the federal-funds rate between zero and 0.25%, but it has been falling within the band, and is now about 0.07%. As banks have abundant reserves, the federal-funds rate is economically insignificant. But rates in secured lending or "repo" markets, which matter much more to the real economy, have been approaching negative territory too. The benchmark secured-financing rate is just 0.01%. One-month Treasury bills yield only 0.03%.

The second effect is that banks are left with a lower ratio of equity capital to assets, making it harder to comply with minimum capital requirements set by regulators. One rule is the "supplementary leverage ratio" (SLR), which requires big banks to fund themselves with equity worth at least 5% of their total assets. In March 2020 regulators exempted both cash reserves and Treasuries from the SLR, recognising that the Fed's emergency actions, by expanding bank assets, had made it bind more tightly. The exemption, however, expires at the end of March.

Left unchecked, both factors could cause markets to behave strangely. If short-term interest rates go negative, then supposedly safe money-market funds might be forced to "break the buck", returning to investors less than was put in. Facing a change to the SLR, banks might turn away

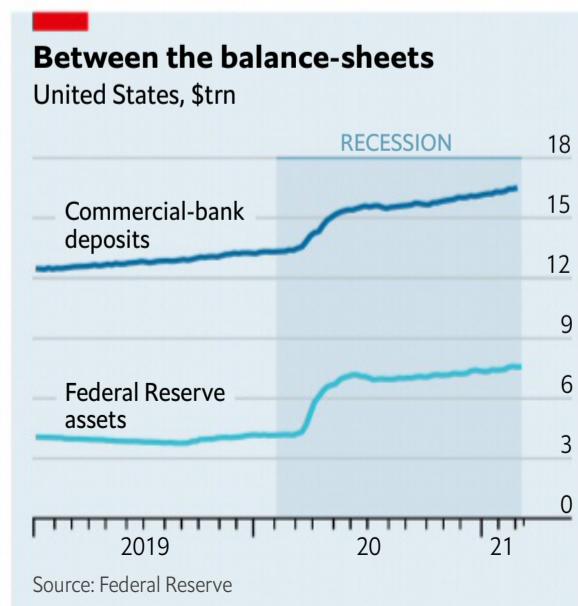
new deposits—a strategy JPMorgan floated in January. (The alternative, raising expensive capital to fund holdings of low-yielding cash, is unattractive.) The biggest worry concerns Treasury markets. An easy way for a bank to shrink its balance-sheet quickly is by selling assets to investors. Were a big bank or two to approach regulatory capital limits and start shunning Treasuries, the market could go into a tailspin. An early sign of this may have been in late February, when, amid a global bond-market sell-off, an auction of seven-year Treasuries suffered record low demand.

What to do? To fight the downward drift in interest rates, the Fed could marginally raise the rate it pays on reserves, currently 0.1%, though it declined to do so after its monetary-policy meeting on March 17th. Regulators might soon extend the exemption of reserves from the SLR (Jerome Powell, the Fed's chairman, hinted that an announcement regarding the rule was imminent). Extending the exemption, however, would be controversial. On February 26th Elizabeth Warren and Sherrod Brown, two Democratic senators, wrote to regulators urging them to restore the SLR "as quickly as possible", fearing that the pandemic was being used as an excuse to weaken reforms made after the global financial crisis.

In any case, renewing the SLR exemption will not solve the problem, argues Zoltan Pozsar of Credit Suisse, a bank. A more binding constraint might be the extra capital requirements that so-called "globally systemically important" banks incur as they grow. By the end of 2020 JPMorgan was on the cusp of seeing its SLR surcharge rise from 4% to 4.5% of risk-weighted assets, creating another regulatory cliff-edge. Other big banks face constraints, too: Wells Fargo, America's third-largest bank, has had its total assets capped since 2018 as punishment for a mis-selling scandal.

The inadequacy of the SLR exemption may explain why the Fed has expanded another of its programmes. The "overnight reverse-repo facility" allows investors to park cash overnight at the central bank in exchange for Treasuries. At its meeting the Fed lifted the maximum exchange with each counterparty from \$30bn to \$80bn. If investors park more money at the central bank directly, then banks' balance-sheets should shrink. The facility is barely being used but the Fed, says Mr Pozsar, is "foaming the runway".

The usual worry about letting investors have direct access to a central bank's balance-sheet is that it disintermediates the banks, and, by providing a new haven for cash, makes bank runs easier. Today, though, draining banks of liquidity might be precisely what is needed for financial stability—the latest example of the mind-bending monetary economics brought about by the pandemic. ■



Non-fungible tokens

What's wrong with this picture?

Non-fungible tokens are useful, innovative—and frothy

“**E**QUIVALENT VIII” by Carl Andre was a minimalist sculpture bought by Britain’s Tate Gallery in 1972. The Tate described the work as “a rectangular arrangement of 120 firebricks...altering the viewer’s relationship to the surrounding space”. The public called it a pile of bricks. A few years later newspapers execrated the gallery for having wasted brick-shaped wads of cash on the avant-garde work.

Once again, a famous institution is embracing a controversial new genre. On March 11th Christie’s sold a digital collage of images called “Everydays—The First 5,000 Days” for a cool \$69.3m. The sale elevated the work’s creator, Mike Winkelmann, aka Beeple, to the august company of David Hockney and Jeff Koons, the only two living painters to sell at such prices.

Christie’s sold the artwork as a “non-fungible token” (NFT), a craze for which has gripped Silicon Valley’s elite. An NFT is a secure, blockchain-based record that represents pieces of digital media. Invented a few years ago, it can link not only to digital art but also to text, videos or bits of code.

The pile-of-bricks criticism of digital artworks is that, in contrast to physical collectibles, they can be copied with perfect fidelity and consumed infinitely online. They thus have limited inherent value. A token brings bragging rights to a unique, authenticated version of a digital artwork, song or cute image of a cat (which first earned NFTs their popularity). Another attraction for the creative world is that NFTs make it easy to build in payments to artists when their works are sold on.

Since almost anything can be tokenised and sold if punters are willing, the craze stretches beyond pictures. Kings of Leon, a rock band, is selling a new album as an NFT and the National Basketball Association is selling clips of famous dunks. Creators can turn to a growing collection of marketplaces, such as OpenSea and Nifty Gateway. Even individual tweets are going for big sums (leading some to wonder if the former tweeter-in-chief, Donald Trump, could flog bits of his oeuvre).

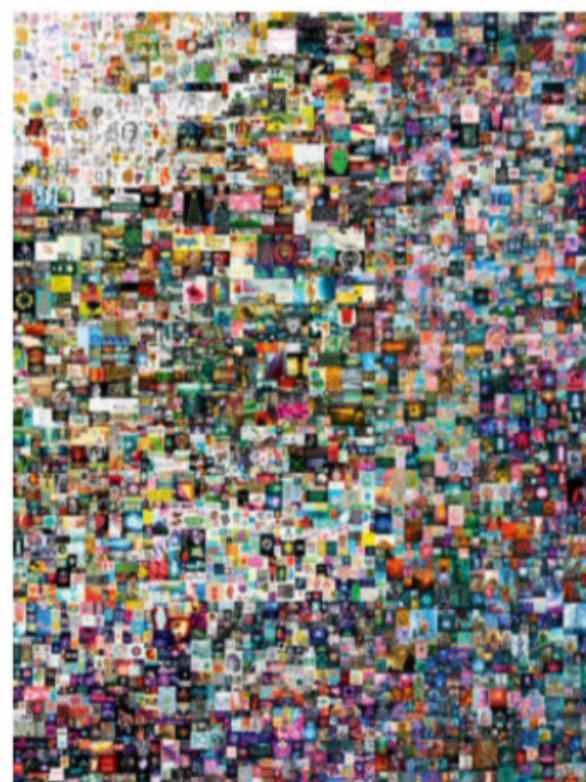
The bumper Beeple sale, plus the arrival of ever more creators, means a mania that has been largely confined to crypto and techie circles could move mainstream. The global NFT market grew from a few tens of millions of dollars in annual sales a few years ago to over \$300m in the past month alone, according to Andreessen Horowitz,

a venture-capital firm. NFTs mesh with the massive network effects of social media and meme culture, notes Sam Hart of the Interchain Foundation, a Swiss backer of blockchain infrastructure. There has been little time to educate buyers, he says.

The pitfalls are being called out by a few crypto experts. One worry is that broad crypto-enthusiasm may be what is really behind soaring NFT values. It has not gone unnoticed that the buyer of Beeple’s “Everydays” is Metakovan, a professional crypto investor. Christie’s got its \$69.3m in Ether, a cryptocurrency.

Some compare the NFT craze to the boom in initial coin offerings, a form of crowdfunding in which firms issue digital “coins” in return for a payment, in 2017–18, which turned to bust soon after. The soaring prices of many NFTs, reliant on ephemeral buzziness in places like Clubhouse, a hot new audio app, could quickly collapse. Celebrities including Lindsay Lohan jumping on a trend that was meant to be about helping penniless artists is, some reckon, another ominous sign. The upfront costs of “minting” NFTs are low, meanwhile, meaning potentially unlimited supply. (For now NFTs’ huge carbon footprint, owing to energy-intensive blockchain transactions, is not transparently recorded.)

A final uncertainty around NFTs’ value is that they can in practice be separated from the digital good to which they are tied, undermining their worth. A creator can change the image even after sale. One crypto artist recently “pulled the rug” on some NFTs to highlight the flaw. A series of colourful digital portraits suddenly metamorphosed into pictures of antique carpets. But the art market has always been prone to dodgy dealing. Picking NFTs looks akin to sorting real Rembrandts from those daubed by mere followers. ■



No Everydays object

Economics education

New instructions

WASHINGTON, DC

Efforts to modernise economics teaching gather steam

ECONOMISTS ARE keen fans of dynamism, but there are too few signs of it in economics teaching. A survey of American lecturers last year found that their methods, which rely on lectures and assigned textbook reading, had barely changed in 25 years. Textbooks themselves can lag behind the practice of economics. A study by Jane Ihrig of the Federal Reserve Board and Scott Wolla of the Federal Reserve Bank of St Louis found that at least three of six leading texts published since the start of 2020 misrepresented monetary policy. They say the Fed sets short-term interest rates by buying and selling securities. But since 2008 the central bank has changed the rate it pays on banks’ reserves instead.

Students say that inequality is the most pressing economic problem of the day, according to a paper by Samuel Bowles of the Santa Fe Institute and Wendy Carlin of University College, London. But in many textbooks, they argue, the topic is merely appended to the core curriculum. In 1993 a study found race and gender bias in introductory textbooks. A quarter of a century on, many are still found to underrepresent women. (The new survey did not consider race.) Some in the profession are now trying to shake up economics instruction.

This is partly because improved pedagogy is being seen as a way to diversify the profession. KimMarie McGoldrick, who leads a committee on economics education for the American Economic Association (AEA), says that teaching used not to be a priority, which may have sapped efforts to entice students into the subject. Now the classroom is being seen as a place for a more active approach.

In January the AEA supported a teacher-training conference meant to improve diversity among students and gather evidence on the impact of different teaching methods on different ethnicities, genders and races. It is also sharing best teaching practices. Those include more student participation, being open about biases in textbooks and encouraging teachers to replace “trivial or sexist” examples like “beer and sports cars” with weightier applications, like inequality and climate change.

Textbooks are evolving too. Last year Betsey Stevenson and Justin Wolfers of the University of Michigan published a tome that tries to avoid representation biases. (Its description of the mechanics of monetary policy also scores well.) In Britain a

► free book published by CORE, a charity that Ms Carlin helps run, has been adopted in 47 out of 60 economics-teaching universities. The book starts with inequality, rather than presenting it as an afterthought.

Yet CORE has struggled to make headway in America. That could reflect perceptions that it is left-wing—or that it de-emphasises the simple supply-and-demand diagrams that professors like to teach, or that it is too mathematically demanding. Or perhaps the incumbents are doing something right, as Gregory Mankiw, the author of a best-selling introductory text,

suggested in a recent webinar.

But barriers to change exist, too. Teachers, not students, pick the textbook, for instance. And though a free book might attract students, it is teachers who bear the cost of switching, as they have to revise their notes. The trend towards online-learning platforms, which bundle books with test banks and homework-marking software, does not help. The CORE team is developing a paid version of its books with such features for the American market.

Where professors have the freedom, time and resources, change is having posi-

tive results. Students of a curriculum based on CORE in Australia seem to do better in follow-up courses. A study by Ann Owen and Paul Hagstrom of Hamilton College found that using practical assignments as well as a curriculum covering “the broad range of social issues that economists study” led to women earning higher grades. When Carina Krusell, a student, took the revamped course she was delighted to be able to replicate analysis that found discrimination against people with black-sounding names. “The course made me realise, oh, this is economics.” ■

Buttonwood The Draghi effect

The bull case for euro-zone stockmarkets centres on Italy

PITY THE broker of European shares. He spends his afternoons making calls to investors in America. Few are returned. His clients are tired of Europe and its vaccine snafus. Even a good-news story, such as Mario Draghi becoming prime minister of Italy, has little traction. Italy is central to the fortunes of the euro zone. Mr Draghi is a reformer to be reckoned with. But a lot of people think the country cannot be fixed. “If God descended from heaven and became Italy’s prime minister,” says a hedge-fund boss, “the market still would not rally.”

The story of 2021 is that America’s economy is reopening with a bang. By comparison, everything in Europe looks sluggish: GDP growth, the roll-out of vaccines, the deployment of fiscal policy, slow-moving companies, and so on. That lack of urgency extends to the stockmarket. Europe has no FOMO (fear of missing out), says Graham Secker of Morgan Stanley, a bank. It is wholly lacking in the froth so evident in America. Yet that is probably a good thing. Because—whisper it—so far this year the euro-zone stockmarket has managed to keep up with America’s.

Among non-US stocks, the euro area looks attractive on a price-to-earnings basis, says Mr Secker. The perennial appeal of Europe is that it is cheap. That is not always, or even usually, decisive in stock investing. (Cheap for a reason, sneer the sceptics.) But since November, when news first broke of an effective vaccine for covid-19, “value” stocks (ie, those with a low price relative to earnings or book value) have generally done better than “growth” stocks, their antithesis. This rotation towards value ought to favour Europe, where bourses are crammed with cheap-looking banks, widget-makers and commodity firms,

the sort that tend to do well in periods of reflation, such as now.

Investors looking for deep value could do worse than consider Italy. In any event, if you take a punt on the euro zone, you are in effect taking a punt on Italy. Its stock-market is more European than most. It is chock-full of energy and financial companies, the kind that have been out of favour with investors until recently, and of which Europe has lots. But this is about more than just the make-up of its stock-market. Italy is the weakest big economy in continental Europe, itself a locus of weakness. If Italy can do better, then there is upside for the region as a whole.

Enter Mr Draghi. He is not quite a deity, though he came close to being one in his euro-saving eight-year stint as boss of the European Central Bank. Last month he was asked by Italy’s president to form a government. Parliament quickly fell in behind him. He has since set out some broad reform goals: to fix Italy’s tax code, its sclerotic bureaucracy and its sluggish courts. Each is a bar to enterprise and a stronger economy. Mr Draghi has picked



the right spots and is the right man to tackle them. But after an early burst of euphoria in Italy’s markets, doubts have crept in. A big one is that his time as prime minister is likely to be short-lived. There is also the question of whether a few bits of legislation can make a difference. Italy is a low-trust economy. This is reflected in the ubiquity of small family firms. An array of restrictive practices is hard-wired into its society. Changing all this quickly is not easy.

Still, you have to start somewhere. A big problem is the difficulty of making business agreements stick. It takes more than twice as long to enforce a contract in Italy than in France or Germany. A better functioning judicial system is the foundation on which a broader construct of trust might be built. Italy’s tax system is complex and discourages job creation. A little judicious reform might go a long way in improving incentives to work. And in his efforts to cut red tape, Mr Draghi can already point to progress. On March 10th Italy’s three largest union federations signed a pact agreeing to reforms of the government bureaucracy. This is a small start. But it speaks to a shift in the mood in Italy.



Mr Draghi has the advantage of being able to offer goodies in return for painful changes. Italy will be the largest beneficiary of the €750bn (\$900bn) EU recovery fund, the disbursements of which are tied to progress on reforms. This is not quite Joe Biden’s \$1.9trn mega-package but it is not nothing either. A lesson from the 1990s, when Italy strove to qualify for the euro, is that reforms can happen if Italians can see a payoff from them. This is a hard story for a broker to sell given the latest vaccine mishaps. Europe is the opposite of a meme stock. But right now, that might actually be a plus.

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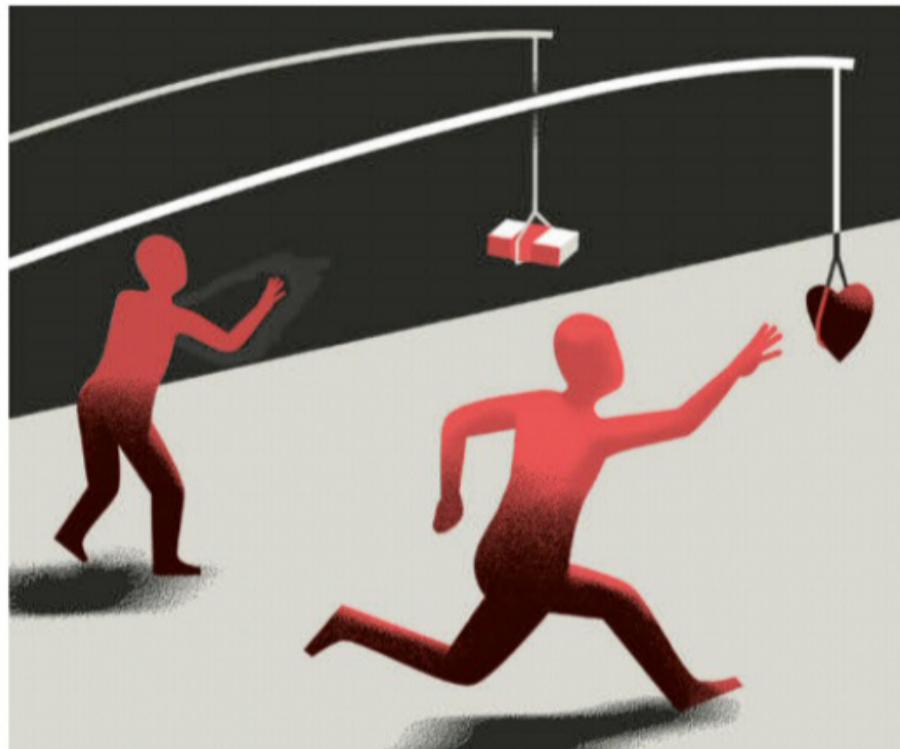


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Why two former central bankers are talking about trust



AFTER THE global financial crisis, people asked whether economists had not misunderstood something important about markets. The trying experience of recent years has some figures broadening the question, to ask whether economists have not failed to grasp something crucial about people. In a new book, "Value(s)", Mark Carney, governor of the Bank of England from 2013 to 2020, argues that within profit-obsessed market economies self-interest crowds out other motivations, making the world a more selfish place—and potentially a less resilient and prosperous one, too. The notion is disconcerting, not least because the dominance of orthodox economic thinking leaves leaders poorly equipped to assess and respond to such claims.

Parts of Mr Carney's argument are echoed in another new book, by Minouche Shafik, director of the London School of Economics, who served as one of Mr Carney's deputies at the Bank of England. Lady Shafik's book, "What We Owe Each Other", examines the role of the social contract and considers how changes in the global economy have undermined the function of the institutions societies rely on to keep the world a reasonably just place. Fixing up and modernising the social contract is necessary, she writes, "if we are not to witness a destructive fracturing of the mutual trust on which citizenship and society is based." People have become too disinterested in their obligations to other people and to society as a whole, Lady Shafik says; they owe each other more.

Such notions would not have been out of place in the work of the classical economists. Indeed, both Mr Carney and Lady Shafik cite Adam Smith's work, "The Theory of Moral Sentiments", which investigated how people come by their values, beliefs and preferences. They do so, Smith argued, through "mutual sympathy"—by imagining how others feel, essentially. This informs the public's sense of right and wrong and establishes a social foundation for other institutions, including markets. Smith saw markets as "living institutions, embedded in the culture, practice, traditions and trust of their day", writes Mr Carney. Modern economists rarely write about markets in such terms. The innovations of the neoclassical economists of the late 19th century shaped the profession into one in which utility, value and market prices are all treated as more or less the same thing. In an effort to become more rigorous

or scientific, economists stripped from their analysis the difficult moral questions that interested Smith. Economics "simply doesn't traffic in morality", writes Mr Carney, quoting "Freakonomics", a popular economics book.

But if economists have lost interest in questions of morality, and prefer instead to model worlds in which people act strictly in their own self-interest, moral forces still matter for economics. Lady Shafik reckons that the solidarity that underpins social stability has a moral rationale—that it is wrong to deny people the ability to meet their basic needs—as well as political and economic ones. If the social contract breaks down, and people do not adequately look after each other, then crises (of finance, public health or the environment, for example) will threaten prosperity.

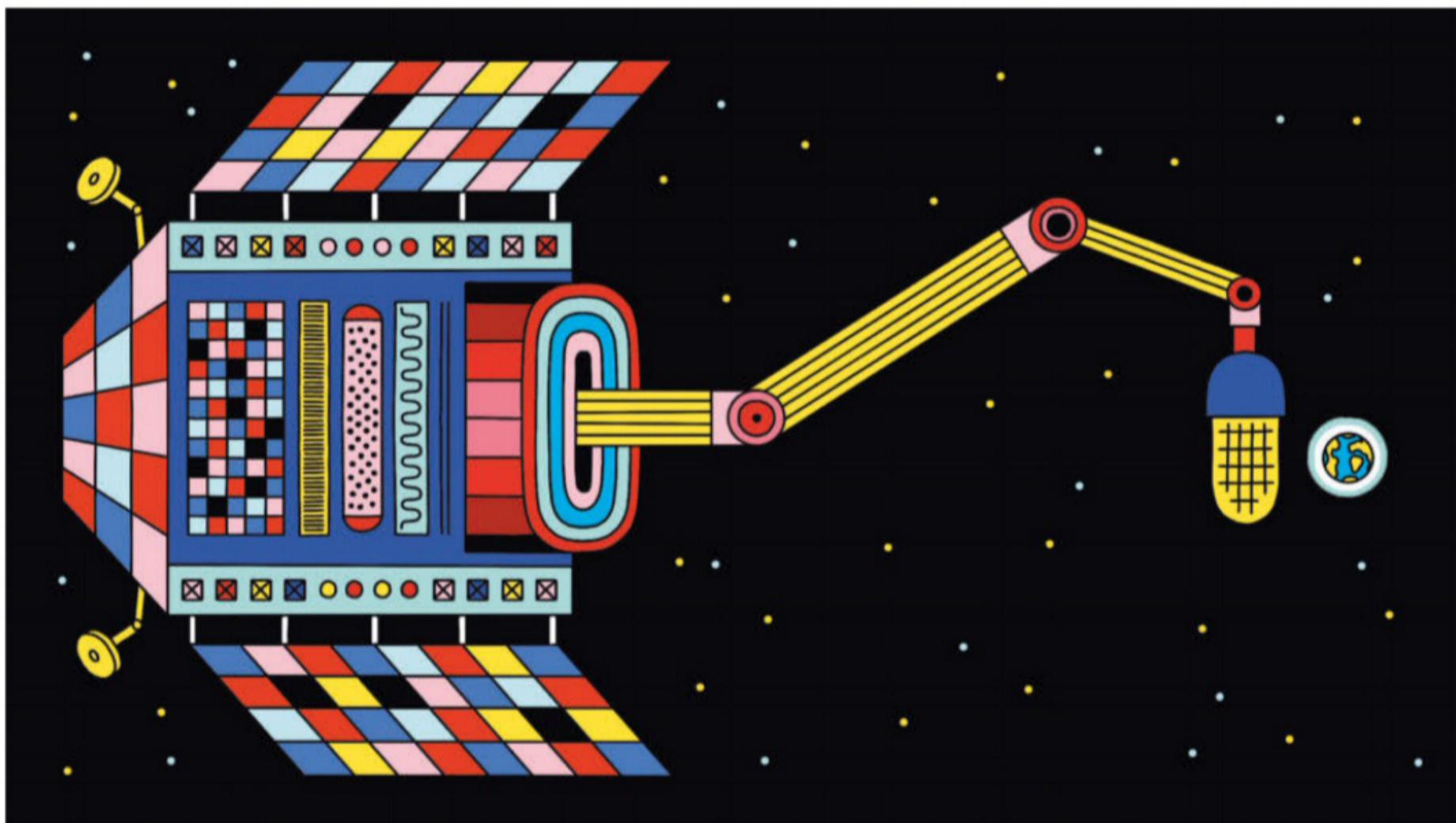
Mr Carney, for his part, worries that market activity and market incentives crowd out important social norms. Private vices like greed or ambition, which can help raise social welfare when exercised within a perfectly competitive market, are often socially destructive in other, less ideal circumstances. As money becomes the primary or sole measure of value, society loses the ability to distinguish between acts of wealth creation that deserve to be heralded and those that do not. People who pass up the opportunity to make money for other more selfless activities come to look more like suckers than model citizens. The loss of interest in doing good for its own sake leaves society less able to meet serious crises like climate change. (Mr Carney himself worked at Goldman Sachs, a bank, early in his career, and recently drew criticism for using dodgy methods to claim that the portfolio of the asset manager for which he now works emits net-zero carbon.)

Mr Carney provides some support for his argument. Studies show that monetary incentives can crowd out pro-social motivations in ways that prove counterproductive. (In experiments, for instance, student groups paid to do charitable work contribute less to the community than those given only a motivational talk about serving a good cause.) But the events of the past year provide lots of corroborating detail, in the struggles governments have faced persuading citizens to wear masks or be vaccinated, and the human and economic costs that have followed.

Maximised futility

It may seem strange that central bankers—who can be a dispassionate and humourless bunch, even for economists—should be among those to raise the alarm about the fraying of the social fabric. But it makes a certain kind of sense. As Mr Carney writes, trust is central to maintaining the stability of a currency or a financial system. Humourlessness itself can be a signal to the public, a mark of seriousness meant to provide assurance that the money and the bank accounts in which people hold their savings can be relied upon. Few public officials will be more aware of the risks from a breakdown in mutual trust and regard for others than those charged with fending off runs on the financial system.

Yet their writing illustrates just how difficult change will be. Their solutions—to make capitalism more inclusive and shore up safety-nets—are built around technocratic tweaks to policy, not a moral awakening, and understandably so. The analytical tools relied upon by top economic policymakers do not include mechanisms for quantifying the importance of social norms or cultivating ethical behaviour across the population. Indeed, Mr Carney's argument poses a fundamental dilemma: today's powerful figures are those that thrived within the current system. If society needs new moral leadership, it may need to look somewhere else. ■



Espionage (1)

Ears in the sky

By listening for radio and radar signals, a new generation of satellites can track human activity, both licit and illicit

IN THE MIDDLE of last year, Ecuadorians watched with concern as 340 foreign boats, most of them Chinese, fished just outside the Exclusive Economic Zone (EEZ) around their country's westernmost province, the Galapagos Islands. The law of the sea requires such vessels to carry GPS-based automatic identification systems (AIS) that broadcast where they are, and to keep those systems switched on. Some boats, however, failed to comply. There were more than 550 instances of vessels not transmitting their locations for over a day. This regular radio silence stoked fears that the boats concerned were sneaking into Ecuador's waters to plunder its fish.

Both local officials and China's ambassador to Ecuador denied this, and said all the boats were sticking to the rules. In October, however, HawkEye 360, a satellite operator based in Virginia, announced it had detected vessels inside Ecuador's EEZ on 14 occasions when the boats in question were not transmitting AIS (see map on next page). HawkEye's satellites could pinpoint these renegades by listening for faint signals emanating from their navigation ra-

dars and radio communications.

HawkEye's satellites are cubesats, a standard design the size of a shoebox that can be furnished with whatever kit the owner chooses. Being small, cubesats are cheap to build and launch. HawkEye deployed its first cluster, of three of them, in 2018. They are now in an orbit that takes them over both of Earth's poles. This means that, as the planet revolves beneath them, every point on its surface can be monitored at regular intervals.

Initially, the data the satellites collected were downloaded to a tracking station on Svalbard, a Norwegian island in the Arctic Ocean. But business has since boomed. HawkEye now counts a dozen governments among its customers, as well as private clients. The firm has therefore recruit-

ed the services of a second ground station, in Antarctica, and it put a second cluster into orbit on January 24th. It plans three more such launches this year, and also intends to widen its network of ground stations yet further.

Given this success, it is hardly surprising that at least six other companies are operating or developing similar systems. Quilty Analytics, a research firm in Florida, expects the number of radio-frequency (RF) intelligence satellites of this sort in orbit to multiply from a dozen at the beginning of January to more than 60 by the end of next year.

Unmixed signals

RF-intelligence satellites detect where a transmission is coming from in two ways. One, trilateration, relies on measuring minute differences in a signal's arrival time at each member of a cluster. The other uses the Doppler effect—the shift in a signal's frequency if the transmitter is moving relative to the receiver. Together, according to HawkEye, these can pinpoint a signal's source to within 500 metres of its true origin. Kleos Space, a Luxembourgish company that launched its first cluster in November and hopes to put two more up later this year, says its accuracy ranges between 3,000 and 200 metres.

A cluster sweeps a band of territory 2,000km wide so, circling the planet every 90 minutes or so, it can revisit many areas several times a day. Moreover, unlike spy satellites fitted with optical cameras, RF

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► satellites can see through clouds. Their receivers are not sensitive enough to detect standard mobile phones. But they can pick up satellite phones, walkie-talkies and all manner of radar. And, while vessels can and do illicitly disable their AIS, switching off their communications gear and the radar they use for navigation and collision-avoidance is another matter entirely. "Even pirates don't turn those things off," says John Beckner, boss of Horizon Technologies, a British firm that plans its first launch in August.

RF data are also cheap to collect. Satellites fitted with robotic high-resolution cameras are costly. Flying shoeboxes that capture and timestamp radio signals are not. Horizon says that building, insuring and launching its August mission should cost no more than about \$1.4m.

America's National Geospatial-Intelligence Agency (NGA), one of that country's numerous spying operations, is a big user of RF intelligence. It employs HawkEye's data to find guerrilla camps and mobile missile-launchers, and to track both conventional warships and unconventional ones, like the weaponised speedboats sometimes deployed by Iran. Robert Cardillo, a former director of the agency who now advises HawkEye, says dozens of navies, Russia's included, spoof AIS signals to make warships appear to be in places which they are not. RF intelligence is not fooled by this. Mr Cardillo says, too, that the tininess of RF satellites makes them hard for an enemy to destroy.

Beside matters military, the NGA also uses RF data to unearth illicit economic activity—of which unauthorised fishing is merely one instance. Outright piracy is another. And the technique also works on land. In 2019, for example, it led to the discovery of an illegal gold mine being run by a Chinese company in a jungle in Gabon. And in 2020 the managers of Garamba National Park in the Democratic Republic of Congo began using HawkEye data to spot

elephant poachers and dispatch rangers to deal with them.

There are commercial uses, too. Andy Bowyer, Kleos's boss, reports interest among telecoms firms keen to locate rogue transmitters, such as unlicensed ham radios, that are operating within their domains. Regulators, meanwhile, would like the firm to create "heat maps" of shifting patterns of legitimate transmissions. These would help them select sites for mobile-phone towers and also give them a better idea of the value in particular places of licences to use parts of the radio spectrum that are going up for auction. Some charities, too, have an interest in Kleos's data. RF information can, for example, flag up routes taken by migrants likely to need food and other aid.

Declustering

Using satellite clusters to gather RF intelligence is clever. But engineers at Unseenlabs, a firm in Rennes, France, reckon it is already outdated. At the moment, Unseen has three satellites in orbit and sells data to about ten navies, including France's, as well as to maritime insurers and a handful of big defence contractors. But its satellites operate independently, rather than as a cluster, for Unseenlabs' engineers have devised a detection system, which they claim is accurate to within 5,000 metres, that requires but a single satellite.

How this system works remains a secret—and one that, according to Clément Galic, Unseenlabs' boss, is protected by the French state. After several attempts were made to steal it, he says, the defence ministry's Directorate General of Armaments offered its assistance in defending the details from cybertheft.

Secret or not, though, Unseenlabs may soon have competitors in the single-satellite-RF-intelligence market, for Horizon, too, says that it has worked out how to perform the trick—a claim backed up by the fact that its launch in August will loft but a

single device. Shortly after it filed an application for a patent in America on the wizardry involved, the government there classified it. Even so, Mr Beckner drops a hint. The method involves assessing differences in the angles at which a target's signals arrive during the satellite's arc across the sky. Horizon says its system will be accurate to within 3,000 metres. By the middle of next year, it, too, plans to operate three satellites in different orbits—enough to scan most of the planet every two hours or so.

Horizon also plans to compile a library of unique radar-pulse "fingerprints" of the world's vessels, for the tiny differences in componentry that exist even between examples of the same make and model of equipment mean that signals can often be linked to a specific device. It will thus be able to determine not merely that a vessel of some sort is in a certain place, but which vessel it is, and where else it has been.

Unseenlabs, for its part, has already catalogued the radar fingerprints of many thousands of vessels, several hundred of which have, subsequent to the events of last summer, spent time in the Galapagos EEZ with their AIS beacons switched off. It remains to be seen what Ecuador's authorities will do with that information. But no one can say they weren't told. ■

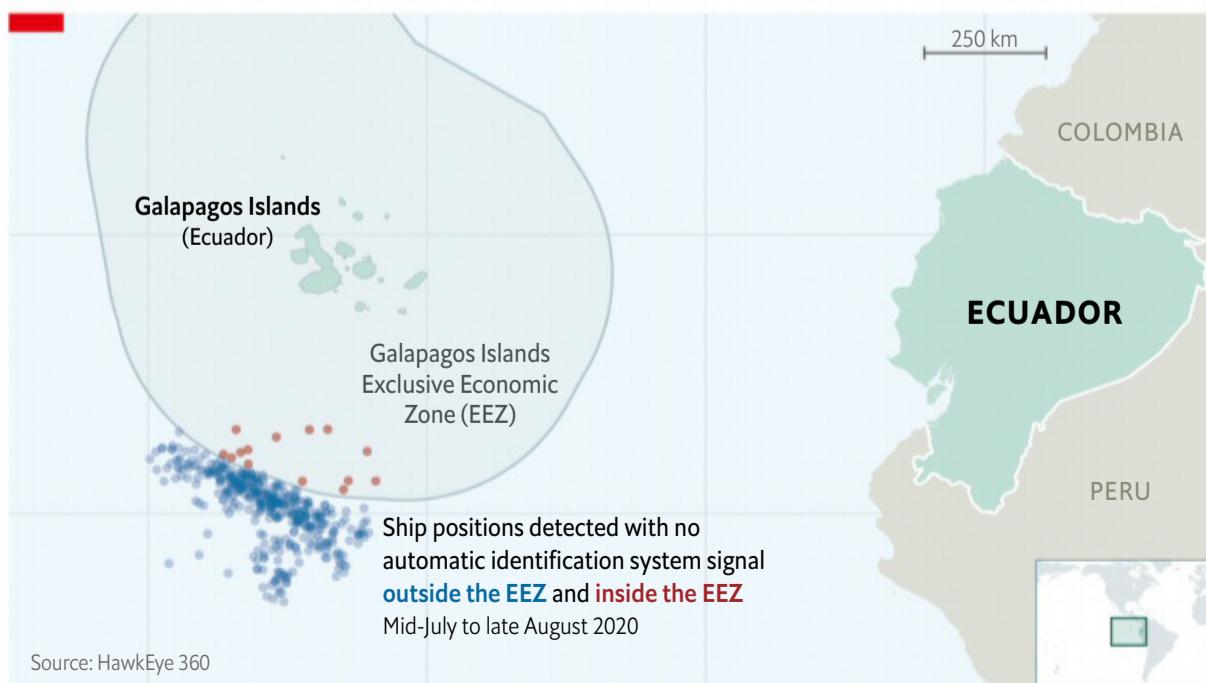
Espionage (2)

Round the bend

How to see what is hidden from view

IN A LOCKED room in a busy city, some terrorists are holding a hostage. The curtains are mostly drawn, cutting off any direct line of sight for those outside. In a building across the street, a team of engineers are set a task: they can have whatever equipment they need, but they must paint as clear a picture as possible of what is happening inside the room.

This was the challenge given in 2015 to Daniele Faccio, then at Heriot-Watt University, in Edinburgh, by Dstl, a British government defence laboratory. He and his team eventually found a way to see around corners from a distance of 50 metres—which was reckoned impressive at the time, even though the system they devised could detect only the motion and position of hidden objects, rather than taking pictures of them. Now, however, Xu Feihu and Pan Jianwei of the University of Science and Technology of China, in Hefei, have blown that record out of the water. As they describe in the *Proceedings of the National Academy of Sciences*, they have managed to



▶ look around corners from a distance of well over a kilometre.

Non-line-of-sight imaging of this sort relies on two principles. One is that objects are visible to an observer if light bouncing off them makes its way to that observer's eyes or instruments. The other is that at least some light reflects off all but the blackest, most absorbing surfaces. The upshot is that something hidden from an observer's line of sight might nevertheless be visible if it is sufficiently near a wall which can serve as a reflecting surface. In this case, the observer can illuminate the wall with a tightly focused beam of light (in practice, probably a laser), knowing that some of the beam's light will bounce off the wall to illuminate the concealed object, and that some of this illumination will, in turn, be reflected back whence it came via the wall. The fraction of the original beam returned by this trilogy of reflections may be minuscule, and the information it contains may appear hopelessly jumbled. But sufficiently smart mathematics can turn it into an image of the thing it bounced off.

Mirror, mirror, you're the wall

Dr Xu and Dr Pan conducted their trial at night, to minimise the amount of background light that might have interfered with the results. Their targets, a dummy of a human being on one experimental run and a giant "H" on another, were concealed behind a barrier in an apartment in a block of flats in Shanghai. Their laser and receiving apparatus were in a second apartment block 1.43km away. The receiving apparatus, an instrument called a single-photon avalanche diode (SPAD), was, as its name suggests, so sensitive that it could detect and count individual photons, the particles of which light beams are composed. This was just as well, for, of every seven million billion photons fired across the gap by the laser, only a single one returned.

Because each firing of the laser yielded so little information, the researchers had to take many shots to build up an image. To that end, they imagined a grid on the target wall, 64 dots wide and 64 deep. They fired the laser at each dot in turn, and then fed the data from the SPAD into an algorithm capable of reconstructing, albeit fuzzily, an image of the hidden object (see picture).

The military applications of this technology suggest themselves. They were, after all, why Dstl sponsored Dr Faccio in the first place. But others are also interested. America's space agency, NASA, has paid for such work in the past in the hope of putting a laser on a satellite orbiting a distant world. This would permit the photographing of the otherwise-invisible interiors of caverns on the surfaces of moons and planets. And, in a more practical vein, engineers in the autonomous-vehicle industry would be keen on a technology that let



Peek-a-boo

their cars spot other motorists blithely speeding around blind corners.

For now, such applications remain far in the future. Capturing the experimental data in Shanghai took several hours, which is of little use either on the road or in fast-moving situations like hostage-taking. The amount of light lost between bounces also puts a limit on how far away an object can be from the reflecting wall before the technique stops being useful. The dummy used by Dr Xu and Dr Pan was 75cm from the wall, which is probably near that limit. These caveats aside, however, performing the trick over a distance of almost 1½km is a staggering advance on previous efforts. It would not be surprising, says Dr Faccio, now that it is known what is possible, if that record, too, were broken. ■

Entomology

Swarm immunity

Honeybees run vaccination programmes, too

AN OLD SAW has it that there is nothing new under the sun. But it may still come as a surprise that human beings are not alone in having invented vaccination. Work just published in the *Journal of Experimental Biology* by Gyan Harwood of the University of Illinois, Urbana-Champaign, confirms that honeybees got there first. It also suggests that they run what look like the equivalent of prime-boost childhood vaccination programmes.

Being gregarious, honeybees are at constant risk of diseases sweeping through their hives. Most animals which live in crowded conditions have particularly robust immune systems, so it long puzzled

entomologists that honeybees do not. Indeed, they actually possess fewer immune-related genes than most solitary bees.

Part of the answer, discovered in 2015, is that queen bees vaccinate their eggs by transferring into them, before they are laid, fragments of proteins from disease-causing pathogens. These act as antigens which trigger the development of a protective immune response in the developing young. But that observation raises the question of how the queen receives her antigen supply in the first place, for she subsists purely on royal jelly, a substance secreted by worker bees which are at the stage of their lives (which precedes the period that they spend flying around foraging for nectar and pollen) when they act as nurses to larvae. Dr Harwood therefore wondered if the nurses were incorporating into the royal jelly they were producing, fragments from pathogens they had consumed while eating the victuals brought to the hive by the foragers.

To test this idea, he teamed up with a group at the University of Helsinki, in Finland, led by Heli Salmela. Together, they collected about 150 nurse bees and divided them among six queenless mini hives equipped with broods of larvae to look after. Instead of nectar, they fed the nurses on sugar-water, and for three of the hives they laced this syrup with *Paenibacillus larvae*, a bacterium that causes a hive-killing disease called American foulbrood.

In this case, to stop such an infection happening, Dr Harwood and Dr Salmela heat-treated, and so killed, the pathogens in advance. They also labelled the dead bacteria with a fluorescent dye, to make their subsequent fates easy to track. And, sure enough, fluorescent microscopy confirmed that fragments of *P. larvae* were getting into royal jelly secreted by those bees which had been fed with the laced sugar-water. Moreover, examination of this royal jelly revealed elevated levels, compared with royal jelly from bees that had not been dosed with *P. larvae*, of an antimicrobial peptide known as defensin-1. This substance is thought to help bee immune systems fend off bacterial infections.

All told, these findings suggest that nurse bees are indeed, via their royal jelly, passing antigens on to the queen for inoculation into her eggs. They also mean, because larvae, too, receive royal jelly for the first few days after they hatch, that the nurses are inoculating their larval charges as well. Each infant bee is therefore being vaccinated twice.

Whether this is simply a belt-and-braces approach, or is actually the equivalent of a prime-boost human vaccination in which the second dose multiplies the effect of the first, remains to be determined. But either way, it seems protective. Not so much herd, as swarm, immunity. ■

Evolution

Mitochondria 2.0

A new single-celled organism throws light on an important biological advance

THE ROAD to human beings was long and winding. But a big step on it was the first eukaryotic cell. Eukaryotes comprise the living world as it is familiar from TV documentaries: animals (humans included) and also plants, seaweeds, fungi and a host of other types of creature too tiny for the naked eye, but which flit around attractively under a microscope.

This extraordinary diversity was made possible because, unlike the cells of life's other two great realms, the bacteria and the archaea, eukaryotic cells have lots of internal structures known as organelles. The division of labour which these organelles permit has allowed eukaryotes not merely to evolve, but to become gradually more sophisticated over the ages in ways that bacteria and archaea have never managed. How organelles came into existence is therefore a matter of great biological interest. And a discovery made recently in the depths of Lake Zug, in Switzerland, has cast a bit more light on the subject.

What lies beneath

Most experts reckon the first eukaryotic cell was a collaboration which happened about 2bn years ago between an archaean and some bacteria. These bacteria were the ancestors of organelles called mitochondria that even today retain their own stripped-down versions of bacterial genomes and which have the specialist task in a cell's economy of generating energy-rich molecules called ATP that power many cellular chemical reactions.

They usually do this by reacting glucose with oxygen to produce water and carbon dioxide, in a process known as aerobic respiration. But not always. Some eukaryotes live in places with no oxygen, and their mitochondria have evolved accordingly. In a less efficient process known as anaerobic respiration, they churn out hydrogen, rather than CO₂. Genetic analysis shows, nevertheless, that these odd mitochondria are still mitochondria. So it came as a surprise to Jon Graf and Jana Milucka of the Max Planck Institute for Marine Microbiology in Bremen, Germany, to discover that the "mitochondria" in some organisms they were looking at, aren't.

The creatures in question (see picture), which they describe in a paper in *Nature*, belong to a group of single-celled eukaryotes called ciliates. They live in Lake Zug at such depth that no oxygen comes down

to them from the surface. These bottom-waters do, however, make up for that lack by being rich in both methane and nitrates. These are the breakdown products of organic matter swept into the lake and digested by bacteria in the lake bed.

Some other bacteria, called methanotrophs, are able to consume the methane as a food stuff. And some methanotrophs are, in turn, able to use nitrates—which have three oxygen atoms to every one of nitrogen—as an oxygen substitute in a form of respiration known as denitrification that is a halfway house between the aerobic and the anaerobic varieties of that process. This was why, in October 2018, Dr Graf and Dr Milucka travelled to Lake Zug. Their goal was to study its methanotrophic bacteria to see if they, too, were denitrifiers.

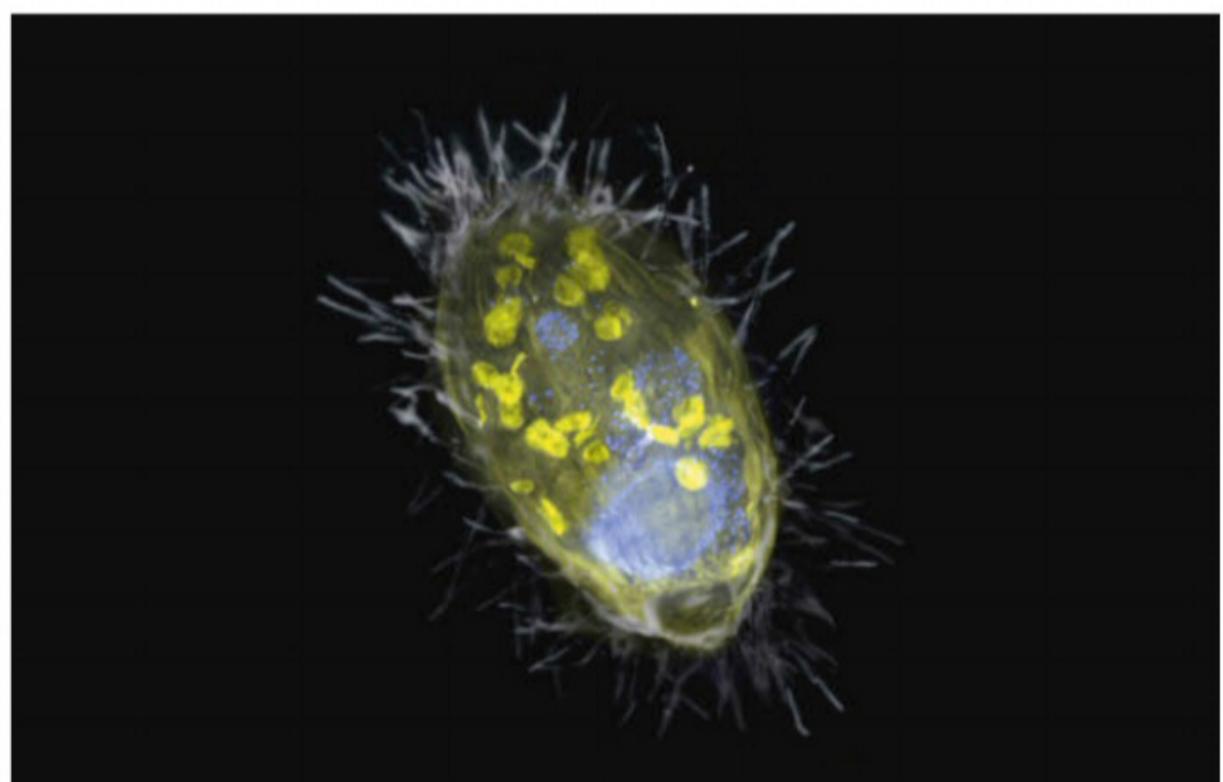
To this end, they collected samples from the lake's depths and sent them to the Max Planck Genome Centre, in Cologne, for analysis. They were searching, in particular, for DNA sequences that looked as though they encoded denitrifying enzymes. And they found some. But not in the way they expected. "We discovered denitrifying genes, but belonging to a genome that was extremely spartan," says Dr Milucka. "It consisted of only 310 genes, encoding a respiration pathway nearly identical to that of mitochondria—except with a chemistry based on nitrate rather than oxygen."

That sparsity suggested the genome in question did not belong to a free-living organism. And, with the benefit of further expeditions to the lake, Dr Graf and Dr Milucka now know that it is actually the DNA of a novel bacterium that is well on the way to becoming an organelle, and is hosted by a previously undescribed species of ciliate. Moreover, this bacterium-cum-organelle's free-living ancestor appears to have taken up residence in the ancestors of its ciliate hosts only 200m years ago. It thus provides a snapshot of the process by which mitochondria themselves formed. It has also proved a success. Nitrate-breathing ciliates related to the one in Lake Zug have spread across the globe. A comparison conducted by Dr Graf and Dr Milucka of DNA samples in a genetic database has revealed closely related species as far afield from Switzerland as the lakes of East Africa's Great Rift Valley.

Complexity theory

Dr Graf's and Dr Milucka's discovery of this incipient organelle does have an intriguing parallel, for mitochondria are not the only organelles to arrive in eukaryotic cells as bacteria. So-called plastids, found in algae and plants (and which, among other things, permit those organisms to photosynthesise), did so too. And they also turned up twice—the first time about 1.5bn years ago and the second some 60m years in the past.

The search is therefore now on for other novel organelles, perhaps encoding other types of respiration, in other single-celled eukaryotes lurking in obscure parts of the world. The more such examples are found, the better the process of organelle formation will be understood, and with it, that mysterious ancestral organism which eventually gave rise to people. ■



Lake monster

**Fighting falsehood**

Not gonna lie

Diagnosing the problem of rampant dishonesty is easier than solving it

THIS IS AN apt moment for a book about the American legal system's treatment of lies. Donald Trump's presidency kicked off with a lie about the size of the crowd at his inauguration and degenerated into a four-year extravaganza of flim-flam. After he lost to Joe Biden, he and his supporters disseminated the biggest lie in the history of modern American politics: that he had won the election, only to have it stolen. The propaganda campaign culminated in a violent assault on the Capitol and Mr Trump's second impeachment. At his trial Republicans argued that, regardless of whether Mr Trump's claims were lies, as long as he did not call for violence he had a constitutional right to make them.

Under current law, they were probably right. The Supreme Court was long ambivalent as to whether falsehoods are protected by the free-speech guarantee of the First Amendment to America's constitution. But in 2012, in *United States v Alvarez*, the court for the first time held that freedom of speech covers not just truth, opin-

Liar. By Cass Sunstein. *Oxford University Press; 192 pages; \$22.95. To be published in Britain in May; £17.99*

ion and mistakes but barefaced lies. The defendant had boasted of playing hockey for the Detroit Red Wings and winning the Congressional Medal of Honour. The second lie violated the Stolen Valour Act, which barred false claims of receiving military decorations. But the court struck down the law, worried that if Congress could stop people making one type of statement, it could stop them making any.

Cass Sunstein, a law professor and formerly an official in Barack Obama's White House, finds the *Alvarez* ruling absurd. He thinks the court was right that falsehoods should normally enjoy First Amendment protection, since no one wants the government investigating everyday fibs. But freedom of speech, like all rights, has limits: in one famous formulation, no one has a right to shout "Fire!" in a crowded theatre.

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There are laws against incitement, fraud, false advertising and defamation. Mr Sunstein wants to draw these limits a bit more tightly, especially because of the internet's staggering power to amplify untruths. His argument is convincing, as far as it goes. But it does not go far enough.

What is wrong with saying things that are not true? In some cases, nothing. Mr Sunstein does not share the Kantian view that lying is wrong on principle, instead taking J.S. Mill's utilitarian stance that it is bad when it hurts people. This leaves room for white lies. One reason falsehoods should normally be considered protected speech is that officials are not sufficiently well-informed to second-guess citizens as to whether a given lie is beneficial. They also cannot reliably tell whether someone is lying or merely deluded. Most important, punishing falsehoods would deter others from voicing their opinions, or even their imprecise memories.

Greatest lies for the greatest number

Yet some kinds of false speech are too dangerous to allow. To clarify the stakes, Mr Sunstein draws a grid showing degrees of culpability (from conscious lying to mere mistakes) and of the imminence, certainty and gravity of the damage (from immediate catastrophe to possible erosion of norms). Established laws against some kinds of false speech tend to respect these distinctions. In America incitement re-

quires a link to an imminent crime. Fraud and defamation need proof that offenders knew or should have known their claims were false, and that someone was harmed.

One area where Mr Sunstein finds the law too narrow is defamation. The current standard was set in 1964 by *New York Times Co. v Sullivan*, in which a police commissioner in Alabama sued over an advertisement placed by civil-rights activists that had minor inaccuracies. Finding for the paper, the Supreme Court established that a public figure who brings a defamation case must prove "actual malice": either deliberate lying, or a reckless disregard for the truth. Awarding damages for mere mistakes would impoverish debate, the court ruled. That comported with an older doctrine, established by Justice Oliver Wendell Holmes, which holds that "the best test of truth is the power of the thought to get itself accepted in the marketplace of ideas". The remedy for false speech is not a ban, but promoting more speech—"counterspeech" as Mr Sunstein puts it—in the confidence that the truth will win out.

That principle is no longer as convincing as it once seemed. Mr Sunstein summarises decades of psychological research showing that people embrace congenial lies rather than difficult truths, and cling to them more firmly when confronted with contradictory evidence. Flashy whoppers spread faster than complex facts, and are remembered even after being debunked. "Falsehood flies, and the Truth comes limping after it; so that when Men come to be undeceiv'd, it is too late," as Jonathan Swift concluded three centuries ago, even without double-blind experiments.

Mendacity flies even faster online. Salacious posts attract attention and retweets; few users bother to share corrections. With the advent of social-media shaming, average folk now experience the public humiliation once reserved for tabloid-worthy celebrities. Deepfakes show people doing things they never did, with near-perfect verisimilitude. In these circumstances, salvaging a reputation with counterspeech seems a tall order.

Mr Sunstein's analysis is solid, but his solutions are vague. He calls for "warnings and disclosures [by social-media platforms]...to inform people that what has been said is not true", a task such firms have hitherto struggled to perform. He suggests a low cap on damages in libel suits, to lessen their chilling effect and make it possible to scrap the "actual malice" requirement. But paltry pay-outs might be a disincentive to sue, even if the chances of success were higher. He is less helpful on how to fight non-defamatory political lies, such as covid-19 denialism, which harm all of society rather than someone specific. He abjures state regulation of such speech, again shunting most of the responsibility

onto those social-media outfits—which, again, have so far not proved up to the job.

His book barely mentions the most vehemently prohibited kind of false speech—perjury. It is treated in passing as a form of prohibition that (like libel) gets a constitutional pass because of its long common-law tradition, and in which the likelihood of imminent harm is similar to false advertising. But Mr Sunstein does not see the irony in a judicial system exempting itself from the principle that a free marketplace of ideas is the best guarantor of truth. America's courts maintain that the First Amendment gives citizens a right to lie—unless they are speaking to those same courts. Then it is a felony punishable by up to five years in jail.

The Republican campaign of electoral repudiation highlighted this paradox. On television and in social media, Mr Trump and his lawyers levelled charges of massive ballot fraud against Democrats, state governments and voting-machine companies. Yet as soon as those lawyers entered a courtroom—where false assertions might be punished—the baseless claims abruptly vanished. Broadcast networks that lent credence to such allegations now face multi-billion-dollar defamation suits brought by voting-machine firms, and have begun blocking guests from repeating them. Social-media platforms, which are legally exempt from liability for their users' statements, still circulate them.

Lots born every minute

Uncomfortably but undeniably, in this episode severe legal penalties have done a better job than counterspeech at safeguarding the integrity of public debate. Indeed, because the law offers remedies to parties that suffer financially from defamation, in America and elsewhere speech focusing on lawyered-up corporations is likely to be more truthful than that about government bodies and other soft targets. The result is a sort of fake-news tragedy of the commons, in which big companies and the rich are fairly represented in public discourse, while the state and civil society sink into a swamp of disinformation.

Mr Sunstein refers several times to the need for internet platforms to discourage dangerous falsehoods through "choice architecture". He even suggests the government might use regulations to promote this. But he makes little effort to explore what it might entail, apart from the content-monitoring that social-media companies already deploy with limited success. He approaches lying mainly as a problem of individuals deciding whether or not to tell the truth, rather than one of systems optimised to spread true or false speech.

In the age of the internet this focus on individual responsibility seems antique, and the distinction between lying and in-

advertent falsehood flimsy. How to decide if a tweeter is lying, deluded or just trying to maximise their likes and shares? It is difficult to know whether Mr Trump, a huckster raised on the all-American dictum that the best salesmen believe their own spiels, actually thinks the election was stolen from him. The con-man's eternal excuse is that he says what the rubes want to hear.

The internet in its current architecture is like a distributed con-artist, powered by artificial intelligence and instantly generating any falsehood that pleases a substantial audience. Perhaps Mr Sunstein is right, and American law, solicitous of freedom of speech, can't do much about this. In that case the big struggles to protect democracy from lies will take place not in the courts but inside technology firms—and will require a different book to chart them. ■



The right to die

Going gently

The Inevitable. By Katie Engelhart. St Martin's Press; 352 pages; \$27.99. Atlantic Books; £15.99

IF IT IS humane to put down a dog in unbearable and incurable pain, why not extend the same right to humans if they want it? That question echoes through "The Inevitable" as it follows four people in search of a good death—and in fear of a bad one.

Katie Engelhart's deeply researched and beautifully reported book raises familiar quandaries. Do people have a right to die on their own terms? Should doctors help? ▶

► Do motivations matter? And might a right become a duty for everyone who grows old, dependent or demented? It also considers less publicised problems, such as: how do people actually die? Advances in medicine and technology that have made pills and appliances safer have made it harder to achieve an “easy” or “peaceful” death for those who seek one.

As policymakers and ethicists ponder these moral conundrums, around the world people are taking matters into their own hands, a trend that gives Ms Engelhart’s book its urgency. Faced with intolerable suffering, her subjects have largely given up on laws and doctors and instead turn to strangers on the internet for help. For instance, Avril Henry, a British octogenarian, spent her nights “marinating in her pain” and considered eating lethal fungi from her garden to end it. But “death by mushroom could be slow, messy, painful. The Nembutal would work better.” The “Peaceful Pill Handbook” suggested buying that drug from either a vet-supply store in Mexico or the Chinese black market. Doubtful about Chinese merchandise, Henry settled on Mexico.

Over several years, Ms Engelhart’s main characters meticulously plan their escapes from old age, dementia and chronic or mental illness. She also follows two doctors, one of whom lost his licence for teaching people how to “exit” via “DIY death seminars”. At times the book itself has a DIY air, taking in the practicalities of connecting a gas canister to a plastic bag that can be placed over a head.

The similarity between the “euthanasia underground” that it describes and underground abortion networks is striking. The president of Compassion & Choices, a lobby group for doctor-assisted dying, once referred to plastic-bag hoods as “the end-of-life equivalent of the coat hanger”. Among those to have taken charge of their deaths were some early AIDS patients, their suffering immense, their fates fixed. Just having the right drugs, or knowing they could get them, seemed to make many of these young men feel better, recalls the more likeable of the two doctors.

Henry planned to kill herself with the Mexican drugs in her bathtub, but fretted that she would soil herself and that her house would smell. Dignity—in life and death—seems to preoccupy her and others above all. Even more than a bad death they fear a bad end to life, in which they are no longer themselves. A desire for autonomy runs through their stories like the thin veins of some of the characters.

Yet this is not a right-to-die manifesto. The author’s own ethical doubts are among the book’s strengths. She writes compassionately of her subjects’ struggles, but is more reserved about the motives of some of their helpers. She remains torn about

what is perhaps the hardest question of all: euthanasia for victims of dementia. Rather than passing judgment, she presents facts. About half of Americans think patients do not have enough control over end-of-life decisions. Existing laws often have arbitrary effects.

After the drugs arrived from Mexico, Henry’s house was raided by police. She had discovered the concept of the “Com-

pleted Life”. “That’s when you feel that your life is shaped and finished. And the direction thereafter is down. I did have a complete life. It was a great life,” she told a friend. Soon after the raid she was found in her bathtub, having drunk the poison the police had missed. The note she left had a postscript: “If I have fouled the bath in death, please please be kind to wash it down.” She provided the disinfectant. ■

Caustic fiction

No man’s land

A bard of the refugee experience turns his attention to France

The Committed. By Viet Thanh Nguyen. Grove Press; 400 pages; \$27. Corsair; £18.99

FEW CHARACTERS capture the bitterness of the refugee experience better than Vo Danh, the narrator of Viet Thanh Nguyen’s acclaimed debut novel “The Sympathizer” (published in 2015), who returns in this excoriating sequel. “Vo Danh” means anonymous or nameless in Vietnamese; in the madcap pages of “The Committed” he is simultaneously alive and dead, winding up as “a dead man whom others seem to think is still alive”.

Vo Danh’s tortured bid to resolve this existential plight takes him on a wild ride through the underworld of immigrant Paris in the aftermath of the Vietnam war, one of legions of “boat people” fleeing his homeland’s victorious communists. But Mr Nguyen’s follow-up to the book that won him a Pulitzer prize is less concerned with the charms of the City of Light than

with the brutal legacy of colonialism.

This tall, nutty tale is almost a parody of the gangster genre (one character goes by the moniker “Le Cao Boi”). Vo Danh, psychologically shattered and prone to fits of weeping, falls in with a drug ring and begins selling hashish and heroin. Cartoonish tit-for-tat hostage-taking with a rival gang ensues. After the real-life drama of “The Sympathizer”, which covered the fall of Saigon and a botched counter-revolutionary plot by South Vietnamese officers, this story is smaller and seamier. It functions mainly as a pretext for the author’s zinging takedowns of the hypocrisy of imperial powers.

As a “man of two minds”, torn between France and Vietnam—and between old radical views and a growing repugnance for violence—Vo Danh is the ideal mouthpiece for Mr Nguyen’s indictment of both capitalism and communism. Each, he claims, winds up as a “Repressive State Apparatus”. In one of the most acerbic, amus-



Paris out of spring time

►ing scenes, Vo Danh and the bouncer at the gang's brothel, a Frenchman of Senegalese descent, bond over revolutionary theory, trading insights from Theodor Adorno, Aimé Césaire and especially Frantz Fanon's "The Wretched of the Earth".

Savage humour keeps the reader wincing yet entertained. The author eviscerates everything from Vietnamese culture to male objectification of women to the coloniser's "beautiful battleship named *La Mission Civilisatrice*". His greatest ire is reserved for the "endless, schmaltzy gratitude that host countries demanded of refugees who came from countries raped and bombed by the host countries". The book is chock-full of one-liners: "Whitewashing the blood-soaked profits of colonisation was the only kind of laundering white men did with their own hands."

In his first novel Mr Nguyen held a mirror up to America's involvement in Vietnam. Now he has done something similar, if less convincingly, for the French. The Eiffel Tower is just a "Gallic erection", Vo Danh concludes, "the French Empire simply exposing itself for all to see". Not so different, in this disillusioned view, from the needle of the Washington Monument. ■

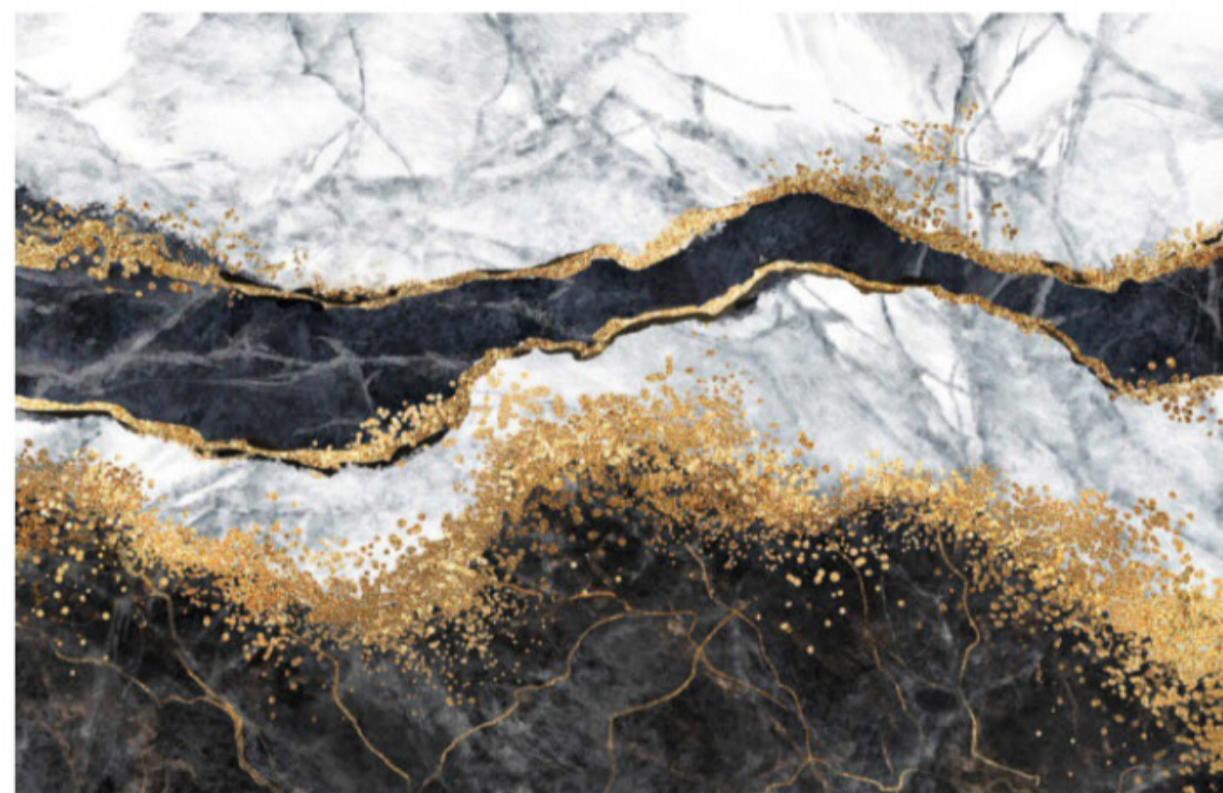
The art of repair

A crack in everything

Kintsugi. By Bonnie Kemske. Bloomsbury; 176 pages; \$38. *Herbert Press*; £30
Art and Faith. By Makoto Fujimura. Yale University Press; 184 pages; \$26 and £20

IN JAPAN ANTIQUE tea bowls can have an aura that surpasses mere appearance. They may connote lyrical names, famous histories, even ancient myths. Take "Seppo" ("Snowy peak"), made by the potter, designer and calligrapher Hon'ami Koetsu in the early 17th century. "Seppo" came damaged from the kiln, with deep crevices running across its reddish *raku*-ware surface. Koetsu repaired it using the traditional method of *kintsugi*, which binds flawed or smashed crockery with lacquer and covers the joins with powdered gold or silver. So this snowy peak has golden rivers cascading down its slopes; the bowl's beautiful wounds may also commemorate the ritual suicide of Koetsu's revered teacher.

Kintsugi is in vogue in the West, with adherents ranging from cake-bakers and jewellery-makers to the designers who, in "The Rise of Skywalker" (released in 2019), gave the turncoat Jedi hero a *kintsugi*-marked helmet. As Bonnie Kemske puts it



Creative destruction

in her book on the method's craft and lore, the golden jigsaw of a *kintsugi*-treated piece "takes an accident and transforms it into a glorious rebirth". Enticingly, the technique not only repairs a damaged treasure but leaves it lovelier, and more valuable. The idea opens up an "intriguing world of beauty, narrative and metaphor".

As Ms Kemske explains, *kintsugi* "never hides the story of the object's damage". It mocks "invisible mending" and challenges "the stigma of repair". Instead, flaws, chips and rifts point the way to a new wholeness that embraces old losses and breakages. Ms Kemske quotes Leonard Cohen: "There is a crack, a crack in everything/That's how the light gets in."

Today this wrecked crockery bears a heavy load of symbolism. But *kintsugi* ("golden join") had a more pragmatic beginning. *Urushi*, a solution made from the sap of the Japanese lacquer tree, was first used for pottery repair in the Jomon era, more than 3,000 years ago. The addition of gold or silver to glorify restoration arrived with the ceremonial tea culture that flourished in 16th- and 17th-century Japan. Fine tea vessels became prized status-markers—but, inevitably, the cherished bowls and pots would sometimes smash. Glittering fixes both enhanced their allure and, paradoxically, nodded to the Zen-influenced *wabi-sabi* aesthetic that valued things "old, worn and tinged with sadness". The leading tea master, Furuta Oribe, decreed that "Perfect tea bowls are dull ones."

Thus *kintsugi* inscribed mixed messages on its striated surfaces. It told of shining magnificence, and of time-battered humility. It was virtuous and chic at once. Thoughtfully written and splendidly illustrated, Ms Kemske's survey of the art's history captures that duality. She sketches its technology and describes illuminating vis-

its to practitioners in America, Britain and Japan—where, she says, *kintsugi* remains free of the "hyperbole" surrounding it in Western art. She salutes its therapeutic power, citing Yukiko Kuroda, a restorer: "Learning to put a pot back together helped me to put myself back together."

The light gets in

Makoto Fujimura frames the redemption of *kintsugi* as a parable of the Christian approach to creativity. "It is precisely through our brokenness and fissures that God's grace can shine," he writes in "Art and Faith". Born in Boston but brought up in Japan, Mr Fujimura won acclaim as a painter in New York. For him, *kintsugi* unites his vocation and his faith: "We are wretched, broken fragments of what was once beautiful." His "theology of making" places creation at the heart of belief.

He takes that theology seriously. "Art and Faith" features more biblical exegesis than studio tips, as the painter wrestles eloquently with art-averse fellow-Christians who prefer narrow-minded "culture war" to the "culture care" he advocates. For him, a rich seam of imagery flows through *kintsugi*. Thanks to Jesus, he says, "our fissures became filled with gold". He uses costly minerals in his painting, offsetting the frugal *wabi-sabi* values of age and wear with a frank delight in artistic abundance, even extravagance: "As God's Creation is sumptuous and excessive, so must our responses be." There is nothing impious in a little worshipful bling.

Kintsugi, as both books indicate, is a glue for scattered ideas. But its core story, of repair that dignifies the fractures and scars of the past, is as simple as it is seductive. Today's artists are doubtless sifting through the shards of this pandemic era, looking for a healing, golden join. ■

Acquire a Piece of Costa Navarino for Life

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Economic data

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units	
	% change on year ago latest	quarter*	2021†	% change on year ago latest	2021†	%		% of GDP, 2021†		% of GDP, 2021†		10-yr gov't bonds latest,%	change on year ago, bp	per \$ Mar 17th	% change on year ago
United States	-2.4	Q4	4.1	4.5	1.7	Feb	1.9	6.2	Feb	-2.8	-10.0	1.6	61.0	-	
China	6.5	Q4	10.8	8.5	-0.2	Feb	1.6	5.5	Feb‡§	2.6	-4.8	3.1	61.0	6.50	7.8
Japan	-1.4	Q4	11.7	2.5	-0.6	Jan	0.2	2.9	Jan	3.5	-9.0	nil	-8.0	109	-1.7
Britain	-7.8	Q4	4.0	4.4	0.7	Jan	1.2	5.1	Nov††	-4.5	-11.5	0.9	38.0	0.72	15.3
Canada	-3.2	Q4	9.6	4.0	1.1	Feb	1.6	8.2	Feb	-2.2	-8.5	1.6	63.0	1.25	13.6
Euro area	-4.9	Q4	-2.6	4.3	0.9	Feb	1.2	8.1	Jan	3.0	-5.9	-0.3	11.0	0.84	8.3
Austria	-5.7	Q4	-5.6	3.7	1.2	Feb	1.6	5.7	Jan	2.4	-6.0	-0.1	-26.0	0.84	8.3
Belgium	-5.1	Q4	-0.6	4.0	0.5	Feb	1.0	5.6	Jan	-0.6	-6.3	nil	-33.0	0.84	8.3
France	-4.9	Q4	-5.7	5.3	0.6	Feb	1.1	7.9	Jan	-1.7	-7.5	-0.1	-8.0	0.84	8.3
Germany	-3.6	Q4	1.4	3.7	1.3	Feb	1.8	4.6	Jan	6.7	-4.0	-0.3	11.0	0.84	8.3
Greece	-5.9	Q4	11.1	3.2	-1.3	Feb	nil	15.8	Dec	-5.1	-5.0	1.0	-272	0.84	8.3
Italy	-6.6	Q4	-7.5	4.0	0.6	Feb	0.7	9.0	Dec	3.0	-8.0	0.7	-168	0.84	8.3
Netherlands	-2.9	Q4	-0.5	3.1	1.8	Feb	1.9	3.6	Jan	11.4	-3.4	-0.3	-14.0	0.84	8.3
Spain	-9.1	Q4	1.6	5.7	nil	Feb	0.8	16.0	Jan	1.3	-8.5	0.3	-31.0	0.84	8.3
Czech Republic	-4.7	Q4	2.4	4.5	2.1	Feb	2.2	3.3	Jan‡	1.9	-5.5	1.9	25.0	22.0	12.4
Denmark	-2.5	Q4	2.5	3.5	0.6	Feb	0.6	4.4	Jan	7.2	-1.5	nil	34.0	6.25	9.0
Norway	-0.6	Q4	2.6	2.6	3.3	Feb	1.6	5.0	Nov‡‡	2.4	-1.7	1.4	55.0	8.51	22.6
Poland	-2.8	Q4	-2.8	3.9	2.4	Feb	2.4	6.5	Jan§	2.3	-4.9	1.5	-30.0	3.87	5.7
Russia	-3.4	Q3	na	2.5	5.7	Feb	3.9	5.8	Jan§	2.8	-1.9	7.1	-98.0	74.2	1.4
Sweden	-2.1	Q4	-1.0	2.3	1.4	Feb	1.4	9.3	Jan§	3.7	-2.3	0.4	41.0	8.52	16.7
Switzerland	-1.6	Q4	1.3	2.5	-0.5	Feb	0.3	3.6	Feb	8.6	-0.9	-0.3	20.0	0.93	3.2
Turkey	5.9	Q4	na	4.0	15.6	Feb	11.1	13.4	Jan§	-1.9	-3.1	13.8	148	7.63	-16.3
Australia	-1.1	Q4	13.1	2.8	0.9	Q4	1.6	5.8	Feb	1.1	-5.9	1.7	63.0	1.30	28.5
Hong Kong	-3.0	Q4	0.7	3.1	1.9	Jan	1.0	7.2	Feb‡‡	2.3	-3.3	1.4	34.0	7.77	-0.1
India	0.4	Q4	42.7	13.0	5.0	Feb	5.0	6.9	Feb	-0.8	-6.7	6.2	-8.0	72.5	2.4
Indonesia	-2.2	Q4	na	3.3	1.4	Feb	2.6	7.1	Q3§	-0.1	-6.8	6.7	-82.0	14,428	5.2
Malaysia	-3.4	Q4	na	4.4	-0.2	Jan	2.4	4.9	Jan§	3.6	-6.3	3.5	25.0	4.12	5.6
Pakistan	0.5	2020**	na	1.7	8.7	Feb	7.3	5.8	2018	-1.2	-6.9	10.4	†††	-2.0	156
Philippines	-8.3	Q4	24.4	6.8	4.7	Feb	4.0	8.7	Q1§	-1.1	-7.2	4.5	-32.0	48.7	5.6
Singapore	-2.4	Q4	15.9	4.6	0.2	Jan	1.6	3.3	Q4	17.3	-4.1	1.6	16.0	1.35	5.9
South Korea	-1.2	Q4	5.0	3.1	1.1	Feb	1.5	4.9	Feb§	4.3	-4.9	2.1	69.0	1,130	10.0
Taiwan	5.1	Q4	5.8	4.5	1.4	Feb	1.5	3.8	Jan	15.1	-0.5	0.4	-9.0	28.3	6.8
Thailand	-4.2	Q4	5.4	3.6	-1.2	Feb	0.9	1.5	Dec§	4.8	-5.6	1.8	66.0	30.8	5.0
Argentina	-10.2	Q3	61.7	6.5	40.7	Feb‡	47.0	11.7	Q3§	0.6	-5.4	na	91.2	-30.7	
Brazil	-1.1	Q4	13.3	3.2	5.2	Feb	5.4	13.9	Dec‡‡	-1.3	-7.3	8.6	98.0	5.66	-11.3
Chile	-9.1	Q3	22.6	5.7	2.8	Feb	3.5	10.2	Jan‡‡	-0.2	-6.6	3.1	-22.0	730	16.5
Colombia	-3.5	Q4	26.5	4.4	1.6	Feb	2.6	17.3	Jan§	-3.8	-5.9	6.0	-223	3,578	13.6
Mexico	-4.3	Q4	13.7	4.0	3.8	Feb	3.4	4.5	Jan	2.0	-2.8	6.2	-155	20.7	12.0
Peru	-1.7	Q4	37.9	8.0	2.4	Feb	2.3	19.0	Feb§	-0.1	-6.9	4.7	-46.0	3.71	-4.3
Egypt	0.7	Q3	na	3.1	4.5	Feb	6.0	7.2	Q4§	-3.5	-8.2	na	na	15.7	0.3
Israel	-1.4	Q4	6.4	3.1	nil	Feb	0.9	4.5	Jan	3.1	-8.9	1.2	-3.0	3.30	16.1
Saudi Arabia	-4.1	2020	na	2.9	5.3	Feb	2.5	8.5	Q3	-1.1	-5.7	na	na	3.75	nil
South Africa	-4.1	Q4	6.2	2.0	3.2	Jan	3.7	32.5	Q4§	-1.2	-9.2	9.4	-138	14.9	11.3

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. #3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

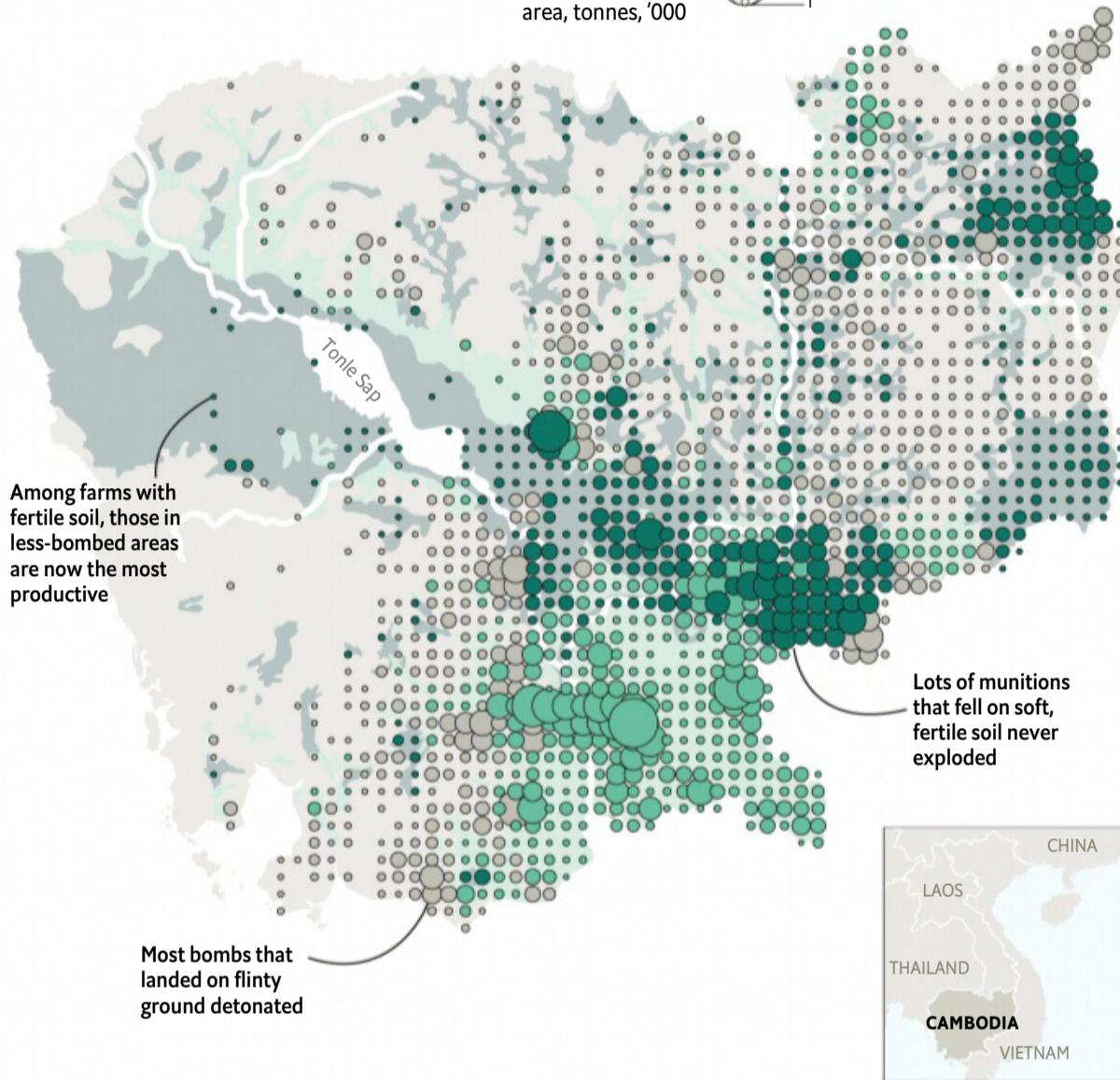
In local currency	Index	% change on:			index	% change on:			index	% change on:		
		Mar 17th	one week	Dec 31st 2020		Mar 17th	one week	Dec 31st 2020		Mar 17th	one week	Dec 31st 2020
United States S&P 500	3,974.1	1.9	5.8		45,450.3	4.0	3.9					
United States NAScomp	13,525.2	3.5	4.9		3,109.7	1.0	9.3					
China Shanghai Comp	3,445.6	2.6	-0.8		3,047.5	3.0	6.1					
China Shenzhen Comp	2,218.3	2.4	-4.8		16,215.8	1.9	10.1					
Japan Nikkei 225	29,914.3	3.0	9.0		1,566.8	-0.4	8.1					
Japan Topix	1,984.0	3.3	9.9		49,916.5	5.4	-2.6					
Britain FTSE 100	6,762.7	0.6	4.7		116,549.4	3.3	-2.1					
Canada S&P TSX	18,983.1	1.6	8.9		47,679.5	0.3	8.2					
Euro area EURO STOXX 50	3,849.7	0.8	8.4		11,068.4	-1.5	2.1					
France CAC 40	6,054.8	1.1	9.1		1,647.9	0.8	5.1					
Germany DAX*	14,596.6	0.4	6.4		9,602.3	0.1	10.5					
Italy FTSE/MIB	24,281.1	1.5	9.2		66,494.5							

→ American bombs in Cambodia were less likely to explode in fertile regions. Bombed land in these areas yields less rice today

Cambodia, soil fertility in 2008 and American bombs dropped 1965-73

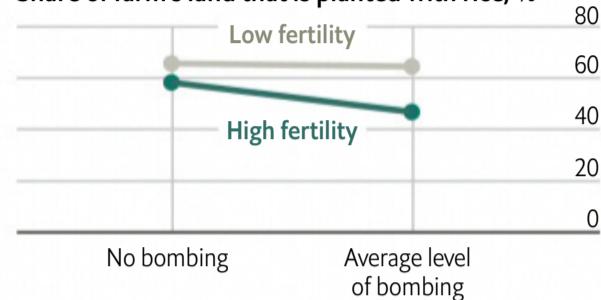
Soil fertility ● Low ● Medium ● High

Estimated weight of bomb payloads in area, tonnes, '000

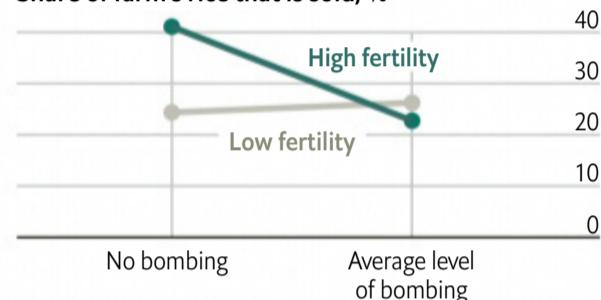


Estimated impact of bombs on current farming
By fertility of soil

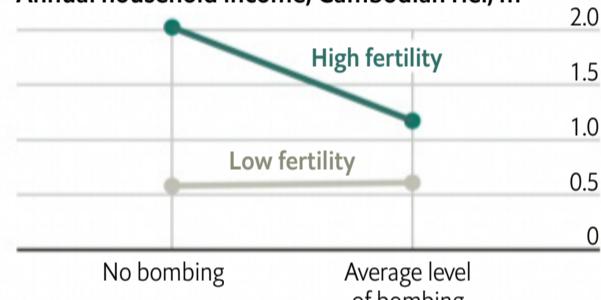
Share of farm's land that is planted with rice, %



Share of farm's rice that is sold, %



Annual household income, Cambodian riel, m



Source: "How war changes land: soil fertility, unexploded bombs, and the underdevelopment of Cambodia", by Erin Lin, 2020

Blood and soil

American bombing 50 years ago still shapes Cambodian agriculture

FARMERS USUALLY consider themselves lucky to till fertile soil. In Cambodia, however, such land often signifies danger rather than abundance. When America dropped an estimated 1.8m tonnes of explosives on the country during the Vietnam war, those falling on flinty ground generally detonated, whereas many landing on softer earth did not. No one knows how many bombs remain in rich soil. But a paper by four academics at Ohio State University (osu), who studied satellite images and reports by landmine-removal groups from a single village, found that perhaps half of the munitions have not exploded.

These wartime remnants have given the United States' bombing campaign of 1965-73—which ostensibly targeted Viet Cong supply lines, but caused perhaps 150,000

deaths—an enduringly lethal legacy. Since 1979, unexploded ordnance has killed at least 19,000 people in Cambodia (though some may have been blown up by landmines from subsequent wars, rather than by American bombs). Cambodia now has the world's highest rate of amputees.

A recent study by Erin Lin, one of the osu researchers, shows that America's bombardment injured not just Cambodia's people but its economy as well. She first interviewed farmers in the country, who said they thought that richer, darker soil presented an unusually high risk of hidden ordnance—especially in heavily bombed areas. They work in constant fear of explosions. Some said that they only planted crops in parts of their farms that they were confident contained no bombs, or that they used hand tools instead of machines to reduce the risk of detonation.

To quantify this behaviour, Ms Lin used agricultural and census records to produce village- and farm-level estimates of investment, productivity, income and soil quality. She then mapped these data to the precise sites of American bombing. After making adjustments for factors such as rice

prices and differences between regions in economic conditions before the war, she found that in areas with relatively barren earth, there was no relationship between the two variables. Historical bombardment does not affect farmers' methods in such places, because bombs that hit rocky ground almost always exploded.

However, in regions with rich soil, aerial attacks 50 years ago make a measurable difference today. Among farms in fertile areas, those in places that were bombed are unusually unproductive. Ms Lin estimates that the share of land planted with crops is about 12 percentage points lower in such farms than in others located in similarly fruitful regions which were spared by the Americans. This shrinks harvests, reducing by half the amount of rice that owners have left over to sell after feeding themselves, and cutting incomes by 40%.

Cambodia suffered years of war and genocide after the bombing ceased, and America is just one of many parties to blame for the country's tribulations. Yet it is a testament to the horror of the bombing that despite the anguish that followed, its signature can still be detected today. ■



Closely observed trains

Wang Fuchun, chronicler of the Chinese on their railways, died on March 13th, aged 79

THERE WAS a time, Wang Fuchun remembered, when all the people on Chinese trains looked more or less the same. In the late 1970s, when he started taking his photographs, everyone seemed to wear green suits and caps like the People's Liberation Army. Seen as a crowd on a railway platform they looked homogeneous, reserved and orderly. All that went to the winds, however, as soon as a train came in.

Then pandemonium broke out. Everyone surged, pushed, shoved forward, some with sacks of rice, or door-frames, or live hens, others with giant wedding photographs or their household goods tied up in bundles, and tried to get on. When the doorways blocked up, the agile heaved themselves in through the windows. These were the "green-skinned" trains that crept between China's main towns and cities at 50 kilometres an hour or so, hauled and heated by coal. He had made loving colour studies of their steam locomotives: the red and yellow wheels, the tall funnels, smoke mingling with the clouds in the sky.

Onboard, all was chaos. Huge bags were crammed into the luggage racks. People spread out their encampments on tables and on the floor. Life seemed to explode on the train as if it was a stage. He did not care what seat he had, for he was on the move, a lean, long-haired, gentle figure with his camera (first a Seagull, then a Leica) hidden under his coat. And so he wandered, for four decades.

China, too, was on the move. By the late 1980s a great rush to the cities had begun, on the trains. He recorded tai-chi sessions in corridors, Uyghurs praying in corners, a well-wrapped baby popping out of a basket, a clamour of hands waving empty tea-jars. In summer he snapped young migrant workers shedding their shirts, running with sweat, with one, all legs and arms, seeking coolness on top of the seats. Among the triple-stacked bunks he found a girl playing a traditional *erhu*, watched admiringly by a young man on the bunk above, and a snarling Pekingese, eyed anxiously by a

woman on the bunk below.

He did not ask anyone's permission to take them, and hoped they did not notice. Plainly, some did. A woman smoking in the corridor, her body one elegant curve, gave him a haughty glare, and a Tibetan monk offered him a ceremonial scarf and a beatific smile. Most people, he found, were unguarded. But he preferred to act covertly, like a thief in a way, because it caught reality better—and so mirrored all the more clearly how China was changing.

His project was all-consuming. Over 40 years he reckoned he had ridden on 1,000 trains and covered more than 100,000 kilometres, on every line in China. (Luckily, as an employee of the railway, his travel was free.) He found he could not sleep properly without the clank of rails beneath him. Each trip, departure time, arrival time and place was neatly jotted in a notebook; he took about 200,000 pictures, and logged each by its place. Those lovers under a blanket, eyes only for each other among the teapots and supper trays, were on the Guangzhou-Chengdu line. That five-year-old girl with a muddy face, asleep standing up beside a door, was on the line from Wuhan to Nanning. He had hesitated to press the shutter; he felt her migrant's poverty too keenly, and he preferred to capture the hope that pushed people on to trains.

His interest in passengers had begun when, just after Mao Zedong's death, he was asked to take photographs of model members of staff employed by the Railway Bureau in Harbin, in north-east China, where he was born. His love of trains went back years, to the time when, as an orphan in his elder brother's house, he had heard them shrieking past. He followed his brother into railway work, hoping to be a train-driver. But being artistic too, good at painting and calligraphy, he found that photography bridged the two worlds. He could make art with his camera, though increasingly he felt that his goal was not art, but life.

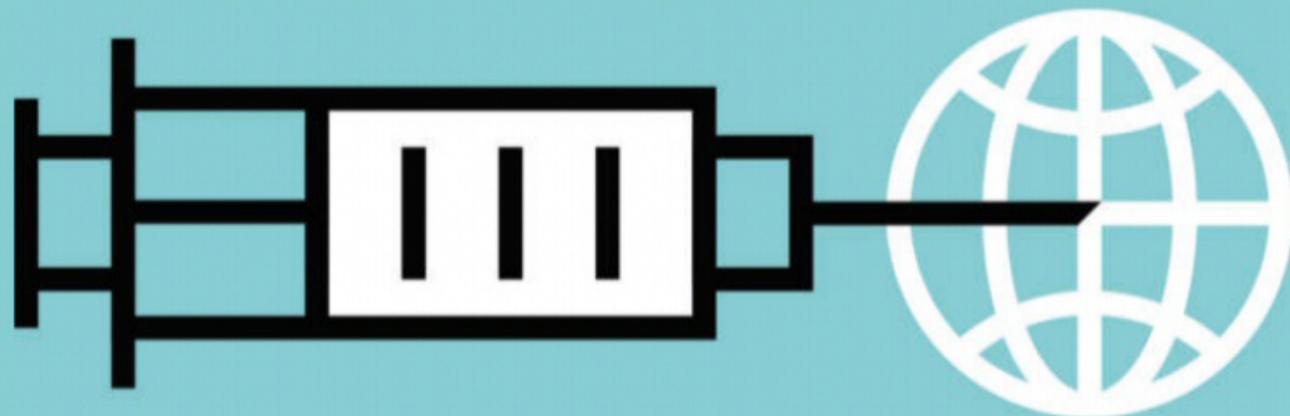
For China was rushing to the modern world, and the trains showed it. Steam was fading; the green-skinned trains acquired fans, then air-conditioning, which provided him with an eerie photograph of passengers shrouded completely in sheets against the icy blasts. Then came express trains, then high-speed rail: by this year 38,000km of it, the longest network in the world. And the passengers, too, changed. In the late 1970s they began to wear jeans; by the 1980s they let their hair grow. The 1990s brought in a vogue for t-shirts emblazoned with favourite stars. People wanted a look that was unique; they became individuals. His book "Chinese on the Train", published in 2001, caught the brief span when old and new collided: a fashionable young woman playing mah-jong, with a weathered man looking on, or a quartet of hefty young men absorbed by a finch in a cage.

Cameras, too, had changed, and by 2012 he boarded trains with a digital Sony RX100 on his wrist, so tiny that he could use it almost playfully, like a toy. That was as well, because people now were far more guarded; they would shrink from him, get police to check his ID and even snatch his camera away. He walked back and forth with a slight bow and an air of apology, as if he simply could not help doing this. But pickings were slimmer than before. Many slow trains had been replaced by high-speed models, as comfortable and quiet as hotels. The aisles were clear, the windows sealed. In the reclining seats, everyone reclined. In the ordinary seats, everyone's noses were buried in their tablets and their phones.

He liked to place two of his photographs side by side. One was of a green-skinned train, pulled by steam, rounding a bend between Tongliao and Jining in 1998, with a merry line of passengers grinning out of the windows. The second picture showed a pair of newly-weds in 2015 in front of a Harmony high-speed train, holding the character for "double happiness". He liked the message of hope; he was proud of what China had achieved. But how sad, he also thought, that on that dashing locomotive there was no mess, no lives colliding and no good subjects for him; that Chinese people should once again look so orderly, reserved and indifferent to each other, even on a train. ■

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