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Covid vaccines: 20m lives saved

Chile's terrible constitution

The new physics

JULY 9TH-15TH 2022

Clownfall

Britain after Boris





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On the cover

Britain's departing prime minister leaves behind a stricken country: leader, page 9. Boris Johnson's premiership is over, but the Conservative Party is ill-prepared to fix the damage, page 55. Many Tories now prefer tax cuts to fiscal prudence. That is worrying, page 56. Fixing the culture of Parliament will not be easy, page 57. No one's reputation can survive contact with the British prime minister: Bagehot, page 58

Who's afraid of TikTok? The world's most exciting app is also its most mistrusted: leader, page 10. Its rivals are nervous. Governments are suspicious. A billion users and rising are glued to their screens: briefing, page 18

Covid-19 vaccines: 20m lives saved The impact of the jabs in their first year: graphic detail, page 85

Chile's terrible new constitution It is a fiscally irresponsible left-wing wish list. Voters should reject it: leader, page 14, and analysis, page 27

The new physics Ten years after the Higgs boson's discovery, what is next for fundamental physics? Page 75

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The world this week

7 A summary of political and business news

Leaders

9 **British politics**
Clownfall

10 **Social media and security**
Who's afraid of TikTok?

11 **America after Roe**
The new exceptionalism

11 **Education**
Crisis in the classroom

12 **Leveraged buy-out**
Private pain

14 **Chile**
Magna mistake

Letters

16 On justice services, abortion, car dealers, BTS, technology at work

Briefing

18 **TikTok**
Competition v security

United States

- 21 The new right's think-tanks
22 Fetal personhood
23 Army entrepreneurship
24 Rebranding the Asian carp
25 Democrats and Latinos
26 **Lexington** The example set by Liz Cheney



The Americas

- 27 Chile's new constitution
28 Infighting in Argentina
30 Rafting with rebels



Asia

- 31 Japan-South Korea relations
32 Taliban bureaucracy
33 Indian state politics
33 Infrastructure and women
34 **Banyan** Japanese isolationism



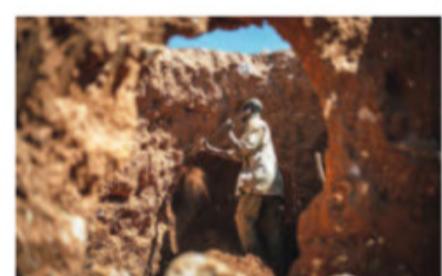
China

- 35 The West's response to Belt and Road
36 Combating floods
37 Shanghai's police hacked
37 A crackdown on larping



Middle East & Africa

- 38 Congo's cobalt pickle
39 Sierra Leone football
40 Israel's new leader
40 Cairo's confiscated houseboats
41 Reviving the railways



Essay

- 42 **Hong Kong, 25 years on**
An anatomy of erasure



Lexington High noon for Liz Cheney: her example holds a lesson for the Republicans—and all of us, page 26



Europe

- 49** Ukraine's counter-offensive
50 Disappeared in Ukraine
51 Poland's boom town
51 Germany's Poland problem
52 A new French government
52 Navalny in Russia's gulag
53 Charlemagne Airport chaos

**Britain**

- 55** After Boris
56 Tory economics
57 MPs behaving badly
58 Bagehot Blond Chernobyl

**International**

- 59** The crisis of covid-19 learning loss

**Business**

- 63** Private equity's fragile future
64 Polish business
65 Europe's unicorns ride on
67 Bartleby Corporate culture
68 Schumpeter The Ambani empire



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

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Finance & economics

- 69** Biden's China strategy
71 Commodities and recession
71 A Chinese tycoon on trial
72 Buttonwood Crypto's last man standing
73 Corporate debt in America
74 Free exchange Emerging-market central banks

**Science & technology**

- 75** The LHC restarts

**Culture**

- 79** Ancient statues uncovered
80 Gaming the haj
81 Chinese challah
81 Chris Patten on Hong Kong
82 Higgs and his boson
83 Back Story Zelensky's lives

**Economic & financial indicators**

- 84** Statistics on 42 economies

Graphic detail

- 85** Covid-19 jabs saved around 20m lives in their first year

Obituary

- 86** Peter Brook, revolutioniser of theatre

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Boris Johnson, Britain's prime minister, is to resign, it was reported, but hopes to stay in office until the autumn, when a new leader can be installed. It was unclear as *The Economist* went to press whether he would, in fact, be allowed to hang on. A rebellion within the Conservative government made his position untenable: dozens of ministers resigned, starting with the health secretary and the chancellor of the exchequer (finance minister). Various scandals were unfolding: the deputy chief whip had stood down amid accusations that he had drunkenly groped two men, and Mr Johnson was shown to have known about prior allegations of misbehaviour when he originally appointed him. Mr Johnson's chaotic management style and repeated failure to tell the truth prompted many who had served under him to say they could no longer do so.

Russia grabs more land

Russian troops captured the industrial town of Lysychansk, completing their takeover of Luhansk oblast in **Ukraine's** east. The Ukrainian army is repositioning itself to defend more strategic sites in Donetsk, the other half of the badly bloodied Donbas region.

A conference on **rebuilding Ukraine** was held in Lugano, Switzerland. Officials from America, Britain, the European Union and international organisations attended. The Ukrainian prime minister said a "full-fledged" recovery plan would cost \$750bn.

Ursula von der Leyen, the president of the European Commission, urged the EU to

be prepared for a cut-off of **Russian gas**. As electricity prices in Europe hit a new high, the European Parliament tweaked laws that would relabel gas and nuclear infrastructure as "green".

The collapse of a glacier in the Italian Alps that killed at least nine people was blamed on climate change. **Italy** declared a state of emergency in five northern regions; a long bout of hot weather has caused the worst drought in 70 years.

A gunman opened fire on a July 4th parade in Highland Park, a wealthy suburb north of Chicago, killing seven people. It was the deadliest such incident over the Independence Day holiday, which normally sees a spike in **shootings**. Eight other people were gunned down in Chicago over the three-day weekend. Across the country more than 200 were killed in gun violence.

In an emergency session, **New York's** state legislature passed a bill that would ban people from carrying guns near "sensitive" places, such as schools. The bill was crafted to comply with the Supreme Court's recent curbs on gun controls.

The Supreme Court limited the power of the **Environmental Protection Agency** to reduce greenhouse-gas emissions. Joe Biden's plans to tackle climate change will now have to be rethought, and approved by Congress rather than implemented by executive fiat.

Violent protests broke out in Karakalpakstan, an autonomous republic within **Uzbekistan**, over planned constitutional changes to strip it of its right to secede. At least 18 people were killed. A state of emergency has been imposed for a month. The proposed changes have been dropped.

Ranil Wickremesinghe, **Sri Lanka's** prime minister, said his country was "bankrupt". Sri Lanka has all but run out of fuel. With inflation at 55% the central bank raised its main

interest rate by one percentage point to a 21-year high. Negotiations are continuing with the IMF over a bail-out.

A trove of Chinese police files has been offered for sale by a hacker in what appears to be one of the largest **data leaks** ever, containing information on 1bn Chinese citizens. China is notorious for its lax data security. The government likes to keep data unencrypted so it can spy on people.



China's president, Xi Jinping, attended a ceremony in **Hong Kong** to mark the 25th anniversary of the return of the city from British to Chinese rule. Mr Xi said the "one country, two systems" model for ruling Hong Kong had worked. Critics say it has been subverted by a new national-security law that takes away many of the freedoms the Chinese government had promised to preserve.

Israel said it shot down three drones heading for its gasfield in the Mediterranean that had been launched by Hizbulah, a Shia Muslim Lebanese party-cum-militia backed by Iran.

Mahmoud Abbas, the **Palestinian** president, and his long-standing rival, Ismail Haniyeh, who heads Hamas, the Islamist group that runs the Gaza Strip, met in Algiers. They have been at loggerheads for many years. Arab intermediaries periodically try in vain to make them reconcile with each other.

Gabriel Boric, **Chile's** president, was presented with the final draft of a new constitution. The document, which has been hashed out by an assembly including many political novices, is left-wing, Utopian

and very, very long. With 388 articles it would, if adopted, be one of the wordiest constitutions in the world. Polls currently suggest that Chileans will reject it in a referendum in September.

Argentina's economy minister, Martín Guzmán, announced his resignation, citing squabbling between the president and vice-president. Mr Guzmán was seen as a stabilising figure in a country that is both politically and economically turbulent.

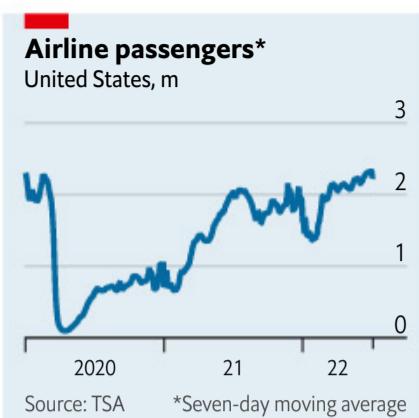
Sudan's military government said it would withdraw from talks aimed at restoring civilian rule and instead allow civilians to form a transitional government. Activists who have protested for months against military rule say they will stay on their barricades to ensure the army, which has staged two coups since 2019, does not cling to power.

Jihadists attacked a prison in Abuja, the capital of **Nigeria**, freeing 600 people including members of Boko Haram, a terrorist group that straps bombs to children. Separately, gunmen attacked a presidential convoy in Katsina, a state in Nigeria's north. Muhammadu Buhari, the president, was not there.

Police in **Ghana** broke up large protests against rising living costs. The government has started talks with the IMF about a bail-out amid a deepening economic crisis.

Africa's big scorers

Sierra Leone's football association is to investigate two matches that reported the astounding scores of 91-1 and 95-0. Allegations of match-fixing have surfaced before in west Africa, notably in 2013 when two games in Nigeria ended with scores of 67-0 and 79-0. The highest-ever scoring match was 149-0 in Madagascar in 2002, when one team's players repeatedly kicked the ball in their own net to protest against refereeing decisions.



More Americans took flights over the July 4th weekend than at any time since the start of the pandemic. The Transportation Security Administration screened almost 2.5m passengers on July 1st alone, the most since February 11th 2020. But the **rebound in travel** has left airlines and airports, which cut staff during the pandemic, struggling to cope. Hundreds of flights were cancelled over the weekend, and thousands more delayed. Estimates of the number of people travelling to America in the coming months have risen, now that it has lifted requirements on testing for covid-19.

Flying into turbulence

Flight cancellations in Europe were more than double those in America between April and June. **British Airways** has cancelled more flights over the busy summer, bringing its total to almost 30,000. The chief operating officer of **easyJet** has resigned. The airline, one of Europe's biggest low-cost carriers, has also had to cut its flight schedule. And **Scandinavian Airlines** sought bankruptcy protection following a strike by its pilots. SAS has long been in trouble. The Swedish government recently refused to bail it out.

Tesla's delivery of vehicles to customers fell by more than a fifth in the second quarter compared with the first three months of the year. It was the first quarter-on-quarter decline in sales for the carmaker since early 2020. The company blamed "ongoing supply chain challenges" and factory shutdowns, but said that it had produced more cars in June than in any previous month.

The Bank of England warned that the **economic outlook** for Britain and the global economy has "deteriorated materially". It noted, however, that liquidity and capital positions at British banks remain strong, and that they still have "considerable capacity" to support lending to households and businesses. Curtailing lending "would harm the broader economy", it said.

Australia's central bank raised its main interest rate by half a percentage point, to 1.35%, the third consecutive increase. Annual inflation of 5.1% is at a 20-year high, and expected to rise again when official figures are published later this month.

South Korea's annual inflation rate hit 6% in June, the highest level since the Asian financial crisis of 1998. The **euro zone's** average inflation rate leapt to a new high, of 8.6%; the Baltic countries of Estonia, Latvia and Lithuania are contending with inflation rates of around 20%. Most countries battling surging prices might take comfort that things aren't as bad as in **Turkey**, where inflation has reached 78.6%. The government there has almost doubled the minimum wage over the past six months to

help low-income workers cope with the soaring cost of living, though that has only added to inflationary pressures.

Germany reported its first monthly trade deficit since 1991, the year after the country's reunification. Exports fell in May, in part because of a big drop in goods sold to Russia, while the cost of energy imported from Russia and other countries increased.

The French government said it would fully renationalise **EDF**, France's biggest electricity provider (the state already held an 84% stake). EDF has been beset by financial woes because of the government's cap on electricity bills. It has also had to lower power production from its ageing nuclear plants.

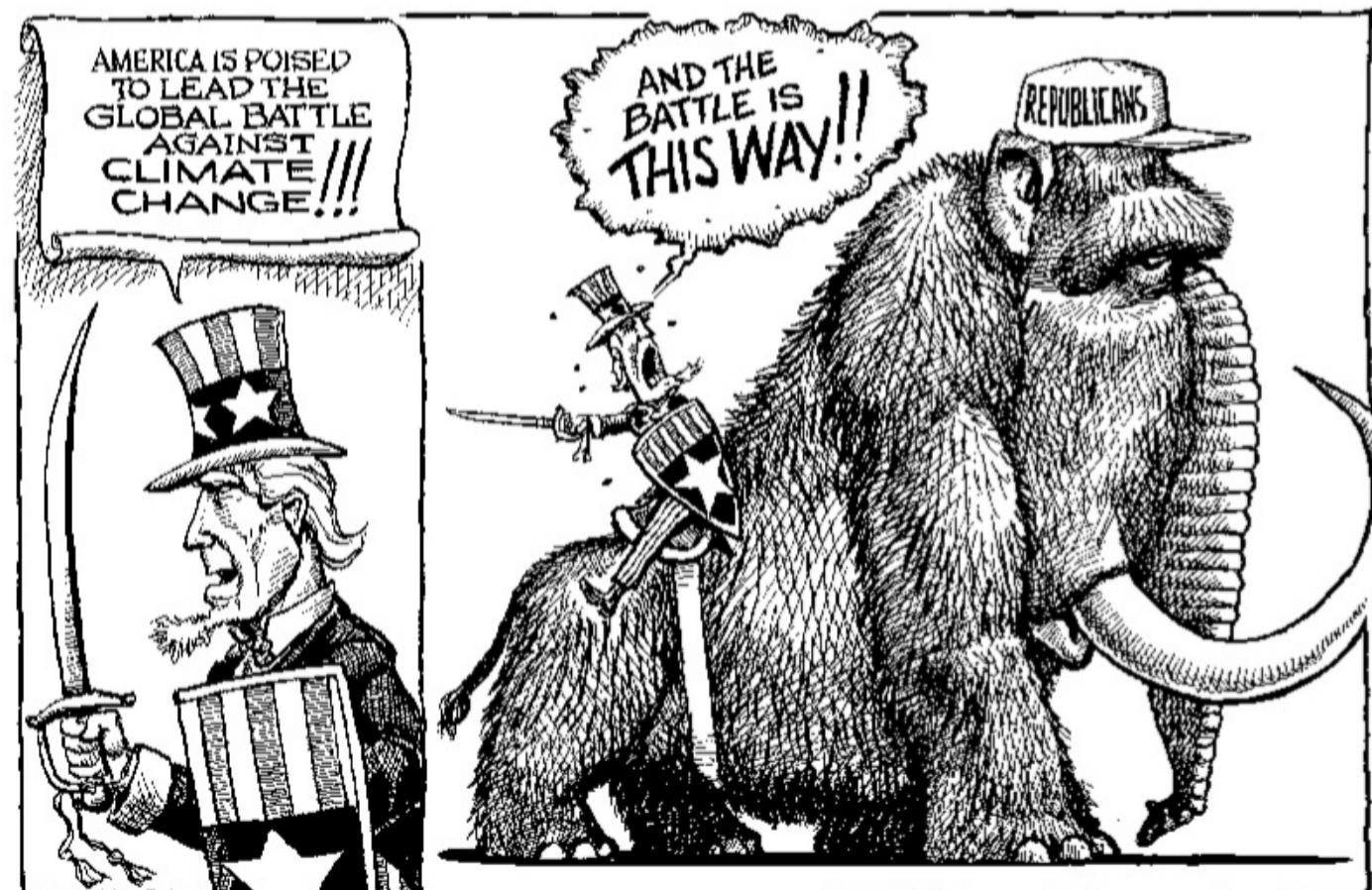
Once a darling of the Democrats, **Jeff Bezos** criticised Joe Biden over the president's handling of inflation, after Mr Biden made a plea for companies that run petrol stations to reduce prices at the pump. The former boss of Amazon described that as "either straight ahead misdirection or a deep misunderstanding of basic market dynamics". Progressives reacted to his comment by renewing calls for a windfall tax on oil firms.

Underlining those market dynamics, petrol prices in America fell this week, as **oil prices** continued to retreat amid speculation of a recession. West Texas Intermediate, the American benchmark, fell below \$100 a barrel. Brent crude hovered above \$100.

Amazon took a small stake in **Grubhub**, a food-delivery service in America that is owned by Just Eat Takeaway. Based in Europe, JET has been pressed by investors to sell Grubhub little more than a year after taking it over. Amazon will offer Grubhub's services at a discount to its Prime members in America.

Justice desserts

Ben & Jerry's sued Unilever, its parent company, to block the sale of its business in Israel to a local licensee. The ice-cream maker has refused to trade its tubs of Chunky Monkey and Caramel Chew Chew in East Jerusalem and the West Bank (in effect a boycott of Israel) in support of the Palestinians. In its suit, Ben & Jerry's said allowing the sale affected its autonomy and its values of "advancing human rights" and economic and social justice. Many Israelis contend that its boycott is Half Baked.



Clownfall

Britain's departing prime minister leaves behind a stricken country

BORIS JOHNSON'S government has collapsed at last. For months Britain's prime minister wriggled out of one scandal after another. Now, irretrievably rejected by his own MPs, he has accepted that his premiership is over. He has asked to stay until the autumn, but he should go immediately.

Mr Johnson was brought down by his own dishonesty, so some may conclude that a simple change of leadership will be enough to get Britain back on course. If only. Although Mr Johnson's fingerprints are all over today's mess, the problems run deeper than one man. Unless the ruling Conservative Party musters the fortitude to face that fact, Britain's many social and economic difficulties will only worsen.

Right up until the end Mr Johnson clung desperately to power, arguing that he had a direct mandate from the people. That was always nonsense: his legitimacy derived from Parliament. Like America's former president, Donald Trump, the more he hung on the more he disqualified himself from office. In his departure, as in government, Mr Johnson demonstrated a wanton disregard for the interests of his party and the nation.

Although the denouement took almost two excruciating days, his fate was sealed on July 5th when two cabinet ministers resigned. The catalyst was the behaviour of his party's deputy chief whip, accused by two men of a drunken sexual assault. Downing Street lied about what the prime minister had known of the whip's record of abuse, and sent out ministers to repeat its falsehoods—just as it had months earlier over illegal parties in the pandemic. Despairing of yet another scandal, over 50 ministers, aides and envoys joined an executive exodus so overwhelming that the BBC featured a ticker with a running total to keep up. In the end the government had so many vacancies that it could no longer function—one reason Mr Johnson should not stay on as caretaker.

The party will hope that its agony is now drawing to a close. But that depends on it taking the right lessons from Mr Johnson's failure. One is about character in politics. Mr Johnson rejected the notion that to govern is to choose. He lacked the moral fibre to take hard decisions for the national good if that threatened his own popularity. He also lacked the constancy and the grasp of detail to see policies through. And he revelled in trampling rules and conventions. At the root of his style was an unshakable faith in his ability to get out of scrapes by spinning words. In a corner, Mr Johnson would charm, temporise, prevaricate and lie outright. Occasionally, he even apologised.

As a result, the bright spots in his record, such as the procurement of vaccines against covid-19 and support for Ukraine, were overwhelmed by scandal elsewhere. Behind the unfolding drama was a void where there should have been a vision. Crises were not a distraction from the business of government: they became the business of government. As the scandals mounted, so did the lies. Eventually, nothing much else was left.

Conservatives have been quick to blame everything on Mr Johnson's character. But his going will be cathartic only if they also acknowledge a second, less comfortable truth. He was an

answer to the contradictions in his party. Many of today's Tory MPs belong to the low-tax, more libertarian and free-market tradition, but others, many from northern constituencies, cleave to a new big-spending, interventionist and protectionist wing. They won Mr Johnson an 87-seat majority in the last election and are vital to Conservative fortunes in the next.

The charismatic Mr Johnson was able to lash these factions together because he never felt the need to resolve their contradictions. Instead he was for both protectionism and free-trade agreements; he wanted a bonfire of red tape even as he punished energy firms for high prices; he planned huge government spending but promised sweeping tax cuts.

This is the politics of fantasy, and you can trace it back to Brexit. In the campaign to leave the European Union Mr Johnson promised voters that they could have everything they wanted—greater wealth, less Europe; more freedom, less regulation; more dynamism, less immigration—and that the EU would be knocking on Britain's door desperate for a deal. It worked so well that fantasy became the Tories' organising principle.

Nowhere more than in the economy, the third lesson the next government must learn. Mr Johnson often boasted that Britain's economic record was the envy of the world, but he was spinning words again. The truth is that the Britain he will leave behind faces grave social and economic problems.

It has the highest inflation in the G7, which lavish government spending using borrowed money could well entrench (see Britain section). As we wrote recently, average annual GDP growth in the decade leading up to the global financial crisis of 2007-09 was 2.7%; today the average is closer to 1.7%. Britain is stuck in a 15-year low-productivity rut. The country is forecast to have the slowest growth in the G7 in 2023.

What is more, this spluttering engine faces extraordinary demands. Industrial action is spreading from the rail unions to lawyers and doctors. As the cost of living rises, a coherent and determined government is needed to hold the line on spending. Britain is ageing. From 1987 to 2010, when the Tories took office, the share of the British population aged over 65 was steady, at 16%. It is now 19% and by 2035 will be close to 25%, adding to the benefits bill and the burden on the National Health Service, already buckling under the weight of untreated patients.

Britain also needs to speed its transition to a net-zero-emissions economy, requiring a vast programme of investment. It has ambitions to count in a world where Russia and China throw their weight around, but its armed forces are small and under-equipped. Scotland and Northern Ireland are restless in the Union and Westminster has no plan to make them content.

Britain is in a dangerous state. The country is poorer than it imagines. Its current-account deficit has ballooned, sterling has tumbled and debt-interest costs are rising. If the next government insists on raising spending and cutting taxes at the same time, it could stumble into a crisis. The time when everything was possible is over. With Mr Johnson's departure, politics must once more become anchored to reality. ■



Social media and security

Who's afraid of TikTok?

The world's most exciting app is also its most mistrusted

WITH ITS wholesome dancing and lip-syncing videos, TikTok once billed itself as “the last sunny corner on the internet”. Since launching just five years ago the app has brought a warm glow to its 1bn-plus users, as well as an icy dash of competition to the social-media incumbents of Silicon Valley. With its rise, a part of the tech industry that had seemed closed to competition has been cracked wide open (see Briefing).

Yet even as TikTok delights consumers and advertisers, others believe the sunny app has a dark side. ByteDance, its owner, has its headquarters in China, whose government is addicted to surveillance and propaganda—making it a worrying place for a media app to be based. As TikTok’s clout grows and as elections loom in America, there is a brewing bipartisan storm in Congress over its supposed role as a “Trojan horse”.

The hype about TikTok is justified—and so are the concerns. The app has transformed competition in social media. Yet unchecked, it presents a security risk to the Chinese Communist Party’s enemies. Finding a way for TikTok to operate safely in the West is a test of whether global business and the global internet can remain intact as US-China relations deteriorate.

Beneath TikTok’s simple interface lies fearsomely advanced artificial intelligence (AI). Its knack for learning what people like helped TikTok sign up its first 1bn users in half the time it took Facebook. In America the average user spends 50% longer on the app each day than the typical user spends on Instagram. TikTok’s revenues are expected to reach \$12bn this year and \$23bn in 2024, drawing level with YouTube’s. Young creators are flocking to the app—along with some older ones. This week *The Economist* joined TikTok (no dancing, we promise).

The effect on competition has been dramatic. In 2020 American trustbusters sued Facebook, now known as Meta, for its alleged dominance of social media. Today such worries look eccentric; Meta has been particularly hard-hit as tech stocks have taken a beating, and the firm is re-engineering its products to mimic TikTok. America often accuses China of copycat capitalism. Now the boot is on the other foot.

Yet concerns about TikTok’s Chinese ownership have long simmered. Donald Trump tried and failed to force ByteDance to sell TikTok’s American business to a domestic owner towards the end of his presidency. Today, with TikTok approaching twice the size it was during the Trump era and with US-China relations at an even lower ebb, things are reaching a critical point.

The most frequently cited risk is privacy. China’s government gives itself the right to demand whatever data it likes from firms based in the country. Though most TikTokers are unbothered by the Communist Party analysing their dance moves, the app’s torrent of videos could be trawled for face and voice data to add to the digital panopticon that China is building at home. Yet this worry is probably exaggerated. Most such information could be scraped from TikTok’s front end or bought online—especially regarding Americans, who are poorly protected by data-privacy laws. The advantage of inside access would be marginal.

The bigger, underappreciated problem with TikTok is the

chance it offers China to manipulate what the app’s vast foreign audience sees. TikTok has gone beyond sunny entertainment to become a major news platform. Open the app and among the songs and skits you may see Supreme Court protests or a flailing Boris Johnson. A quarter of American users say they consider TikTok to be a news source. In countries with weaker mainstream media the share is as high as 50%.

That makes TikTok’s headquartered in China a serious worry. The Chinese government actively meddles in domestic media; four years ago it shut down another popular ByteDance app, unamused by the subversive jokes being shared on it. TikTok’s content moderators are outside China. But the app’s algorithm is nurtured in Beijing. A tweak here or there could give more traction to videos questioning covid-19’s Chinese origin, say, or blaming NATO for the war in Ukraine. Because each user gets a personalised feed, tampering would be hard to spot.

TikTok insists no such meddling has taken place. But a company vulnerable to bullying by an authoritarian government obsessed with media manipulation is clearly a risk. Anyone who considers this paranoid should consider China’s record in Hong Kong (see Essay). Without new safety mechanisms, Western countries might one day have to shut TikTok down.

The first step to avoiding that involves technical fixes. TikTok is working with American regulators on a framework in which American users’ data are held by Oracle, an American firm, with limited access for TikTok’s China-based staff. To tackle the manipulation question, TikTok has offered to let third parties inspect its algorithm. It is hard to understand the black box of an AI program—does a glut of pro-Trump videos indicate that someone in Beijing is pulling a lever, or

simply that audiences enjoy polarising content? But showing the source code and allowing ongoing inspection of how the algorithm is updated would provide some reassurance.

Clouding over

The harder step is to shore up TikTok’s independence. ByteDance’s efforts to separate TikTok’s management from the parent company must go further. TikTok should be ultimately responsible to an independent board of its own, with members from outside China (ideally including some who speak for wider interests than venture capital). Its ownership and voting rights should be more broadly distributed to give foreigners more say, for example by listing outside China. These would be ways of demonstrating that TikTok was genuinely autonomous.

China may bridle at all this. It recently classified content-recommendation algorithms as a key technology and may object to TikTok’s code being made available for dissection. It will be reluctant to cede any corporate control to foreigners. But it must recognise that if it wants its companies to operate globally in sensitive sectors, while the country remains an autocracy in which the state seeks to control business, adaptations will be necessary. If it refuses, the likely result is that TikTok—and more companies like it—will be locked out of the West altogether. ■



America after Roe

The new exceptionalism

America has a set of laws on important subjects that do not reflect the views of Americans

IF A WOMAN in Texas has an abortion she is breaking the law, even if her pregnancy is the result of a rape. The same woman may, however, buy an AR-15 rifle capable of firing 45 rounds a minute, and she may carry a pistol on her hip when picking her toddler up from pre-school. In these, and in a few other ways, America is an outlier compared with other rich democracies. You might assume that this simply reflects the preferences of voters. You would be wrong: it is the result of a political failure.

American exceptionalism once seemed to be the cause of all sorts of transatlantic differences, for good and ill. America's greater religiosity explained the intensity of the culture wars over gay marriage and abortion. Greater individualism explained the dynamism of America's entrepreneurial economy, the willingness to move in search of something better and also, unfortunately, the passion for guns.

This diagnosis is no longer accurate. Before covid-19 hit, internal migration was at its lowest since records began. The share of Americans who belong to a church, synagogue or mosque has fallen from 70% in 2000 to below 50% now. The birth rate is the same as in France.

As America has become less exceptional in these ways, so has its public opinion. On abortion, Americans' views are strikingly close to those in other rich countries. A majority of Americans think it should be legal in the first trimester and restricted thereafter, with exemptions if the mother's health is at risk, and for rape and incest—a qualifier that should be redundant, but is included because six Republican state legislatures have abortion bans with no such exemptions (see United States section). Support for gay marriage, at 40% in 2000, is at 70% now. Americans are about as accepting of homosexuality as Italians are, and more tolerant than the Japanese or Poles.

On climate change, American attitudes are remarkable in their ordinariness. Three-quarters of Americans are willing to make some changes to their lives to help reduce the effects of cli-

mate change. That is slightly higher than the share of Dutch who say the same, and about level with Belgium. On guns, America truly is an outlier: it is the only country with more civilian-owned firearms than people. But here too the overall picture is misleading: 60% of American homes have no guns in them, up from 50% in 1960. A clear majority favours banning guns that can fire lots of bullets quickly.

Yet despite this, America has not banned assault weapons, nor legalised abortion or gay marriage through the normal democratic process. Ireland, where anti-abortion sentiment has historically been stronger, has come to a democratic settlement on abortion—as has Japan, where a woman's right to choose is less popular than in America. Switzerland, nobody's idea of a

forward-thinking place (it gave women the right to vote only in 1971), has legalised gay marriage through a referendum. America and Italy are the only members of the G7 that have not enshrined net-zero emissions targets in law.

America has been unable to settle any of these questions through elections and votes in legislatures. The federal right to abortion was created by the Supreme Court in 1973. The closest thing to a national climate law came in 2007 when the Court decided the president could regulate carbon emissions. Then in 2015 the Court decided gay marriage was a constitutional right. In all three cases the Court stepped in when Congress had failed to legislate. Now that the Court has reversed one of those decisions and some justices are talking about undoing the others, the costs of this political abdication are ever more apparent.

The solution sounds easy: Congress should pass laws that reflect public opinion. In practice, assembling a House majority, 60 votes in the Senate and a presidential signature for anything vaguely controversial is extraordinarily hard. The result is a set of federal laws that do not reflect what Americans actually want. That is what is exceptional now. ■



Education

Crisis in the classroom

Governments are ignoring the pandemic's disastrous effect on education

IF HISTORY IS "a race between education and catastrophe", as H.G. Wells once put it, education seemed until recently to be winning. In 1950 only about half of adults globally had any schooling; now at least 85% do. Between 2000 and 2018, the proportion of school-age children who were not enrolled in classes fell from 26% to 17%. But the rapid rise in attendance masked an ugly truth: many pupils were spending years behind desks but learning almost nothing. In 2019 the World Bank started keeping count of the number of children who still cannot read by the time they finish primary school. It found that less than half of ten-year-olds in developing countries (home to 90% of the

world's children) could read and understand a simple story.

Then the pandemic struck and hundreds of millions of pupils were locked out of school. At first, when it was not yet known whether children were vulnerable to covid-19 or were likely to spread the virus to older people, school closures were a prudent precaution. But in many places they continued long after it became clear that the risks of reopening classrooms were relatively small. During the first two years of the pandemic more than 80% of schooldays in Latin America and South Asia were disrupted by closures of some sort. Even today schools in some countries, such as the Philippines, remain shut to most pupils, ►

leaving their minds to atrophy.

Globally, the harm that school closures have done to children has vastly outweighed any benefits they may have had for public health (see International section). The World Bank says the share of ten-year-olds in middle- and low-income countries who cannot read and understand a simple story has risen from 57% in 2019 to roughly 70%. If they lack such elementary skills, they will struggle to earn a good living. The bank estimates that \$21trn will be wiped off their lifetime earnings—equivalent to about 20% of the world's annual GDP today.

This should be seen for what it is: a global emergency. Nearly every problem that confronts humanity can be alleviated by good schooling. Better-educated people are more likely to devise a cleaner energy source, a cure for malaria or a smarter town plan. Workers who can read and manipulate numbers are more productive. Bookish populations will find it easier to adapt to climate change. They will also have fewer babies, and educate them better. If the damage the pandemic has done to education is not reversed, all these goals will be harder to reach.

Politicians talk endlessly about the importance of schooling, but words are cheap and a fit-for-purpose education system is not. Spending has risen modestly in recent decades but fell in many countries during the pandemic. Scandalously, many governments spend more on rich pupils than they do on poor ones. Moreover, too little development aid goes to education, and some is self-interested. A chunk goes to donor countries' own

universities, to fund scholarships for the relatively well-to-do from poor places. Such exchanges are welcome, but funding primary schools in poor countries does more good.

Many of the most critical changes are not things that money will buy. Testing is a mess, leading governments to overestimate levels of literacy. New teachers have been hired but not trained properly. Lessons in reading and maths are too often cut short to make room for instruction in whatever other subjects happen to be faddish, from the moral certainties of left-leaning Westerners to the thoughts of Xi Jinping. Teachers, who have come through the same education systems they are supposed to be improving, often struggle to teach. They would benefit from clear lesson plans, as well as the freedom to pause and help children who have fallen behind. Politicians must stop pandering to teachers' unions, many of which want schools to be run for the comfort of unsackable adults, rather than for the benefit of pupils.

At present a quarter of countries do not have any plans to help children claw back learning lost during the pandemic, according to a survey carried out earlier this year by UNICEF. Another quarter have inadequate catch-up strategies. The same energy that was once poured into building schools and filling up classrooms should now be used to improve the lessons that take place within them. At stake is the future not only of the generation scarred by the pandemic, but of all the pupils who will come after them. No more children should stumble through their school days without learning to read or add up. ■

Leveraged buy-out Private pain

The buy-out business may struggle in a changed economic climate

HELD IN FEBRUARY 2007, the 60th-birthday celebrations of Stephen Schwarzman, a private-equity magnate, captured the spirit of an age. Nothing distils the hubris of Manhattan on the eve of a financial crisis like Rod Stewart belting out "Maggie May" to a fizz-drinking crowd in Hermès ties. Within two years Mr Schwarzman's firm, Blackstone, had lost more than 80% of its market value. Yet the striking thing is that the private-equity industry, including Blackstone, soon bounced back to enjoy a gargantuan boom. Today private equity is again on the ropes (see Business section). But shifting investment patterns and higher interest rates mean it is unlikely to enjoy such a miraculous recovery.

As central banks raise interest rates and shrink their balance-sheets, markets are reeling. This year equities have suffered the worst sell-off in a generation. Things are also messy in debt markets, particularly the risky "high-yield" corners where private-equity funds gather ammunition for deals. Junk-bond yields have reached 9%.

All this raises questions about one of the biggest investing fashions of the past two decades. Private-equity assets have more than tripled over the past decade to reach \$4.6trn. Desperate for higher returns as interest rates fell, almost all pension funds, endowments, sovereign-wealth investors and life insurers piled into private assets. It is commonplace for a pension fund to have 10% of its holdings in this asset class.

Now a crunch is coming, in two ways. First, the deals done at

sky-high valuations look a lot less clever. Higher costs and slowing economic growth will squeeze the profits of private-equity-owned firms. With share prices lower it becomes harder to sell or float firms at attractive valuations. In contrast with the last boom, buy-out funds have loaded up on tech firms that are facing a bigger valuation hit than the market overall. It will take months for funds to mark down their valuations and for investors to get a clear view of the damage, but it is possible that funds raised since 2018 will struggle to return any profits of note.

The second part of the crunch relates to future investments. The industry is sitting on \$1.3trn of "dry powder" and investors are still increasing their allocations. Yet whether the business model works in the new macroeconomic environment is uncertain. Buy-outs, which involve buying firms using debt, can generate returns in three ways: through rising valuations, high leverage or improving operational performance. Today two of the three levers are impaired.

As interest rates rise, reversing a long-term downward trend, it seems unlikely that asset prices will bounce back. Meanwhile, higher borrowing costs may be here to stay. Leverage is the life-blood of buy-outs: the calculations have fundamentally shifted.

Private-equity managers will struggle to find a playbook from the industry's 40-year history. The first cycle, in the 1980s, saw a band of pioneers capitalise on the inefficiencies of lumbering public corporations. The music stopped when credit markets, ►



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► epitomised by the junk-bond king Michael Milken, crashed. Today there are few large, cheaply valued companies that are ripe for this kind of shock-therapy. Private equity recovered rapidly after the global financial crisis; by early 2011, business was back. But the most significant factor was central banks pushing interest rates to zero. Now some private-equity tycoons may hope to compensate by improving firms' operating performance. Yet it is an open secret that many are speculators, not managers.

Who will suffer most? The first losses will be incurred by investment bankers who underwrote buy-out debt at frothy prices. But that will be bonus-crushing, not system-shaking. Disclosure is patchy but, by our crude estimates, the five biggest American investment banks have up to \$90bn of corporate loans held for short-term purposes. Even if they were worth nothing this

would knock only about 12% off the banks' total core capital. The ultimate investors face a bigger headache: they are betting on high returns from private equity to fulfil the promises they have made to retirees and other beneficiaries.

You stole my heart and that's what really hurts

Best positioned of all are the private-equity firms themselves. Since the 1980s they have diversified. They often have property, credit and infrastructure businesses that are comparable in size to their buy-out activities. These areas may do well during inflationary periods. The industry's pioneers have largely retired. One who has stayed the course, Mr Schwarzman, today manages a vastly different firm, with diversified assets under management of \$915bn. For some people, the party never ends. ■

Chile

Magna mistake

Chile's draft constitution is a fiscally irresponsible left-wing wish list. Voters should reject it

WHEN ANGRY and occasionally violent protesters took to the streets of Santiago, Chile's capital, in 2019 and 2020, their grievances were manifold. Students marched against costly tuition; others demonstrated against the country's private pension system and threadbare health care. Many blamed Chile's ills on one document: the constitution adopted in 1980 under Augusto Pinochet, the dictator who ruled from 1973 to 1990.

To quell the protests, in which at least 30 people died, the centre-right government of the day agreed to have a new constitution drafted. A constituent assembly of 155 people was elected, many of them from social movements rather than established parties. The final result of their haggling was released on July 4th (see Americas section). It is absurdly long, with 388 articles. It is also fiscally irresponsible and sometimes dotty.

To be fair, it omits some of the worst ideas aired in the assembly, which was dominated by leftists. These included nationalising all natural resources (mining generates 12% of GDP) and scrapping the upper house. The central bank retains its independence, though its remit has been expanded to include "employment protection, care for the environment and the natural heritage".

A few ideas are laudable. The document would require the devolution of some powers to regions, and would give indigenous people the right to be taught in their own languages in schools. It seems to require laws to be passed to legalise abortion and assisted suicide.

But overall the draft is a confusing mess, full of woolly language that more or less guarantees decades of squabbling about what it actually means. "Nature" would be given rights. The draft mentions "gender" 39 times. Court rulings, the police and a national health system will have to operate with a "gender perspective", which it does not define.

The document is far less business- or growth-friendly than the current constitution. It gives trade unions the sole right to represent workers, guarantees them a say in corporate decision-making and allows them to strike for any reason, not just those relating to work. It says that everyone has the "right to work" and that "all forms of job insecurity are prohibited". That could make

it rather hard to fire anyone. Landowners, such as farmers, could potentially lose the property rights to water on their land. Compensation for expropriated land would not be at a market price but at whatever Congress deems a "just" one.

The draft creates a portfolio of socioeconomic rights that could blow up the budget. It requires the establishment of several new bodies, such as an integrated national health system, and cradle-to-grave care, without giving much thought to how they would be funded. The state would oversee the provision of housing, to which it says every person has a right. Property speculation would be banned. So would for-profit education.

Legal checks and balances on the government would be watered down. A new council would have power over all judicial nominations; previously the Supreme Court, the president, the court of appeals and the Senate all had a role. The draft upends

the budget process by giving Congress new powers to propose spending bills, although the president can veto them.

The document is ridiculously broad. It says the state should "promote the culinary and gastronomic heritage" of Chile and recognise "spirituality as an essential element of the human being". Everyone has a "right to sports".

Non-humans get a look in, too: the state will promote "education based on empathy and respect for animals".

Chile's old constitution was hardly perfect. Indeed, it has been amended nearly 60 times. But compared with its proposed replacement, it is a paragon of clarity. More importantly, the old blueprint for governing works. Since democracy was restored, Chile has been a Latin American success. GDP per person has tripled since 1990 and poverty has fallen.

Rather than scrapping the old constitution, Chileans should scrap the new one. When the draft is put to a referendum in September, they should reject it. Congress should then make a determined effort to reform the existing constitution to salve Chile's discontent, for example by making it easier to build a strong welfare state. That may sound uninspiring to those who took to the streets in 2019 and 2020. But in the long run it is far more likely to make Chile prosperous—and governable. ■

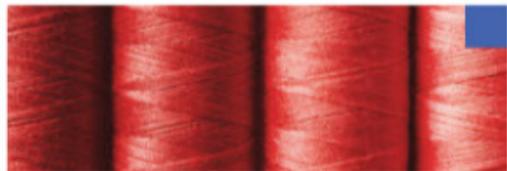


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Frontline justice

As you suggest, brave grassroots activists who challenge and hold governments to account can lead to improvements in a country's rule of law ("Overruled", June 11th). But this is a long-term endeavour. In the meantime, improving frontline services to deal with people's everyday justice problems is possible and affordable. In low-income countries it costs just \$20 per person a year to provide basic community-level justice services. Sierra Leone's government-funded Legal Aid Board, with its network of community-based paralegals, reaches ten times more people than the previous coalition of small-scale grassroots activists. It offers a powerful example of what can be done where there is political will and scaled-up targeted investment.

In rich countries, the failure to fund systems to deal with people's routine legal problems is a political choice. But in poor countries affordability is an issue. These countries are unable to provide half the cost of a basic justice service, even if they maximise their tax take and allocate the same percentage to justice as OECD countries do. Targeting more of the aid budget that is spent on justice towards frontline services would be a good starting-point for opening up access.

CLARE MANUEL
MARCUS MANUEL
Senior research associates
ODI
London

What did you expect?

Your leader on the Supreme Court's overturning of *Roe v Wade* admitted that the decision in 1973 to grant abortion rights "rested on shaky legal arguments" ("After the shattering of Roe", July 2nd). So why, in the face of this, wouldn't conservatives have been expected to overturn *Roe* when they got the chance to do so?

America's culture wars have a strange character. They tend to be assumed to be fine until

conservatives respond to the attacks made on their views. I personally favour a right to abortion, but it should be codified by Congress, which is accountable to the electorate. The same is true of some of the other dubious constitutional-law issues that have been introduced under substantive due process.

JEREMY SHEARMUR
Dumfries

Federal legislation is needed to fill the legal vacuum "that sucks in the justices", you say. One pragmatic way of dealing with this would be for Congress to codify federal "guardrails" for abortion that all 50 states must abide by. Legislation that legalises abortion nationwide between eight and 18 weeks gestation, for example, would provide such guardrails. States would then enact their own abortion laws within these parameters, permitting places like Idaho to ban abortion eight weeks after conception and those like California to legalise it until 18 weeks. Sufficient numbers of pro-choice legislators might begrudgingly support such legislation, knowing that abortion would be legal nationwide until embryos become fetuses. Conversely, enough pro-life legislators may get on board if abortion after quickening was banned nationwide.

This would require arduous compromise, but the 50 outcomes subsequently produced by the states would more closely align with the abortion values held by the overwhelming majority of Americans, rather than the chaos that now portends.

T. MICHAEL SPENCER
Washington, DC

Dealers or no dealers?

I enjoyed your article on the upheaval in the automobile industry ("The great Teslafication", June 18th). The switch to electric vehicles (EVs) will be daunting; the inputs and skills required to design and build them are fundamentally different from those required for

vehicles powered by internal-combustion engines.

However, I challenge the notion that the "time-honoured dealership system" is still useful as we move to an EV world. The function of dealers as holders of new car inventory was on its way out because of Tesla's online ordering system. This change has been hastened by the global chip shortage. You mentioned that dealers also serve an important service function. My new electric Volvo's first recommended service is at 20,000 miles, about three times longer than for traditional cars. EVs have fewer moving parts or fluids that need changing; they barely even use their traditional brakes because of regenerative braking.

If I don't need a dealership to buy a car, and the car I buy needs little servicing, what time-honoured function are dealers serving?

JAKE DEAN
Director
Grainger Centre for Supply
Chain Management
Wisconsin School of Business
Madison, Wisconsin

You quote analysis from Barclays that carmakers need to "move at Silicon Valley speed". If this is the same speed at which Barclays bank customer centres take my calls, the challenge is not so great.

PAUL SAMENGO-TURNER
Berlin

Life goes on

As a long-term subscriber to *The Economist*, history professor and BTS ARMY (Adorable Representative MC for Youth), I was disappointed by Banyan's column on the legacy of the South Korean boyband (June 25th). In their break-up video, the members of BTS discuss their ongoing commitment to create innovative and meaningful music, a process fuelled sometimes by public engagement and at other times by introspection. In the comments on that video, you will find ARMYs who appreciate the group's honest assessment of the challenges that they face

and who look forward eagerly to their solo albums. In BTS's Korean-language songs, you will find commentary on Korean social issues and online bullies. Try "Silver Spoon", "Spring Day", or "Ugh!". HANNAH BARKER
Tempe, Arizona

The work-app balance

Sadly, I fear Bartleby's belief that technology will lead to less wasted time at work is misguided (June 18th). We recently moved to jazzy new headquarters, fully digitally enabled. In practice, this means I now require four new apps on my phone. One has my access pass to get in. Another lets me reserve a desk, book a meeting room or open my locker. A third enables me to buy my lunch. The fourth provides a secure verification to access all the other apps.

As a result, every time I am at the office I add five minutes of swearing to my day as I open the incorrect app and another nine minutes staring at my screen so that I can use face recognition to avoid entering a password. I must also spend 12 minutes repeatedly giving my phone a mini-charge before each meeting. Fortunately, I'm in the office only two days a week due to our new flexible work policy.

SIAN DAVIES
London

When Bartleby says "Whether the time thereby saved would be put to more productive use" he could stop wasting time by eliminating "thereby".

KEITH SAWYER
Bushmills, County Antrim

I am surprised that Bartleby left out the most pointless of pointless tasks: writing letters to the editor.

CHARLES HAGEDORN
Hopedale, Massachusetts



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- Has the ability to skillfully influence externally through vision, effective communication, political finesse and networking; and
- Demonstrates a genuine commitment to the WWF mission and values.

Egon Zehnder has been retained as our exclusive partner in this search. Please register your interest at WWFIInternationalDG2022@EgonZehnder.com. The submission deadline is 31 July 2022.

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BOARD CHAIRPERSON – WWF INTERNATIONAL



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WWF now seeks a new Chair of the International board. The (non-executive) board oversees the activities of WWF International and is the custodian of the Panda brand.

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- Has the personality and capabilities to work effectively with the global WWF network; and
- Demonstrates a genuine commitment to the WWF mission and values.

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Egon Zehnder has been retained as our exclusive partner in this search. Please register your interest at WWFIInternationalChair2022@EgonZehnder.com. The submission deadline is 31 August 2022.

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Quavering

TikTok's rivals are nervous. Governments are suspicious. A billion users and rising are glued to their screens

THE CAT strains to see what is on the counter, first hopping on its hind legs, then bounding up for a closer look—only to recoil as if electrocuted at the sight of a piece of tinfoil. This six-second drama, which has been viewed more than 40m times, was highlighted by TikTok as one of its “hottest” recent videos.

Cat videos are the butt of jokes on late-night TV. But they and the hundreds of millions of other short clips uploaded to TikTok are causing sleepless nights in both Silicon Valley and Western capitals. The app is growing at a pace that has startled competitors and regulators. In just five years it has broken into the top tier of global social media, a club that American officials used to consider so closed to competition that they started an antitrust case against its leading member, Facebook. As TikTok hoovers up users, and the advertising dollars that follow them, its larger rivals are rewriting their own apps to mimic the young upstart. The shake-up may not end there: TikTok’s move into e-commerce could disrupt another industry.

Governments eye TikTok nervously for different reasons. As the first consumer-facing app from China to take off in the West, TikTok is a source of pride in Beijing. But the app’s Chinese ownership makes politicians elsewhere uneasy about its tightening grip on their citizens’ attention. Users’ data could end up in the wrong hands, they fear, or their viewing could be moulded by Chinese propagandists. TikTok has already been banned in India, formerly its largest market. Other countries, including America, are considering their next move.

It was only ten years ago that Zhang Yiming, a bookish Chinese entrepreneur a year older than Facebook’s Mark Zuckerberg, founded a software firm called ByteDance. Among its first creations were Neihan Duanzi (Inside Jokes), a platform for sharing gags, and Toutiao (Headlines), a news aggregator. The apps used artificial intelligence (AI) to learn what kind of sketches or stories users liked. Both took off; today Toutiao is China’s biggest news aggregator, with 360m users.

Mr Zhang soon wondered what else his algorithm might do. In 2016 ByteDance released Douyin (Shaking Sound), an app for recording and sharing lip-sync videos. Douyin was modelled on Musical.ly, another Chinese-made lip-syncing app that was popular with young Americans, but enhanced by ByteDance’s AI discovery engine. It was a hit. The following year ByteDance released a twin app outside China, with an identical interface and algorithm but separate content. It used Douyin’s logo of a juddering musical quaver but had a snappier name: TikTok.

At first TikTok was little noticed outside Asia. But in 2017 ByteDance bought Musical.ly and soon transferred its 100m users to TikTok. TikTok has since grown like no other app. In September, when it was a little over four years old, it reached 1bn users, a milestone that Facebook, YouTube and Instagram took eight years to pass, albeit at a time when fewer people were online. It has been the world’s most downloaded mobile app since early 2020. And whereas young audiences are lukewarm about Facebook, TikTok has them hooked. Some 44% of its American users are under 25, believes eMarketer, a data company, compared with 16% of Facebook’s.

TikTok makes creating films easy. It has done for video-editing what Instagram did for photo-editing a decade ago, allowing amateurs to turn wobbly recordings into slick-looking films. Better yet, the AI discovery algorithm dangles the prospect of ➤

► viral success before unknown creators, who struggle on apps like Facebook, which reward those with lots of followers. Whereas the biggest personal accounts on Facebook are of athletes, singers or other celebrities, the top TikTokers are famous for being TikTokers. Khaby Lame, a Senegalese silent comic, leads the pack with 146m followers. Star creators have been pampered—and paid—by the company to stay on the platform.

TikTok is also easy to watch. Whereas most social-media apps recommend content from the user's network of friends, TikTok requires no network, no searching, nor even any login: its algorithm plucks videos from its vast archives and learns what the viewer likes. The format is supremely addictive. In America TikTok's users spend an average of 46 minutes a day on the app, a fraction longer than they spend on YouTube and 16 minutes longer than on Facebook or Instagram.

TikTok is fast monetising this attention. Its revenues were about \$4bn last year and should reach \$12bn this year and \$23bn in 2024, nearly all from advertising, forecasts eMarketer (see chart). That is more than Twitter, Snapchat, Pinterest and other apps in the second tier of social media and would put it on a par with YouTube. TikTok might become bigger still, judging by its Chinese twin, Douyin. The average user spends 100 minutes a day on Douyin, which accounts for more than 12% of total time spent online in China, according to Bernstein, a broker. ByteDance—which owns several popular Chinese apps besides Douyin—had 28% of China's digital ad market last year, ahead of rivals such as Tencent and Baidu, and was still growing.

Douyin also demonstrates how TikTok could move beyond advertising. The app is a big force in e-commerce, its live-streaming stars flogging products in a 21st-century reimaging of the TV shopping channel. Although TikTok's first such foray, TikTok Shop, which was launched in November in Britain and Indonesia, has flopped, it is unlikely to give up.

TikTok's competitors are unnerved. In April Mr Zuckerberg announced that Facebook's news feed, which for more than 16 years has shown users mainly posts from their friends, would become a "discovery engine", using AI to serve up content from all over the internet—just like TikTok. He mentioned TikTok five times on an earnings call in February. Meta, the parent of Facebook and Instagram, has developed a TikTokesque short-video format called Reels, which it has incorporated into both of those apps.

Such clones are everywhere: consider Snapchat Spotlight, YouTube Shorts, Pinterest Watch and even Netflix's Fast Laughs. Some of them are succeeding. Reels accounts for more than 20% of time

spent on Instagram. YouTube Shorts has 1.5bn monthly users, which is probably more than TikTok itself.

But TikTok, in turn, is pinching some of its rivals' ideas. It has raised the maximum length of its videos to ten minutes, eating into YouTube's market. It has launched disappearing clips along the lines of Snapchat's "stories". It is trialling a subscription model, similar to that on Twitch, Amazon's live-video platform, in which fans pay to access a creator's channel. And it recently started paying some creators a share of ad revenues, as YouTube has long done.

All this disruption is healthy in a market long thought uncompetitive. In 2020 America's Federal Trade Commission launched an antitrust case against Meta. As TikTok takes users and advertisers from Meta, whose market value has fallen by more than half this year, there is less reason to worry about a lack of competition.

Weapon of mass distraction

Instead, regulators have begun to fret about TikTok for a different reason: national security. ByteDance, TikTok's owner, is incorporated in the Cayman Islands and has investors from all over, including America's General Atlantic and Japan's SoftBank. Bill Ford, General Atlantic's boss and a member of ByteDance's board, has characterised ByteDance as "a global internet company with Chinese heritage, as opposed to a Chinese internet company". But the firm's headquarters are in Beijing. Like other big Chinese companies, it is subject to the influence—official and unofficial—of the Chinese Communist Party.

In 2018 ByteDance was forced to shut down Neihan Duanzi, its joke-sharing app, which once had more than 200m users, after China's media regulator claimed that its "off-colour" content had "triggered intense resentment among internet users". Mr Zhang, ByteDance's founder, made a public apology: "The product has gone astray, posting content that goes against socialist core values. It's all on me. I accept all the punishment since it failed to direct

public opinion in the right way."

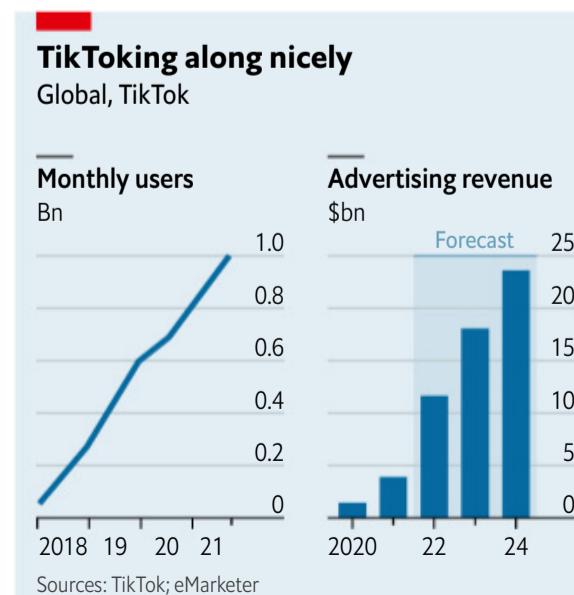
What would China's government want with TikTok? Two things, claim hawks. First, the data of the app's billion-plus users. There is no evidence TikTok is collecting information it shouldn't. The University of Toronto's Citizen Lab last year found no sign that either TikTok or Douyin harvested contacts, photos, audio, video or location data without permission. It found that Douyin had features that can be considered shifty outside China, such as "dynamic code-loading" (ie, loading extra code while running). But TikTok did not.

Like most social apps, however, TikTok hoovers up information about customers' phones, usage patterns and locations, and uses third-party tracking services. Under Chinese law, the government can demand more or less any data from Chinese firms, including data held abroad. For that reason the Committee on Foreign Investment in the United States (CFIUS), a Treasury-led panel which vets deals for national-security risks, ordered the reversal in 2020 of a Chinese company's purchase of Grindr, a dating app which records users' sexuality and HIV status, among other things.

TikTok says the Chinese government has never asked for, nor been provided with, users' data (though some senior staff privately admit they might not know if it had). The app has less blackmail potential than Grindr. Yet James Lewis of the Centre for Strategic and International Studies, an American think-tank, points out that intelligence agencies' biographic databases routinely mine social media. China's vast domestic surveillance programme records facial and vocal prints. Logging such data, and matching it to individuals, would be easier if the information came directly from TikTok, not scraped from the web. And if TikTok's ambitions to broaden its business are realised, the firm will know not only what its users look and sound like, but also what they buy and where they live.

In 2020 India banned TikTok and dozens of other Chinese apps. Though the ban was provoked by a border clash, India claimed the apps were "stealing and surreptitiously transmitting" Indian users' information. Two months later Donald Trump, America's president at the time, issued an executive order requiring TikTok to be sold to an American company within 45 days or else face a ban, citing the "vast swathes" of information it was collecting, "potentially allowing China to track the locations of Federal employees and contractors, build dossiers of personal information for blackmail and conduct corporate espionage". (ByteDance successfully challenged the order in court; Mr Trump's successor, Joe Biden, revoked it.)

TikTok has tried to calm such fears by keeping foreign users' data out of China. This in itself doesn't count for much: a re-



Report by BuzzFeed last month found that China-based staff repeatedly accessed American users' data as recently as January. "Everything is seen in China," a member of TikTok's Trust and Safety department was quoted as saying.

On June 17th TikTok announced that American users' traffic would henceforth be routed through servers operated by Oracle, an American firm which has a similar contract with Zoom, another tech company that has faced suspicion over links to China. Staff in China will be able to access American users' data only via protocols overseen by a security team based in America. The details are being hammered out with American authorities. If they approve the plan, it could be replicated elsewhere.

Xi TV

But there is a second, bigger fear about security, which concerns not what TikTok learns about its users, but what they learn from it. The app presents itself as an entertainment platform, with content to "make your day". But as it has grown, so has the breadth of its output. About a third of TikTokers treat it as a source of news, according to the Reuters Institute at Oxford University. In countries with weak mainstream media the share is higher: in Indonesia, Malaysia, the Philippines and Thailand, about half use the app for news. Young people, the most avid TikTokers, are more likely than others to get news from it. Mainstream media, meanwhile, use TikTok to promote their content (*The Economist* launched a TikTok channel this week).

TikTok's growing role as a news platform has sparked fears that, in the words of Ted Cruz, an American senator, it is "a Trojan horse the Chinese Communist Party can use to influence what Americans see, hear and ultimately think". China's government is known to manipulate social media at home. On June 3rd, the eve of the anniversary of the Tiananmen Square massacre, Li Jiaqi, a streaming salesman known as the Lipstick King, was yanked from Weibo, a social-media site, after showing a cake resembling a tank. Government censors work in ByteDance's office in Beijing, according to a former employee (the company disputes this). Searches for Xi Jinping, China's president, on Douyin, TikTok's Chinese twin, return nothing but the blandest propaganda.

The same search on TikTok produces more normal results. Yet TikTok's moderation has sometimes displayed Chinese characteristics. Internal guidelines unearthed by the *Guardian* in 2019 banned references to Tiananmen, Tibet and Taiwan, alongside "highly controversial topics" from other countries, including Northern Ireland. Those rules have since been liberalised; TikTok says content moderation has been run from outside China for two



Listen to the podcast

Hear more on this story on "Money Talks" at economist.com/tiktokpod

years. But the recommendation algorithm, TikTok's secret sauce, is still updated by ByteDance in China.

Nana Li of the Asian Corporate Governance Association, a watchdog, doubts that the Chinese government is steering TikTok's coverage. "Given TikTok's popularity outside China, I don't think they're going to risk it," she says. "There would be a reputational cost for all overseas Chinese companies. And for what?"

Still, American teenagers' favourite source of entertainment and, increasingly, news, is ultimately run from China. Most countries have rules limiting foreign ownership of old-media companies, notes Rasmus Nielsen of the Reuters Institute. Media mergers in general are subject to more scrutiny than other deals, since concentration of ownership has implications beyond pricing power, he points out. Social-media platforms, by contrast, face little regulation in most democracies. Last month Brendan Carr, a member of America's Federal Communications Commission (FCC) appointed by Mr Trump, called on Apple and Google to boot TikTok from their app stores. But the FCC cannot compel them to do so.

And whereas it is easy for regulators to monitor the output of newspapers or television stations, it is hard to know what people see on their personalised social feeds. Sputnik and Russia Today, news channels with ties to the Kremlin, were banned in many Western countries in March over what the European Union called "systematic information manipulation and disinformation" about the war in Ukraine. It would be harder to know if TikTok users were being subjected to "disinformation campaigns that benefit the Chi-

nese Communist Party", as Mr Trump's executive order put it. TikTok promises that as part of its deal with Oracle it will allow third-party vetting of its algorithm.

Will this satisfy its critics? ByteDance is eager to get its international business on a surer footing. Even as TikTok has soared in popularity, the uncertainty abroad and a crackdown on tech firms at home have arguably damaged the parent company. China's policing of online content is becoming stricter, threatening live-streaming and the commerce and advertising attached to it. Tiger Global, an American investment-management company, has reduced its valuation of ByteDance by about a third since earlier this year, to under \$300bn, according to the *Wall Street Journal*. Last year there was talk of an initial public offering. That now seems to be off the table. Mr Zhang, ByteDance's founder, retired as its chief executive and chairman last year, as the government's campaign against tech magnates intensified. (He still owns a big stake in the company and reportedly retains a majority of voting rights.)

Some in TikTok compare its predicament to the suspicion that Japanese companies faced in the West in the 1980s. But the position is more complicated than that. Last year Mr Biden signed an executive order of his own, laying down criteria by which the government would evaluate the risk posed by apps connected to foreign adversaries, including China. It is reportedly working on new regulations for foreign software, focusing on misuse of data.

CFIUS, the panel that unwound the Grindr deal, is reviewing TikTok, too, and is facing mounting pressure to report (on June 24th six Republican senators sent a chivvying letter to the Treasury). The panel could order the undoing of the five-year-old Musical.ly deal—a hideously complicated prospect—or even revert to Mr Trump's plan of forcing ByteDance to sell TikTok's American business. Given TikTok's popularity, CFIUS may find it easier to accept some combination of the set-up with Oracle and the opening of the app's algorithm to outside scrutiny.

China, however, might not agree to those terms. In 2020, as Mr Trump demanded TikTok's American business be sold, China passed a law that classified TikTok's recommendation algorithm as sensitive technology, which could prevent its sale to a foreign company. The law may also bar ByteDance from allowing American regulators to examine its code more closely, suspects Adam Segal of the Council on Foreign Relations, another think-tank.

China might prefer to take TikTok away than to hand it over. America, for its part, could then face a choice between doing without the world's hottest app and ignoring the risks. "At some point", says Mr Segal, "someone has to blink." ■





American conservatives

Trumpism's new Washington army

WASHINGTON, DC

In preparation for power, the new right builds new institutions

A GILDED CONFERENCE room stocked with coffee and lanyard-wearing men in dark suits is a common enough sight in Washington. Only a sign at the door reading “The Lies of the Ruling Class”, hosted by the Claremont Institute’s year-old Centre for the American Way of Life, marks this event at the Mayflower Hotel as something more unusual. “America’s elites are not bright, not competent and not qualified,” says Michael Anton, a former national-security aide to Donald Trump, in the day’s first session. United in favour of economic nationalism, a restrained foreign policy and restricted immigration, many of the room’s self-described national conservatives see the “threat” to America from the left in existential terms. Yet they are brimming with confidence.

Come November, when Republicans expect to retake one if not both chambers of Congress, the national conservatives hope to translate their budding movement’s energy into a share of that power. Thrilled by Mr Trump’s election but disappointed by his inability to convert unorthodox instincts into action, they are intent on shap-

ing a new conservative elite and agenda. Like-minded wonks and former Trump-administration officials are busy building think-tanks and advocacy organisations, to provide the policies and, crucially, the personnel for a new Republican right.

Conservatives have long relied on such places to “formulate concepts, strategies and policies that elected officials can implement when in positions of authority”, says Matthew Continetti, a scholar at the American Enterprise Institute (AEI), a conservative think-tank, and author of a history of the American right. Years before Ronald Reagan became president, think-tanks including the Heritage Foundation and

magazines such as *National Review* promoted a generation of Republicans that embraced free markets, social conservatism and an assertive foreign policy. They provided a career for young conservatives—and cadres for White House personnel directors and congressional chiefs of staff seeking to hire ideological allies.

But Mr Trump’s unexpected election was not preceded by institution-building to match his America First instincts. To staff the government, Mr Trump instead depended on outfits like the Heritage Foundation, stocked with many experts who had opposed him. The Republican majority in Congress busied itself with older priorities, such as tax cuts. It was the handful of dissident Republicans with experience and networks in Washington, like Robert Lighthizer, a lawyer appointed as US trade representative, who proved to be the most effective policymakers in the administration, reckons Mr Continetti.

Among the first to act was the Claremont Institute, based in southern California. It shot to prominence for its affiliates’ defence of Mr Trump. One of these was Mr Anton. Another, John Eastman, was the legal theorist behind Mr Trump’s bid to cling to power after the 2020 election. The institute has a highbrow journal, the *Claremont Review of Books*, and a centre on Capitol Hill near other new-right institutions. A few blocks away is the Washington outpost of the conservative Hillsdale College, where Mr Anton is a lecturer. Nearby is the townhouse of a former Trump adviser,

→ Also in this section

- 22 The push for fetal personhood
- 23 Military culture gets entrepreneurial
- 24 A makeover for the Asian carp
- 25 The Democrats’ Hispanic problem
- 26 Lexington: Liz Cheney’s example

► Steve Bannon, convener of new-right personalities and backer of national conservatives abroad like Italy's Matteo Salvini.

A clutch of journals now promotes the new right's ideas. First published in 2017, the quarterly *American Affairs* defends industrial policy and rejects the laissez-faire of conservatives past; it exemplifies the new right's interest in using state power to reshape the economy and society. *First Things* and the *American Conservative* are older but represent the salience of religious and nationalist thinking. *First Things* has published essays in favour of a pro-family welfare state to complement abortion bans. The *American Conservative* has argued for limits on American support for the war in Ukraine. Their tiny circulation belies their significance in stirring debate and giving new-right thinkers a chance to burnish their reputations.

Part wonkish, part anti-woke

To translate such ideas into policy, new think-tanks have sprung up. Among the more sophisticated is American Compass, founded in 2020. "There was this white space in the institutional landscape to put out new ideas in a rigorous way," says Oren Cass, its founder. He has no love for Mr Trump, whose actions following the 2020 election he called "impeachable offences". Mr Cass prefers to focus on wonkish proposals in support of the Republican Party's turn towards statism, which have been influential among lawmakers.

Last year Senator Mitt Romney proposed a universal child allowance to cut poverty and encourage family formation. It shared many characteristics with a scheme from American Compass, but Mr Cass and his colleagues criticised the absence of an incentive for work. A new version of the bill released on June 15th incorporated an earnings requirement. Another proposal from the think-tank to create firm-based workers' councils, rather than labour unions, has been taken up by Senator Marco Rubio.

Former officials from the Trump administration have also created think-tanks, perhaps for combat in the culture wars as much as for policy work. The America First Policy Institute and the Centre for Renewing America (CRA) churn out reports on right-wing bugbears: the latter, for example, has drafted tools for school boards to clamp down on the teaching of critical race theory. America First Legal, founded by Stephen Miller, a former Trump aide, is challenging the Biden administration in court, mostly over any loosening of immigration rules.

These outfits are perhaps the most loyal on the new right to Mr Trump personally. The CRA employs Jeffrey Clark, whom the former president attempted to install as attorney-general to help him remain in of-

fice. After the FBI searched Mr Clark's home on June 22nd in connection with the plot, Russ Vought, president of the CRA and Mr Trump's former budget director, decried the raid as "criminalising politics".

Whether policies become reality depends on attracting and developing cadres, particularly young ones. The most prominent of these efforts is the National Conservatism Conference, begun during the Trump administration and held annually. It has drawn not only the new right's leading thinkers, but also many ambitious politicians like Senators Josh Hawley and Ted Cruz. The opportunity to rub shoulders with new-right icons has made the conference hugely popular with young conservatives. That enthusiasm is evident in some older conservative institutions that cater to the young and to activists, including Turning Point USA and the Conservative Political Action Conference, which have embraced Mr Trump to retain their clout.

The Claremont Institute's long-standing fellowship has alumni spread across the conservative movement. But American Moment, launched in February 2021, has made it its mission to identify and train young national conservatives for careers in Washington. "We're looking for people who share our beliefs and motivations, to get them involved in the fight," says Sauabh Sharma, the organisation's president.

All of these initiatives require money. Some comes from donors that have long funded conservative causes, such as the Bradley, DeVos and Scaife foundations. Older institutions will compete for these funds: under a new president, the Heritage Foundation is shifting towards new-right positions and rhetoric, in part to retain access to donors; Trump-sceptical redoubts such as AEI may fade into irrelevance in the party even as many remain formidable fundraisers.

But the new right has also proved adept at mobilising new funders. Peter Thiel, a venture capitalist and early backer of Mr Trump, has become a major benefactor to the National Conservatism Conference. Two Silicon Valley-based philanthropies, the Hewlett Foundation and the Omidyar Network, have earmarked millions of dollars for organisations to develop alternatives to market-friendly policies. *American Affairs*, American Compass and American Moment have each managed to secure some of these grants.

The effectiveness of all this activity will become clearer after November's mid-term elections. If Republicans retake both chambers, the party may need over 1,000 additional staff; the new right aims to contribute many of them. They will spread ideas and craft legislation. And they will eventually populate the executive branch under the next Republican president.

Where the new right may stumble is in

its affiliation with Mr Trump. Many policy wonks are ambivalent about his continued involvement in Republican Party politics; they are more concerned about the long-term prospects of their own movement. Republican voters' fealty to the erratic former president may thwart any hopes by new-right elites for a more disciplined successor, such as Florida's governor, Ron DeSantis. But any future new-right president will have a Washington army in waiting. ■

Fetal personhood

Votes for zygotes?

WASHINGTON, DC

Obtaining rights for the unborn is the next frontier for anti-abortionists

WHAT HAPPENS when America's extreme anti-abortion activism meets its litigiousness? Fetuses get their own lawyers. In recent years some judges in conservative states have appointed legal representation for fetuses in abortion disputes (generally, when a minor wants to terminate a pregnancy). The arrangement has some glaring holes. Lawyers cannot meet or talk to their client or, supposing a fetus had wishes, guess at them. Yet with the recent overturning of *Roe v Wade*—the ruling that had enshrined access to abortion as a constitutional right—the push for legal recognition of the "personhood" of fetuses is set to grow.

Many anti-abortionists believe that life begins at conception. Proponents of "fetal personhood" go a step further, arguing that the 14th Amendment of America's constitution gives "equal protection of the laws" to all, including a fertilised egg (despite the fact that as many as half of all zygotes do



Only getting louder

► not implant and become pregnancies). Increasingly, anti-abortion legislation is adopting the language of fetal personhood.

Dobbs v Jackson Women's Health Organisation, the case that ended *Roe*, did not do so. But the Supreme Court's momentous ruling, on June 24th, criticised the view that "the Constitution requires the states to regard a fetus as lacking even the most basic human right—to live—at least until an arbitrary point in a pregnancy has passed". Laura Portuondo, a fellow in reproductive rights and justice at Yale Law School, says this is likely to encourage the emergence of state laws banning abortion explicitly in the name of fetal personhood.

Efforts to ban abortions on personhood grounds are "ethically clearer", argues John Seago, the president of Texas Right to Life, an anti-abortion organisation. Mr Seago was influential in the push to pass a stringent abortion ban in Texas last year. "They are more honest about the ethical principle that underlines the belief that abortions are wrong," he adds. Emphasising fetal personhood is a natural next step, he says, in working towards a national ban. Like many others in this camp, Mr Seago is "not content" for abortion to be decided on a state-by-state basis.

Before *Roe* was overturned dozens of states introduced bills that banned abortion by establishing fetal personhood, according to the Guttmacher Institute, a pro-choice think-tank. Because *Roe* rejected the idea and protected abortion until a fetus was viable, such laws were blocked. Since its overruling, at least two states have sought to reinvigorate them.

It is unclear if such laws will be allowed to stand. In Arizona the American Civil Liberties Union and the Centre for Reproductive Rights, two advocacy groups, are suing state officials over an abortion ban that would give "an unborn child at every stage of development all rights, privileges and immunities..." on the basis that the law's "vagueness" violates the right to due process and puts providers and women at risk of prosecution.

Congress is not likely to pass an abortion ban based on fetal personhood any time soon. Elizabeth Sepper, a professor at the University of Texas School of Law, says it would lead to impossible questions over matters from the census (should it count fetuses?) to imprisoning pregnant women (can the state not imprison pregnant women since it would mean locking up the fetus as well?). Most Americans would not, she says, "struggle between saving a one-month-old infant and a container with dozens of embryos".

Yet such beliefs need not be explicitly written into law to have an impact. Abortion-rights activists note that emphasising the legal rights of a fetus means compromising those of the woman who is carrying

it. Believing that fetuses have rights has already led to cruel extremes, such as abortion bans with no exceptions for pregnancies that arise from rape.

The idea also affects how women are treated in pregnancy. Dana Sussman, deputy executive director of the National Advocates for Pregnant Women, which provides legal assistance for those who have had abortions, says her organisation has recorded lots of examples of forced inter-

ventions that prioritise the fetus over the well-being and autonomy of the mother, from bed rest to caesarean sections. Hospitals have reported pregnant women to the police for testing positive for drugs while pregnant. Some doctors are unsure about whether they may insert IUDs as emergency contraception (in some cases the devices prevent the implantation of a fertilised egg). Without *Roe* such distressing scenarios will become more common. ■



Command and control

Allow and unleash

America aims to harness its entrepreneurial, democratic spirit for a military edge

THE WAR in Ukraine is hastening America's own military rethink. The fighting holds lessons, from the vulnerability of tanks to the value of defensive weapons. Those pondering a future war between America and China draw a further conclusion: the advantage that "mission command" can give a military force, even one as outgunned as Ukraine's.

A "decentralised, power-down, do-whatever-it-takes-to-win approach" to command and control is one reason the Ukrainians have pushed the Russians back from Kyiv, notes Doug Crissman, who was recently in charge of the Mission Command Centre of Excellence at Fort Leavenworth, Kansas, where much military doctrine is developed. In contrast, the Russian army's rigid, top-down command system from the Soviet era has left it flat-footed, able to advance only through destructive artillery fire. Around a dozen Russian generals, taking charge of matters on the front line, have been killed there.

American planners are grappling with the new age of great-power contest, in which conflict with Russia or China is likely to mean American troops' being outnumbered and fighting far from home. Rivals are already shrinking the technological gap that America has long enjoyed; in some areas, such as hypersonic missiles, Russia and China already outpace it.

So America is doubling down on its cherished concept of "mission command". This involves the commander setting out objectives and then delegating much decision-making to lower-level officers. Western soldiers, many argue, are better able to take the initiative than troops trained under an authoritarian system. The idea, says Michèle Flournoy, a former under-secretary of defence for policy, is to harness this cultural strength of democracies more fully. As long as soldiers abide by the commander's intent, they fight more effectively when given "licence and encouragement" to deviate from plans. ►

► Generals like to say that no plan survives first contact with the enemy. Units able to improvise and devise alternatives should thus be able to seize opportunities. The notion was important in Iraq and Afghanistan, where small units were often dispersed. It could be even more important in the vast expanse of the Pacific. China's arsenal of medium- and longer-range ballistic missiles makes large permanent bases more vulnerable. American forces are moving towards more flexible, dispersed forms of warfare. That will require the ability to detect enemy targets and strike them across long distances, and to push out supplies to far-flung units. It will also require those units to be more autonomous.

America's Marine Corps is keenest on the trend. Implementation, says Eric Flanagan, a spokesman for its commandant, David Berger, includes training recruits to "go out on a limb, think differently" and not fear failure. In November the marines announced a personnel revamp, Talent Management 2030. It tightens selection criteria to create a smaller, more independent force. The incentives to re-enlist have been expanded, with the aim of increasing its median age and therefore, it is hoped, military judgment. The plan also calls for recruiting mid-career professionals.

The navy, too, sees mission command as central to its "distributed lethality" reconfiguration: as anti-ship missiles proliferate, the navy will operate in more scattered fashion to avoid radio communications that can reveal its positions. The air force's chief of staff told officers last year to "push decisions to the lowest competent, capable level". Even the army is empowering "privates and sergeants at the tip of the spear" to take action "without calling back to the mother ship", says Mr Crissman.

Control and command

The war in Ukraine is a natural experiment in the value of mission command. Ukrainian forces have used it well, partly thanks to three decades of democracy, however fledgling, and years of training provided by Western allies. Some experts thought Russia's army would embrace mission command with its modernisation, begun after its poor performance in Georgia in 2008.

But the concept has proved anathema to an increasingly authoritarian system, says Nora Bensahel of Johns Hopkins University. Nor does it help, she adds, that many Russian soldiers are conscripts disinclined to give their "creative all". Russia's big military exercises seem designed less for cultivating problem-solving than for political signalling and propaganda. Rampant corruption and restrictions on speech dampen, respectively, trust and critical thought—essential to mission command.

What about China? As part of his quest to turn it into a "world-class" military pow-

Rebranding the Asian carp Copicat

NEW YORK

To hook diners, an invasive species of carp gets a new name

WHAT'S NOT to like about Asian carp? Nutritious, mild and delicate in flavour, it can be filleted, deep-fried or minced into fish cakes—just mind the bones. But Americans do not care for it. For starters, they confuse the fish with the common (or European) carp that is a bottom feeder, a much-maligned group. Yet tempting people to eat more Asian carp could boost biodiversity in rivers across America's South and Midwest. With a new campaign, officials in Illinois hope to lure diners.

The carp was brought from Asia in the 1970s to help clean aquafarms in Arkansas. (They clear the water of plankton and algae, earning them the name of "filter feeders".) From there they escaped into the Mississippi and propagated northward, outcompeting native fish species for food. Now they are abundant in the Illinois River. Ecologists worry they will evade barriers in the waterways around Chicago and enter the Great Lakes, reducing the native fish diversity there.



Ceci n'est pas une carpe

er by 2049, President Xi Jinping has pressed for the introduction of modern weapons and the recruitment of more talented soldiers. But he also wants to step up their political education. Military commanders must "ensure rigid adherence to party guidelines", explains Blake Herzinger, an American naval reserve officer who lives in Singapore.

Should America ever fight China, a

In 2018 the Illinois Department of Natural Resources decided it would "recast" how Asian carp is perceived. Marketers were brought in. They cooked up a new name, which was released on June 22nd: copi (for copious). Nick Adam of Span, the agency behind the rebranding, says the goal was to shed the fish's reputation as one only for adventurous eaters. Focus groups described copi as "cute" and "manageable".

Asian carp is not the first to get a makeover. The Patagonian toothfish is marketed in America as Chilean sea bass (it is neither a bass nor native to Chile). The foul-sounding slimehead has been much better known as orange roughy since the late 1970s. And managing invasive species by harvesting them is not a novel idea either. The National Oceanic and Atmospheric Administration, a federal agency, exhorts people to eat lionfish, which threaten reefs along the Atlantic coast and in the Caribbean. Louisiana's wildlife department offers recipes for nutria, a semi-aquatic rodent with an irrepressible breeding habit.

Ragondin à l'orange, anyone?

Lionfish is quite well-liked, notwithstanding its 18 venomous fin spines; the toothfish's new name was such a hit that it arguably contributed to its overfishing. But evidence is mixed about whether harvesting to control an invasive species is effective. With Asian carp, only larger fish are targeted for human consumption. A study by researchers at Michigan State University recommended that fishermen be given incentives to catch small ones too, for use in fertiliser and fish meal.

But creating demand also risks impeding efforts to reduce numbers. Prairie Rivers Network, an environmental group, has opposed the copi rebranding because it seems to "incentivise a long-term sustainable carp fishery in Illinois waters". Much will depend on whether America's gourmands cop on to copi.

more dynamic military culture should offer an important edge. But as the conflicts in Iraq and Afghanistan showed, there is more to winning wars than effective mission command. What is more, says Jason Brown, a former air-force colonel, defence planners would be wise not to assume that every non-democracy would perform as poorly as Russia's army. China's entrepreneurial spirit, he notes, runs deep. ■

Latino voters

No, no se puede

WASHINGTON, DC

Democrats have a Hispanic problem

SOUTHERN TEXAS, a heavily Hispanic region along the American border with Mexico, was once a Democratic stronghold as reliable as any urban core. But it now appears to be crumbling. Last month a special election was held to pick the next representative for the state's 34th congressional district, which snakes 250 miles (400km) down from the San Antonio suburbs to the border city of Brownsville and the southernmost tip of the state. Some parts of the district have been represented continuously by Democrats since 1870. Barack Obama carried it by 23 percentage points in 2012. It is 85% Hispanic.

Yet it was a Republican, Mayra Flores (pictured), who triumphed. The first Mexican-born congresswoman in American history is hardly a moderate. She is a pro-life, anti-vaccine-mandate Republican who is searingly critical of illegal immigration (and married to a Border Patrol agent, to boot).

Democrats are starting to realise that they have a Hispanic problem. Party strategists who hoped that Donald Trump's racially incendiary rhetoric, his campaign pledge of a big, beautiful border wall and the fiasco of his family-separation policy might have pushed more Hispanic voters into the Democratic camp found the opposite. Between 2016 and 2020, Mr Trump improved his share of the Hispanic vote, according to numbers crunched by Catalyst, a Democratic-aligned political-data firm—from 29% to 37%. Among all major ethnic groups, that shift was the largest.

The Democratic erosion was worst along the Texas border and in Southern Florida—dimming Democrats' hopes of winning Senate seats or governorships in those states. In the district flipped by Ms Flores, Hillary Clinton won 59% of the vote in 2016. President Joe Biden managed just 51.5% against 47.5% for Donald Trump. Republicans are now seriously contesting three congressional districts in Southern Texas. In Florida, analysis by Equis Research, which specialises in Hispanic public opinion, shows that in majority-Latino precincts of Miami-Dade County, Mr Trump improved his performance from 30% of the vote in 2016 to 50% in 2020.

In both Texas and Florida, local conditions may be magnifying the national trend. Open borders and police abolition are dirty words, not the stuff of liberating slogans, for Hispanics who live along the

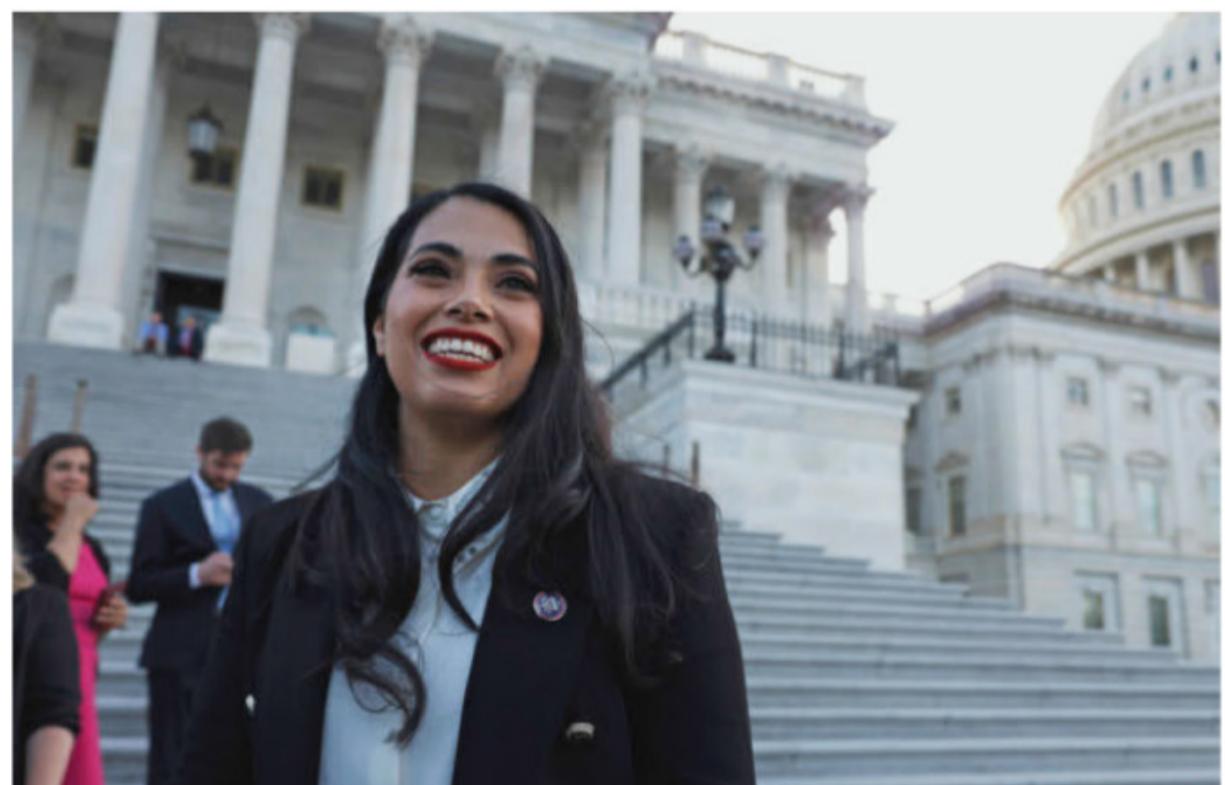
southern border. Antipathy for encroaching socialism is especially high among Hispanics in southern Florida, many of whom arrived as refugees from dictatorial communist or leftist regimes. Research by Equis shows that more Hispanic voters (and many more so in Florida) said they worried about Democrats embracing socialism and leftism than they did about Republicans embracing fascism and anti-democratic politics.

Southern Texas Democrats, who are overwhelmingly Hispanic, have "always been more conservative than Hispanics elsewhere", says Mark Jones, a professor of Latin American studies at Rice University in Houston. Henry Cuellar, a Democratic congressman facing a close race to keep his district, on the border with Mexico, is the only Democrat in the House of Representatives who opposes abortion. Mr Jones notes that his polling of Hispanics in Texas shows that those who are male, evangelical or have two white grandparents are gravitating towards the Republican Party fastest. For conservative Hispanics, the Democrats' national brand has become associated with gun control, trans rights, lax border policy and limited support for law enforcement, and is therefore less palatable. Although more Democrats running in border states have recently taken to criticising Mr Biden's immigration policy, it may be too little, too late.

On both the economy and culture, Republicans claim to be the rightful party of the working class, whether white or Hispanic. "The number-one reason for success is how terrible the Democrats are. They've taken this far-left socialist turn, and it has turned a lot of Hispanic voters off," says Tony Gonzales, a Republican congressman from Texas's 23rd district, which stretches along the south-western border. Mr Gonzales notes that anti-police rhetoric does especially poorly in a district like his where many Hispanics have family who work in law enforcement.

Mario Díaz-Balart, a Republican congressman from southern Florida, argues that the Democratic Party has simply become out of touch. "It's become the party of the corporate elites, it's become the party of the media elite...Latinx' comes to mind. No Latino, no Hispanic calls themselves Latinx," he says. Ruben Gallego, a Democratic representative from Arizona, has berated his party for ignoring that linguistic reality, and argues that the gender-neutral adjective is used only to "appease white rich progressives". Only 2% of Hispanics say they use the term.

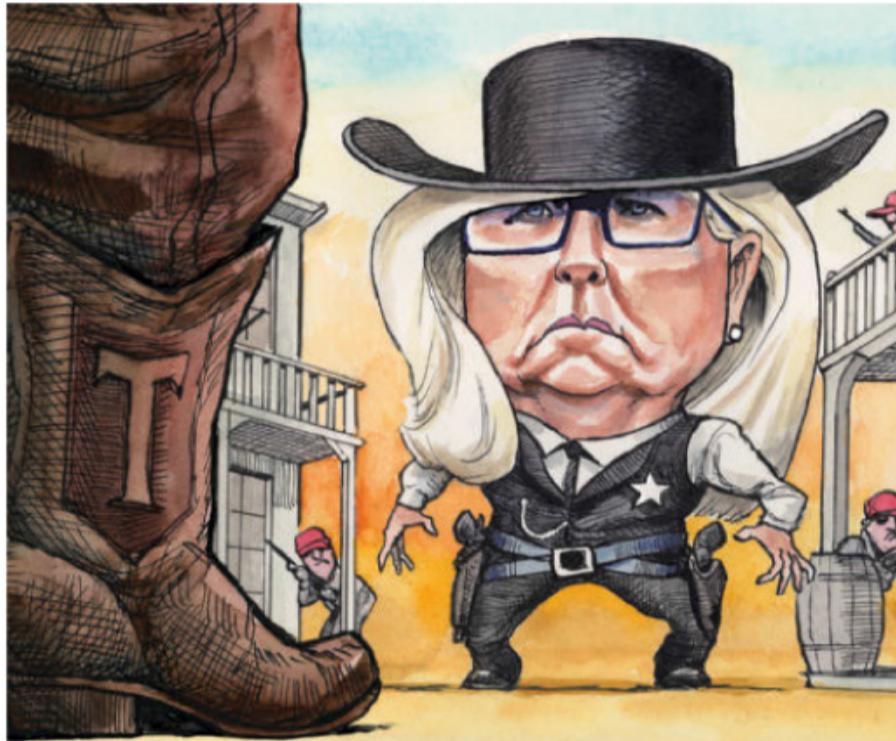
Messrs Gonzales and Díaz-Balart recently launched the Hispanic Leadership Trust, a political action committee to support the election of conservative Latino candidates. One of the new breed of Republicans it might help put in office is George Santos, a gay son of Brazilian immigrants, who is running for a toss-up congressional seat on Long Island in New York. He notes Latinos are conservative by nature. "South America is the largest Catholic, Christian continent in the world...I think that this excessive left-leaning social agenda that the Democrats are pushing is counterproductive. And the Republicans for the first time are hitting the messaging right." ■



The triumphant face of Texas's new Republicans

Lexington | High noon for Liz Cheney

The lesson from the film most requested by presidents in the White House



HIS FIANCEE, the pretty schoolmarm from Vermont, has tried to understand his peculiar code of honour. But as she begs the cowboy known simply as “the Virginian” not to go into Medicine Bow’s dusty streets to face the bad guy, she accuses him of serving only his pride. “I don’t know what you call it,” replies the cowboy, played by Gary Cooper in “The Virginian”, a film from 1929 based on a classic novel of that name. “But it’s somethin’ in the feelings of a man, down deep inside. Somethin’ a man can’t go back on.”

When Harriet Hageman, who is running in the Republican primary to be Wyoming’s sole member of Congress, mocks the incumbent, Liz Cheney, as “the Virginian”—Ms Cheney grew up there—it is doubtful she means to invoke this tale, which helped mint the heroic image of the cowboy. But, however unintentionally, she does point up how little value many Republicans place these days on rugged individualism, backbone, honour and so forth. In real life, they find these traits pretty annoying. They prefer the cattle to the cowboys.

Ms Cheney’s failing, Ms Hageman says, is that she has gone her own way rather than “ride for the brand”. You can guess what brand that really is. Back in 2016, Donald Trump barely registered in the Republican primary in Wyoming. Ted Cruz was favoured, including by Ms Hageman. She called Mr Trump “racist and xenophobic”. Now Mr Trump is so popular in Wyoming that even a Democrat seeking Ms Cheney’s seat supports him.

Ms Hageman backs him with zeal and questions the legitimacy of his defeat in 2020. Mr Trump prizes no supporters more than those who once rejected him but then roped, broke and branded themselves. He has endorsed Ms Hageman and appeared last month at a rally in Casper with her. Ms Hageman, a lawyer, stoked the crowd by itemising things to revile, from illegal immigration to Anthony Fauci. But one bit of elaboration popped out when she said Mr Trump knew she would represent “your fallacies”, quickly amending that to “families”.

Ms Cheney has travelled the other way. She endorsed Mr Trump in 2016, the year she first won her father Dick Cheney’s old seat, and voted with him more than 90% of the time, according to the politics website FiveThirtyEight. Her own rise was meteoric. After just a term her colleagues elected her conference chairwoman, the

third-ranking Republican leader, and talked of her as an eventual speaker. They loved her slashing attacks on Democrats (“the party of anti-Semitism, the party of infanticide, the party of socialism”).

Then, on the night of January 6th last year, Ms Cheney found herself in the Capitol’s statuary hall. Exhausted law enforcement officers in black armour sat on the floor, resting against the marble figures. She looked up at the building’s oldest statue, of Clio, the muse of history. Though other Republicans’ resolve to punish Mr Trump would crumble, Ms Cheney voted to impeach him and kept hammering away even as her colleagues stripped her of her post, and her state party voted not to recognise her as a Republican. When Nancy Pelosi asked her to serve on the January 6th committee, after Republican leaders forswore it, she accepted immediately. “I’m asking you to understand that I will never violate my oath of office, and if you’re looking for somebody who will then you need to vote for somebody else,” she said in a recent debate.

The primary is on August 16th, and Ms Cheney appears to be trailing. Alan Simpson, a former three-term senator, has known her since she was a girl. Asked if she could win, he says he doesn’t know. “That really isn’t the issue for her,” he adds. “That’s not the golden chalice for Liz.”

Senator Simpson, droll as ever at 90, was once booted from a leadership position himself, for insisting on being pro-choice in a pro-life party. He is delighted by Ms Cheney’s resistance to the herd: “She’s her own person.” He describes an environment of hate and nihilism around Mr Trump like nothing he has seen. “The guy is a wrecking ball of history,” he says. The chalice, for Ms Cheney, is to block Mr Trump’s path back to power, and the testimony elicited by her sombre, methodical questioning may just achieve that.

The Gary Cooper character she most resembles now is not the Virginian but Will Kane, the lawman of “High Noon”. When he learns on his wedding day that the murderer he sent away is returning with henchmen to get his revenge, Kane tries to enlist his fellow citizens in the town’s defence, only to be turned down time and again. Many are afraid; some consider Kane a tiresome prig; some admire the bad guy. For Kane, the corrupt character of his community comes into agonising focus.

In the end, Kane has an ally in his wife, played by Grace Kelly. Ms Cheney is stuck with the Democrats and their affiliated news organisations. They are treating her as a hero. That should prompt them to ask whether they had enough respect for her character before, when she took positions obnoxious to them. In this tribal, conformist era, they certainly respect Republican mavericks far more than they do their own—just ask Joe Manchin, the West Virginia senator who has been demonised for resisting the president.

Hero and the herd

“High Noon” came out more than 20 years after “The Virginian”, in 1952, the McCarthy era. As he was finishing the script, the writer, Carl Foreman, was subpoenaed by the House Un-American Activities Committee. He admitted he had been a member of the American Communist Party. But he refused to name others, an act of principled defiance that landed him on Hollywood’s blacklist.

“High Noon” is the film most requested in the White House by presidents, writes Glenn Frankel in his book about the film and its era. Bill Clinton screened it some 20 times. No doubt these presidents identify with Kane, as does anyone who watches the film. We are kidding ourselves; the film suspects us all. As Mr Frankel puts it, “‘High Noon’ says, ‘Let’s look at ourselves carefully.’ So does Ms Cheney. ■



Chile

Hearts, not minds

A new draft constitution would shift the country far to the left

“IN THE MIDDLE of a political...crisis not seen in our country in decades, Chileans opted for more democracy, not less,” exclaimed Gabriel Boric, Chile’s 36-year-old president, on July 4th. His words marked the end of a year-long process to rewrite the country’s constitution. The final draft, which was presented to Mr Boric in a ceremony, will now be put to a referendum in September.

Chile’s current constitution was adopted in 1980, during the dictatorship of Augusto Pinochet. Even though it has been amended almost 60 times, some feel a completely new document is needed. In 2019 millions of people took to the streets in protests, some of which turned violent. Many of them argued that Chile’s problems stemmed from the old constitution. As a result, the centre-right government of the day put the idea of rewriting it to a referendum. Voters gave the go-ahead.

A constituent assembly was formed of 155 people, many of them political novices. It was meant to rebuild trust in Chile’s in-

stitutions. Half of the delegates were women and seats were given to indigenous people to reflect their share of the population. But instead of uniting the country it has increased polarisation. Polls suggest that voters will reject the new constitution.

Part of the problem lies with the assembly itself. Although it was demographically representative, its ideological slant was not. Only 43% of voters bothered to choose the convention’s members in May 2021. Around 55 delegates were hard leftists, many of whom ran on single-issue tickets. Scandals did not help. A deputy resigned for lying about having cancer. They bickered among themselves. Indigenous constituents complained about racism. Right-

wing representatives accused other assembly members of wanting to create an “indigenous monarchy”. Today only 40% of people trust the convention, down from a high of 63% in July 2021. Two-thirds find the draft worrying. A third find it hopeful.

Another problem is that the issues Chileans care about have changed. In May last year, most of those polled worried about health care and pensions. Today they care more about inflation and rising crime. Yet the convention carried on in a Utopian spirit. “The delegates saw themselves as the founders of a new republic, and it’s not clear that they should have interpreted their mandate in that way,” says Gabriel Negretto, a constitutional expert at Chile’s Catholic University.

The resulting draft includes 388 articles, making it one of the world’s longest constitutions (see chart on next page). It reflects the left-wing skew of the assembly. Although its language is opaque, it creates new socio-economic rights that, if enforced, would surely increase government spending a lot. One article says that “everybody has the right to care” from birth until death, and orders the creation of a state-run “care system”, whatever that might be. However much this costs, funding must be “sufficient and permanent”. Congress would be able to propose bills to increase spending, previously a power reserved for the president. (He retains a veto.)

Some articles unnerve investors. Trade ➤

→ Also in this section

28 Political infighting in Argentina

30 Rafting with ex-FARC rebels

— Bello is away

▶ unions would have a right to strike for any reason they see fit. Limits would only apply if a strike affects essential public services. When expropriating land, the state will pay a "just price" for compensation, a weaker protection than the formulation in the current constitution, which says that owners will receive compensation for "the pecuniary damage actually caused". Water rights, previously treated as part of someone's private property, become a public good. They would be regulated under a new state body that would issue permits. Farmers, who consume 72% of Chile's water, say this creates uncertainty over the value of their land.

The final document shows flashes of restraint. It enshrines the independence of the central bank and maintains most checks and balances. It circumscribes regional governments' power to borrow and repeatedly mentions fiscal responsibility.

But constitutional scholars fret about the creation of a 17-member judicial council, which would have a broad mandate. It would nominate all judges; previously the Supreme Court, the Senate, the president and the court of appeals all had a role. Every five years the council would review the work of judges at public hearings (though it would not be able to review sentences). Rodrigo Correa of Adolfo Ibáñez University worries that this could put judges under pressure from public opinion.

The draft also tackles many subjects not normally considered constitutional. One article gives citizens the right to "adequate, healthy, sufficient, nutritionally complete and culturally relevant food". The text mandates that the health-care system, courts and police all operate "with a gender perspective", without elaborating.

If voters reject the new constitution, the old one would remain in force. It could be improved. A super-majority in Congress

could revise or scrap some of its 21 "organic laws" which make tweaking legislation difficult. For example, changing education policy in Chile is almost impossible. The country's Constitutional Tribunal also needs to be reformed. It often protects vested interests: in 2018 it prohibited a law that would have given the consumer-protection bureau the right to sanction companies that colluded to fix prices.

Mr Boric will want the new constitution to be approved. His plans, such as creating a more elaborate national health service, would be easier to bring to fruition if it passes. But as the polls have turned against the charter in recent months, his people have stressed that they can implement their agenda even if it does not. Still, it would be a blow for Mr Boric, who championed the assembly, if its new constitution is stillborn. ■

departure. The cost of a dollar on the black market, which more accurately reflects the value of the peso, shot up from 239 pesos to 260 (the official rate is artificially maintained at around 125). Some government bonds are trading as low as 20 cents on the dollar. The cost of insuring the country's debt rose by 6%. Some businesses suspended sales, because the economic outlook seemed so uncertain. Meanwhile annual inflation is above 60%. The central bank has scant reserves of dollars.

Mr Guzmán was seen as one of the more sensible figures in the cabinet. He restructured \$65bn of debt to international creditors in 2020 (equal to about a year's government expenditure). He also cut the fiscal deficit after a spending boom during the pandemic and led talks to renegotiate the \$44bn Argentina owes to the IMF. None of this improved investors' confidence in the country, which is a serial defaulter, though it did buy the government time. Yet it sparked the ire of Ms Fernández, who recently said that inflation is not caused by fiscal deficits but rather by debt. She also suggested the president should "use his pen" to halt imports. She believes that is the best way to remedy the dollar shortage.

Silvina Batakis, the new economy minister, is a former civil servant. She was the economy minister of Argentina's most populous province from 2011 to 2015, where she defended the use of price controls and higher wealth taxes. But more recently she said she believed in a balanced budget, agreed to stick with the deal with the IMF (though she said "adjustments" were needed), conceded that price controls alone do not lower inflation and said that energy subsidies must "rapidly" be reduced—a particular affront to the more extreme elements in the government. Implementing these measures could stem another crisis. That is, if Ms Fernández allows it. ■

Argentina

Find works; insert spanner; repeat

BUENOS AIRES

Martin Guzmán resigns because of political infighting

FOR SEVERAL months Argentina's president, Alberto Fernández, and his more left-wing vice-president, Cristina Fernández de Kirchner (no relation), have publicly aired their differences. Since September Ms Fernández has published blog posts that denounce the president's supposed austerity. When he reached an agreement with the IMF in January to restructure a gigantic debt, she flew to Honduras in a huff. To mark remembrance day in March, which commemorates the victims of Argentina's military dictatorship, her son, a congressman, organised a separate parade to rival the president's pow-wow.

Now the saga has taken its most dramatic turn. On July 2nd Martin Guzmán, the economy minister, published a seven-page resignation letter in which he suggested that the spats between his superiors had prevented him from doing his job. The resignation is a victory for Ms Fernández, who had been pushing for Mr Guzmán, the president's closest ally, to go.

It comes less than a month after Matías Kulfas, the minister of industry and another ally of the president, was forced to resign after casting doubt on the role of Ms Fernández's allies in the licensing of a gas pipeline (the case is being investigated; Ms Fernández described Mr Kulfas' comments as "very unfair"). Both he and Mr Guzmán have been replaced by ministers closer to Ms Fernández.

Markets reacted badly to Mr Guzmán's



Breaking free

Expounding fathers

National constitutions currently in force
Word count*, '000, at July 6th 2022



*As originally adopted †Proposed

Source: "Characteristics of national constitutions, version 3.0", by Z. Elkins and T. Ginsburg, Comparative Constitutions Project, 2021; Centre for Law & Policy Research

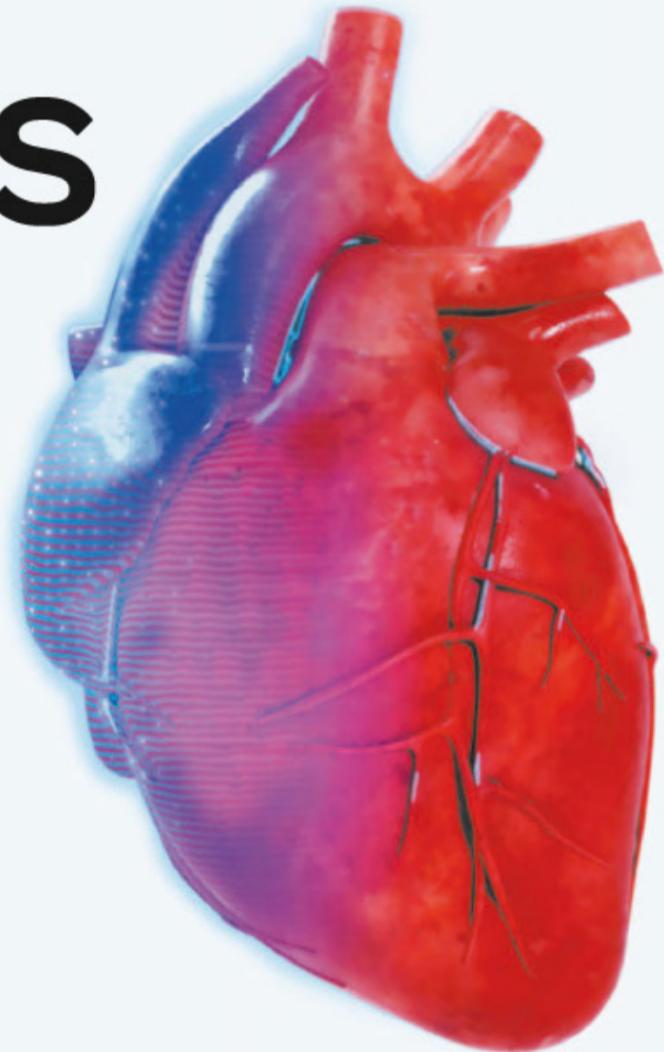
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Colombia

Rafting with rebels

MIRAVALLE

Some ex-FARC guerrillas have become tourist guides. But not everyone has swapped pistols for paddles

IT FEELS LIKE floating down the nave of a flooded cathedral. Sheer walls of rock rise from placid, muddy waters, echoing with dripping vines and squawking parrots. Then the river widens and quickens, occasionally blocked by boulders that demand bicep-burning bursts of paddling to swerve. Waves of cold water smash over the raft as it bounces through foamy rapids. Eventually, it glides to a halt on a beach, where a local family waits with sugarcane and guava juice. "We've exchanged our rifles for oars," grins a soggy Frellin Noreña, who was steering the raft and goes by the *nom de guerre* of *pato*, or duck. "You'd have to be mad to prefer war over peace."

Mr Noreña is a former fighter of the Revolutionary Armed Forces of Colombia (FARC), a guerrilla group. Some 7,000 of his comrades gave up their weapons after a peace deal in 2016 that formally brought to an end the longest-running domestic conflict in the western hemisphere. He now works as a guide with Caguán Expeditions, which brings tourists to hurtle down rivers near Miravalle, in Caquetá, a remote corner of Colombia where outsiders have scarcely trod for decades. Backed by the UN, the initiative aims to reintegrate former guerrillas by putting their knowledge of the Amazonian region to better use.

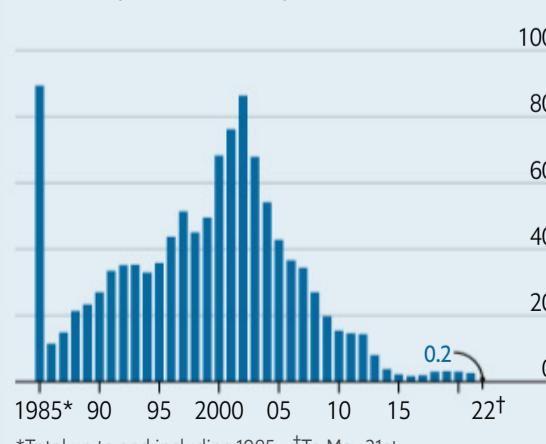
Several such projects exist. Ex-guerrillas offer birdwatching, hiking and hearty campfire cuisine as part of Tierra Grata Ecotours in La Paz, a town near the border

with Venezuela. Over a two-day hike along boggy mountain paths, Jhonni Giraldo, a former FARC footsoldier, leads hardy tourists to Marquetalia, a hamlet. In 1964 the military bombed an armed commune founded by refugees here into oblivion; the survivors headed to the hills and the FARC insurgency was born. There is not much to see other than the rusted remains of a downed helicopter. Mr Giraldo is mulling over reconstructing the house of Manuel Marulanda, the founder of the FARC.

Lodging with local farmers provides tourists with a window into the stubborn poverty that the accord of 2016 was supposed to tackle. There are no roads and doctors visit rarely, says Fredy Conde, who

A long road to peace

Colombia, violent deaths, '000



laboriously transports his cheese on mules to sell at a local market. "In Colombia, the countryside is abandoned." Staying in the FARC resettlement camps, set up after the peace deal to rehabilitate ex-fighters, also offers a glimpse of the strains of demobilisation. Miravalle, daubed with murals of FARC leaders and perched above a lush valley, boasts a fish farm, an organic greenhouse and a small museum as well as the rafting project. The rowing rebels have even competed in Australia.

But some river guides have decided to work instead as bodyguards for their former *comandantes*, says Mr Noreña (some 300 demobilised FARC fighters have been killed since 2016). Many still revere their former commander, Hernán Darío Velásquez, better known as El Paisa, who abandoned Miravalle and returned to the jungle with a handful of men in 2018, leaving behind girlfriends and young children. El Paisa, reportedly killed in Venezuela in December last year, was a drug trafficker who murdered scores of civilians, counters Sebastián Velásquez of the Colombian Federation of FARC Victims, an NGO.

Partly because such tensions remain, these ex-FARC initiatives are unlikely to become a highlight on the international tourist trail. Just 10% of Caguán Expeditions' clients so far have been foreigners, says Mr Noreña. The white-water rafting at San Gil, a seven-hour drive from the capital, is more exhilarating, he concedes. The Marquetalia Route will mostly interest history buffs and coffee fanatics (the region's volcanic slopes pullulate with the stuff).

Battle scars

But these initiatives are keeping a few families on the straight and narrow. And that is no small thing in a country where the scars from the armed conflict are still fresh. In its final report on June 28th, Colombia's Truth Commission, set up in 2016 as part of the peace agreement, found that over 450,000 people were killed between 1985 and 2018—double previous estimates. Paramilitaries often linked to business elites and landowners were responsible for nearly half the killings; the FARC and lesser rebel groups, a quarter. Some 7m people fled their homes.

The newly elected leftist president, Gustavo Petro—himself a former guerrilla, with the M-19 group—has promised to implement the commission's recommendations, including reforming the armed forces and regulating the drug trade. Even a squaddie who briefly falls in with Mr Giraldo on the trail to Marquetalia argues that the state has so far failed to honour the promises of rural development. "Conflict isn't good for anyone," says the former rebel, trudging uphill to where it all began. The soldier concurs. "Not for civilians, nor the government." ■



East Asian relations

Cold comfort

SEOUL AND TOKYO

History divides South Korea and Japan. They have a rare chance to make up

THE FLIGHT time between Seoul and Tokyo is just under two hours. Yet the last time a leader of South Korea or Japan paid a state visit to the other was in 2011, when Lee Myung-bak, then South Korea's president, went to see Noda Yoshihiko, Japan's prime minister at the time. Mr Lee praised Mr Noda's recent goodwill gesture of returning some 1,205 royal books, which Japan had filched from South Korea during colonial times. Mr Noda held an intimate dinner party in Kyoto in honour of Mr Lee's 70th birthday and 41st wedding anniversary. The two leaders expressed their desire to build a "future-oriented relationship" between their countries.

Along with China, Japan and South Korea are East Asia's economic powerhouses. Unlike their giant neighbour, they are established democracies and staunch allies of America. They are also wary of China's growing clout in the region, to say nothing of the threat from a bellicose North Korea. But despite their shared contemporary interests, the past divides them. During the

same summit, Mr Lee and Mr Noda clashed over the issue of "comfort women", as Koreans and others forced into brothels for the benefit of Japanese soldiers during the second world war were euphemistically called (a memorial to the women is pictured). The goodwill quickly turned to renewed bad faith. A mix of historical grievances and fresh disputes has continued to curdle relations for a decade.

The problems stem from divergent memories about Japan's colonisation of Korea between 1910 and 1945 and the suffering it inflicted on Koreans. It looked for a brief moment in 2015 as if the two might begin to put the past behind them. That year, Japan's Abe Shinzo and South Korea's Park Geun-hye, the countries' leaders at the time, agreed a "final and irreversible" deal on the matter of comfort women. Mr Abe issued an official apology. His government gave ¥1bn (\$7.4m) to a foundation to compensate victims.

Ms Park's successor, Moon Jae-in, was critical of the deal from its inception. In

→ Also in this section

- 32 Afghan theocracy and bureaucracy
- 33 State politics in India
- 33 Female employment in Bangladesh
- 34 Banyan:Japan's new isolationism

► make haste in repairing relations.

That depends on first resolving the forced-labour dispute. South Korean courts have approved the seizure of assets belonging to Mitsubishi Heavy Industries and Nippon Steel, Japanese industrial giants that used forced labour during the second world war. Appeals have delayed the process, but the assets, which include South Korean patents and revenues, may be liquidated and the proceeds given to victims (or, in most cases, their surviving relatives). On July 4th Mr Yoon's government launched a council tasked with devising a plan to avert that irreversible step.

Much will depend on Mr Yoon's ability to keep the public and the opposition on side. Any perception that he is doing all the give and Mr Kishida all the take will enrage voters. "We cannot dance a tango alone," says Shin Kak-soo, a former South Korean ambassador to Japan.

Many Japanese politicians reckon the sides are playing tennis, not dancing together. "It's very clear the ball is in Korea's court—they have to fix it," says one LDP lawmaker. Mr Kishida, who as foreign minister in 2015 led negotiations on the ill-fated comfort-women agreement, is himself hesitant. He must also handle his party's nationalist wing, which can be tin-eared on historical issues. Yet he may still be persuaded to two-step. Japanese diplomats recognise the strategic folly of continuing to quarrel with South Korea.

Averting the liquidation will require careful choreography and mutual trust, which is in short supply. If efforts fail, relations will surely deteriorate further. Military co-operation between America, Japan and South Korea could stall. Trade restrictions could multiply. China and North Korea would surely rejoice.

Shared strategic interests should, in theory, create a "lower limit" to how bad relations can get, says Sohn Yul of the East Asia Institute, a think-tank in Seoul. North Korea's recent barrage of missile launches, and the spectre of a nuclear test, are a strong incentive for Japan and South Korea to work together. America has so far only sought to bring its two allies to the table, but it may try more active arm-twisting as the spat threatens to upset its efforts to rally allies in the region against China.

The rewards for improved relations are big. A successful resolution to the court case might beget closer co-operation not only on security, but on a broader range of issues, such as supply-chain resilience. More co-ordinated economic outreach to South-East Asia would help to counter China's clout in the region. Yet the countries' troubled history also imposes "an upper limit" on how good relations can get, Mr Sohn says. Without confronting the past, Japan and South Korea will struggle to face the future together. ■

Afghanistan

Bureaucratic nightmare

KABUL
Technocrats and former fighters rub shoulders in the civil service

UNDER ASHRAF GHANI, Afghanistan's president until the Taliban seized power last August, the country's interior ministry oversaw much of the security apparatus involved in fighting the insurgents. It is now presided over by one of its deadliest foes, Sirajuddin Haqqani, who led a faction of fighters known for its high-profile bombings in Kabul, the capital. Corridors where American and European advisers once roamed are crowded instead with Mr Haqqani's long-haired fighters. Civil servants who worked for Mr Ghani's government sit alongside men who would cheerfully have murdered them a year ago.

Such shared offices are now found throughout the Afghan government. The country's civil service, like those across South Asia, is a bloated, inefficient thing that puts much stock in the power of rubber stamps and official signatures. The Taliban has adopted this bureaucratic machinery wholesale, filling it with its own people. After all, citizens still need permits, licences and official forms.

Civil servants from the previous regime have little option but to make the best of it. They and their new colleagues rub along as well as they can. Pragmatic technocrats are growing out their beards and swapping suits for the traditional clothing favoured by their new masters. It is sometimes hard to tell the difference between old and new officials.

At other times the divide is clear. "Don't worry. I am not one of them. I will

help you," whispers one manager once he is sure none of his Taliban colleagues can overhear. "These people are ignorant," complains another. At one department, a functionary being interviewed by a journalist worries he has offended his bullying new Taliban director. "Please write that he is a great man," he pleads.

The Taliban's appointments fill holes left when thousands of Afghan civil servants fled the country last year. The calibre of the replacements is often questionable. The new Taliban counterpart of the medical director at one Kabul hospital at least has a degree in medicine. But at other hospitals, staff said the new Taliban appointees were fighters or village clerics with more interest in how women dressed than in public health.

Nor are things much better at the highest levels of government. The cabinet is packed with ethnic-Pushtun Taliban stalwarts. Other groups are sidelined. Appointments "have favoured loyalty and seniority over competence", notes a UN report. Decision-making is unpredictable, say foreign officials who deal with the new government.

Any hope that the demands of running a battered country might mellow the militants' ideology was dashed last week, after the regime held a *jirga*, or grand council, of religious scholars. More than 3,000 clerics and notables—all men—were invited to Kabul for three days of confabulation. It was the biggest gabfest since the Taliban took power. Speculation was rife that the *jirga* would revisit the unpopular decision to stop girls going to secondary school. Marginalised ethnic groups as well as some inside the Taliban sought signs of compromise from a leadership they see as increasingly remote and autocratic.

The Taliban's supreme leader, Haibatullah Akhundzada, offered no such thing. Instead, he delivered an emphatic speech in which he called for total obedience and unity. He outlined a theocracy where clerics would guide everything. Mr Akhundzada made it clear that anyone associated with the former government would not be allowed to share power. The Talibanised ministries and courts, he boasted, had banished bribery and corruption, and brought justice and harmony. There was no mention of girls' education. For the officials in charge of implementing these policies, more awkward conversations lie ahead.



Turning swords into office chairs

Indian politics

Shinde shindig

MUMBAI

The Bharatiya Janata Party wrests control of India's richest state

A HEAVY DOWNPOUR washed over Thane, a distant suburb of Mumbai, on the night of June 30th as the monsoon at last put in an appearance. No matter—the streets were alight with celebration. Firecrackers and rockets went off. People played music and danced in the road. “I banged the drum so hard that it tore,” enthused Sanjay Dalvi, an autorickshaw driver. At 7.30pm that evening Eknath Shinde, who represents a part of Thane in the state assembly and had himself once driven an autorickshaw for a living, had been sworn in as chief minister of Maharashtra, of which Mumbai is the capital.

Mr Shinde's ascent capped ten days of political turmoil in India's richest and second-most populous state. A longtime member of the Shiv Sena, for decades Maharashtra's dominant political force, Mr Shinde broke away along with some 40-odd legislators and tied up with the Bharatiya Janata Party (BJP), which runs the national government. “It is a blockbuster surprise,” says Sanjay Jha, a former spokesman for the Congress party, which until last week helped run the state in a grand coalition with the Shiv Sena and a third party. Nobody expected the Sena, as it is often known, to crack up.

Long before the BJP veered down the path of muscular *Hindutva*, or Hindu nationalism, the Shiv Sena had established itself as a fierce defender of Hindus in general and native Maharashtrians in particular. Under its firebrand founder, Balasaheb Thackeray, it developed a reputation for assaulting migrant workers in Mumbai. Its members were also involved in bloody anti-Muslim riots in Mumbai the early 1990s.

Yet in recent years the Sena had mellowed. Uddhav Thackeray, Balasaheb's son and Maharashtra's now-former chief minister, had built a reputation for competence and good administration. The state had remained mostly free of the religious clashes common in BJP-ruled states. Though covid-19 hit Mumbai as hard as any other Indian city, the health system managed to avoid the wrenching scenes of people dying outside hospitals seen in Delhi, the capital, and the north. That earned Uddhav new admirers, even among liberal types who once loathed his party.

It also earned him the hatred of the BJP. The parties were natural allies, and indeed had fought elections together since 1989. But they fell out after the last poll, in 2019,



over who should get the chief minister's post. The BJP has been trying to bring down the state government ever since. It repeatedly accused the Sena of forgetting its *Hindutva* antecedents. Uddhav, for his part, emphasised governance over hatemongering: “Our *Hindutva* is not to burn houses, but to light stoves in houses,” he said at a rally in May.

The trouble started on June 21st, when Mr Shinde took 11 lawmakers to a hotel in Surat, a business hub in the BJP-ruled state of Gujarat. By noon the number of rebels had grown to 25. Two days later he put them on a plane and locked them up in a hotel in Guwahati in Assam, another BJP-ruled state (see map). By now they were 40.

There, he told them he had the support of “a national party that shook Pakistan”, a reference to the BJP. Next, they shifted base to yet another five-star hotel in BJP-ruled Goa. Having lost the support of the majority of his lawmakers, Uddhav resigned on June 29th. Mr Shinde later credited Devendra Fadnavis, a former BJP chief minister of Maharashtra (who is now Mr Shinde's deputy), with orchestrating the whole thing. Such shenanigans are common enough to have a name: “resort politics”.

Opposition parties across the country will be worried by the BJP's ability to split the Sena, a usually disciplined group. The BJP, for its part, gloated over its victory by vowing to pick up other states that seem out of its reach, such as Tamil Nadu in the south and West Bengal in the east. One test of its popularity in Maharashtra will come later this year, when Mumbai holds municipal elections. The Sena dominates the city, but the split may cost it dearly.

For the citizens of Maharashtra, the immediate worry is that the BJP's divisive politics, and the violence and disharmony that come with it, will disrupt life in the state. Mumbaikars in particular tend to prize business over politics and ideology. Yet they too may soon find themselves subject to the same forces that govern much of the rest of the country. ■

Women in South Asia

Bridges to liberty

Female employment rises as journey times fall

MAMTAJ BEGUM has lost count of the hours she has spent waiting for a ferry on the banks of Bangladesh's Padma River. Travelling from her hometown of Faridpur to Dhaka, the capital, and back can take days. It is also hazardous. Last year, as one of the heaving boats lurched across the water, she watched a man drop dead from heat stroke. Her cousin drowned when his overloaded ferry overturned. The 33-year-old garment worker also faces “horrific harassment” during the bus and boat rides, she says. Back home, her neighbours call her “prostitute of garments” for undertaking such a long journey alone.

Since Bangladesh's economy took off a few decades ago, millions have headed to the capital to make their fortunes. Many of them are women, who make up 80% of the 4m workers in the garment industry, which has propelled the country's rise. For the women of Faridpur, a town 60km south-west of Dhaka, these jobs have been tantalisingly close, yet hard to reach. Now, a new bridge spanning the Padma, which opened on June 25th, has cut the journey time to the capital to just a couple of hours.

Some 23 years in the works and costing more than \$3.5bn, the Padma bridge promises to connect around 30m people in Bangladesh's south-west to jobs and trade in the east. Such projects benefit everybody, but especially women, whose ability to travel is often restricted in conservative South Asian societies, says Mushfiq Mobarak, an economist at Yale University. The greater the distance or perceived distance, the greater the stigma.

New research on an earlier project reveals what women stand to gain from the Padma bridge. In 1998, when the Jamuna bridge connected Bangladesh's north-west to Dhaka, journey times plummeted. For residents of one city, for instance, a trip that took anywhere from 12 to 36 hours was cut to four hours. The number of women migrating and finding work in garment factories soared compared with those in similarly remote regions, researchers at the University of Kent in Britain and Monash University Malaysia found.

Yet that bridge, and the greater ease of getting to work it allowed, did not wholly offset the effect of conservative social norms, says Zaki Wahaj, one of the study's authors. These often prohibit women from travelling alone. The number of unmarried or unaccompanied women ↗

► migrating did not go up. What changed was that families were happier to marry their daughters to men heading for Dhaka. They felt that a faraway place had come closer. Many of those women then took up work in the garment industry.

Women were not passively carted off to the city by industrious husbands, though, says Niaz Asadullah, another author of the study. After the bridge was built, migrating grooms were more likely to receive a dowry. Women—or their families—appeared to be looking specifically for men migrating to the capital. They were prepared to pay a

premium for such a catch.

Opportunities for and ease of access to work can also shift cultural norms. After the Jamuna bridge was built girls in Bangladesh's north-west spent on average an extra year in primary school, and those from wealthier families were more likely to enroll in secondary school, perhaps in part because their parents hoped a better education would help them snag a migrating husband. In villages where women could travel to a garment factory and back within a day, parents were more likely to send their daughters to school than in vil-

lages that were slightly farther away, another study co-authored by Yale's Dr Mobarak found. In this case, their efforts seemed aimed at securing jobs, not husbands, for their daughters.

Only some 20% of Indian and Pakistani workers are women, compared with 36% in Bangladesh. Changing that is critical. "If you cannot make half the population productive, that's always going to be an impediment to growth," says Dr Mobarak. Governments everywhere love things like bridges. In South Asia, such efforts have the added bonus of benefiting women. ■

Banyan The new isolationism

Pandemic border closures have cut Japan off from the world. It's time to end them

FACING THE menace of Christianity in the early 17th century, the Tokugawa shoguns closed Japan's borders. Foreigners were allowed to visit just a handful of ports. Japanese who tried to travel abroad, or who did so and returned home, were put to death. If they brought back a letter, their families were executed, too. Thus began the period later dubbed *sakoku*, or "closed country"; it lasted until Western warships "opened" Japan in the mid-19th century.

Cut to the 21st century. Throughout the pandemic, Japan has maintained some of the tightest border controls of any democratic country. To this day, tourists are barred unless part of a group tour. Some observers are calling the government's approach "neo-sakoku".

In some ways, Japan's pandemic policies are normal for Asia, where many places took a draconian approach to keeping out the virus. Yet whereas other countries pursuing zero-covid strategies, such as China and Australia, barred even their own citizens from leaving, Japan created a dual system. Japanese nationals were largely free to come and go. Foreigners, even those with permanent residence, faced restrictions. *Nikkei*, a daily, reported in October that roughly 370,000 foreign students, guest workers and their relatives were stuck outside the country despite holding residence visas. "Does the virus read your passport?" quipped a global health official.

Such isolationism is a reversal of the pre-pandemic direction of travel, so to speak. Spurred by its ageing, shrinking population, Japan had been opening up. The number of tourists had grown from fewer than 7m in 2009 to more than 30m in 2019. The number of foreign students nearly doubled over the same period. The tally of foreign workers had trebled,

albeit from a low base. In 2019 the Japanese government loosened laws to allow some foreigners to stay for longer.

The pandemic revived an enduring scepticism about foreigners. "Japanese conceptualised covid as something that comes from the outside," says Oussouby Sacko, a former dean of Kyoto Seika University, who was born in Mali. The unspoken logic is that foreigners cannot be trusted to stick to the practices, from mask-wearing to silent eating, that many believe helped the country maintain the lowest death-rate from covid in the OECD, a club of 38 mostly rich countries, despite having the highest share of old people. Border closures have been popular: nearly 90% of Japanese approved when Kishida Fumio, Japan's prime minister, tightened travel restrictions in response to the outbreak of the Omicron variant late last year.

The short-term political gain comes at a cost, however. Japan has already lost a cohort of foreign students, the very people who often go on to become bridge-builders between countries. Only around 11,600 managed to enter Japan in 2021, compared

with some 120,000 in 2019. Foreign students stuck in limbo have protested. Some have switched to studying in countries with more open borders, such as South Korea. Foreign businesspeople complain that the policies have made it harder to oversee operations, negotiate deals and make investments.

The present-day isolationism serves as a reminder of why Japan needs outsiders in the first place. The country needs to quadruple the number of foreign workers by 2040 to sustain the government's modest average growth target of 1.2%, according to a recent study by a group of Japanese think-tanks. (Without sustained investment in automation, the number would have to rise more than ten-fold.) Japanese business leaders have been among the loudest voices calling for reopening. "Business is not conducted solely on a domestic basis," the head of Keidanren, Japan's biggest business lobby, said when calling for an end to the "*sakoku* situation" earlier this year. As demographic change accelerates, labour shortages will become more acute.

Mercifully, neo-sakoku looks likely to ease a lot sooner than the original version. Japan began letting business travellers and students into the country in March and allowed group tours in June. Officials whisper that a full reopening will come sometime after upper-house elections on July 10th, barring a resurgence of the virus. If anything, demand for travel is likely to have grown rather than faded: in an annual survey, readers of *Condé Nast Traveler*, an American magazine, put three Japanese cities at the top of their list of favourite foreign cities in 2021, despite being unable to visit. Like it or not, the world wants Japan, and Japan needs the world.





Global infrastructure investment

Building blocs

Having watched China's Belt and Road Initiative for nearly a decade, the G7 has at last come up with an alternative

IN THE NINE years since China launched its Belt and Road Initiative (BRI), a multi-billion-dollar spree of global infrastructure-building, American efforts to counter the scheme have repeatedly faltered. Barack Obama's administration failed to persuade allies to boycott the Chinese-led Asian Infrastructure Investment Bank. Mr Obama touted a free-trade deal, the Trans-Pacific Partnership, but Donald Trump sank it in his first week in the White House.

As some countries struggled to repay Chinese loans, the Trump administration got some traction calling the BRI "debt-trap diplomacy". The scheme still accounted for about \$890bn in investment and construction contracts (many financed by Chinese loans) between 2013 and 2021, says Christoph Nedopil Wang at Shanghai's Fudan University. And every time America criticised China's "new Silk Road", the riposte came: "What are you offering instead?"

Now, just as China starts to scale back its programme, America and its allies appear to have come up with an answer. On June 26th the rich democracies of the G7 unveiled a plan to mobilise \$600bn of priv-

ate and public investment in infrastructure in low- and middle-income countries over the next five years. It is called the Partnership for Global Infrastructure and Investment (PGII). President Joe Biden said his country would stump up \$200bn.

Western officials say the scheme will not compete directly with the BRI, which has focused on ports, railways and other "hard" infrastructure. Instead, it will try to play to the G7's strengths by prioritising climate and energy security, digital connectivity, health and women's equality. In contrast to China's scheme, it promises to be transparent and sustainable—financially, environmentally and socially. Whereas China's programme mainly involves loans from state-controlled banks, the PGII will

aim to use limited government resources to catalyse larger private investments. "This isn't aid or charity," Mr Biden said on the plan's launch. "It's an investment that will deliver returns for everyone."

On the face of it, the plan is bad news for China. The BRI was already facing headwinds, owing partly to excessive lending to commercially dubious projects and partly to the impact of covid-19. Pakistan, once hailed as the BRI's centrepiece, is on the brink of default. Sri Lanka, another big recipient of Chinese loans, defaulted in May. The BRI had also grown too large to manage effectively. Those problems, combined with an economic slowdown at home, have prompted a scaling back, and the steering of funds towards smaller, higher-quality projects and into "soft" infrastructure such as health care. Although the BRI will continue (it is written into the constitution), China's president, Xi Jinping, is now promoting a new idea, the Global Development Initiative, which is expected to focus more on sustainable development.

The upshot is that China's efforts will increasingly come into direct competition with the G7's. Some Chinese experts warn this will complicate Chinese strategic goals. Wang Yongzhong of the Chinese Academy of Social Sciences says that by focusing on "soft" infrastructure where they have comparative advantages, Western countries aim to boost exports of their own technology and services in areas such as 5G telecoms, blockchain and clean energy. That would allow them to "reap rich geo-

→ Also in this section

36 Success in dealing with floods

37 Shanghai's police hacked

37 A crackdown on larping

— Chaguan is away

► political and economic rewards", he wrote in *People's Tribune*, an official magazine.

A broader concern for China is that America and its allies are getting better at co-ordinating efforts to counterbalance Chinese economic and military heft. The G7's plan was launched two days before the 30 members of NATO agreed at a summit to include threats posed by China in a blueprint for its future strategy. The summit was also attended for the first time by the leaders of Japan, South Korea, Australia and New Zealand. A few days earlier, America and four of its closest allies launched yet another initiative, the Partners in the Blue Pacific pact, aimed at offsetting Chinese influence in the Pacific islands.

In public, China has been dismissive of such efforts. "What the international community wants to see is real money and projects that actually benefit the people," said Zhao Lijian, a spokesman, after the PGII was launched. Privately, though, some Chinese experts worry that such Western efforts are gaining pace just as China's image has been tarnished by its zero-covid strategy and support for Russia in Ukraine.

Yet there are reasons to be sceptical of the G7's plan, too. It is a repackaging of an idea called Build Back Better World that was launched at the group's summit last year. The rebranding was partly due to Mr Biden's failure to win congressional support for his domestic Build Back Better initiative, Western officials say. But they also concede that there was little progress in implementing the international plan.

The G7's plan has roots, too, in an even earlier initiative, the Blue Dot Network, which was started by America, Japan and Australia in 2019 but has made little headway, in part because of differences over climate change. There are also overlaps with the EU's Global Gateway scheme, launched in December to "mobilise" €300bn (\$340bn) in infrastructure investment by 2027, and Britain's Clean Green Initiative, unveiled a month earlier with a pledge of £3bn (\$4.1bn) for sustainable infrastructure in developing countries.

Western officials say these efforts are complementary. But some observers see a lack of new money on offer. They worry that inflation and domestic politics will limit state funding, and the private sector will be wary of investing in unstable countries. "One has to wonder if this isn't all just too little, too late," said Matt Ferchen of the Leiden Asia Centre in the Netherlands.

In one indication of how the G7 will try to meet its \$600bn goal, the White House listed several ongoing projects that were retroactively included. China did the same when it launched the BRI. But the G7 will need to show more substantial results fast if it is to convince developing countries that it offers a better alternative to China's new Silk Road, rather than a dead end. ■

Floods

Above the water line

YINGDE

Improved planning means fewer people are dying from floods

AS THE WATERS submerged her village's ancestral shrine, Yu Jingyu and her family put their chickens upstairs and fled to the upper floor of their neighbour's taller house. In the bamboo-clad hills of Yingde, in the southern province of Guangdong, locals say these are the worst floods they have ever seen. The nearby river has risen to its highest level since records began in 1951. "Everything is gone," says Ms Yu, cradling her baby.

Yet there have been no reported deaths in Yingde in June and July, despite the severity of the flooding. This is telling. Between 1990 and 1999, there were more than 1,000 deaths across China from flooding and landslides every year and, in three of those years, more than 3,000. Since 2011 the toll has topped 1,000 only twice. Data are imperfect and the government tries to hide its failures. But experts agree that the downward trend in deaths from flooding is clear, even though overall levels of precipitation have remained steady and, for the past three years at least, there have been more "intense rain events".

There are a few reasons for this. First, the Communist Party has spent lavishly to respond to emergencies, especially since a devastating earthquake in 2008, says Scott Moore of the University of Pennsylvania. "High-profile disasters were perceived as being significant challenges to the Party's ability to protect the people, which of course it claims to do," he says. Political pressure means disaster response has be-

come one of the few areas where government departments work well together, he says. Rescue efforts by heroic officials and soldiers also provide good propaganda.

The government has got much better at moving people to safety. In 2020's rainy season, 4.7m people were evacuated from floods, nearly 50% more than the average of the previous five years. More accurate weather forecasts and fast communications are crucial. Villagers in Yingde were warned on WeChat, a ubiquitous messaging app, that a flood was coming and they should be ready to flee.

The thousands of dams and dykes built over the past few decades are also life-savers. So many of them block China's big rivers that officials are running out of good sites to build new ones. The infrastructure came with huge costs in concrete, forced resettlement and damage to the environment. But officials can now protect big cities by holding floodwaters upstream and staggering their release. Not everyone benefits. "The logic is to protect more populated regions," says Ma Jun, an environmentalist. "But this may induce a cost upstream." In Yingde some grumbled that their villages were used as a reservoir to protect Guangzhou, a city downriver.

Despite lower death tolls, China's age-old battle against floods is likely to get harder as extreme weather becomes more common. China is "probably the most exposed of any large country or economy" to climate risks, says Mr Moore. For one thing, river dams do not protect against rising sea levels. More investment in building sea walls will be needed, he says.

Upstream dams do not help much if enough rain falls directly on cities, overwhelming storm drains and sewers. Making cities more absorbent with parks and wetlands can help. China has invested billions of yuan in creating such "sponge cities". But even these struggle to cope if rains are too intense, says Faith Chan of the University of Nottingham in Ningbo. Floods that killed around 400 last year in Zhengzhou, a showcase sponge city, came after a year's worth of rain fell in three days.

And although China has reduced deaths from rising waters, it is poorly prepared for the economic damage that they bring. Floods in 2021 caused \$23bn in losses, second only to Europe. Only 10% of those losses were insured, according to estimates by Swiss Re, a reinsurance firm. In Europe, in contrast, 32% of losses from floods were insured last year.

Ms Yu and others in Yingde say the floods have cost them tens of thousands of yuan. Most make around 3,000 yuan (\$440) a month and few have insurance. What they do possess is the stoicism of the ages in the face of tragedy. "If there's rice we'll eat rice," says one. "And if there's just porridge, then we'll eat porridge." ■



Everywhere

Online security

Hacked

A huge recent data leak was not unexpected

THE COMMUNIST PARTY's obsession with surveillance may have come back to bite it on June 30th. A hacker using the name "ChinaDan" claimed to have stolen a database from Shanghai's police department, containing information—including names, phone numbers, national ID numbers and case details—of 1bn people. For the price of ten bitcoin (around \$200,000), ChinaDan was willing to sell the data. To prove authenticity, the hacker released a data set containing 750,000 records.

Chinese authorities have refused to comment. But the leaked data appear to be real. When journalists from the *Wall Street Journal* called five people exposed by the hack, they confirmed that the information about them was correct.

If the news is true, the breach would be one of the largest ever in China, or indeed anywhere. The leak is not, however, a surprise. China is notorious for its lax data-security practices, caused, in part, by the government's desire to spy on its own citizens, which means much data is left unencrypted. Experts have been saying for years that such a leak was likely.

Yet the timing of the breach is especially embarrassing, says Paul Triolo of Albright Stonebridge Group, a consultancy, as the government has recently tried to improve data security. Last year it passed a "personal-information protection" law, requiring companies and public bodies to make better efforts to protect citizens' data. But, unsurprisingly, the law is enforced less strictly on officialdom, and there is little evidence of any change.

Ordinary citizens seem unlikely to be too inconvenienced. There appear to be no credit-card details leaked, and experts say the data will not be very useful for carrying out fraud. Rather, says Rogier Creemers of Leiden University, the question is how bad the leak will make the party look to its own people. "China is a dictatorial state but that does not mean the state can do anything it likes, because individuals are going to get a bit angry," he says. The authorities are busy trying to clamp down on discussion. The hashtag "data leak" was blocked on Weibo, a microblog, soon after news started to circulate. Discussion on WeChat, a messaging app, is also constrained.

The leak could add to growing discontent about the party's competence. Many Chinese people are already exasperated by the government's handling of covid-19

Youth culture

Having a larp

Officials worry about a new form of entertainment

IN THE PAST few days, news from the south-western city of Chengdu has swept the internet. A 22-year-old student was admitted to hospital after playing a game of *jubensha* ("script killing"). So terrified had she become that she felt dizzy and numb. Doctors concluded she had suffered a brain haemorrhage. The terse report in state-run media rang alarm bells. On Weibo, a microblog, more than 140m people viewed a hashtag referring to it. Thousands posted comments. The concern of many was not the fate of the woman but of *jubensha*.

Despite lockdowns, the number of venues for playing it has risen from fewer than 3,000 in 2019 to tens of thousands. A Chinese firm, iiMedia Research, estimates fans spent \$2.7bn on the game in 2021. From a survey of internet users it concluded that, by 2021, *jubensha* had become the third most popular offline pastime after the cinema and the gym.

The game is what is known outside China as "live action role-playing", or larping. Larpers dress up as the characters they play and remain immersed in

those identities as they interact with other players to achieve specified goals: solving a murder is a common one. Venues have several rooms. Participants choose a script and occupy a room decorated to match the theme (spooky music optional). A game can last for hours. One attraction is that *jubensha* helps as an ice-breaker when dating.

The government is worried, for several reasons. One is that no formal mechanism exists for censoring the scripts. They are circulated in *samizdat* form, without going through the normal publishing process. There has been much hand-wringing in state media over the danger this poses of players being exposed to "harmful" content such as sex, violence or supernatural horror. Some Weibo users asked which script the hospitalised woman had been using so they could play it too.

You do not need to be Sherlock Holmes (who features in some *jubensha* scripts) to work out that when the government publishes bad news linked to a form of entertainment, a clampdown is likely. In January Shanghai became the first Chinese city to publish regulations governing *jubensha* scripts. They set out ten types of prohibited content, such as any that "propagates" sex, violence or superstition or that "threatens national security". Scripts must be submitted to local officials. On June 27th the central government banned anyone under 18 from visiting *jubensha* venues except at weekends and during holidays. It required venues to register online and provide details of their scripts.

Many players fret about how this will end. "Could it be that they want to create politically correct versions about beating landlords?" asks Ashley Miao, a businesswoman in Shanghai who loves the mental exercise involved in *jubensha*. A Weibo user with more than 14,000 followers put it more bluntly: "If you want us to become North Koreans, just say so."



Elementary, my dear Huasheng

lockdowns and the resulting harm to the economy, which is faltering. Ahead of this autumn's party conference, where Xi Jinping is seeking a third term as leader, the top brass could do without additional causes of popular annoyance.

More hacks are likely in future. Indeed, they may have already happened. China's lack of strict disclosure laws in the event of a breach means that other leaks may have

gone unreported. And as long as the country continues to harvest its citizens' data indiscriminately, those data will be at risk. The party can probably tighten security in its own internal networks. But governing in China, as elsewhere, is all about priorities. And continued surveillance over its own citizens will remain far more important to the authorities than protecting those citizens' data. ■



Congo

Either ore

KOLWEZI AND FUNGURUME

How the world depends on small cobalt miners

AT FIRST GLANCE the dust-caked men carrying sacks of rocks into a trading depot outside Kolwezi, in the Democratic Republic of Congo (DRC), have little in common with “Avon ladies” selling cosmetics in the rich world. But in both cases, the more you flog, the better the bonuses. At the depot industrious miners who hit production targets get bumper perks such as a bag of maize meal or a television.

The ultimate prize is the cobalt that will be extracted from the rock. An essential component of batteries in phones, laptops and electric cars, which are now the biggest source of demand, cobalt is at the heart of the green economy. Its consumption is expected to rise six-fold by 2050, according to the authors of an IMF paper published last year. However, they also noted that cobalt supply could be a bottleneck in the move to cleaner energy.

To understand why, consider Congo’s copper belt, from which 60-70% of the world’s cobalt is extracted (see map on next

page). Most of Congo’s cobalt is a by-product of large copper mines which cannot quickly increase their output and have little incentive to do so unless copper prices also rise. The other big source of supply in Congo is so-called “artisanal” mining. Small-scale informal miners dig up about 15% of Congo’s cobalt. That is more than the entire output of Russia, the world’s second-largest producer (see chart).

Artisanal miners are critical to global supply. They hand-dig higher-grade ores than those produced by large mechanised mines and can act as swing producers. Yet Congo’s small miners face immense obsta-

cles, which prevent them from reaping the rewards of the clean-energy revolution.

Chief among these problems is that small mines are dangerous and polluting. International NGOs have reported on horrendous incidents of miners being killed when tunnels collapse and of children as young as seven digging for cobalt. After a report in 2016 by Amnesty International on the human cost of artisanal mines, a number of large mobile-phone and car companies pledged to eliminate artisanal cobalt from the batteries they used and to improve safety in small mines. Six years on, too little has changed.

Part of the reason why the lot of small-scale miners has not improved is because of the way they are pushed to the margins of the industry. In 2019 the army evicted 5,000-8,000 miners from the Tenke Fungurume Mine, which is owned by China Molybdenum. Still, people returned to the mine, roughly 100km from Kolwezi, even in the face of violence. “Security is chasing us, beating us,” says Generose Yandaya, who washes rocks to support her orphaned grandchildren. “I want them to go to school. The problem is there is no money and mining is the only job.”

Roughly 140,000-200,000 people in the copper belt work as artisanal miners. Most earn less than \$10 per day, according to Germany’s Federal Institute for Geosciences and Natural Resources (BGR). That is ➤

→ Also in this section

39 Football’s high goals in Sierra Leone

40 Israel’s new leader

40 Cairo’s confiscated houseboats

41 Reviving the Middle East’s railways

► still more than most get in a country where 73% earn less than \$1.90 a day. Children work at 25-30% of mines. Kitenge Mami, a teenager in Fungurume, says she goes to the quarry "because I don't want to be a beggar". Mining powers the wider economy: the motorcycle-taxi drivers transporting three sack-laden miners at a time; coiffed women selling "I heart DRC" sacks for collecting rocks. One study suggests 60% of households in the region rely on artisanal mining for their livelihoods.

Pollution is rife. Fathers with mining jobs are unusually likely to have children with birth defects. A law limiting pit depths to 30m is widely flouted. Collapses are common. "There are no statistics but many, many are dying," says Donat Kambo-la Lenge, a human-rights lawyer. George Ngome, a pastor, says he presides over lots of funerals for miners without identity papers. "Their families never know."

By law miners must belong to co-operatives. Often these are little more than labour gangs controlled by bigwigs. This year the provincial government named as its new mining minister the head of one of the largest co-operatives. The trading depots must be owned by Congolese. But they are often financed by Chinese traders. Every depot is colloquially known as *La Maison Chinoise*. At one your correspondent's journalistic interest is conflated with the commercial sort, leading to an offer to *The Economist*: "You can also exploit our ores."

It is mostly miners who seem to be getting exploited. Some of them say that traders' scales and spectrometers (used to measure the concentration of cobalt) are rigged. They complain about a litany of unofficial "taxes" imposed by state agencies, chiefs, police and security guards, who can make \$250 a night in bribes. "We have laws but there is no respect for the law," says Mr Lenge. "Government is just corrupted."

Artisanal cobalt is trucked from trading depots to refineries where it may be blended with ore from big mines. "Despite the efforts of some companies to portray industrial [large-scale] mining and artisanal mining as completely distinct," argues the Natural Resource Governance Institute, an NGO based in New York, "the boundaries between the two are permeable."

The international firms that trade, refine and use cobalt have tried to understand what happens in their supply chains. Apple, for example, lists all of its cobalt refiners. Many companies use RCS Global, a consultancy with auditing staff permanently stationed at ten artisanal mines.

Some try to use less cobalt from Congo, especially the artisanal sort. BMW says it buys exclusively from Australia and Morocco. Tesla is producing batteries that use much less cobalt. And firms are sponsoring initiatives to make life better for miners. The Fair Cobalt Alliance, which counts

Tesla and Google among its members, is improving safety at an artisanal mine and renovating schools to give parents more reason to keep their kids away from pits. The Responsible Cobalt Initiative, an association of German car firms and industrial giants, wants to offer safety training.

But critics say this is not enough. "There is artisanal cobalt in supply chains, even if it is not acknowledged," says Benjamin Katz of the OECD, a club of mostly rich countries. "And there is very little being done to improve conditions." A consultant to large firms adds: "You have a group of downstream businesses that get their annual auditor report, pretend to be virtuous and go back to selling phones and cars."

In 2019 the Congolese government proposed giving a subsidiary of Gécamines, the state miner, a monopoly over the buying of artisanal cobalt. "We are going to eliminate child labour," said Albert Yuma, then the boss of Gécamines. "Perhaps not today, but tomorrow, the Congo will be the equivalent of OPEC [for cobalt]." As part of the proposal some revenue would go towards improving mine safety.

There are plenty of moral incentives to reform artisanal mines but not enough market ones. "There is a double standard," argues Mickael Daudin of PACT, an American NGO. "The approach is: 'We will help you but we don't want to buy from you.'" Firms argue that Congo ought to clarify the legal status of artisanal sites and that rich-country governments should be clear about what amounts to a responsible standard for cobalt, as is the case with "blood diamonds". Both steps could allow artisanal cobalt into the market legitimately and improve the lot of Congo's people.

In Kolwezi, Pastor Ngembe watches a Christian channel on TV, seeking inspiration for his sermon later. The topic is that age-old question: "DRC is a rich country, so why are so many people poor?" ■



Football in Sierra Leone

He shoots, he scores...

FREETOWN

...again and again and again (allegedly)

UNLIKE NEIGHBOURING Liberia (whose president, George Weah, was Africa's first recipient of football's most prestigious award), Sierra Leone is not known for its footballing talent. But it would take an extraordinarily inept goalkeeper to concede more than one goal every minute. Yet that is what allegedly happened on July 3rd, when Gulf FC and Kahunla Rangers reported respective victories by 91-1 and 95-0 in league games. The only larger margin recorded in world football was 149-0 in 2002, when players from a Madagascan team repeatedly kicked the ball in their own net in protest at poor refereeing.

Football fans in Freetown, the capital, are outraged. "The over 180 goals are a national disgrace," says Mohamed Kalokoh. "Our country is not serious about fair play." The Sierra Leone Football Association (SLFA) said the results were "impractical" and that it would investigate.

News travelled quickly along the banter highway, but few bothered to verify it. Enquiries by *The Economist* suggest that, unlike in Madagascar, the bumper scores did not actually occur. Eric Kaitell, the boss of Kahunla Rangers, says he watched the first half, which ended with his team up by 2-0, then went home for a nap. When he woke he learnt his team had supposedly scored another 93. Football is, as the cliché goes, a game of two halves. But that is a stretch.

Mohamed Patel Jabbie, the chairman of Lumbenbu United, which allegedly lost 95-0, says: "My team only conceded five goals." He adds that it would be impossible to score more than 90, partly because the pitch was waterlogged. He reckons the scores were changed after the final whistle.

Why? The clubs and the SLFA are, for want of a better phrase, shifting the goalposts. First there were suggestions of match-fixing for gambling syndicates, but that seems unlikely given that these were amateur games not covered by bookmakers. Mr Jabbie suggests that the two teams needed this many goals to get promoted. African players are prominent in the world's best teams but domestic leagues are underfunded and their players underpaid. There might be a strong incentive to move up to the country's premier league, where there is some prize money.

Mr Kaitell apologises to fans and says he will get to the bottom of the matter. The only upside for Sierra Leone is that its goalkeepers are not as bad as they seemed. ■

Israel's new prime minister

Yair apparent

JERUSALEM

Yair Lapid has four months to stop Binyamin Netanyahu from returning

WITH NO CEREMONY or fanfare, not even a formal swearing in, Yair Lapid became Israel's 14th prime minister at midnight on June 30th. His predecessor, Naftali Bennett, who took office a year ago, now holds the dubious title of having had the briefest ever stint as the country's leader. But Mr Lapid will struggle to stay even for that long. He took office hours after Israel's parliament, the Knesset, voted to dissolve itself, scheduling a general election for November 1st, its fifth in under four years.

Mr Lapid, aged 58, was the architect of the coalition that imploded on June 20th after barely a year's rule. He had cobbled together eight disparate parties, including for the first time an independent Arab party, ending Binyamin Netanyahu's 12 years in power. Though he led the coalition's largest party, Mr Lapid agreed to cede the first half of the term to Mr Bennett. Under the terms of their deal, he replaces him as prime minister until after the election—and perhaps longer if he wins it.

Before entering politics and founding his centrist Yesh Atid party in 2012, Mr Lapid was a popular columnist and television chat-show host. He also dabbled in boxing, acting and writing thrillers, pop songs and TV dramas. As a journalist and politician, he appeals to Israel's cosmopolitan, secular middle class. Often regarded as a lightweight, he proved his critics wrong by engineering Mr Netanyahu's downfall. To prevent his return, Mr Lapid has just four months to broaden his personal appeal while once again building a coalition that is bound again to be creaky. So he must prove he can run Israel's complex affairs, presiding over a cabinet in which three-quarters of the ministers belong to rival parties vying with him for votes. This may leave little time for electioneering.

Looking abroad, Mr Lapid will have to chart a canny path, especially with regard to Iran and Lebanon. His predecessor ratcheted up tension with a series of clandestine attacks against Iran, including some assassinations. On Mr Lapid's second day in office Hizbullah, Iran's Shia Muslim ally in Lebanon, launched a flight of drones towards Israeli gas platforms in the Mediterranean. Israel shot them down.

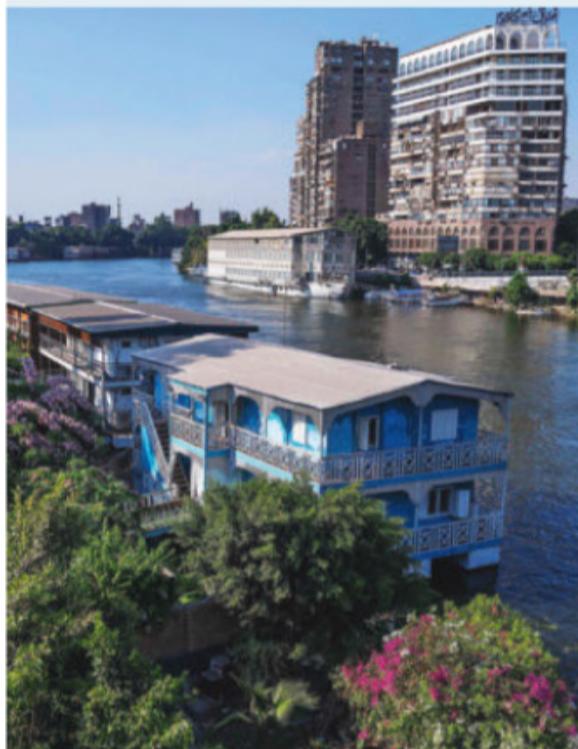
President Joe Biden, who is due to visit the region starting in Israel on July 13th, will provide an early test of Mr Lapid's international statesmanship, not least because the American president still wants to

Historic houseboats are the latest victims of an addiction to cement

THE COLOURFUL houseboats anchored along the Nile have been fixtures of Cairo since the 1800s. Bigwigs once stashed mistresses on board. Diplomats and artists drank on their decks. They feature in film and the writings of Naguib Mahfouz, who won the Nobel prize for literature in 1988.

No matter. Last month the government ordered their removal, saying the boats were unsafe and lacked permits—no surprise, since it stopped renewing the permits two years ago. It has recently begun towing them away. Officials are coy about their plans for the riverbank. If the past is any guide, the boats will be replaced by restaurants and cafés, their lush gardens buried under concrete.

Abdel-Fattah al-Sisi, Egypt's authoritarian president, is addicted to the stuff.



The past unmoored

revive a nuclear deal with Iran which Israel's previous two leaders have opposed. Mr Lapid has equivocated, saying he might back a deal if it were beefed up.

After a burst of violence in Israel and the West Bank during the recent month of Ramadan, the Palestinian front seems fairly calm. Yet that conflict simmers as ever. Unlike Mr Bennett, Mr Lapid favours a two-state solution in principle, but as foreign minister he showed scant interest in making it happen. Millions of stateless Palestinians have their ways of reminding Israeli prime ministers of their existence, often at the least convenient moment.

Mr Lapid faces a string of challenges at

Egypt

Paving paradise

His ministers brag about 5,500km of new roads. Some of this frantic construction has won praise from citizens. Egypt's crumbling infrastructure needs renewing. It also pleases allies. The army, where Mr Sisi spent most of his career, is often the lead contractor on big works and owns factories that make cement, steel and other materials.

But centuries-old neighbourhoods have been torn down and thousands of people evicted. Many receive little notice. Just a few days pass between red marks being daubed on their doors and bulldozers rolling down their streets. There is no space for sentimentality or historic preservation. A seventh-century cemetery in eastern Cairo may be razed.

Officials rarely consult the public on projects. If they did, someone might have raised questions about the new motorway on the north coast. It should speed the journey to the growing expanse of villas that lines the Mediterranean, a popular escape for rich Egyptians.

But many of those using it describe it as a death trap. Gated compounds spill directly onto the motorway, leading to dangerous tailbacks. Exits are oddly designed and lack signs. One widely mocked video on social media shows an elevated roundabout with unfinished lanes and confused drivers going against traffic. On June 28th seven people were killed in an accident.

Mr Sisi says the road is not finished and that the naysayers want to defame his government. But he also promised personally to review their complaints. It is probably no coincidence that his children have homes off the highway. Needless to say, the houseboat owners lacked such influential neighbours.

home, too. Israel's economy is recovering fast from covid-19, but global factors are making the cost of living shoot up all the same. Mr Netanyahu, ever the populist, is already capitalising on this in campaign jaunts to shopping centres. Mr Lapid must urgently fend off the threat of chaos posed by teachers' unions seeking higher salaries and aggrieved police who have been resigning in droves for similar reasons.

Above all, Mr Lapid needs to project the image of a steady, "normal" prime minister in contrast to the bombastic, sometimes mercurial Mr Netanyahu. But four months of normality in Israel would itself be considered quite abnormal. ■

Railways in the Middle East

A burgeoning new bazaar

QURAYYAT

Arabs and their neighbours are rediscovering an old love

NOT SINCE the Hijaz railway between Damascus and the holy city of Medina was ruptured by the British buccaneer-cum-scholar T.E. Lawrence in the first world war has overland travel out of Saudi Arabia's hinterland seemed so simple. On March 31st the first passenger train pulled out of Riyadh, the Saudi capital, and sped north past 1,215km (755 miles) of sand dunes to Qurayyat, a town near the Jordanian border. Within weeks the sleeper was proving so popular that your aggrieved correspondent's couchette was double-booked. "You'll get your bed in heaven, God willing," promised the train's conductor, ushering him into one of the few vacant overnight seats.

Colonial-era railway routes blocked or destroyed by conflict or disuse are being reconnected. From Marrakech in Morocco to Mashhad in Iran, governments are investing tens of billions of dollars expanding decayed networks. Some 25,000km of track today is expected to grow by tens of thousands of kilometres by 2040. Saudi Arabia is tripling its network. The region has two high-speed lines that whizz passengers at 300kph, with more being built.

The revival has long been delayed, in part for lack of regional integration. After the collapse of the Ottoman, British and French empires, independence severed the lines colonial powers had built to help rule vast swathes of land. Newly minted countries closed borders and blew up bridges. Israel's creation in 1948 drove a wedge between lines linking Asia to Africa.

What is more, most governments gave priority to private over public transport. "Everyone thought cars and trucks were enough," says a spokesman for Israel Railways. Plans for an Arab Mashreq International Railway with a hub in Baghdad have come to nothing. The six countries of the Gulf Co-operation Council (GCC) paid only lip service to a railway project to link Kuwait along the Gulf to Oman.

But clogged roads, soaring populations and climate change are prompting a rethink. People need to move faster and more cleanly than along jammed, polluting roads, says the GCC's Abdel Aziz Alwaish. Travelling on the proposed new line across the United Arab Emirates (UAE) from Abu Dhabi to Fujairah will take half the time of the car journey. Iran's high-speed line from Tehran to Isfahan will cut the trip from five hours to 90 minutes.



Making pilgrims fast

Demand is booming. Israel's passenger volume has soared from 12m two decades ago to 70m today and is projected to reach 400m by 2040. Egypt must upgrade its main lines, since passenger volume has risen 15-fold since the 1930s on track that is largely unchanged.

Metro systems are multiplying, too. Algiers, Dubai, Doha (Qatar's capital), Cairo and Tehran have expanded their systems. Riyadh's and Tel Aviv's should open next year. Cairo's new administrative capital will have north Africa's first monorail.

Tourists and pilgrims should benefit. Saudi Arabia's first high-speed train (pictured) runs between the holy cities of Mecca and Medina. Egypt has just signed a con-

tract to build a fast track from Cairo along the Nile to the pharaonic statues at Abu Simbel, 1,100km away, near the border with Sudan. Morocco is planning a high-speed line to the tourist hub of Marrakech.

Trade should improve, too. Egypt's first high-speed train, set to open in 2027, will run from the Red Sea port of Ain Sukhna to Mersa Matruh on the Mediterranean, offering an alternative to the congested Suez canal. Saudi Arabia is planning a speedy railway running from the port of Jeddah via Riyadh to the Gulf. The new line to Fujairah, on the Indian Ocean, will provide a means for freight leaving or entering the UAE to avoid the Strait of Hormuz, a strategic chokepoint at the entrance to the Gulf that Iran periodically threatens to close. Morocco hopes its high-speed train from Tangiers will one day zip along the coast through disputed Western Sahara to markets in west Africa. Even an undersea tunnel to Spain has been mooted.

China, a world leader in high-speed trains, wants to link Asia to Europe overland through the Middle East to foster its Belt and Road initiative. It has discussed such plans with Iran, Israel and the UAE. But Siemens, a German company, has outbid Chinese rivals to build Egypt's high-speed tracks. Morocco has signed up a French company, Saudi Arabia a Spanish one and Israel a German one for their high-speed projects. Most of the UAE's line has gone to a consortium of British and German companies.

Not all are aboard. Iraq, Palestine, Lebanon, Libya, Sudan, Syria and Yemen are too poor, war-torn or dysfunctional to restore their old tracks. State-owned airlines are lobbying to keep their lucrative short-haul routes. Old fears still make some governments twitchy. Oman, always wary of entanglements, has held back. Kuwait, wary of invasion, is nervous about linking up with Iraq. Qatar had once planned to build high-speed lines to Bahrain and Riyadh in time for this year's football World Cup. But it put on the brakes after its neighbours blockaded it for political reasons.

The fact that most of the new lines stop tantalisingly short of their frontiers illustrates this underlying queasiness. Israel's "peace line" ends 8km short of the border with Jordan. The new Saudi line north from Riyadh peters out 28km from the crossing into Jordan, which is wary of being part of a direct link from Mecca to Israeli-occupied East Jerusalem. Though Morocco has built a gleaming new station at Oujda, the old border crossing with Algeria, the link between the two countries remains firmly shut. And China's dream of reaching the Levant is blocked by a missing link, 22km long, between Iran and Iraq. For all the talk of regional integration and new silk routes, the Middle East's railway map is still holed by the moths of history. ■





AN ANATOMY OF ERASURE

How a free and open Hong Kong became a police state

A QUARTER OF A century after Britain returned Hong Kong to China, the texture of the city, its sights and sounds, are little changed. In its thrumming wet markets, carp still lie under red lamps, fishmongers extolling their freshness. Shoppers worship the gods of purse and phone at upscale malls. Construction workers sweat in the wet air, their jackhammers a rhythm section to the chimes of the trams.

The topography of the island still makes the heart pound. Behind a cavernous convention centre that squats beside Victoria harbour, the jungled ridge running up to the famous Peak sparkles with lights from some of the priciest living rooms on Earth. A steep tram still pulls day-trippers up for the view. Far below, the iconic Star ferries chug across the busy harbour.

On the territory's mainland, a knuckle-shaped mountain called Lion Rock stands guard over the more populous, less privileged conurbation of Kowloon. Slightly lower than the Peak, Lion Rock looms larger in Hong Kongers' imaginations. A squatter settlement at

the foot of the mountain provided the setting for "Beneath Lion Rock", a popular television drama which first aired in the 1970s, celebrating the grit of a generation of Hong Kongers, most of whom had left China to escape turmoil and poverty. It told stories about struggling to feed the family and building a future in a new home. Start singing its theme tune to a Hong Konger of a certain age and there's a good chance they will join in: "Of one mind in pursuit of our dream/All discord set aside, with one heart on the same bright quest.../Hand in hand to the ends of the earth."

It was the people beneath Lion Rock who had, by the late 1960s, made Hong Kong one of the world's most important manufacturing hubs. Ching Cheong, who was five years old when his family fled to Hong Kong in the 1950s, dreamed of returning to the mainland as he grew up living off church provisions in a housing estate. The dream vanished when, as a teenager, he saw corpses floating down the river from China, their hands and feet bound, victims of the Cultural

► Revolution unleashed by Mao Zedong in 1966. "Many of us remember the marine police picking up these dead bodies," he recalls. "After that, none of us thought about returning to live in China."

He and his peers built a new Hong Kong identity based on hard work, solidarity and a pride in the new life they were making. If they turned their back on China, they never forgot that they were Chinese, especially as Hong Kong was still governed by British administrators. Since seizing the island more than a century before to serve as a trading depot (from which to smuggle illegal opium into China) its colonial rulers had preferred to manage things with, as the historian Elizabeth Sinn put it, "the least effort and the greatest economy". They had little interest in seeing the colony's people pursue their dreams with one heart.

Under their neglectful, but not utterly repressive, rule, protest was inevitable. The most violent was that of 1967, when the chaos of China's Cultural Revolution spilled across the border. Supporters of Mao, backed by the underground party, set off bombs, slaughtering children playing in the streets. By September, 51 people (including ten police officers) had been killed. The majority was firmly against the protesters, and developed a new affinity for the police.

Yet these protests also increased the government's awareness of social problems and laid the foundations for the decades of protests which followed. Most of them aimed to move things not towards the chaos of China but towards the sort of Hong Kong people wanted to see. They fought for improvements in education and social services. In the late 1960s and 1970s the administration reduced working hours, created a compulsory free education system, built new public housing and began offering basic medical and social-welfare services. It also added a new rule requiring permission from the police for any public gatherings.

They rarely refused such requests. Leo Goodstadt, an academic who served in the colonial administration, estimated there were, on average, more than 180 protests a year between 1975 and 1995. "Public protests and political activism in the 1970s created an awareness of the relevance of the rule of law to the rights of public assembly and freedom of speech," he wrote in 2005. Never a democracy, by the 1980s Hong Kong had an independent legal system, a robust free press and entrenched civic and economic freedoms. This was the world Mr Ching and his peers inherited.

In 1970, to the well-earned pride of his determined parents, he won a coveted place at the University of Hong Kong. After graduating, though, he made what his elite classmates saw as an odd choice. For a paltry wage, he joined *Wen Wei Po*, a pro-Beijing newspaper. His high-school teacher had encouraged a love of Chinese culture, and Mr Ching wanted to contribute to creating a better China, one not brutalised by the Communist Party nor ruled by British mandarins. He was not interested in promoting Communist Party ideas, but excited by the chance to see the rest of China.

In 1981 Mr Ching became the first Hong Kong journalist posted to Beijing, where he inhaled the excitement of the country opening up. In 1989, by then the paper's deputy chief editor, Mr Ching spent weeks among the students who had occupied Tiananmen Square, reporting on—and sympathising with—their demands for democratic reform and an end to corruption. When it became clear that a crackdown was com-

ing, he was ordered back to Hong Kong, arriving on June 3rd. By dawn on June 4th, hundreds, if not thousands, of protesters had died around the square.

The carnage in Beijing sparked a political explosion across Hong Kong. In 1984 the British had signed an agreement to return the territory to China in 1997, built around the formula of "one country, two systems". The negotiations which had come up with that idea, at which Hong Kongers were not represented, promised that the territory would enjoy a "high degree of autonomy" for 50 years, with a degree of self-rule. But the protests crystallised a sense that the liberties gained in previous decades through stable administration, business success, popular protest and the rule of law would not persist under Beijing's rule. Almost 1m people marched through Hong Kong as rumours spread of an imminent crackdown. Afterwards Mr Ching and 40 colleagues resigned from *Wen Wei Po*. Pro-Beijing businesses and civil-society groups, normally sympathetic to the party, condemned the bloodshed.

A NEW LONG MARCH

One of those marching was a young man named Jimmy Lai. Born just across the border, he had stowed away on a boat bound for the colony in 1959, when he was twelve. From child labourer in the rag trade he worked his way up to be factory manager, then founded his own clothing line—the very embodiment of the self-improving Lion Rock spirit. In 1989 he brought out t-shirts supporting the students in Tiananmen Square and sent all the profits to a pro-democracy group. "I thought it was a turning point," he later said. "I was wrong, of course, but I was very optimistic at the time."

Civic leaders continued to push the British for more representation in the post-handover polity. Many believed China would not keep its two-systems promise unless the people had clear ways of standing up for themselves. By 1995, says Mr Ching, "I had been able to get very close to the party, to understand its aspirations, its mode of operating, its ulterior motives." He wrote an article for *China Times*, a Taiwanese paper, warning that China would not keep its promises.

Before the handover, the last colonial governor, Chris Patten, had many concerns about China's leaders keeping their word. But on June 30th 1997, his speech in the convention centre beside the harbour was full of professional optimism about "a day of celebration, not sorrow." No dependent territory, he said, had ever left British rule more prosperous, or with such a "rich texture and fabric of civil society". Under "one country, two systems", he concluded, "Hong Kong people are to run Hong Kong. That is the promise. And that is the unshakeable destiny."

In fact, under the Basic Law—the city's post-handover constitution—Hong Kongers had few ways to take part in the city's governance. Despite last-minute reforms to allow greater scope for elections, key appointments still had to be approved in Beijing. Most legislators and the city's new "chief executive" were appointed by bodies controlled by party loyalists, many with business interests in China.

In 2008, when Mr Ching returned after more than two years in a Chinese prison on dubious spying charges, he found the culture of protest flourishing. In 2014 after the party ruled out universal suffrage, protests morphed into what became known as the Umbrella Revolution. At one point protesters draped a banner ►

"Hong Kong people are to run Hong Kong. That is the promise. And that is the unshakeable destiny"

► that read “I want genuine universal suffrage” over the top of Lion Rock, claiming its spirit anew.

In 2019 the government sought to introduce a law that would have allowed criminal suspects to be extradited to mainland China to face justice. Hong Kongers quickly understood that, at the party’s whim, anyone could be whisked to China, where courts have no transparency or presumption of innocence. By summer the protests were the largest the city had ever seen.

Young people were the face of the protests. But lawyers provided *pro bono* advice to those arrested, and accountants volunteered to do the books for crowd-funding campaigns that raised millions of dollars. Ordinary workers bought prepaid Mastercards from convenience stores so they could donate food and gas masks anonymously. In August 2019, 200,000 Hong Kongers linked hands to form human chains that wound for 50km around the harbour and over the top of Lion Rock itself. The scale of such demonstrations would have brought down nearly any democratic government—and some authoritarian ones, too.

The police soon responded in heavy-handed fashion. The protests grew in number and, occasionally, violence. One, surrounding the building that houses the legislature, prevented a second reading of the extradition bill. In the face of such opposition, the bill was shelved. But the stubborn, party-backed chief executive, Carrie Lam, remained in office. No conciliatory gesture was made towards the protesters.

Instead, the Communist Party made the subtext of its previous attempts at change explicit: the Hong Kong identity created in the late 20th century and the independent-minded tradition of protest that went with it was a threat. In May 2020 China announced that a new national-security law was to be imposed on the territory, bolting legislation against secession, subversion, terrorism and collusion with foreign powers on top of the Basic Law. The final text of the law was published only hours before its promulgation at 11pm on June 30th. Not even Mrs Lam had been shown the details beforehand. Arrests began soon after.

So much for an unshakeable destiny.



ALMOST EVERY prominent democrat in Hong Kong is now either in jail or exile. The fabric of “professions, churches, newspapers, charities, civil servants” which Lord Patten honoured at the handover has been torn apart. A national-security committee, modelled on a counterpart in mainland China, sits above the rest of Hong Kong’s government. July 1st, the 25th anniversary of the handover, saw an ex-policeman and security chief, John Lee, sworn in as chief executive, the first to be drawn from the security services. In 2019 he oversaw the benighted extradition bill. After the national-security law was imposed in 2020 his role as secretary for security made him a prime mover in the city’s devastation. He was chosen from a party shortlist of one, despite being widely loathed in the territory.

The city’s police budget has grown by 45% over the past five years, and the force has been granted sweeping powers to target individuals and organisations



without judicial supervision or scrutiny. Nearly 200 people have been arrested under the national-security law, which has a presumption against bail.

One of them is Jimmy Lai, who donated the profits from his t-shirt sales to students in Tiananmen Square in 1989. After his criticism of the party saw him forced to shut down his Giordano clothing chain in mainland China, he pivoted to publishing, founding *Apple Daily*, a newspaper. In the 2000s it grew to be Hong Kong’s most influential pro-democracy publication. But as time went by, various big firms stopped buying advertisements, fearful of being shut out of the Chinese market. Journalists backed by the party hunted for gossip to undermine him. Pro-Beijing media outlets camped outside his house, intimidating his family and photographing everyone who visited. He was the victim of firebombs and, in 2008, an assassination attempt. Next Digital, the parent company of *Apple Daily*, was the target of relentless hacking attempts. Mr Lai’s popularity among Hong Kongers only grew.

In 2019 the party sent Mr Lai’s sister from mainland China to Hong Kong with a chilling message: they would send her son to prison if Mr Lai did not shut his paper. He refused and was expunged from a family tree which goes back 28 generations. In August 2020 he was arrested. Mr Lee froze *Apple Daily*’s bank accounts and Mr Lai’s personal accounts. Unable to pay the paper’s staff, or even its electricity bills, the directors had no choice but to shut the paper down, according to Mark Clifford in his book, “Today Hong Kong, Tomorrow the World”. Mr Lai sits in a prison cell facing multiple charges. A devout Catholic, he prays daily. His family and friends say his letters show him to be in good spirits.

Every other major pro-democracy news outlet in Hong Kong has been closed. The newspapers which matter are *Ta Kung Pao* and *Wen Wei Po*—which the ►



► party now uses as proxies to help run the city. Democrats have learned to read them closely. If you become one of their targets, you can expect a knock on the door in the middle of the night.

A culture of fear and reporting has seeped into the civil service and schools, courts and universities. Some outspoken teachers have lost their licences. Many others have received warnings after being anonymously accused of saying the wrong thing. Their so-called crimes are often vague, which encourages those who want to avoid their fate to attend to every possible aspect of their lives that might bring disapproval.

It is a long-established approach. In 2002 Perry Link, an American scholar of China now banned from the country, wrote:

"The Communist Party's censorial authority in recent times has resembled not so much a man-eating tiger or fire-snorting dragon as a giant anaconda coiled in an overhead chandelier. Normally the great snake doesn't move. It doesn't have to. It feels no need to be clear about its prohibitions. Its constant silent message is 'You yourself decide', after which, more often than not, everyone in its shadow makes his or her large and small adjustments—all quite 'naturally'. The Soviet Union, where Stalin's notion of 'engineering the soul' was first pursued, in practice fell far short of what the Chinese Communists have achieved in psychological engineering."

Look up in today's Hong Kong and the snake is there. The authorities have established an anonymous hotline for Hong Kongers to report on each other. More than a quarter of a million such reports have been lodged over the past two years.

Academics at the city's world-class universities have stopped researching subjects deemed sensitive by the party such as Taiwan, religion in mainland China and public opinion in Hong Kong. "We look at

scholars in mainland China and see our future. To survive, we will have to be the government's mouthpiece," says one Hong Kong academic. "If you are outspoken, the government will attack you through its newspapers." In April 2022 Peter Baehr, a retired academic who worked at Lingnan University in Hong Kong for 21 years, wrote that "University senior managements are the chief drivers of repression...They are opportunists and weathervanes, rather than militants and pioneers. It is ambition more than ideology that motivates them." Such mediocre opportunists are now littered throughout the texture and fabric of Hong Kong.

A once outspoken legal profession has been neutered. The former chair of the Hong Kong Bar Association, Paul Harris, vilified by the pro-Beijing press, fled the city after being questioned by national-security police. Barristers know they may lose business from mainland firms if they speak up. In his first interview as the new chair of the bar, Victor Dawes said the organisation would not discuss politics. He means the bar will not oppose the government.

The authorities have used similar tactics, as well as colonial-era laws, to bring teachers, social workers and labour unions to heel. The Foreign Correspondents' Club of Hong Kong suspended its annual human-rights press awards just days before the winners were to be announced in April. "Successful reporters know where the red lines are...Some may decry that as self-censorship. I call it common sense," Keith Richburg, the club's president, wrote. The anaconda above gave a soft, satisfied hiss.

A record number of civil servants have resigned and the number of new applicants fell by 30% in 2021. In April, having found it increasingly hard to recruit Hong Kongers, the police force ditched a requirement that applicants must have lived in the city for at least seven years. The justice department has rapidly promoted prosecutors who have worked on high-profile cases against protesters. In an attempt to increase the prestige of working as a government lawyer, prosecutors are now allowed to hold the title of senior counsel, a term previously reserved for the city's top barristers.

MANDARINS SPEAKING MANDARIN

In 2021 over 100,000 Hong Kongers applied for a British National (Overseas) visa which, if granted, allows them to live in Britain. That number is likely to rise. Many more have left for Australia, Canada and Taiwan. At the same time new government policies have made migration from the mainland even easier. For young, ambitious mainlanders fluent in Mandarin, Cantonese and English, the future in Hong Kong is brighter than ever. In 2019 party cadres in Hong Kong were ordered to study an article that outlined a policy known as "keep Hong Kong but not its people".

Many of those who remain lose themselves in popular culture—a trend that was also seen on the mainland after 1989. Songs about saying goodbye have become some of the city's most popular tunes. Mirror, a local boy band, shot to fame in 2020. Instead of singing conventional love songs, their lyrics are about looking after yourself. "You can't protest," says one fan. "You can't sing protest songs, so you listen to Mirror."

Natalie Wong, a middle-aged banker and mother, signed up to Instagram to follow Keung To, one of the members of Mirror. She thinks most famous Hong Kong singers are compromised because of their desire ►

"The Communist Party resembled not so much a fire-snorting dragon as a giant anaconda coiled in an overhead chandelier"

► to make money in China. Ms Wong (not her real name) points to Eason Chan, one of Hong Kong's most famous singers, who cut his ties with Adidas after the sportswear brand announced it would not use Xinjiang cotton. Some fans perceive Mirror to be pro-democracy, but the band has not explicitly said so. But they give Hong Kongers something to unite around and enjoy. "Keung To is very authentic," she says. "This is a quality now missing in Hong Kong, a society filled with hypocrisy and distrust." His motto inspires her, she says. "You got a dream, you gotta protect it."

Not pursue it hand-in-hand with others, to the ends of the earth. Just protect it.

三

RARELY DO PEOPLE understand Hong Kong from the perspective of China," wrote Jiang Shigong, an influential Chinese scholar, after working for the party's outpost in Hong Kong, the Liaison Office, from 2004 to 2008. "Instead, they understand Hong Kong from the perspective of the West, or from the perspective of Hong Kong, or they use Hong Kong to understand China." He was right. To understand why the party crushed Hong Kong when it did, rather than either doing so earlier or not doing so at all, the Chinese side of the story is vital—as it is to understanding why the clampdown has been so effective.

China's offer of "one country, two systems" was made because the Chinese Communist Party felt a flourishing post-handover Hong Kong would be a valuable source of capital, trade and business expertise. For it to make the most of that situation, however, it required a Hong Kong which, although governed by another system *de jure*, was *de facto* aligned with the interests of the party. Well before the handover it had begun a thorough and ambitious campaign to take clandestine control of key parts of the Hong Kong government and to co-opt the city's elites.

During British rule the party was an illegal organisation (indeed even today it has no official presence in the territory). That did not stop it from recruiting. Mr Ching estimates there are currently some 400,000 underground party members in Hong Kong, around 5% of the population. Roughly half were born and raised in Hong Kong. The other half were born on the mainland and resettled themselves in the city.

In her book, "Underground Front", Christine Loh, an official in Hong Kong's government in the 2010s, cites one estimate that 83,000 mainland officials entered Hong Kong under assumed names and false identities between 1983, when negotiations on the handover began, and its eventual achievement in 1997. After seven years in Hong Kong the infiltrators qualified for permanent residency, which gave them the right to apply for jobs in the Hong Kong civil service. The party prioritised infiltrating departments like the police, customs and immigration to ensure it had control over the city, says Mr Ching. The response to the protests of 2019 had been years in the making.

The party had, decades before, set up a shadowy department to work alongside supporters who were not members. It was known as the United Front Work De-

partment, and it continues to cultivate individuals and organisations around the world. Friendly scholars and businesspeople looked to it for access to things the party controlled, such as research materials and photo-ops with senior officials. Chairman Mao called the United Front one of the party's "magic weapons".

Dr Chung Kim-wah, a social scientist at Hong Kong Polytechnic University who wrote columns in the city's newspapers, was one such target. In 1997 he bought a flat in Guangzhou where he liked to spend weekends reading and thinking. A mainland official, who Dr Chung suspected was from the United Front, regularly invited him for tea or beers. After the official learned Dr Chung loved football, he took him to watch the English Premier League at a sports bar. Many Hong Kongers have similar stories of efforts to build and maintain relationships and exchange information.

Compliant civil-society organisations could look to the United Front for money before and after the handover. For every pro-democracy trade union or newspaper, the party ensured it backed an equivalent pro-Beijing one, if necessary building it from scratch. This is one reason why the impressive number of civil-society bodies the city boasts today should not be taken as a sign of a robust civil society. Many are simply legal fronts for the party's underground operations, posing as alumni associations, chambers of commerce and travel groups. "Not all these societies are party cells, but the majority are," says Mr Ching, who himself was approached to join the party. He declined. "This is one way the party infiltrated Hong Kong."

Party operatives initially attempted to cultivate relationships with pro-democracy groups. The movement's members were often willing partners; as several former lawmakers attest, they believed that opening a channel of communication with state security would be helpful. And many felt that a few cordial meetings would be unlikely to change anyone's mind. But they gave the party a detailed understanding of Hong Kong and, in the end, leverage over many of its leaders.

"Looking back, we were very naïve," says one former lawmaker. Many democrats were invited to dinners and meetings in Beijing where party officials would offer money, women or positions of power in exchange for co-operation and information. "They can give you anything, except democracy," says Lee Wing-tat, a former leader of the Democratic Party who now lives in Britain. Several pro-democracy politicians were co-opted, he says.

An obvious way to influence governance was to boost pro-China voices among the business elite, many of whom had served in government roles under the British and continued to do so after the handover. "[We were ordered] to hinder British business, consolidate Chinese business, bring together investment from Taiwan and the overseas Chinese community," wrote Xu Jiatun, who was the top Chinese representative in Hong Kong from 1983 to 1990 when, as an opponent of the 1989 crackdown, he fled to America.

For the first 15 years after Hong Kong's return to China, this effort seemed to have little impact on the city's governance. But the ascent to power of Xi Jinping in 2012 marked a change which would lead to the party using its power in Hong Kong far more directly.

The boom which had followed China's accession to the World Trade Organisation meant that China's need for Hong Kong's capital, expertise and connections de- ►

Officials would offer money, women or power in exchange for co-operation and information

►creased. As leader of the party's Hong Kong policy group from 2007, Mr Xi came to see the city's tycoons as arrogant and entitled. The dinners that played to their self-importance (and provided lucrative business opportunities) became infrequent and formal. The party became more demanding.

"I could feel the screws tightening," says Desmond Shum, a former tycoon now living in the West. "They kept asking us to do more things, give more donations." This included prominently campaigning and voting for party interests in the city. "All of us were being directed to facilitate China's direct meddling in Hong Kong's elections. What amazes me is that none of us ever came out publicly and said 'This is what I did and it was wrong,'" Mr Shum wrote in "Red Roulette", a memoir he published last year. "It tells you how much we feared the party and the possible repercussions of saying no and speaking out."

Mr Xi launched a revitalisation of the national-security complex. Unlike in the West, where concerns about national security focus on external threats, in China they encompass all threats to the party's grip on power. In the more explicitly repressive context of Mr Xi's rule, Hong Kong came to be seen ever less as an engine of growth and ever more as a site of subversion.

When the protests of 2019 erupted the party quickly began weaponising its carefully cultivated relationships with Hong Kong's civil society. Dr Chung was turned back at the border when trying to visit Guangzhou. His sports-bar buddy visited him in Hong Kong, suggesting he could sort the matter out. "But only if I stopped writing for *Apple Daily*," says Dr Chung. He declined. Stories abound of the party finding the pressure points of thousands of Hong Kongers in this way.

Pressure on business leaders was sometimes highly public. When Li Ka-shing, Hong Kong's wealthiest tycoon, called for restraint in 2019 from both the gov-

ernment and protesters, the party and its proxies labelled the 91-year-old billionaire the "king of cockroaches". He got the message. From then on every Hong Kong tycoon voiced support for the government's harsh response to the protesters. They all saw what happened to Jimmy Lai.

Big brands surrendered, too. In 2019 John Slosar, chairman of Cathay Pacific, an airline, defended his employees' right to protest. "We...wouldn't dream of telling them what they have to think about something." The party threatened to ban Cathay's planes from Chinese airspace. Mr Slosar was forced out. His successor, Patrick Healy, enthusiastically took part in the sham election of Mr Lee, the city's new leader.

IT'S MY PARTY

All of this meant that when Beijing announced Hong Kong's national-security law, the city's business establishment offered no opposition. The city's largest businesses like HSBC, Standard Chartered, Swire and Jardine Matheson all issued statements of support for the law. HSBC, Europe's largest bank by assets, has frozen the accounts of pro-democracy politicians and civil-society organisations. The Big Four accounting firms—Deloitte, EY, KPMG and PwC—all published advertisements in pro-Beijing newspapers congratulating Mr Lee on becoming the city's chief executive.

With the new national-security law and Hong Kong police backing them, China's ministry of state security and the United Front started using their middlemen to make personal threats against leaders they had long cultivated, according to interviews with six people who had direct contact with the middlemen involved. Sometimes the warning came through a mysterious phone call, at other times from a long-time acquaintance at church. Delay or prevarication saw arrests. "One of my colleagues was warned, 'You had better leave Hong Kong soon,'" says the former lawmaker. "But he didn't heed that warning. Now he is in jail."

Dr Chung, the football fan, came out of retirement in 2020 to take part in some polling. He was questioned twice by police and received "threats from powerful bodies". Yet it was not until his friend, another retired lecturer, was jailed that Dr Chung realised he could not face it if his elderly parents "could only see me by visiting me in prison". In April, he fled to Britain, where the middlemen still contact him.

Understood from the perspective of China, Hong Kong has not just seen the tactics of co-option and threat, developed for a gentler takeover, turned to the service of a far more draconian one. It has also seen the perfection of methods of co-opting businesses and academics, infiltrating institutions like universities and funding pro-party propaganda on social media which can be used farther afield. "I saw what was coming," says Mr Ching, who first warned of the threat the party posed in the lead-up to the handover. "But nobody listened." Today, the need to listen remains urgent everywhere in the world where China seeks influence.

But in Hong Kong, there is little left to listen to. Just trams and jackhammers, deal-making and everyday conversation—and a cover version of "Beneath Lion Rock", recently released by Mirror. Some see the recording as yet another piece of co-option, the government despoiling something which once had real meaning. Others enjoy the lilting melody.

Some remember, but say nothing. ■



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Ukraine's counter-offensive

Kherson bound

ZELENODOLSK AND KRYVYI RIH

Driving Russian occupiers from the south will be a fierce fight

IN THE EARLY days of the war in Ukraine, a rapid Russian advance plunged Kherson province into darkness. What little is known about life there comes from refugees who escape to front-line towns such as Zelenodolsk. They come by foot, bike, boat and in wheelchairs. One woman was dragged by her son on a carpet. At one point, nearly 1,000 were arriving a day. Destroyed bridges and increased risks have cut the daily count to single digits. But a vast yard of abandoned bicycles, wheelchairs and baskets stands as a memorial to the lives left behind—temporarily, so those who have fled hope.

The most recent arrivals talk of intense fighting as Ukraine readies itself to counter-attack from the west, near Mykolayiv, and the north, from towns like Zelenodolsk. Vlad Milin, 31, and Olha Shelemba, 26, said that shelling had become so relentless in their village, Dovhove, that they decided to travel with their five young children in a boat, then navigate fields and mined roads to safety. There was little point in watching the battle unfold, they

said. "Neither side is going to give up."

Kherson, a gateway to Crimea, is the only regional capital Russia has captured since the war began on February 24th. Just as important to Russia's southern strategy is its occupation of neighbouring Kakhovka, on the left bank of the Dnieper, where a dam provides the annexed peninsula's water. The region is an agricultural powerhouse, growing tomatoes, watermelons, sunflowers and soyabeans. For these reasons and more, Ukraine is trying hard to retake it. The country's forces can already boast tactical successes. A military-intelli-

gence officer says forward units are within sniper range (a kilometre or so) of Chornobavka, an outer suburb of Kherson. "The next week or two will be even more interesting," he promises.

Whatever is under way does not yet appear to be a full-fledged counter-offensive. Ukraine remains focused on halting Russia's advance in the east; on July 2nd its troops retreated from Lysychansk in Luhansk province. Its southern grouping does not enjoy the three-to-one advantage strategists recommend for an offensive. Soldiers complain of a shortage of ammunition and infantry. "There is a tendency by our bosses to overstate success on the battlefield," says Banderas, the *nom de guerre* of a Ukrainian reconnaissance commander. That could change only if more Western rocket systems are used in the southern theatre, he adds. Currently only a handful of M777 howitzers are deployed there.

Where the Ukrainians are pushing, the Russians are fighting back. Serhiy, a Ukrainian territorial-defence soldier working behind Russian lines in Vysokopillya, just across from Zelenodolsk, says the enemy has built reinforced bunkers under the ground. When they try to push the Russians out, they return in greater numbers. "Their ten becomes a hundred," he says. One village base has four air-defence units protecting it. Ukraine's task has been hindered, the soldier complains, by locals who have not fled the occupation and are being used by Russian troops as human shields:

→ Also in this section

50 Disappeared in Ukraine

51 Poland's boom town

51 Germany's Poland problem

52 A new French government

52 Navalny in Russia's gulag

53 Charlemagne: Airport chaos

► “We can’t shoot at our own people.”

A handful of locals are collaborating with the enemy, he says. Girls as young as 15 have been recruited by the Russians. In early June Serhiy’s company discovered a 40-year-old artillery spotter during a random search. The man’s near-clean mobile phone gave him away. It had just one computer-game app installed. Closer inspection revealed the game was, in fact, a tool to record co-ordinates and receive cryptocurrency payments.

The exposed lowlands of Kherson mean that any Ukrainian advance there feels the full force of Russian artillery. There is already talk of serious losses south of Zelenodolsk. An attempt to cross the Inhulets river at the village of Davydov Brid in May—essential for a second-prong attack on Kakhovka—was particularly costly. “They were baited into the line of fire,” says Victoria, a farmer who lived in Davydov Brid until it became impossible in mid-May. “A lot of our men lost their lives.”

The 38-year-old fidgets as she recounts her own escape. The cue to leave came when Grad rockets landed in the farmyard. She jumped into a car and joined a convoy of vehicles waiting to pass over the bridge, which has since been destroyed. Russian soldiers gave the go-ahead, but as the convoy approached Ukrainian positions on the other side, it was shelled. To this day, it is unclear who fired. Ukrainian authorities say between 20 and 50 people died. Their bodies have not been recovered.

Victoria has not moved far from danger. She is living near the front line in Zelenodolsk, housed by local volunteers. Like many of Kherson’s mostly poor refugees, she has no money for anything else. She left everything behind in the village: her house, her cows, her chickens.

Not all the Russian soldiers were villains, she says; she even felt sorry for the



youngest. Some were Ukrainians conscripted in occupied Luhansk. They paid for everything they took from the village shop, she says, and said “thank you” in Ukrainian. But when Russian positions came under attack, they were reinforced with angrier colleagues from Russia itself.

The shift in Davydov Brid is a warning of what may happen in Kherson if Ukraine’s counter-offensive gathers pace. “Anton”, the pseudonym of a former official who fled to Kryvyi Rih in late May, says Russia has tried not to upset locals too much in the hope of co-opting them. But if the occupiers are forced out of Kherson, things will turn nasty, and quickly. “The Russians will be angry as hell, and lash out, but the partisan resistance will be just as fierce,” he says. “The locals will simply tear the Russians apart.” ■

Ukraine’s disappeared

Fate unknown

Russia is abducting thousands of Ukrainians

WHEN RUSSIA occupied Bucha, a suburb of Kyiv, in February, most residents fled. But a baker named Matviy stayed to help his neighbours. (The names of the disappeared and their families have been changed for their protection.) On March 18th Russian soldiers burst into his home and took him away at gunpoint, says his sister Natalia: “We have not heard from him since.” Ukraine’s overwhelmed police, prosecutors and human-rights groups have been unable to help.

Bucha is the tip of the iceberg. Thousands of Ukrainians have been abducted from Russian-occupied areas, including activists, journalists and humanitarian workers. Journalists Serhey Tsyhipa and Oleh Baturin were seized on March 12th while reporting on atrocities committed by Russian forces. “They were taken to an unknown place with bags on their heads,” says Anastasia, Mr Tsyhipa’s step-daughter. Mr Tsyhipa eventually appeared on Russian state TV looking thin and spouting Kremlin propaganda.

“The Russians are abducting people to silence dissent,” says Nadia Dobriansk of Zmina, a Ukrainian human-rights group. Torture has been widely documented. Mykola Panchenko, an activist who had attended protests in occupied territory, was kidnapped while buying groceries. His wife Svitlana says masked men brought him to their house hours later and searched for weapons, then took him away again. The Russians released Mr Panchenko a month later with broken ribs. Other victims have turned up dead.

Disappearances in Ukraine are not new. Between 2014 and 2021 over 2,000 people vanished; both pro-Russian forces and Ukrainian security services were implicated. Russia has deployed such terror tactics for decades. After it annexed Crimea in 2014, Crimean Tatar activists and community leaders disappeared in droves. During Russia’s two wars in Chechnya in the 1990s, disappearances were so widespread that Human Rights Watch said they amounted to a crime against humanity.

“There are over ten thousand that we know are missing, but this is certainly an underestimate,” says Katya Osadcha, a Ukrainian TV presenter who set up a Telegram group called Search for the Missing. Police submitted over 9,000 missing-person reports from February 24th to May 24th, mostly from the Donetsk region in eastern Ukraine. The government claims hundreds of thousands of its citizens have been deported to Russia. Soldiers at filtration camps often confiscate people’s documents. “If we don’t have information, we can’t find people,” says Ms Osadcha.

Ukraine’s missing-persons systems are patchy. In 2018 the country passed a law setting up procedures to document and trace those who had disappeared since the conflict with Russia started, but it became mired in bureaucracy. The new war could provide fresh impetus. “We had to discover new procedures of registration and ways of searching for missing persons,” says Alyona Lunova of Zmina.

Families like Anastasia’s are trying everything to get loved ones back. “The state has not done anything,” she says. She has applied to a UN working group on enforced disappearances and is submitting a case to the European Court of Human Rights. “We do not know when Matviy will come back, but we will wait and he will return. There is no other way.” ■



Gone, not forgotten

Poland's arms port

Welcome to boom town

RZESZOW

American weapons shipments transform Rzeszow

ARMED VEHICLES pepper the tarmac. Patriot missile batteries, which America deployed here in March, scan the skies overhead. Military planes touch down, offload their cargo and take off, almost around the clock. Inside the arrivals hall a couple of foreign volunteers to fight in Ukraine, including a former American soldier, collect their luggage. The airport just north of Rzeszow, a city in south-eastern Poland, used to handle only a few flights a day. Vladimir Putin's war has transformed it into the main entrepot for Western weapons destined for Ukraine. It has also transformed Rzeszow itself.

At the start of the year Rzeszow, an hour by train from the Ukrainian border, was the 15th-biggest city in Poland with a population just under 200,000. Since then about 100,000 refugees have arrived; depending on how many have stayed, it may now be the tenth-biggest. Ukrainians are not the only newcomers. Foreign diplomats, American troops and aid workers crowd the hotels and restaurants. A waitress is surprised when a customer speaks Polish.

"But where are the refugee camps?" the city's mayor, Konrad Fijolek, recalls people asking at the start of the war. There aren't any to speak of. Only a fraction of the displaced live in shelters. The rest were taken in by locals, or rented places of their own. As soon as the war started, emergency aid, packed onto buses, lorries and passenger cars, began making its way from Rzeszow to western Ukraine. On May 22nd Volodymyr Zelensky, Ukraine's president, declared Rzeszow Ukraine's "saviour city".

The warmth surprised even the locals. Relations in the border areas had been haunted by memories of atrocities during the second world war: massacres of Poles by Ukrainian nationalists; ethnic cleansing of Ukrainians by Polish partisans and later the communist regime. These fading grudges have been wiped away by Russia's invasion, says Mr Fijolek. "The Ukrainians are fighting for us," he says, "so that the Russians don't get any stupid ideas about coming here."

The local economy is thriving. The maker of engines for America's F-16 fighter jets, one of many aviation companies based in Rzeszow, is the region's biggest employer. Rzeszow is also an IT and pharmaceutical hub. But Ukrainians are struggling to find good jobs. Oksana Hluschko, who ran a pharmacy in Kyiv before the Rus-



Bubbling enthusiasm

sians invaded, now cleans rooms at a hotel on the outskirts of town. She has signed up for Polish classes, she says, and plans to become a licensed pharmacist.

Many Ukrainians who passed through have moved on to bigger cities, or returned home. Ola Filaretova, a ballet dancer from Dnipro, and her two children returned to Rzeszow after a few weeks elsewhere in Poland. Her youngest daughter had missed the city, and the friends she had made here. Mrs Filaretova missed being closer to home. "It's only 100km to the border," she says, through tears. "That makes things more bearable." ■

German-Polish relations

From bad to worse

BERLIN AND WARSAW

Trust between the two neighbours is at a low ebb

GERMANY AND Poland have never been great friends, but Vladimir Putin's invasion of Ukraine could have been a turning-point. Relations had improved during the tenure of Civic Platform, a centrist party, only to sour again after the populist Law and Justice (PiS) party won the elections in 2015. A major sticking point was Germany's relationship with Russia, which Poles considered dangerously chummy.

Russia's assault on its neighbour has outraged Germans and Poles alike. Yet there has been no rapprochement between Mitteleuropa's biggest countries. Days after the invasion Olaf Scholz, Germany's chancellor, heralded a *Zeitenwende*, or seismic shift, in foreign and security policy. But Polish politicians were soon denouncing Germany for doing too little too late—with some reason, as German arms have been

slow to arrive in Ukraine. They also pillory German officials for continuing to talk to Russian ones.

As Germany's ambassador to Poland in recent years, Arndt Freytag von Loringhoven tried in vain to repair relations. "PiS needs bogeymen," says Mr Freytag von Loringhoven. Its villains are Russia, Germany and the European Union, usually in that order. "Trust between our countries is at an all-time low," says the German envoy, who left Warsaw at the end of June. His successor will be Thomas Bagger, a top diplomat.

Mr Scholz got a taste of the acrimony after becoming chancellor in December. A foundation close to Poland's ministry of culture sponsored a campaign demanding Germany pay reparations for the second world war. Placards in Warsaw showed Joseph Goebbels, Adolf Hitler's chief propagandist, next to Angela Merkel, Mr Scholz's predecessor; Frank-Walter Steinmeier, Germany's president; and Mr Freytag von Loringhoven. Germany rules out reparations, saying Poland renounced them in 1953 and did not raise them in 1990 when German reunification was negotiated.

Poles tend to assume the worst of Germany. When Mr Scholz travelled to Kyiv in June along with Mario Draghi, the Italian premier, Emmanuel Macron, the French president, and Klaus Iohannis, the Romanian president, rumours circulated in Warsaw that Mr Scholz wanted to strike a deal to end the war and force Ukraine to give up territory. It did not go unnoticed that Messrs Scholz, Macron and Draghi invited Mr Iohannis along rather than Andrzej Duda, the Polish president. Mr Duda had alienated the German and French leaders by comparing their telephone diplomacy with Mr Putin to calling up Hitler.

Mr Duda also accused Germany of breaking its promise to replace the 200-plus tanks which Poland has supplied to Ukraine. The German government says Poland refused its offer of Leopard tanks and Marder fighting vehicles because they were not the latest models and there were not enough of them. But "the mainstream of public opinion in Poland is convinced Germany has not yet delivered on the *Zeitenwende*," says Sebastian Plociennik of Vistula University. Poland wants massive armed support for Ukraine, and finds Germany's incremental approach foolish.

"It's easy to push the anti-German button in Poland," says Maria Skora, an expert on German-Polish relations. References to the defeat of the Teutonic Order at the battle of Grunwald in 1410 or Prussia's role in partitioning the Polish-Lithuanian Commonwealth in the 18th century are still part of Polish political discourse. Fanning historical grudges may help PiS to convince Poles their country needs patriotic leaders. But it does not help build the alliances Europe needs against Russia. ■

France's new government

Minority report

PARIS

Emmanuel Macron goes it alone

LATE LAST month, before heading off on a four-country marathon of summits, Emmanuel Macron vowed to put together a coalition government that would reach from the Communists on the left to the Republicans on the right. After losing his parliamentary majority at a general election in June, the centrist French president hoped this might secure broad-church support. But on July 4th, after mainstream opposition parties on the left and right rejected his advances, Mr Macron shelved the plan. Instead he unveiled a reshuffled government made up largely of fellow centrists, which will govern with only minority support in parliament.

Many of those in top jobs remain, including Elisabeth Borne, the prime minister, Bruno Le Maire at finance, and Catherine Colonna, the foreign minister. The few outside political recruits include a former Communist, Olivier Klein, mayor of the Paris *banlieue* of Clichy-sous-Bois, who was named cities minister. Some loyal parliamentarians were rewarded, including Roland Lescure, who became industry minister. Given the prospect of greater parliamentarianism in France, however, this was not the heavyweight cross-party government that some had hoped to see.

As well as centrist friends, Mr Macron has turned to experts from outside politics. Laurence Boone, chief economist at the OECD, takes over as Europe minister from Clément Beaune, who becomes transport minister. The new health minister is François Braun, a doctor and head of SAMU, the

ambulance and emergency services agency. Jean-Christophe Combe, head of the French Red Cross, was appointed "solidarity" minister.

The big question now is whether Mr Macron's second term can begin to match the ambition of the first. In 2017, backed by a solid parliamentary majority, the young president had clear plans: to shake up France, make it more competitive and job-creating, and open up opportunities for all to benefit. Since his re-election in April, however, there has been a sense of drift. Some close to Mr Macron say he is tired. Others think he has been waiting to test the political balance of power before deciding what is feasible. Either way, it is unclear whether the president can revive that reformist zeal, or whether his second term will be diminished to little more than in-tray management.

On July 6th Ms Borne sounded a confident note when she laid out her plans, promising to raise the pension age, bring about full employment and fully national-

ise EDF, an energy giant. After she decided not to follow tradition and put this to a vote of confidence, Jean-Luc Mélenchon's radical-left alliance, NUPES, offered a motion of censure instead. His attempt to topple the government is likely to fail. But it reflects the hostile mood. NUPES, which holds 151 seats to Mr Macron's 250, insists that the president "lost" the election and should implement its policies, not his.

Even if Mr Macron tries to spend his way out of trouble, to help ease the soaring cost of living, it will never be enough for the left. And the president has promised not to raise taxes or debt. Already, Mr Le Maire has warned that debt-servicing charges are rising, as spreads on French borrowing widen. Moreover the country's nuclear-energy plants are struggling with maintenance just as the energy prices leap. French public opinion, unlike that in Germany, has not been remotely prepared for the coming need to curb energy use. In short, France, like Mr Macron, is heading for a turbulent few months. ■



Borne to rule

Russian repression

Slings and arrows

TBILISI

Alexei Navalny's jailers are trying to break him

ALEXEI NAVALNY does not complain easily. The Russian opposition leader, who survived poisoning in 2020 and has been imprisoned since January 2021, treats his jailers with defiant irony. In June he was transferred to a notoriously brutal maximum-security prison. Suffering from a bad back, he sits seven-hour shifts at a sewing machine on a stool below knee height. The goal, says Leonid Volkov, Mr Navalny's chief of staff, is to isolate and cripple him. Mr Navalny describes his situation with his trademark humour. "I live like Putin," he wrote in a social-media message posted via his lawyers. "I have a loudspeaker in my barracks that plays songs like 'Glory to the FSB', and I think Putin does too."

The FSB, the successor to Stalin's secret police, is ramping up repression at home to accompany the war in Ukraine. On June 30th it arrested Dmitry Kolker, a terminally ill physicist at Novosibirsk University, on charges of passing secrets to China. (He had given lectures to Chinese students.) Agents took him from his hospital to a Moscow jail where he died a few days later. On July 2nd the FSB arrested his colleague Anatoly Maslov on similar charges.

The purpose of such prosecutions "is to demonstrate that Russia is surrounded by enemies", says Ivan Pavlov, a human-rights lawyer. With an acquittal rate

he calculates at 0.17%, the best lawyers can do is provide a "palliative" service. He and his team, who defended Mr Navalny, were chased out of the country by the FSB with threats and restrictions. On June 28th Dmitry Talantov, an attorney who had taken over Mr Pavlov's cases, was arrested for speaking out against the war. On the same day Ilya Yashin, one of the few opposition politicians still in Russia, was jailed for 15 days. Mr Yashin called it an "invitation to emigrate".

Inevitably, the repression is hitting the elite, too. On June 30th Vladimir Mau, an economist who headed a Russian academy that trains civil servants, was arrested. Mr Mau had demonstrated his loyalty by signing a letter in support of Mr Putin's war. He is charged with fraud, but few believe this was the reason for his detention, which seems to be part of a purge of universities. As the crackdown continues, members of the elite who thought themselves secure may be having doubts.

"You know me, I'm an optimist," wrote Mr Navalny on July 1st. "While sewing, I've memorised Hamlet's monologue in English. The inmates in my shift say that when I close my eyes and mutter something...like 'in thy orisons be all my sins remembered' it looks like I'm summoning a demon." The demons hardly need summoning.

Charlemagne | No-fly zone

A summer of travel chaos is a glimpse of a future with few spare workers



WHERE DID all the workers go? The question feels ubiquitous in Europe. From French cafés to Irish construction crews, Czech car factories and Italian farms, employers once assumed cheap staff could be summoned at will. Now the toilers seem to have simply vanished. Companies are grumbling, though rarely as loudly as Parisians waiting for an oblivious *garçon* to arrive with their drinks. In no sector is the lack of staff so glaring as in air travel. For weeks tourists at some of Europe's biggest airports have faced serpentine queues to catch their flights, assuming those flights have not been cancelled due to the shortage of hands. Going on a relaxing holiday has never seemed so stressful. In this economy, everybody in Europe can find work; as a result, Europe isn't working.

After two years of pandemic uncertainty, tourism is back (minus a few Asian visitors). For Europe, which attracts half the world's international travellers, that ought to be a boon. And yet the headlines are grim. Staff shortages at airports and airlines have prompted a surge in flight cancellations. In June, just as resorts and city centres ought to have been filling up, carriers in Britain, France, Germany, Italy and Spain cancelled nearly 8,000 flights, roughly three times the figure in 2019, according to Cirium, a consultancy. Each scrapped journey gives rise to a planeload of sob stories: Alicante stag parties postponed, Tuscan family getaways forsaken. American air travel has problems too, but nothing like the bedlam that has engulfed parts of Europe.

Those whose flights were not cancelled might wish they had been. Waiting times at Amsterdam's Schiphol airport ran to six hours on some days in late May, prompting KLM, the Dutch flag-carrier, to suspend bookings from its main hub for four days. Given the chaos behind the scenes, checking in luggage has become an act of faith. At Paris's main airport, nearly half of all bags that were meant to follow their owners to their destinations on July 2nd went astray. Passengers have been warned by unions they may never be reunited with their swimming trunks. A member of the Cypriot parliament stuck at Frankfurt airport for two days decried the "third-world conditions" there in much the same tone some Germans use when they travel to the Mediterranean.

Some of the havoc is down to tourism rebounding unexpected-

ly fast. Deprived of holidays for years, vacationers are "revenge travelling", depleting what remains of their pandemic-era stimulus cheques. War on the fringes of the continent might have been expected to crimp demand. Instead it sent the euro tanking (to near parity with the American dollar), making Greek tavernas and Baltic beaches irresistible.

Airports should have been prepared. Forecasting the number of travellers on a given day is not unreasonably complicated, given that they have bought tickets well beforehand. But aviation bosses have complained for months of the difficulty of hiring staff. Ramping up operations takes time: airport security must be vetted and cabin crew trained (though you wouldn't know it at some airlines). Then came the strikes. Travel workers walking off the job in recent weeks included Scandinavian pilots, German security staff, French airport firemen, Dutch cleaners, Belgian cabin crew and Italian air-traffic controllers.

In part the strikes reflect workers demanding that pay keep up with high tourist loads and soaring inflation. But airports' difficulties are not merely the result of local labour troubles. Far beyond the tarmac, European workers currently have the upper hand. Unemployment in the euro area, at 6.6%, is at its lowest since the single currency was launched two decades ago. Some places have all but run out of workers: Germany's jobless rate is just 2.8%. It would once have fixed a shortage of hands by importing willing throngs of Poles or Bulgarians. That no longer works: Poles and Bulgarians now find plenty of good jobs at home. Germany is issuing work permits to Turks to handle its luggage instead. Whatever reluctance it might have felt to let in more non-EU migrants has been set aside. Europe is now employing nearly everyone within its borders who is willing and able to work.

Some might suspect that generous welfare states are letting a lot of Europeans shirk. The talk last year was of a "Great Resignation" of the previously employed. Yet this does not seem to be the case. A higher percentage of 15- to 64-year-olds in the euro area have jobs than before lockdowns. The EU's labour force, unlike Britain's or America's, is now bigger than before the pandemic, notes Jessica Hinds of Capital Economics. Many have better options than the jobs once reserved for them. "Everyone's asking, where have they all gone?" pondered Tim Clark, the boss of Emirates airline, according to Bloomberg. "And the answer is always: Amazon." It turns out that handling e-commerce packages for decent pay while listening to podcasts beats arriving at 5am to ask passengers whether they have packed any liquids in their carry-on. Or serving impatient Parisians their cocktails, for that matter.

Europe is healing

Given its rigid labour rules and ho-hum growth in recent decades, Europe has not often had to face the problem of having too many jobs. It is a problem nonetheless. The dramas visible at airports are also unfolding in care homes, hotels and other places that need a lot of unskilled staff. They simply get less attention. Some workers may see salaries rise, though many firms that rely on cheap labour say they cannot afford to pay more. Meanwhile, the unions who typically bargain for permanent wage bumps may worry that doing so now might feed inflation.

Perhaps the labour market will regain some slack as Europe's economy slows down. Soaring energy prices have soured the mood in recent weeks, as has a resurgence of covid. That would hardly be good news, except for hard-up employers—and those looking to catch a bit of downtime on a far-flung beach. ■

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The World in Brief



Cover Story



Money Talks



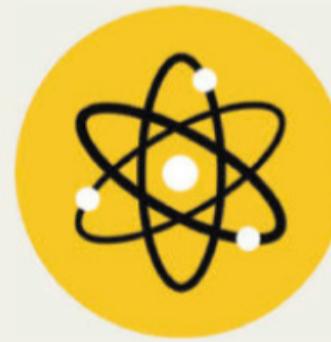
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Boris Johnson

The wreckage he leaves behind

The Johnson premiership is over. The Tories are ill-prepared to fix the damage

BORIS JOHNSON's premiership started collapsing to the sound of "Zadok the Priest". On July 5th, beneath the windows of Downing Street, the bands of the Household Division were conducting the Beating Retreat, an annual parade marking the closure of camp gates at nightfall. One hour before, Rishi Sunak, the chancellor of the exchequer, and Sajid Javid, the health secretary, had resigned. In the offices of Whitehall, all hell was breaking loose. On the square below, immaculate precision.

Over the next 36 hours, some 50 members of the government would resign; countless more MPs would urge Mr Johnson to go. On the evening of July 6th, a delegation of cabinet ministers—among them Mr Sunak's replacement, Nadhim Zahawi—told him the game was up. His response was a fit of Shakespearean defiance. He sacked Michael Gove, the closest thing the cabinet had to a greybeard, and insisted upon his personal electoral mandate of 14m voters (a bastardisation of the constitution: Britons elect parliaments, not presidents). He hinted at asking the queen for an election to save himself from

his colleagues; that would have tested constitutional conventions to the limit. Boris Johnson did what he always does: he looked out for Boris Johnson.

By the next morning, he did not even have a Potemkin government left to run. He told his colleagues he would go, but asked to be allowed to stay on to oversee a transition. Fat chance, thought many; the most careless of prime ministers could not be a caretaker. "Evict TODAY or he'll cause CARNAGE," tweeted Dominic Cummings, a vengeful former aide. Mr Johnson had promised to end the instability that blighted Theresa May's short premiership. He has more than matched it (see chart 1).

At the front of the queue to succeed Mr Johnson is Mr Zahawi. A child refugee from Iraq, who supported Brexit and oversaw a successful vaccine programme, he is a popular figure in the party. But the field will be large. Liz Truss, the foreign secretary, is keen; so is Tom Tugendhat, the chair of the foreign-affairs committee, and Suella Braverman, the attorney-general. Mr Sunak and Mr Javid are expected to have a tilt.

Whoever succeeds Mr Johnson will in-

→ Also in this section

56 Tory economics

57 Pestminster, a history

58 Bagehot: Blond Chernobyl

→ Read more at: Economist.com/Britain

— Labour shortages

— Lifelong learning

— Chinese spying

herit a monstrous in-tray. The Bank of England forecasts inflation to reach 11% in the autumn; the pound is fragile. The NHS is grappling with an immense backlog of 4.3m patients waiting for elective procedures. The long-term growth outlook is poor. He or she will also confront a deeper question: is the Conservative Party still capable of governing?

Support for the Tories has fallen across all types of voters who backed them in 2019, according to our analysis of polling conducted by YouGov in June (see chart 2). The next election will see them fight on all fronts, as new northern seats and southern heartlands face a pincer movement from Labour and the Liberal Democrats. After 12 years in power, four general elections and the imminent loss of a third prime minister, the exhaustion may be too great and the rifts too deep for the party to recover.

Mr Johnson's policy of vigorous support for Ukraine is not in any great jeopardy. Beyond that, difficult choices lie. Lee Anderson, the blunt Tory MP for Ashfield, an old mining district, declared he had no confidence in Mr Johnson and called for a "government of low taxation [that] will be tough on illegal immigration." Such simple demands, so hard to meet.

On the economy, Mr Sunak's departure underlined deep Tory divisions. In his resignation letter to Mr Johnson, Mr Sunak, who espouses fiscal discipline, declared that their approaches were "fundamentally too different". A leadership contest will be rich in Thatcherite homilies but unlike- ➤

ly to resolve the party's simultaneous desires for low taxes, balanced budgets and expansive public services.

On immigration, one right-winger lamented that Mr Johnson might have been safe had he only cracked on with sending asylum-seekers to Rwanda in defiance of a ruling of the European Court of Human Rights. Similarly, the Eurosceptic right will seek promises to overturn the part of the Brexit treaty that deals with Northern Ireland as the price of its support for any leadership candidate.

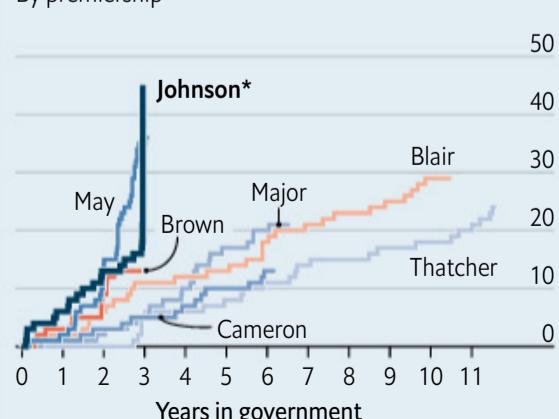
Yet such violations of international law gravely alarm the liberal wing of the party, which sees them as ruinous to the reputation of Britain abroad. There is no consensus on whether Britain should pursue a rapprochement with the EU or fight it. Mr Johnson has hooked his party on quick fixes to intractable problems. It will take years to get clean.

On culture, too, it is riven. Mike Freer, who resigned as the equalities minister, accused the government of "creating an atmosphere of hostility for LGBT+ people"; many other MPs want the government to be more sceptical of transgender rights. The question of whether Mr Johnson's skirmishes with the BBC, universities and other agents of "wokery" were a net gain or a net drag on Tory performance is unresolved. The party never fully digested how it won so handsomely in 2019; many Tories have confused their personal hobbyhorses for the priorities of the electorate.

The Conservative Party will unite on one thing, however, and it is the silver lining to a very dark cloud. Above all, the coming leadership contest will be dominated by the question of who can restore the Conservative Party's values of government, says Will Tanner, of Onward, a think-tank close to the party. Candidates will outbid each other with pledges to restore integrity to public office, uphold conventions and put the national interest over ideological purity. Shirts will be tucked in; shoes buffed. They will agree that chaos in Downing Street has paralysed policymaking.

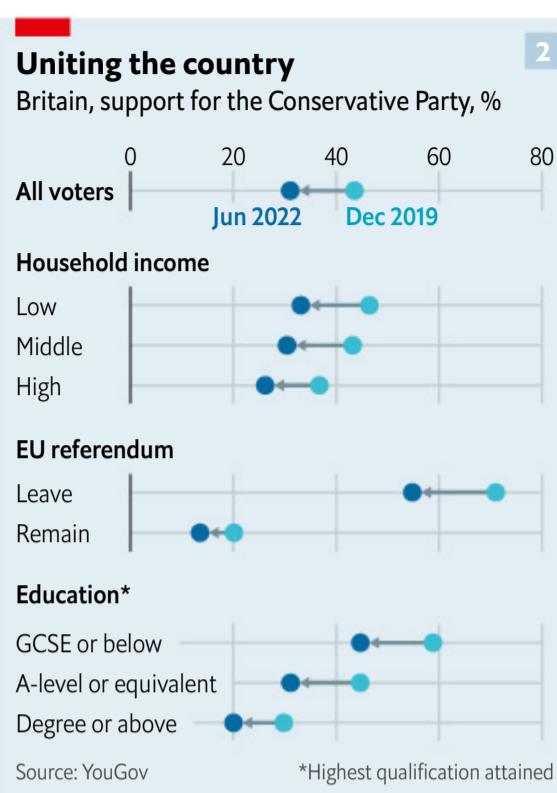
Revolting

Britain, ministerial resignations
By premiership



Source: Institute for Government

*At July 7th 2022, 10am BST



After Donald Trump's downfall, America's Republicans doubled down on populist excess. For three years, the Conservative Party has leant over the precipice. Mr Johnson was happy to plough straight on. But Tory MPs have chosen to turn back. ■

Economic policy

Spend rift

Many Conservatives now eschew fiscal prudence. That is worrying

BRITISH POLITICS has become so tumultuous and scandal-ridden that disagreements over policy seem almost courtly. But their consequences can be profound. A rift with Boris Johnson over the economy lay behind the resignation of Rishi Sunak as chancellor of the exchequer on July 5th. This philosophical divide may result in Britain throwing fiscal caution to the wind at precisely the wrong time.

The Conservatives have spent most of their 12 years in government trying to balance budgets: cutting the deficit was their flagship policy when David Cameron was prime minister. Yet some British right-wingers have recently started following a path laid down by America's Republicans, whose pivot from fiscal hawkishness to embracing deficits under President Donald Trump was a sight to behold. These Tories want Britain to cut taxes without worrying about how to pay for it.

The pressures brought about by an ageing population and slow economic growth have for years deprived tax-cutters of red meat. As a share of GDP, Britain's tax take is on course to rise to its highest in decades

(see chart). In part this is because Messrs Johnson and Sunak raised national insurance, a payroll tax, to help fund the creaking NHS and social-care system. Corporate tax is scheduled to rise sharply in 2023. The electorate has noticed the growing tax burden. YouGov, a pollster, found that in June over two-thirds of adults thought the government was handling tax badly, up from under two-fifths a year earlier.

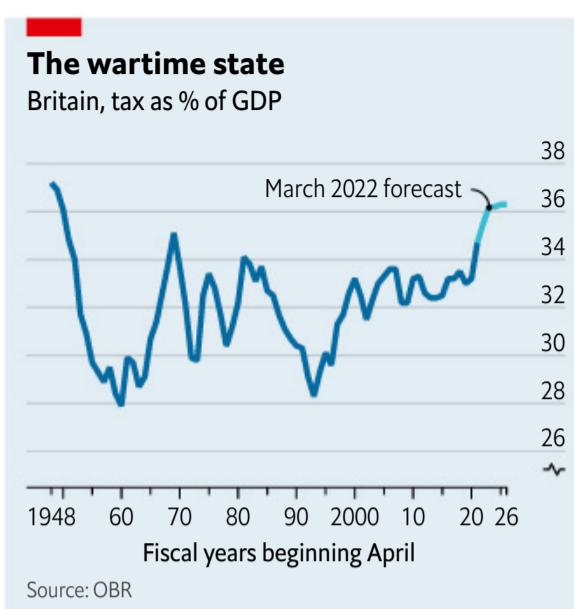
Mr Sunak had begun to loosen the purse-strings in response to soaring energy bills. In March he cut fuel duty and announced a partial reversal of the national-insurance increase. He had also planned to cut the main rate of income tax in April 2024. Yet reports suggest Mr Johnson wanted Mr Sunak to scrap the planned increase in corporation tax. One of his advisers had floated a temporary cut to value-added tax (VAT). Nadhim Zahawi, Mr Sunak's successor, reportedly thinks that tax cuts are necessary to achieve growth.

Mr Trump's tax cuts did indeed stimulate America's economy but at a time when inflation was low and there was therefore room to boost growth. British annual inflation is 9.1% and the Bank of England is trying to reduce economy-wide spending by raising interest rates. Tax cuts would, by injecting cash into the economy, work in the opposite direction. Well-designed ones could encourage work and investment, or deliver targeted relief to the poor. A VAT cut would do neither.

The push for tax cuts comes at a time when the public finances are being squeezed. High inflation is leading public-sector workers to demand big pay rises. Mr Zahawi, who was education secretary before his promotion this week, has already promised to increase teachers' starting salaries by 9%. Generosity in one area of spending will make demands in others harder to resist.

If the central bank raises interest rates even higher as a result, the government's bills will follow. The pandemic sent Britain's public debt soaring to almost 84% of GDP (excluding the Bank of England). A one-percentage-point rise in interest rates causes the government's annual debt-service costs to rise by 0.5% of GDP within a year, according to the Office for Budget Responsibility, a watchdog. Britain's inflation-linked debt, a quarter of its total borrowing, is proving especially painful to service: in March interest costs in the current fiscal year were projected to reach 7.6% of GDP, the highest since 1997.

The likely path of both interest rates and inflation has risen since that forecast was issued. The outlook for economic growth has worsened, too. Though sterling barely budged against the dollar when Mr Sunak announced his resignation, it is down by 4% this year, on a trade-weighted basis. Britain's current-account deficit has



► grown to an astonishing 8.3% of GDP, rekindling fears that the economy is too dependent on external financing.

There is room for some giveaways, especially temporary ones, without causing a crisis in the public finances. Inflation is boosting tax receipts and eroding the real value of debts that are fixed in nominal terms; the Treasury can still borrow for ten years at an annual interest rate of just 2.1%. But the population continues to age, raising the cost of the NHS and pensions. The need to decarbonise the economy is becoming more urgent. The war in Ukraine makes the case for defence spending stronger. Many argue that the austerity policies of the 2010s went too far. With the battle to succeed Mr Johnson now under way, the danger is that the Tories will veer towards fiscal populism just when hard-headedness is needed. ■

Politics and sex

Men behaving badly

Fixing the culture of Parliament will not be easy

WHEN THE school nurse walked into the London schoolroom in 1815, she found the member of Parliament for Barnstaple already there. Sir Eyre Coote was distinguished by a history of public service and a surpassing fondness for flagellation. He had popped into the school that day to pay the young boys to flog him. The nurse arrived as Coote was buttoning up his breeches. Scandal duly ensued and, in the words of Robert Morrison, a historian, Coote became "the most infamous Regency flagellant".

Parliament has been synonymous with sexual misbehaviour for centuries. As well as Coote and his switch there was John Profumo in the pool with the showgirl; the ru-

mour about Lord Palmerston on the billiard table with the housemaid; and David Lloyd George ("the Goat") in the cabinet room with more or less anyone. Not to mention Jeremy Thorpe and the inept assassin, and Ron Davies in the bushes with the badgers.

A list of parliamentary scandals reads like a concupiscent "Cluedo"—and as with "Cluedo", more details often only deepen the mystery. When Lord Lambton, a Tory MP, was questioned over his misconduct in the 1970s he confessed to indulging in a "frenzied" bout of "gardening and debauchery", a pairing that almost certainly raised more questions than it answered.

Parliament, then, has always been a peculiar place. But the current litany of scandals still surprises for its quantity and severity. Chris Pincher, whose resignation as deputy chief whip on June 30th led to this week's collapse in support for Boris Johnson, is just one of many men (for it is almost always men) under scrutiny. Some of what is alleged is salacious; much of it is straightforwardly criminal. In May one unnamed Tory MP was arrested on suspicion of rape and released on bail, and another was jailed for molesting a child; a third had just been suspended after allegations of drug abuse and sexual harassment.

Conservative MPs are at the centre of most of these stories, but not all of them. Trade unions say that the seat of British democracy is an unsafe workplace. The Independent Complaints and Grievance Scheme (ICIGS), a parliamentary watchdog, investigated 43 cases against MPs for bullying, harassment and sexual misconduct in the three years to June 2021.

Whether things are getting worse is hard to tell. "We absolutely don't know," says Sir Anthony Seldon, a political biographer. "We are dealing here with the shadow world." Although tabloid attention can help to raise standards, it can also occlude. The larky language of newspaper scandals—of romps and love rats and Lotharios—can make the reader forget that for many of those involved, such scandals are not amusing at all. When Matthew Parris, a writer and former Conservative MP, researched a history of parliamentary scandals he wrote that it had "proved less of a giggle than perhaps I hoped". Each story, while often "richly comic", was also a chronicle of lives ruined.

Many of those involved had little choice in the matter. Look at a list of those caught up in famous scandals, not the romping MPs but those with whom they "romped", and you see schoolchildren and prostitutes and, particularly in the first half of the 20th century, gay men. People without power, those who couldn't speak or couldn't be heard.

How can things be improved? Various sensible reforms were implemented after a

previous wave of scandals in 2017, including the establishment of the ICIGS. But plainly none of the hotlines and codes of conduct have resolved the issue. Parliament's blend of late nights, raging egos and multiple bars is one reason why misconduct persists. But other organisations have toxic cultures and predatory men. If Westminster were a company, there would be a cull, a new CEO and a revamped logo. But this organisation has features that make it easier for miscreants to hide.

One is the way political parties work. In the corporate world, good employees will quickly leave for other firms; consumers will boycott tarnished brands. Neither force operates in Westminster. A system of adversarial partisanship also makes it harder to hold the line on standards: even Theresa May, a figure of unquestioned integrity, gave the (metaphorical) whip back to two sexual predators when she was prime minister in order to win a vote. The constituency system creates a system of, in effect, 650 independent employers. A central HR function with power would have to be reconciled with the democratic mandates given to MPs.

Parliament does make periodic attempts to improve itself—as some MPs have found to their cost. In the 1920s a prison visitor found Horatio Bottomley, a former MP who had been convicted of fraud and sentenced to penal servitude, mending mailbags. "Sewing, Horatio?" he asked. "No, reaping," came the reply. But any lasting solution lies in the hands of the parties themselves. More women in Parliament would help, particularly in the Conservative Party, which has the lowest proportion of female MPs of the four main parties. So would a Tory leader with the mandate and the determination to root out misconduct. Till then, the harassment will continue. ■



The Harass of Pestminster

Bagehot | The toxicity of Boris Johnson

No one's reputation could survive contact with the prime minister



EVERY GOOD disaster movie has a scene in which the characters realise that they are in mortal peril, that the threat they all fear is much closer than anyone had thought. The shark is in the water, the caller is in the house, the virus is airborne. Footage of a cabinet meeting on July 5th—taken before the watershed resignations of Rishi Sunak, the chancellor of the exchequer, and Sajid Javid, the health secretary—provided an equivalent moment in Westminster's current horror show. The faces of Britain's most senior politicians are ashen, the mood is palpably grim. A deadly toxin menaces them and their party, and it is chairing the meeting.

The fact that Boris Johnson is a serial liar and lacks the self-discipline to apply himself to hard problems was well-known. One of those grey-faced cabinet ministers, Michael Gove, said that Mr Johnson was not up to the task of leadership in 2016. (Mr Gove himself was sacked on July 6th, a day before the prime minister said he would resign.) But the extent to which Mr Johnson has poisoned the reputations of those he works with seems to have been less appreciated. This toxicity is not just a personal characteristic. It also says something about the political system he sat atop.

Take a moment to consider some of the people tarnished by exposure to Mr Johnson. Many were politicians, sent out to defend the prime minister's integrity only to find their own impugned as a result. The end of the Johnson era was sparked by the demise of Chris Pincher, who resigned as deputy chief whip on June 30th after being accused of drunkenly groping two men. Ministers dutifully told interviewers that Mr Johnson had not been aware of prior allegations about Mr Pincher's behaviour, and quickly found out this was untrue. At best such politicians looked like idiots, at worst as slippery as their boss.

Reputations for competence as well as honesty were also irradiated by Mr Johnson. Steve Barclay was brought in as his chief of staff in February to help shake up Number 10 in the wake of Partygate, a series of gatherings in Downing Street which broke covid-era lockdown rules. Mr Barclay was feted as a fearsomely efficient manager. A matter of weeks in proximity to Mr Johnson, and he seemed to have as much grip as a tea tray on a ski jump. His elevation this week to replace Mr Javid placed him in the category of Johnsonian flunkey rather than besuited machine.

But the real victims of Mr Johnson's toxicity have been non-politicians. A parade of people with distinguished reputations and an alphabet's worth of honours after their names were infected. Taking the position of independent ethics adviser to the prime minister sounds like a nice way to top off a distinguished career of public service. Under Mr Johnson it was anything but.

Sir Alex Allan held the role for nearly eight quietish years under David Cameron and Theresa May, but lasted for just over a year under Mr Johnson; he quit after the prime minister ignored his finding that Priti Patel, the home secretary, had been bullying civil servants. His successor was Sir Christopher Geidt (GCB, GCVO, OBE, QSO), who resigned in June after cutting an increasingly sad figure. He found that the prime minister had acted "unwisely" over a donor-funded refurbishment of his flat. His discomfort over Partygate was painful to watch. The post remains vacant: at some point it isn't ethical to advise someone without ethics on ethics.

Sue Gray, a civil servant who wrote a report on Partygate, was lauded by all and sundry for her steely independence, only to be accused of pulling her punches when she failed to look into every drunken bash. Simon Case, the head of the civil service, is meant to be the brightest and the best of his generation. Now he's just that guy with the beard who partied with Boris when everyone else was isolating at home.

Mr Johnson's character flaws have not always corroded those around him. He was a lazy, selfish dilettante when he was mayor of London, and the people who worked with him then did not all suffer. But the position of prime minister is not simply different from mayor in its importance and in its nature: less cheer and more leader. The prime minister is also central to the entire system of government. In several respects, the position is peculiarly designed to spread poison if the person in charge is toxic.

Blond Chernobyl

Most obviously, standards in British public life depend on the person at the top. The ministerial code says that the prime minister is the ultimate judge of what constitutes acceptable behaviour. When the wrongdoer is the prime minister, he judges himself. Mr Johnson's own misconduct, and his tolerance of it in others, leached straight into the body politic.

Second, the cabinet is bound by a system of collective responsibility. Defending the prime minister's behaviour on the broadcast rounds is an act of loyalty. Private differences over policy are papered over in the name of unity. That works when a government is led by someone who is competent and trustworthy. But in Mr Johnson's case, it served to make colleagues complicit in his failures. Mr Sunak says he fell into line repeatedly, until his disagreements with his boss became too great to sustain. Mr Javid told Parliament on July 6th that "treading the tightrope between loyalty and integrity has become impossible".

Finally, the civil service is particularly exposed to a virulent PM. Although civil servants are impartial and independent, the prime minister is still their ultimate boss. They are meant to work hand in glove with ministers; Mr Case sits in cabinet, a literal right-hand man to Mr Johnson. When they appear before MPs they represent the views of their elected masters. And when the prime minister is toxic, they have no immune system to protect them.

Mr Johnson is not the cause of all that ails Britain. He has brio and charm. But the dangers of sitting around that cabinet table with him were real. His flaws tarnished good people. They poisoned the government—and by extension, the country. ■



Education

Millions of wasted minds

MANILA, MUMBAI AND TUXTLA

Covid learning loss has been a global disaster. The costs are stacking up

KING NORVIC TARROYO lives with his parents and five siblings in a slum near the sea wall in Manila, the capital of the Philippines. The eight-year-old has not set foot in a school since March 2020, when classrooms closed as a precaution against covid-19. Twenty-seven months later his school, like thousands of others across the country, remains shut. A year ago teachers gave him a tablet computer for remote learning. But his mother says he uses it for only a few hours each day. After that, he pretends to snooze or scampers into alleys near his home. His mum sometimes does his schoolwork for him.

The Philippines' response to covid-19 has been terrible for its children. For the first seven months of the pandemic the country's 27m pupils received no classes of any kind. For more than a year children in much of the Philippines were not even supposed to leave their homes. Since the start of 2022 about 80% of government schools have been granted permission to

restart some limited face-to-face lessons. But not all of them have chosen to do so. Perhaps two-thirds of children have not yet been invited back to school at all.

When covid-19 first began to spread around the world, pausing normal lessons was a forgivable precaution. No one knew how transmissible the virus was in classrooms; how sick youngsters would become; or how likely they would be to infect their grandparents. But disruptions to education lasted long after encouraging answers to these questions emerged.

New data suggest that the damage has been worse than almost anyone expected. Locking kids out of school has prevented many of them from learning how to read properly. Before the pandemic 57% of ten-year-olds in low and middle-income countries could not read a simple story, says the World Bank. That figure may have risen to 70%, it now estimates. The share of ten-year-olds who cannot read in Latin America, probably the worst-affected region,

could rocket from around 50% to 80% (see chart 1 on next page).

Children who never master the basics will grow up to be less productive and to earn less. McKinsey, a consultancy, estimates that by 2040 education lost to school closures could cause global GDP to be 0.9% lower than it would otherwise have been—an annual loss of \$1.6trn. The World Bank thinks the disruption could cost children \$21trn in earnings over their lifetimes—a sum equivalent to 17% of global GDP today. That is much more than the \$10trn it had estimated in 2020, and also an increase on the \$17trn it was predicting last year.

In many parts of the world, schools were closed for far too long (see chart 2 on next page). During the first two years of the pandemic countries enforced national school closures lasting 20 weeks on average, according to UNESCO. Periods of "partial" closure—when schools were closed in some parts of a country, or to some year groups, or were running part-time schedules—wasted a further 21 weeks. Regional differences are huge. Full and partial shutdowns lasted 29 weeks in Europe and 32 weeks in sub-Saharan Africa. Countries in Latin America imposed restrictions lasting 63 weeks, on average. That figure was 73 weeks in South Asia.

Over two years nearly 153m children missed more than half of all in-person schooling, reckons UNESCO. More than ➤

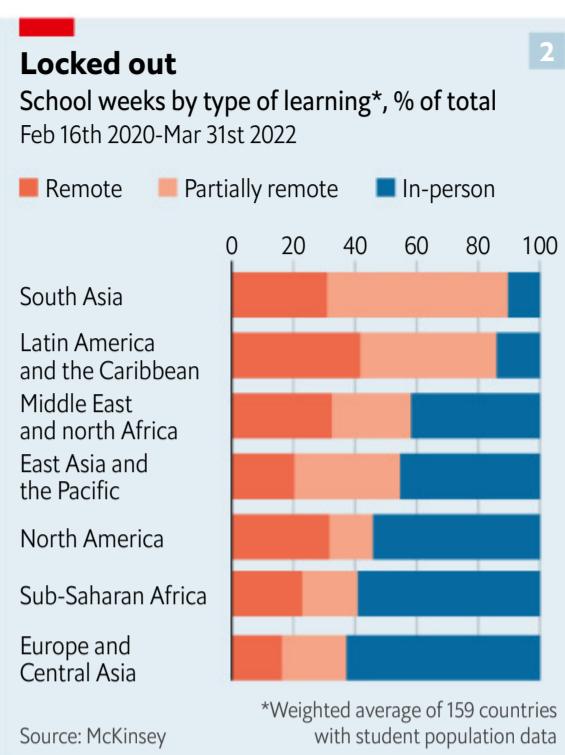
► 60m missed three-quarters. By the end of May pupils in 13 countries were still enduring some restrictions on face-to-face learning—among them China, Iraq and Russia. In the Philippines and North Korea, classrooms were still more or less shut.

Poorer countries stayed closed longer than their neighbours. Places with low-performing schools kept them shut for longer than others in their regions. Closures were often long in places where teachers' unions were especially powerful, such as Mexico and parts of the United States. Unions have fought hard to keep schools closed long after it was clear that this would harm children.

School closures were also long in places where women tend not to hold jobs, perhaps because there was less clamour for schools to go back to providing child care. Many children in the Philippines live with their grandparents, says Bernadette Madrid, an expert in child protection in Manila. That made people cautious about letting them mingle in the playground.

Places where schooling is controlled locally have found it harder to reopen. In highly centralised France, President Emmanuel Macron decreed that all but the eldest pupils would return to school nationwide before the end of the 2020 summer term. It was the first big European country to do this. This gave other countries more confidence to follow. By contrast, decisions about reopening in places such as Brazil dissolved into local squabbles. In America a full year separated the districts that were first and last to restart properly.

India, which has one-fifth of the world's schoolchildren, suffered unusually long closures. Rakshit Mamumkar was 13 when his school near Mumbai shut its doors two years ago. He found himself with nothing to do and nowhere to go. Some days he and his 10-year-old brother played cricket in the small brick house in



which they live with their mother, a domestic helper. But mostly, he says, "I would just watch TV and sleep."

Rakshit's classrooms stayed closed from March 2020 until February this year, save for a few weeks in late 2021. For some of that time he took a job helping the neighbourhood ironing man, for whom he collected and delivered clothes. His mother needed the money: her earnings had fallen by half at the start of the pandemic, and her sons were no longer eating free at school. Eventually she scraped together enough cash to buy a second-hand smartphone so Rakshit could keep learning. She had to borrow some of it from an employer.

Mexico enforced one of the world's longest nationwide school closures, lasting more than 50 weeks. In theory its schools are now open but many children are absent. In Colegio Laureles—a school in Chiapas, Mexico's poorest state—staff are trying simultaneously to teach children in the classroom and remotely. Ten months after Mexico's classrooms started to reopen, perhaps only half of that school's pupils have returned. Some are still in places their families went to during the pandemic, such as Argentina and Brazil. Many parents remain too worried about infection to let their children attend in person, says David Gómez, one of the school's bosses.

Youngsters who are back in their seats sound overjoyed to be there. "We used not to want to come to school," says José Emilio Robles, 16. "Now we really do." Most think they learned little when schooling was remote. They were supposed to send teachers photos of the work they had completed. Sometimes these were too fuzzy to be useful; sometimes they tried to cheat. Monserrath Gómez, 16, says that when asked to send evidence of having done her PE lesson she was tempted just to "pose for a photo" in her gym kit.

A paper published in May by analysts at

the World Bank, Harvard and the Brookings Institution looks at 35 studies of learning loss from 20 mostly rich countries. It finds that the average loss across these studies was equivalent to what would usually be learned in one-third to one-half of a year of normal schooling.

In England test scores at the start of the 2021-22 school year suggest that primary-school kids were almost two months behind where they should be in maths, and one month in reading. Similar research in America found that children were on average between 8-19 weeks behind.

In some countries the results were truly dire. In South Africa primary schoolchildren tested after a 22-week closure were found to have learned only about one-quarter of what they should have. Brazilian secondary-school pupils who had missed almost six months of face-to-face school did similarly dreadfully. A study of 3,000 children in Mexico who had missed 48 weeks of in-person schooling suggests they appeared to have learned little or nothing during that time.

For the moment rigorous information on learning loss comes from only about one-sixth of countries, most of them rich ones. Back-of-the-envelope calculations published by McKinsey try to fill in the blanks. They combine several sets of data: how much schoolchildren usually learned in every country before schools closed; how long they shut classrooms for; and how effective their efforts at distance learning were likely to have been. (Estimates of this last measure were based on how rich each country is.)

A learning experience

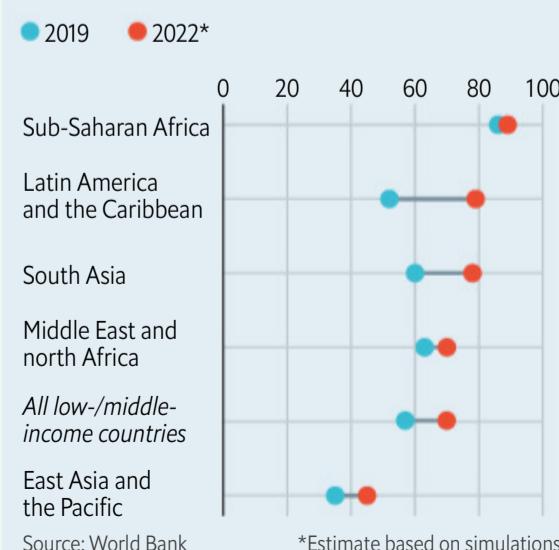
Their results (see chart 3 on next page) suggest that globally schoolchildren may be eight months behind where they would normally be. The damage may be massive in many middle-income countries, which are together home to about 75% of all school-age children. The lag in lots of those places could be 9-15 months. These countries generally kept school buildings closed longer than rich ones, and probably did a worse job of teaching remotely.

The estimated effect of the pandemic on education in poor countries was less awful. The most likely explanation, alas, is that schools in such places were so bad before the pandemic that children did not miss out as much when they closed.

Around the world children have fallen further behind in maths than in reading. Pupils of primary-school age have drifted further back than older ones. Learners who were doing worse before the pandemic have generally dealt worse with the disruptions. And studies everywhere find that within each country, poorer children appear to have suffered more than richer ones. A paper from America examines the

Wordless

Share of children who cannot read and understand a simple text by age ten, %
Low- and middle-income countries



► progress of children in schools that stayed remote for longer than half of the 2020-21 school year. It finds children enrolled at institutions which had lots of poor pupils lost nearly twice as much learning during that time as did those in schools where children were mostly better off.

To reduce the harm caused by school closures, countries will have to pull out all the stops to help children catch up. A good start would be to get them all back into classrooms. Even then, "business as usual" won't do, says Jaime Saavedra of the World Bank. Children who have not received the right support when they have returned to school may still be falling behind.

Before the pandemic many teachers had to struggle through dense curriculums packed with inessential stuff. Their task is made harder by the way the pandemic has widened the gap between the best- and worst-performing students in each class. Pupils who found schooling tiresome before covid are even more disengaged now. Many have dropped out. Trying to race pupils through more material in less time may prompt even more to give up.

Three-quarters of countries have put some thought into catch-up, according to a survey by UNICEF. Nearly 70% of those have slimmed down curriculums. Efforts in Indonesia and South Africa to carve out more of the school day for reading and maths are especially notable, boffins say.

Rich countries have commonly put money into tutoring, which is the most reliable way of helping struggling students. That is expensive, but need not lie out of reach in poorer places. In Bangladesh an experiment that provided tutoring over the phone during school closures saw pupils' literacy improve about 50% faster than for those who did not receive the calls. A similar scheme in Nepal boosted learning in maths by 30%. Results from that pilot suggested it could raise a child's achievement

by an amount normally bestowed by a full year of school, for a cost of around \$100.

In Botswana, India and Zambia students are getting catch-up classes of a type pioneered by Pratham, an Indian NGO. Teaching at the Right Level encourages teachers to use brief oral tests to sort students according to how much they know, rather than by age. These groups meet daily for short lessons in maths and reading. Before the pandemic similar classes in Uttar Pradesh, India's largest state, raised the share of students who could read a paragraph from 15% to 48% after just 50 days.

Ring the bells

Data from a few rich countries suggest that schoolchildren in those places are gradually catching up. Although primary-school pupils in England are about two months behind in maths, that is much better than in autumn 2020, when they lagged by three-and-a-half months. By last autumn third-graders in Ohio had made back two-thirds of the learning that was found to have been lost by the start of the 2020-21 school year (when they were about one-third of a year behind where they would normally have been).

Before covid-19 governments in many developing countries were overlooking egregious failures in their education systems. Optimists hope that the pandemic could spur them to start fixing the problems. Schemes to recover lost learning could lead to permanent reforms. Never before has there been so much good evidence about what works to improve schooling at scale, says Benjamin Piper of the Bill & Melinda Gates Foundation.

Yet this is only one possible outcome. Schools in a quarter of countries still have no plans for catch-up, says UNICEF. Fewer than half of governments have scribbled strategies that are national in scale. Poor children are clawing back time more slow-

ly than wealthier ones. "The costs are astounding if we don't fix them," says Noam Angrist, an education specialist at the University of Oxford.

Half of countries cut funding for education in 2020, the year school buildings first closed. The share of foreign aid that goes to education declined. A quarter of poor countries are not keeping track of how many pupils have returned to school. Going after dropouts while there is still a chance to tempt them back is urgent. "It could be hopeless in six months," says Abhijit Banerjee, an economist and Nobel prize winner.

Mr Saavedra says school closures have caused perhaps "the worst educational crisis for a century, and certainly since the world wars". He worries that too few countries have recognised the scale of the disaster, and that the true cost will not be visible for years. "My fear is that 15 years from now people will be writing papers documenting consistently lower earnings, productivity and well-being for people who are now between six and 20 years old," he says. "I don't see societies taking this seriously."

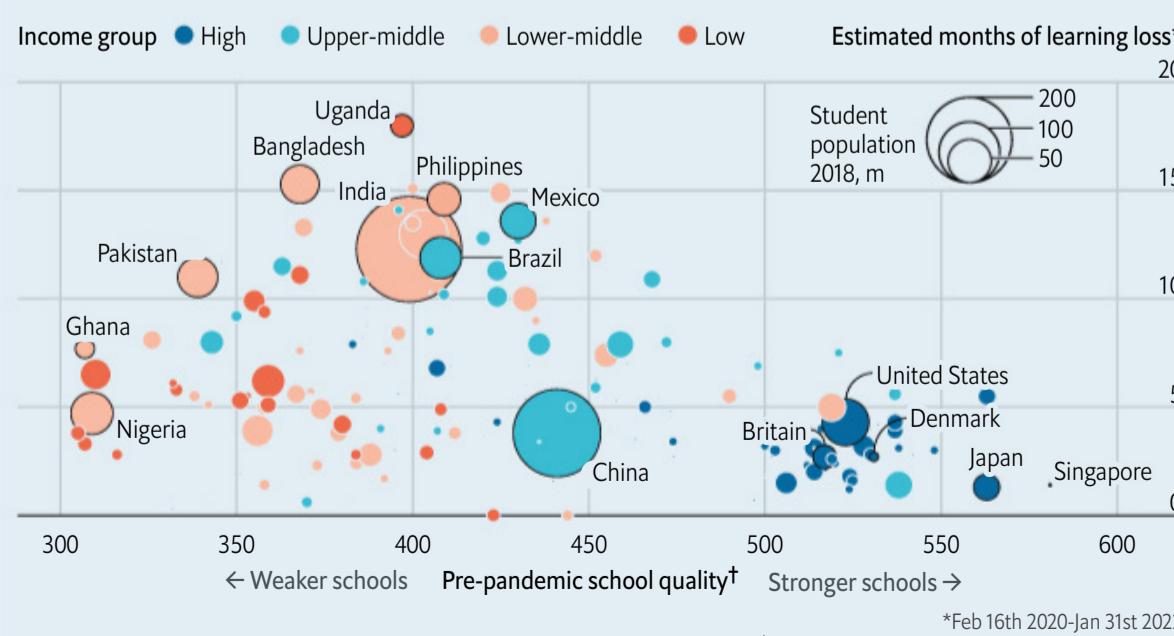
Teachers in Chiapas, and across Mexico, agree that children are struggling. They are "two years" behind where they should be, says Vianney Narváez, a teacher in Mexico City. "The main focus has had to be on whether they are okay, not their education." Teachers report that basic skills such as handwriting and spelling have gone backwards. School buildings have decayed. Some were looted or damaged during long closures. Parents have been asked to chip in for repairs.

Mexico has not done any national testing that could show how far children have fallen behind. Only three of its 32 states have run big assessments. The government has extended this school year into the summer. But there is no other national plan, nor new funding, to drag back drop-outs and drive catch-up. "It is a deep tragedy," says Marco Fernández of the Monterrey Institute of Technology.

No one in the Philippines can say when normal schooling will resume. Ruby Ana Bernardo, a teacher in Manila, says the number of children who show up for her online lessons is dwindling. The government wants all schools to offer face-to-face classes during the coming school year. But to begin with this will be only part-time.

Filipino parents are still afraid of the virus, and not kicking up a fuss. The crisis in schooling played remarkably little role in campaigning for the country's presidential election, which was won in May by Ferdinand Marcos, the son of a crooked dictator. Ms Madrid in Manila says she thinks some wealthy pupils will be able to make up for time wasted during the pandemic. But for the average child, she fears, these years "will be lost". ■

Stuck in the middle



What if →



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**Private equity**

PE lessons

After several heady years private equity may be heading for a fall

IF INVESTORS IN equities and debt markets will remember anything of the first half of 2022 it will be generational sell-offs. But the turmoil in public markets has not yet fully bled into private equity: fundraising has marched on, large deals are still being consummated and paper returns look strong. The blood, however, may be about to flow. Buy-out barbarians made their names in the late 1980s, not the 1970s, for good reason. The corporate buy-out is a financial ploy unsuited to the coming period of slow growth and high inflation; no previous boom-and-bust cycle in private-equity's 40-year history has been like it. Most important, cheap debt is unlikely to be able to save the day.

If trouble is to strike, it will hit an industry that is now hubristic and vast. The amount of money invested, or waiting to be invested, by private-equity funds has swelled from \$1.3trn in 2009 to \$4.6trn today. This was driven by a scramble for yield among pension funds, insurance companies and endowments during a decade of historically low interest rates in the aftermath of the global financial crisis of 2007-

09. Many have more than doubled their allocations to private equity. Since 2015 the ten largest American public-sector pension funds have collectively committed in excess of \$100bn to buy-out funds.

In the search for market-beating returns, some \$3.3trn managed by private-equity firms is currently invested in private companies. A chunk of this reflects the \$850bn of buy-out deals done during 2021 (see chart 1 on next page). It is not by the genius of private-equity bosses that this capital has been posting impressive paper gains (see chart 2). Rather, company valuations have until recently been on a tear; low interest rates push up the valuations of firms, which have been chased by buy-out firms armed with cheap debt. Buy-outs

have been increasingly common in sectors with the highest valuations, including technology, driving the average valuation multiple for American transactions to take firms private to 19.3 times EBITDA (earnings before interest, tax, depreciation and amortisation) in 2021, compared with 12.6 in 2007, according to Bain & Company, a consulting firm.

The stockmarket crash this year will take months to wash through private markets. But a reckoning is on the horizon. Private equity benefits from a fig leaf of illiquidity, resulting in a delay between real and reported fund valuations. In the absence of a liquid market to price investments, private-equity funds assess the current "fair value" of their portfolio based on the price an investment would realise in an "orderly transaction", which should look similar to the valuations of comparable companies in the public markets.

But such "orderly" exits are drying up fast. Market turmoil means stockmarket listings are off the table and companies are thinking harder about spending cash on acquisitions ahead of a recession. Sales from one private-equity fund to another will not sustain an alternative reality of high valuations. For some fund managers, adjusting valuations will be painful. Funds which bought companies at a premium to sky-high stockmarket prices will suffer significant mark-downs. Fund managers and investors accustomed to stable, market-beating returns must accept the true underlying volatility of their investments. ►

→ Also in this section

64 Poland's precarious businesses

65 Europe's unicorns ride on

67 Bartleby: Corporate culture

68 Schumpeter: The Ambani empire

Only the smartest fund managers, who have kept their discipline and sought bargains outside frothy sectors, need not fear the accountant's scythe.

Public markets are a useful window on the future of private-equity returns. The view is not a pleasant one. One index, which maps private-equity portfolios to their public stockmarket equivalents, is down by 37% this year. Another proxy is the share-price performance of investment trusts, a type of publicly traded investment vehicle, which invest in private equity. Usually, these trusts trade close to their underlying asset values, which are based on "fair value" assessments provided by the private-equity funds. These spreads have widened, sometimes cavernously. HgCapital Trust, a technology-focused private-equity investor, currently trades at a 25% discount to its most recent net-asset value; the trust's largest investments are held at 27 times EBITDA.

Private-equity bosses often claim it is their skills as business-operators, rather than financial engineers, which generate returns (and handsome fees). Their investors should hope this is true. But these masters of the universe will find that they are not immune from the difficulties of managing a business during a period of stagflation; growth and margin worries keep bosses of private companies up at night, too. According to one study, expanding margins accounted for only 6% of private-equity value-creation during the past five years; as pricing-power becomes the focus of all firms, defending profitability will take priority over growth. The penalties for failing to adapt will be harsh. Hefty debt piles (average leverage in large American buy-outs is now more than seven times EBITDA, the highest since 2007) make getting this right critical to avoiding the bankruptcy courts.

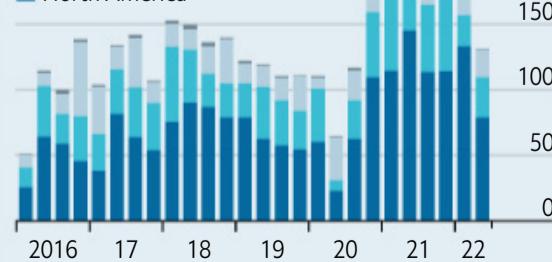
The fate of the \$1.3trn waiting to be invested by private-equity firms, known as "dry powder", is also uncertain. Volatile valuations are one immediate obstacle to spending it. A widening gap in price expecta-

Bye bye, buy buy buy

Private-equity-backed buy-outs

Value, \$bn

- Rest of world
- Asia
- Europe
- North America



Source: Preqin Pro



tions between buyers and sellers of companies is proving fatal to would-be deals. On 28th June Walgreens Boots Alliance, the American parent company of Boots, a British pharmacist-cum-retailer, called it quits on the sale of the well-known British brand after lengthy talks with potential private-equity suitors failed. A dramatic adjustment in valuations is needed to push buy-outs over the line: on June 24th Zendesk, an American software firm, announced it had agreed to a \$10.2bn buy-out by Hellman & Friedman and Permira, two private-equity firms. Only four months earlier, Zendesk had rejected a \$17bn proposal from the same funds.

Interest rates will prove a more enduring challenge to the buy-out playbook. Cheap debt is a red rag to private-equity bulls: around half a typical buy-out is paid for using debt, magnifying the returns to investors' capital. It has played a critical role in each buy-out boom period; the present one can trace its genealogy directly to rate cuts by central banks during the global financial crisis.

As these policies are unwound in response to rising inflation, buy-out debt has become significantly more expensive. That is not going to change soon. Investors not fleeing these risky assets are demanding far higher returns than before, and American junk-bond yields have reached 9%. The availability of leveraged loans, critical for executing buy-out transactions, has collapsed; in June, loan issuance was down by 41% compared with the same month last year. Investment bankers, who typically underwrite these loans, are bracing for significant losses as the ground shifts beneath their feet and they struggle to offload the debt to investors.

A heady mix of stockmarket mania and historically low interest rates has sustained the fourth buy-out boom; it has been scaled-up by immense pools of capital increasing their exposure to private markets. Private equity is coming back down to earth. It will be returning to an unfamiliar planet. ■

Business in Poland

Strong headwinds

BERLIN

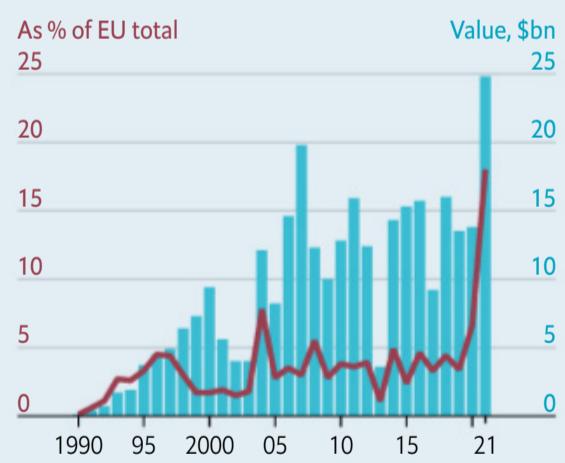
Inflation, the war in Ukraine and government policies are taking a toll

After an astonishingly robust recovery last year from the pandemic-induced contraction of the economy, Polish industry also had a strong start to 2022. Beating expectations, industrial output increased by 17.3% year on year in March, the first full month after Russia attacked Ukraine, and manufacturing grew by 12.4%. Higher output from energy and mining as well as heavy industries compensated for a decrease in production of cars and parts. But the rebound is likely to be short-lived.

The war in neighbouring Ukraine had no big impact on businesses in the first quarter, as companies still had full order books. But the outlook for the rest of the year is far less optimistic, according to ING, a Dutch bank. The fighting in Ukraine has increased the risk of serious disruptions to supply chains, creating a deep crisis of confidence. The rate of inflation was already high before the war, but it is now in double digits and continues to climb, putting pressure on production costs. And the an-

Pole position

Poland, foreign direct investment inflows



Stockmarket indices, January 1st 2022=100





Will the lights go out for Polish business?

▶ **ti**-business bent of Law and Justice (PiS), the populist party in power, will become even more pronounced as Poland prepares for parliamentary elections that will take place in the autumn next year.

Economists disagree about which is the strongest of the multiple headwinds blowing against business in Poland, though nearly everyone forecasts a recession this year. For Ignacy Morawski, chief economist of *Puls Biznesu*, a business daily, the macro-economic picture is the biggest cloud for foreign investors. Consumer prices rose by 15.6% in June compared with last year, a level unseen in more than 20 years, and up from 13.9% in May, according to Poland's statistics agency. Interest rates have shot up from 0.5% last October to 6%. That has squeezed borrowers as about 90% of loans to households and businesses are at variable rates. This in turn creates even more uncertainty, says Mr Morawski. The zloty, Poland's currency, is weak, which helps exporters but makes the imports needed by producers pricier still.

Adam Czerniak of Polityka Insight, a research outfit, thinks concerns over the rule of law and "economic patriotism" are the biggest worries for foreign investors, in particular those from euro-zone countries. Since coming to power in 2015 PiS has neutered the judiciary and placed judges firmly under the control of the government. It extols the virtues of "repolonisation". State-controlled companies bought foreign-owned banks (on a voluntary basis); the government is now targeting bank profits with a moratorium on loans. And PiS tried to limit foreign investors to a stake of no more than 30% in Polish media firms.

Last year foreign direct investment (FDI), both greenfield and other funding, was still strong owing to Poland's well-

trained labour force, relatively low wages and closeness to western Europe. FDI flows were up by 79% (see chart on next page) and the stock grew by a healthy 7.8% compared with a slump by 2.7% for the entire European Union. This year FDI is set to decline, though it is unclear how cold foreign investors' feet will become. Since the start of the year investors have dumped Polish

stocks in droves. The WIG20, the stock-market index of the 20 largest companies listed on the Warsaw stock exchange, declined by 28% from the start of the year to July 6th. Polish mutual funds are reporting redemptions, which means the WIG20 is unlikely to make up lost ground soon.

Mr Czerniak forecasts that the economy will be in recession in the second quarter. Poland's manufacturing sector contracted for a second month in June, when Standard & Poor's Polish manufacturing purchasing-managers' index fell to 44.4 from 48.5 in May, remaining below the line of 50 that divides growth from contraction. Like most of his colleagues Mr Czerniak expects a soft landing in which the heat is gently taken out of the economy and the unemployment rate remains low.

Business leaders are holding their breath. The government has in recent months stimulated demand with generous tax cuts, which is fuelling the inflationary spiral. Adam Glapinski, the head of the central bank, recently said that the rate-raising cycle is nearing the end, but he did not name a specific timeline. Foreign investors expect both inflation and interest rates to stay high for some time to come and they do not anticipate that the war in Ukraine will come to an end at any time soon. On top of which PiS is forecast to win the election next year, giving business little hope of relief. ■

Venture capitalism in Europe

A species reborn

BERLIN AND SAN FRANCISCO

The downturn is unlikely to lay waste to the old continent's tech unicorns

NONE OF MY friends stayed in tech." Fred Plais, the boss of Platform.sh, a cloud-computing company based in Paris, still remembers vividly what happened in Europe in 2001. The firm he ran back then, an online-search engine, closed down after the dotcom bubble burst—along with most of the other startups he knew.

The story was much the same in 2008 as a result of the global financial crisis. European technology firms again suffered more than their American counterparts. Fears that the looming downturn and plummeting tech valuations will once more hit harder in Europe than across the Atlantic were stoked on July 1st, when the *Wall Street Journal* reported that Klarna, a Swedish buy-now-pay-later darling, was trying to raise fresh capital at less than a fifth of its peak valuation of \$46bn.

Such stories notwithstanding, both Europe's startups and its venture capital-

ists look much sturdier than they have in the past, and much less reliant on foreign know-how and capital. They may even weather the storm better than American counterparts this time around.

To understand why, start by considering the boom. Last year was a smasher in Europe even by frenetic global standards. For the first time, venture-capital (VC) investments on the old continent exceeded €100bn (\$118bn) in a single year, reports PitchBook, a data provider. Startup valuations rocketed accordingly, pushing the number of European "unicorns", private firms worth more than \$1bn, to nearly 150 today, about 13% of the world's total. Although Europe's tech ecosystem is still only about a third as big as America's in terms of VC investments, it has more than doubled in size since 2020.

Some of this growth is a mechanical consequence of excess capital flooding ➤

into Europe, where startup valuations had lagged behind those in America and Asia. In 2021 American vc firms invested in European deals worth \$83bn, a threefold increase on the previous year, according to PitchBook. Non-traditional investors, both American and from elsewhere, such as hedge funds and big companies' vc arms, discovered Europe, too, participating in nearly \$100bn-worth of deals, an increase of 150% from 2020.

As Klarna's attempt to raise funds implies, this surfeit of capital is poised to end this year in Europe as elsewhere. Happily for European tech, that isn't the whole story. "The European flywheel has taken off," says Sarah Guemouri of Atomico, a vc firm in London, referring to the idea that success in tech breeds further success. Flywheels spin at the level of the individual firm, when more users translate into better services, which draws in more users, and so on. They can also help to rev up the whole industry.

Nothing ventured, nothing gained

European venture capitalism indeed looks capable of powering itself. A critical resource is talent. Last year Dealroom, another data provider, analysed the careers of 38,000 startup executives. Almost two-fifths had already worked for both small startups and established firms, signalling a growing collective experience. Similarly, when Mosaic Ventures, another European vc firm, recently looked at nearly 200 founders of unicorns, it discovered that two in three were repeat entrepreneurs. "It is the second or third time that produces a unicorn," says Simon Levene, one of the firm's partners.

As they become more experienced, European entrepreneurs are not only becoming more ambitious, but better at telling a convincing story about what they want to achieve. Nadine Hachach-Haram, founder of Proximie, a health-care startup which uses augmented reality to allow doctors to remotely watch a surgery, is on a mission to create the "borderless operating room". Avi Meir, who runs TravelPerk, a site to manage business travel based in Barcelona, wants it to become the place to facilitate "human connections between remote workers", for instance by offering tools to organise real-life team meetings. Nicolas Brusson, the boss of BlaBlaCar, which started as a Parisian service to arrange shared car rides between cities, aims to turn it into a "multimodal platform" that also aggregates demand for buses and perhaps even trains globally. To some this may sound like marketing guff but it is precisely the sort of thing investors and prospective staff still want to hear.

Capital is being accumulated and fed back into the industry, too. According to PitchBook, nearly €100bn in vc was raised



by European funds over the past five years. Almost half of that has yet to be deployed, leaving Europe's venture capitalists with plenty of "dry powder" to tide over startups even if the crisis drags on. European investors also tend to plough a lot of cash into early-stage startups. In 2021 European startups attracted a third of all investments in financing rounds of up to \$5m globally, estimates Dealroom—almost as much as their American counterparts.

The number of "angels", successful entrepreneurs who funnel some of their tech wealth back into other startups, is also growing. Some create their own vc firms. On June 28th Taavet Hinrikus, co-founder of Wise, an international-payments service, and three other European entrepreneurs, launched Plural, a €250m fund. Executives lower down the food chain have also started to invest, in part because more and more European tech workers are compensated in part with their employer's stock. A few years ago only about 10% of shares were allocated to employees, says Dominic Jacquesson of Index Ventures, a transatlantic vc stalwart. Thanks to legal

changes, and a growing cultural acceptance of stock options in Europe, the figure is about 17%, not far off the 20% or so common in America.

The structure of the tech ecosystem is also more robust now whereas once it was a disparate collection of unlikely success stories, such as Skype, a video-conferencing service now owned by Microsoft, or Spotify, a Swedish music-streaming app. In a recent report on European unicorns Richard Kersley of Credit Suisse, an investment bank, and his colleagues split the firms into "enablers", for example payment services like Klarna and Checkout.com, and "disrupters" (such as Getir, a Turkish delivery app) which thrive by piggybacking on such infrastructure.

On top of more home-grown experience and capital, as well as a harder structure, European firms boast certain comparative advantages that will come in handy in a leaner, post-pandemic era. One is their relative thriftiness. Although private companies are not required to disclose such numbers, indications are that their "burn rate", the speed at which they spend money they have raised, is lower, at least at younger startups. It helps that hiring software developers in Barcelona or Berlin costs on average only half what it does in San Francisco or Seattle.

Burning ambition

As they become unicorns, however, such differences seem to disappear. On average, American and European startups have raised about the same amount of capital before reaching that status: \$378m compared with \$392m for firms that have achieved a valuation of more than \$1bn since the beginning of 2021.

Mature startups in Europe, meanwhile, are less geographically concentrated than their counterparts in America, both in



► terms of their markets and their vc support. Because Europe's domestic markets and talent pools are limited, firms quickly expand abroad. Veriff, an Estonian online-identification service, recently opened a site in Barcelona because it could not hire enough engineers in Tallinn.

As a result, about 80% of European tech companies have an international presence, compared with 61% of firms based in Silicon Valley, according to Atomico. Only one in five European firms has an office in its home territory alone and just over half are present in three or more countries. In

Silicon Valley the ratio is reversed. In a crisis, such diversification is a boon.

Europe's thematic unicorn mix may also help. According to the classification used by Credit Suisse, recession-prone businesses such as consumer services are less prevalent than in America. A third of European unicorns operate in fintech, often providing payment services to other firms, thanks to the EU's more open financial regulations. Nearly a quarter of unicorns, the bank estimates, could be put in the bucket labelled "sustainability"—a type of business that is likely to benefit as

the world gets more serious about fighting climate change.

All this helps explain why the number of unicorns has risen in Europe this year. PitchBook counted another 42 in the first six months, compared with 37 created in the same period in 2021. The coming quarters are certain to be tougher. But so are Europe's tech companies. Platform.sh recently managed to raise \$140m (the valuation was not disclosed, but is approaching unicorn territory). And that means Mr Plais, its boss, is unlikely to have to go job-hunting again soon. ■

Bartleby How to read corporate culture

Outsiders have more ways to understand what firms are really like

CULTURE EATS strategy for breakfast, runs the aphorism. It also projectile vomits employees who don't fit in. In a survey conducted earlier this year by Flexjobs, an employment site, culture was the most common reason people gave for quitting. And it matters more than high wages. A study published last year by Jason Sockin of the University of Pennsylvania found that workers rated things like respectfulness, work-life balance and morale as more important to job satisfaction than pay.

The problem is that culture can be very hard to fathom from the outside. It resides in quotidian interactions between colleagues and in the hidden threads that bind decisions on everything from promotions to product development. You need to be inside an organisation to really understand it. But more sunlight is getting in. Firms are doing more to signal what they stand for. Job-seekers have new ways to peer inside firms. So do investors, who share their interest in evaluating corporate culture.

Offices are places where culture can be transmitted osmotically. Now that more workers are remote, firms increasingly write down their values. Qualtrics, a software firm, may not believe in grammar but it does believe in Transparent, All in, Customer obsessed, One team and Scrappy. Justworks, an HR technology firm, subscribes to Camaraderie, Openness, Grit, Integrity and Simplicity. Lists like these can turn blandness into an art form, and are overly determined by what will create an acronym. They may not reflect what actually happens inside the company. Plenty of firms are characterised by Cluelessness, Rancour, Amateurism, Skiving and Stupidity, but you won't find that on the website.

But companies that codify their val-

ues are at least thinking about them. And their choices can offer meaningful clues. Kraken, a cryptocurrency exchange, sets out its beliefs in ten "Tentaclemandments". You need to see only that one word to know whether this is the workplace for you or whether you would rather be hurled into an active volcano.

Updates can also be instructive. In "ReCulturing", a new book, Melissa Daimler lays out some of the changes that Dara Khosrowshahi made when he became CEO of Uber in 2017. The values of the previous regime, which included "Superpumped" and "Always be Hustlin'", were overhauled for something a little less hormonal. The change from "Meritocracy and toe-stepping" to "We value ideas over hierarchy" told people something useful about the aspirations of the new leadership team.

Culture is increasingly readable in other ways, too. Since the pandemic, firms' policies on remote working have given outsiders greater clarity on how employers view issues like work-life balance. Under increasing pressure from employees to take stances, companies are

likelier to offer opinions on political and social issues. Others go the other way: Coinbase, another crypto firm, has made it clear that it won't tolerate employee activism on subjects unrelated to its core mission. That's information, too.

Windows on cultural norms are being opened by regulators, who are pushing for greater disclosure about firms' workforces. Candidates seem to value this kind of information: a working paper published earlier this year by Jung Ho Choi of Stanford Graduate School of Business and his co-authors found that clickthrough rates for job postings rose for firms with higher diversity scores.

The behaviour of CEOs used to be directly visible only to a limited number of people. Now bosses are everywhere, tweeting, posting and making stilted videos. In a recent survey by Brunswick Group, a PR firm, 82% of respondents said they would research the boss's social-media accounts if they were considering joining a new firm. Even earnings calls offer insights. Academics at Columbia Business School and Harvard Business School have found that managers who invite colleagues to respond to analysts' questions on these calls are more likely to work in firms that have more cohesive leadership teams.

Employee-review sites like Glassdoor are another source of insight. These sites can be distorted by embittered ex-workers. But, says Kevin Oakes of the Institute for Corporate Productivity, a research outfit, they are also likely to contain "slivers of truth". And all these slivers add up. There is no substitute for being at a firm day in, day out, if you want to understand what it is really like. But the outlines of corporate culture are more discernible than ever. That ought to lead to fewer cases of indigestion.



Schumpeter | Self-Reliance

The future of its biggest company is important for India itself



INDIA INC's business calendar has only one contender to rival Berkshire Hathaway's famous shareholder gathering. The sub-continent's equivalent of that "Woodstock for capitalists" is the annual general meeting of Reliance Industries. Like Warren Buffett's shindig it usually features a celebratory crowd of devoted investors (although not the same quality of corporate-finance insights). The company's founder, Dhirubhai Ambani, an upstart entrepreneur from Gujarat, was also an outsider with a nose for opportunities. He built India's largest company from a humble trading and textiles firm into a vast conglomerate. It has continued to expand after his death under the leadership of his son Mukesh Ambani and today encompasses petrochemicals, refining, telecoms, a shopping app and retail stores—among other things.

The importance of the resulting entity to India is impossible to overstate. With a market value of \$206bn, the firm's revenues are the equivalent of 3% of the country's GDP. Among India's largest 500 public companies, it is responsible for 6% of sales and profits, 7% of total capitalisation and a staggering 18% of capital investment. Jio, the telecoms division, provides service to 410m Indians, and is the latest in a series of massive, stomach-churning capital-intensive bets that have paid off over the years. The retail operations are by far the largest in India, encompassing 15,000 shops. Its refinery and petrochemicals operation in the north-west of the country is among the biggest in the world. In short, any change at Reliance affects India as a whole—and it appears that change may well be on the way.

The rumour mill has been abuzz because this year the annual meeting, usually held in June or July in Mumbai, has yet to be scheduled. Mr Ambani seems to have largely withdrawn from public appearances. The company says he is spending time in Jamnagar, the site of the company's massive oil refinery. India's gossipy business world, where no figure receives more attention, is alight with talk that he may be suffering from health problems. The company says he is well and continues to attend public functions within the restrictions of a pandemic.

On June 28th the company said that Mr Ambani would step aside from the chairmanship of Jio Infocomm, a subsidiary of the telecoms arm, in favour of his 30-year-old son, Akash. The next

day reports emerged that Akash's twin sister, Isha, would soon head Reliance's retail operations. And on July 3rd the *Hindu Business Line*, a newspaper, said that Mr Ambani's wife, Nita, already a director of Reliance, was favoured by some on the board to become a vice-chairman of the company. Another son, Anant, is also said to be positioned to take over running part of its energy operations.

Interpreting these rumours is tricky. Perhaps they reflect prudent succession planning. Mr Ambani is 65, not old for an Indian tycoon, but it is time to start teeing up the next generation of leaders. Even if his children were to take over the running of some of the group's major subsidiaries, they would ideally have years more experience at management and building teams before even being considered as candidates qualified to take over Reliance itself. And Reliance's history shows the drawbacks of leaving it too late. Soon after Dhirubhai died in 2002 a brutal succession battle broke out between Mr Ambani and his brother, Anil, which ended with the company being split into two, and Anil's side of the business fading into obscurity.

Whenever he departs, there is little debate that Mr Ambani's exit would constitute a huge loss for the company. Reliance has a loyal cadre of managers but he is regarded as the driving force behind every facet of Reliance's business from strategy to finance. He is seen as having the ability to deal with the complicated judicial, political and economic currents of India better than anyone. Whether in telecoms, energy or retail, Reliance has navigated and benefited from innumerable rules and rulings that make hamstrung competitors seethe with envy. Ensuring that this continues will be a tall order for the next generation at Reliance.

Perhaps most important, Mr Ambani has continued a pattern that his father began: betting the firm on enormous and risky projects within India. Some of these wagers have not worked well: Reliance's attempt to develop gas fields in the Bay of Bengal has been underwhelming, for example. But some have been both jaw-droppingly daring and successful. Reliance's telecoms and digital operation required huge upfront investments—its assets are now \$49bn, according to Bloomberg data, up from close to zero a decade ago. And by bringing cheap communications to the masses it has helped transform Indian society.

This may go some way to explaining the respect now shown to Reliance even by its critics. Unlike classic crony capitalism where the extraction of rents is paramount, Reliance's huge level of reinvestment mean its return on capital is modest: below 10% every year for the past decade. Already the next big bet is being lined up. Profits from refining are providing tens of billions of dollars for investments in renewable energy infrastructure in a country with a shortage of power generation and an over-dependence on fossil fuels that will need to be remedied soon.

A reliable appetite for risk

One theory is that the annual meeting has been delayed while a break-up of the company is debated. The firm is certainly in good nick. After India went into lockdown in 2020 it brought minority investors, including Google, into its digital arm. The cash was used to slash debt. Refining profits are at high levels, notwithstanding the recent imposition of a windfall tax by the government. Jio enjoys a steady subscriber base and rising tariffs. Reliance's retailing arm is profitable and expanding. All this suggests Reliance, or its constituent parts, could plod on without Mr Ambani at the helm. But would the group still have the appetite to undertake some of the boldest bets in global business? ■



Sino-American rivalry

Tougher than tariffs

WASHINGTON, DC

America rethinks its strategy for taking on China's economy

CHINA IS OFTEN said to be an area of rare consensus in American politics. Just about everyone agrees that something must be done to counter its rise. But this appearance of unity masks divisions and even confusion about what exactly needs to be done, most of all in the economic domain. Is the ultimate goal to open the Chinese market to American businesses, or to dissolve commercial bonds with China?

For Joe Biden's administration, these cross-currents have led to prolonged deliberations—so much so that some critics accuse it of paralysis. A seemingly endless debate about whether to remove tariffs on China is the latest example of indecision. Slowly, though, the shape of Mr Biden's approach to the Chinese economy is emerging. The coming weeks may determine whether it amounts to a resolute, coherent strategy or a mess of contradictions.

The narrative is clear enough. In a speech in May Antony Blinken, America's secretary of state, boiled down Mr Biden's China policy to three words: "invest, align, compete". That is, America should invest in its own strength; align more closely

with allies; and confront China where necessary. Putting the spin to one side, these are in fact good categories for understanding how the Biden administration is trying to deal with China's economy.

Start with competition. This took centre-stage under Donald Trump, who dragged America away from a lingering desire to "engage" China towards a sharper rivalry with it. By the time he left office, America's average tariff on Chinese products had risen from roughly 3% to nearly 20%, according to calculations by Chad Bown of the Peterson Institute for International Economics (see chart 1 on next page). The immediate question for Mr Biden is

→ Also in this section

71 Commodities and recession risk

71 A secretive trial in China

72 Buttonwood: Crypto's J.P. Morgan

73 Can companies pay their debts?

74 Free exchange: EM central banks

what to do about this inheritance.

With inflation running high, Mr Biden wants to lessen price pressures. Eliminating tariffs on China—which are, in effect, a tax on consumers—would in theory help. In practice it may make a very small contribution. One study from the Peterson Institute estimated that removing the tariffs would shave just 0.3 percentage points off the annual inflation rate, which is now running at more than 8%. On the one hand, every little counts. On the other, Mr Biden is loth to do something that would be portrayed by Republicans, and perhaps China itself, as a capitulation.

Even within his own administration, many view the tariffs as precious leverage. The most likely outcome will be minor tweaks. Mr Trump's earlier tariffs went after products such as semiconductors. But later levies hit items like shoes, hurting consumers more directly. Removing tariffs on some consumer products would therefore seem like an easy decision. Beyond that, opposition to cuts grows stiffer. "For tariffs on high-tech products or industrial inputs, the Biden administration may want to increase these substantially at the same time that it eliminates others. It needs to determine which are working and which are not," says Clete Willems, a veteran of Mr Trump's trade team. Hawks welcome the fact that America imports less from China than it did at the start of the trade war (see chart 2 on next page).

The Biden administration has also debated whether to begin a new probe into ➤

► China's economic behaviour. Mr Trump's big investigation, conducted under section 301 of American trade law (used to tackle problems not solvable within the WTO), was focused on China's "forced technology transfers". Many in the Biden administration see that as a misdiagnosis. The real issue is China's broader state capitalism.

A new 301 investigation could put China's industrial plans and subsidies at the forefront of America's economic grievances with it. Intellectually, that would be appealing. "The bigger challenge will be, is the administration ready to do what a 301 says? Is it ready to impose significant new penalties on China?" says Scott Kennedy of the Centre for Strategic and International Studies, a think-tank in Washington. The White House's delay in announcing a new 301 case, despite talk swirling around it for months, reveals its hesitancy.

Another plank in America's competition with China is the battery of economic sanctions rolled out against companies. Mr Trump's administration blazed the trail, placing Chinese industrial champions from Huawei, a telecoms giant, to DJI, a dronemaker, on the government's "entity list", thereby preventing American companies from selling them any items without permission. By the end of his term, though, his methods were increasingly chaotic, epitomised by his ill-fated demand that the Chinese owner of TikTok, a wildly popular app, spin off its American operations (see Briefing).

Mr Biden's team has worked to place sanctions on a sounder legal footing, while also making them more targeted. Most of Mr Trump's corporate blacklistings are still in place. Mr Biden has added to them, including barring American investments in a range of Chinese surveillance-tech companies. It is also considering new rules to block foreign rivals' access to Americans' personal data, which may yet ensnare TikTok. Taken together, the Biden approach looks less like a retreat from Mr Trump's brawl with China and more like a professionalisation of it.

The second part of Mr Biden's strategy—alignment with allies—sets him much further apart from his predecessor. Whereas Mr Trump revelled in scorning America's staunchest friends, Mr Biden has steadfastly repaired relations. The cornerstone of his approach to Asia was unveiled in May with the launch of the Indo-Pacific Economic Framework (IPEF), tying together countries that represent 40% of global GDP. India, Japan and Vietnam are part of it and, most crucially, China is not. Another fruit of Mr Biden's efforts was a joint statement at the end of the G7 summit on June 28th pledging to "reduce strategic dependencies" on China (see China section).

There are doubts that these fine words will add up to much concrete action. The



messages shared by several Asian diplomats about the IPEF are remarkably similar: it is good to have America back at the table, but the only dish on offer is thin gruel. The IPEF will include discussions about everything from decarbonisation to data sharing, but there will be nothing on tariffs, a mainstay of traditional trade talks. The Biden administration disputes this characterisation. One senior official points to the IPEF's focus on supply chains, arguing that it will be meaty. With talks starting later this month, the official believes that a deal to accelerate port-clearance times could be reached within as little as a year.

Even if that comes to fruition, there is frustration among many in America and abroad that Mr Biden will not do more on trade. A stubborn bipartisan group of politicians in Washington is still agitating for America to re-enter the Trans-Pacific Partnership, a regional trade deal from which Mr Trump withdrew. Allies such as Japan would love that. They believe forging new supply chains is essential to lessening reliance on China. For the Biden administration, though, the idea is a non-starter; it is fearful of alienating union supporters and angering a trade-wary public. The unsatisfactory conclusion is that Mr Biden's desire to align with allies in its China strategy can only go so far.



That speaks to the final element of Mr Biden's approach: investing at home. This is the area where rhetoric and action are furthest apart. After all, Mr Biden's signature spending plan, his "Build Back Better" social-and-climate package, has not yet made it through Congress. It is now crunch time for an initiative that was conceived as a response to China. The Senate and House have passed two alternative bills with the same centrepiece: a \$52bn plan for bolstering America's capacity to produce semiconductors. The Senate's is more modest and has received bipartisan support. The House's, almost exclusively backed by Democrats, contains a hodge-podge of measures—including even funding to save coral reefs.

People familiar with talks to bridge the differences say there has been recent progress, bringing the unified bill closer to the Senate's version. One aspect of the House's may, in reduced form, survive: the creation of a mechanism that, for the first time, would require American companies to notify the government of overseas spending, raising the possibility that the White House could block some investments in China. For the bill to pass before mid-term elections in November, agreement will probably have to be hammered out before Congress breaks for recess for August.

Even without that bill, the Biden administration has tried to set the tone for an investment push at home. Mr Trump cajoled and threatened companies to set up factories in America, making limited headway. Mr Biden's big initiative, grabbing fewer headlines, has been a sprawling review of supply chains. In February the government published six separate reports, covering semiconductors, batteries and more. This hardly equates to industrial policy on a Chinese scale. But the aim is to channel financing and incentives to strengthen America's manufacturing base.

The Biden plan may be pushing at an open door. Since the start of his administration companies have announced more than \$75bn of investments in semiconductor production and research in America. That is in part a response to Mr Biden's actions, but also a recognition of the fragility of global supply chains. Indeed, perhaps the most useful policy in weaning companies off the Chinese market is Xi Jinping's foolhardy pursuit of "zero covid", which has almost walled off the country.

If Mr Biden does succeed in boosting domestic manufacturing, that victory could well come at the cost of higher prices for consumers, reduced efficiency and, ultimately, lower economic growth. True, he is rebuilding frayed relationships with allies. But in other respects, his economic strategy for dealing with China looks a lot like a refinement of the bare-knuckle competition started by Mr Trump. ■



Commodity prices

Helter skelter

Are commodities now signalling recession, rather than inflation?

THE WAR in Ukraine throttled a flow of raw materials that was already being restricted by logistical logjams, bad weather and other disruptions. The result was soaring prices. In March a barrel of Brent crude oil hit \$128, and European gas prices were three times higher than they had been just two months earlier. Copper, a trendsetter for all industrial metals, hit a record price of \$10,845 per tonne. Wheat, corn and soyabean prices rose by double-digit percentages. The surge turbocharged consumer-price inflation, which, by challenging central banks' credibility, has given them another reason to raise interest rates.

Yet in recent weeks the wind has changed. Oil is trading at around \$100 a barrel. Copper has dropped below \$8,000 a tonne for the first time in 18 months; metals in general have fallen by 10-40% since May. Agricultural-commodity prices are back at pre-war levels. (Europe's gas prices, which have continued to rise as Russia has cut supply, are bucking the trend.) The slide may fuel hopes that inflation will soon be defeated. But the victory might prove hollow—if there is one at all.

One explanation for tanking commodity prices is that worries about a recession are taking hold. In this view, rising interest rates are cooling the market for new homes, dampening demand for building materials such as copper and wood, and lowering spending on things like clothing, appliances and cars, which in turn hurts everything from aluminium to zinc. More-

over, some of the supply constraints that contributed to price rises earlier in the year have eased—the weather in grain-growing regions has improved, for instance. Meanwhile, the UN is trying to end a blockade on Ukraine's shipments of wheat.

For central banks, this is mixed news. It suggests that inflation may be beaten even though they have only just begun tightening monetary policy. True, this might be accompanied by a recession, but, because inflation would be tamed without interest rates having to rise too much, the downturn would, perhaps, at least be shallow.

Worries about the economy are not the only force pushing down prices. Much of the money that has fled commodities, say industry experts, belongs not to physical traders but to financial punters. In the week to July 1st about \$16bn flowed out of commodity-futures markets, bringing the total for the year so far to a record \$145bn, according to JPMorgan Chase, a bank. In part that reflects rising interest rates. In May America's long-dated real rates turned positive for the first time since 2020. That made commodities, which do not offer a yield, less attractive to speculators.

This suggests that commodity-price inflation may not have been slayed. Movements driven by real-rate swings are usually short-lived, says Tom Price of Liberum, an investment bank. The last time one happened, in 2013, prices stabilised within weeks. Prices are also still sensitive to further supply disruptions. Commodity stocks remain 19% below historical average at a time of tight production, meaning there is less of a buffer against shocks.

Even as some supply problems have eased, triggers for others abound. Energy prices are still vulnerable to Vladimir Putin's whims. Pricey energy, in turn, would cause metals producers to trim output further, making production tighter still. And the return of La Niña, a harsh climate pattern, for the third consecutive year could disrupt grain harvests worldwide. Prices, in other words, might stay high even if recession hits. ■



Hidden risks in China

Case closed

SHANGHAI

What a secretive trial of a tycoon says about the rot in the financial system

INSIDERS HAVE been waiting for half a decade for official word on the whereabouts of Xiao Jianhua, an erstwhile billionaire financier. So far they have heard nothing, not even as his trial kicked off in a Shanghai courtroom on July 4th. All details of the charges he faces have been kept secret. The only official recognition of the trial itself has been from Canada's foreign ministry (Mr Xiao is a Canadian citizen), which says its diplomats have been denied entry to the proceedings.

For leaders in Beijing, the secrecy is necessary because the case presents an uncomfortable picture of the Chinese political and financial system. Not long ago Mr Xiao counted some of China's most powerful families as clients. His dealings have been linked to many elite families including, according to the *New York Times*, that of Xi Jinping, the president. This alone makes his trial extremely sensitive.

Mr Xiao was abducted by Chinese agents from his suite in the Four Seasons hotel in Hong Kong in early 2017, in violation of local law. He has been held for five years at an undisclosed location in Shanghai as he helps financial authorities untangle his business empire. Mere recognition that he is in China is a prickly fact officials would prefer to sidestep.

Many of the details of Mr Xiao's case may never be revealed to the public. But his tribulations have already laid bare some of the hidden risks lurking within China's financial system. His conglomerate, Tomor-►

Buttonwood Last man standing



Is Sam Bankman-Fried the John Pierpont Morgan of crypto?

TWO YEARS ago scarcely anyone in mainstream finance had heard of Sam Bankman-Fried, or FTX, the cryptocurrency exchange he launched in 2019. Both gained greater prominence, first as the crypto craze reached fever pitch and then as crypto fell to Earth. Mr Bankman-Fried (widely known as SBF) has lately been at the centre of attempts to rescue beleaguered crypto firms. To some observers, the role calls to mind the rescue missions organised by John Pierpont Morgan and America's other banking scions in the early 20th century. The comparison is surprisingly instructive.

The recent slump has left destruction in its wake. Some crypto-lending firms, notably Celsius, have collapsed; some stablecoins, like terra, have been obliterated. At least one crypto hedge fund, Three Arrows Capital, has gone bust. Estimates of SBF's personal wealth have tumbled, too, from \$26bn just over three months ago to nearer \$8bn now. Nonetheless, his companies (FTX and Alameda, a trading firm) seem to be the great survivors of the recent chaos. FTX had kept employee numbers relatively low; SBF has said the exchange is still profitable. Well-timed funding rounds early this year saw its global and American arms raising \$400m each. That has enabled SBF to help others in need. In June Voyager Digital, a broker, secured loans worth \$485m from Alameda. BlockFi, another trader, has received a revolving line of credit from FTX's American arm.

To some this harks back to America's banking panic of 1907. The economy was in recession; towards the end of that year the thinly capitalised Knickerbocker Trust Company, one of America's largest financial firms at the time, collapsed. Morgan went on to orchestrate a series of private rescues with other financiers,

offering deposits in the tens of millions of dollars to various banks in order to prevent runs. Those actions are usually credited with preventing a deeper, more damaging crisis. No other trusts went under.

At first glance, then, the comparison is a flattering one for SBF. But 1907 was not the Morgan family's only attempt at a big bail-out. When the Wall Street crash struck in 1929, J.P. Morgan junior, like his father, sought to bring together a gang of plutocrats to stem the tide. Several bankers and brokers pledged to buy \$125m in stocks, equivalent to around 0.1% of America's GDP at the time (which would be about \$27bn today). The plan failed miserably. The purchases perhaps pushed out the stockmarket's collapse by a few days, but did not prevent it from imploding. The Dow Jones Industrial Average index of stocks fell by around 35% between early September 1929 and the end of the year. By its nadir in 1932, it was almost 90% lower.

Historians are divided over why one intervention worked but not the other. Perhaps the panic in 1929 was too far gone for private purchases to make a difference,



for instance. Other research suggests that the success of 1907 may have been overplayed, and that it was action by the Bank of France to calm domestic markets that spilled over to America and halted the mayhem. The debate suggests that identifying SBF's role in quelling chaos today may be just as hard. The trouble could simply continue, for a start. Indeed, on July 5th Voyager filed for bankruptcy.

A cynic might point out that SBF might be striking deals with other firms not because he wants to rescue the industry, but because he has spotted an opportunity to snap up some of his competitors' operations for pennies on the dollar. Some of these attempts may not succeed—Voyager owed Alameda \$75m when it went under—but others could. On July 1st Zac Prince, BlockFi's chief executive, said that its credit line from FTX had been increased to \$400m, and included an option to acquire BlockFi for up to \$240m. That looks like a bargain compared with the valuation of \$5bn that BlockFi was reportedly seeking during a fundraising round last year.

Even if SBF is not attempting to save crypto, though, history remains relevant. The panic of 1907 was a proximate reason for the creation of the Federal Reserve and the beginnings of the progressive taxation of income in America, as well as an expansion of antitrust law. Instead of being hailed as a hero, Morgan senior became the focal point for concerns that power was too concentrated in the hands of a small number of financiers.

Now, too, there is a possibility that a crash leads to more stringent oversight, particularly if the volatility in digital assets spills over to other markets, galvanising regulators. Boosters may see a J.P. Morgan in Sam Bankman-Fried and FTX. They might come to regret needing one.

▶ **P**row Group, once controlled a vast array of assets from mining and property to banking and insurance. Over the years his network built up huge debts, which quickly turned into financial losses after he was abducted. The Chinese state was forced to take over his bank, Baoshang Bank, in 2019 in order to prevent spillovers to the wider system. Several other institutions were also eventually bailed out or seized in what posed one of the biggest threats to China's financial system in years.

Once-hidden risks such as these are now popping up in other corners. Poor

oversight of smaller lenders has led to an accumulation of bad debt. In many cases tycoons such as Mr Xiao have been allowed to control banks and use them to lend to their own ventures, or to friends.

Central auditors recently discovered that a handful of small banks had understated their bad debts by a total of more than 170bn yuan (\$25bn). The central bank has said there are more than 300 high-risk institutions in the country. All this is starting to test public trust in the thousands of small lenders. Bank runs are occurring more frequently. In May depositors at sev-

eral rural banks in Henan province discovered they could no longer withdraw billions of dollars in funds, leading to protests in the provincial capital of Zhengzhou. The banks are linked to a property tycoon.

Covid-19 is making the problems worse. Lockdowns are expected to create a new wave of troubled loans worth 1.1trn yuan this year alone. Adam Liu of the National University of Singapore recently noted that a "systematic central bail-out is increasingly foreseeable". Political intrigue can be contained in a closed court. But the financial spillovers are harder to keep secret. ■

Corporate debt in America

Bills, bills, bills

WASHINGTON, DC

As interest rates climb and the economy cools, can firms pay their debts?

WELOCOME TO THE American corporate-debt market of 2022. Often the only risky bonds that are being issued are the legacy debts of a now ancient-seeming time—when interest rates were low and a recession was unthinkable. Elsewhere, the high-yield market has almost ground to a halt. A paltry \$83bn of risky debt has been issued so far in 2022, 75% less than in the same period last year.

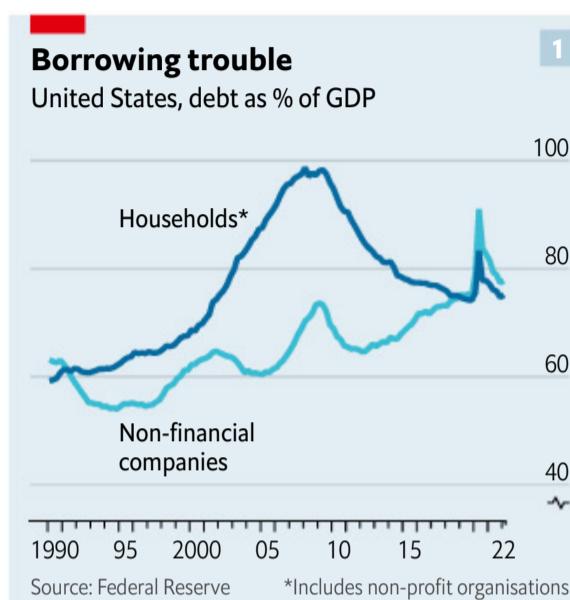
A sharp rise in interest rates this year has cooled credit markets, wrong-footed investors and complicated bankers' lives. In January Bank of America, Credit Suisse, Goldman Sachs and a handful of other lenders agreed to finance a \$15bn deal for two private-equity firms to buy Citrix, a software firm. They promised to issue the riskiest \$4bn of that debt at a maximum interest rate of 9%. At the time, the average yield on bonds with a credit rating of CCC, a speculative grade, was around 8%.

The Citrix deal is expected to close this month. But the yield on CCC-rated bonds has soared above 14%. Should the bankers be unable to sell the debt below the interest-rate cap they will be on the hook for the difference. "If the market is anything like it is today, they are going to lose hundreds of millions—and potentially a billion—dollars on this deal alone," says Roberta Goss of Pretrium, a debt-investment manager.

Such potential losses offer a glimpse of the impact that higher rates are having on company borrowing in America. Bankers stand to make losses on the \$80bn of buy-out financing they have agreed to facilitate for deals that are yet to close. That will weigh both on their profits, and their willingness to lend.

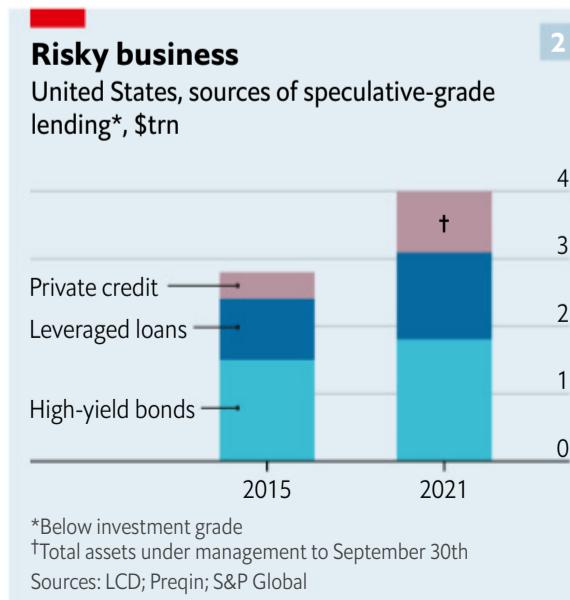
Companies are also going to suffer; the only question is how much. A steady fall in interest rates over the past 30 years encouraged firms to borrow record amounts. Now the cost of servicing and refinancing that debt is climbing, profits are being dented by rising costs and inventories are piling up at some firms as demand slows. Does a corporate-debt meltdown loom?

America's last big debt crisis, in 2007-09, was in housing. The stock of household debt relative to GDP had jumped as lenders aggressively issued mortgages and property prices soared. When interest rates rose, borrowers began to default. Some 3m households were eventually foreclosed on in 2008. This time it seems far less likely that households will be the borrowers



struggling. Lending standards have been tightened and debt levels have fallen. Household debt to GDP peaked at 99% in 2008 but has since tumbled to 75%. By contrast, corporate debt as a share of GDP, at around 80%, has been at or near record highs over the past two years (see chart 1).

To understand where problems might arise, it is important to look across the funding options available to firms and their owners. American companies owe around \$12.2trn. Some \$6.7trn of that is in bonds, mostly issued by large or mid-size public firms. Another \$1.2trn is loans from banks, and \$1.1trn is mortgage debt. The rest—over \$3trn—is financing from non-banks, made up mostly of either private credit, typically loans made for private-equity buy-outs, or "syndicated" loans, which originate in banks but are split into pieces and sold to investors, or sometimes bundled into other debt securities.



The bond market, as the biggest source of debt, might seem like the natural place to look for trouble. But firms that issued bonds are "relative winners" of the rise in interest rates, says Eric Beinstein of JPMorgan Chase, a bank, because most of them pay fixed coupons. Of the \$5trn-worth of corporate bonds issued since the start of 2020 some 87% pay fixed coupons. And those rates are at all-time lows. The average coupon on an investment-grade bond is just 3.6%—half the rate in the early 2000s and still below the level in 2019. That will insulate borrowers as rates rise.

These fixed-rate bonds are not due to mature soon, either. The high-yield end of the market—the roughly \$1.8trn owed by sub-investment-grade issuers, which tend to be smaller or heavily indebted companies—saw a wave of refinancing in 2020 and 2021. The result is that only a tiny \$73bn-worth of high-yield bonds are due to mature in 2022 and 2023. The peak of risky-bond maturation will not come until 2029.

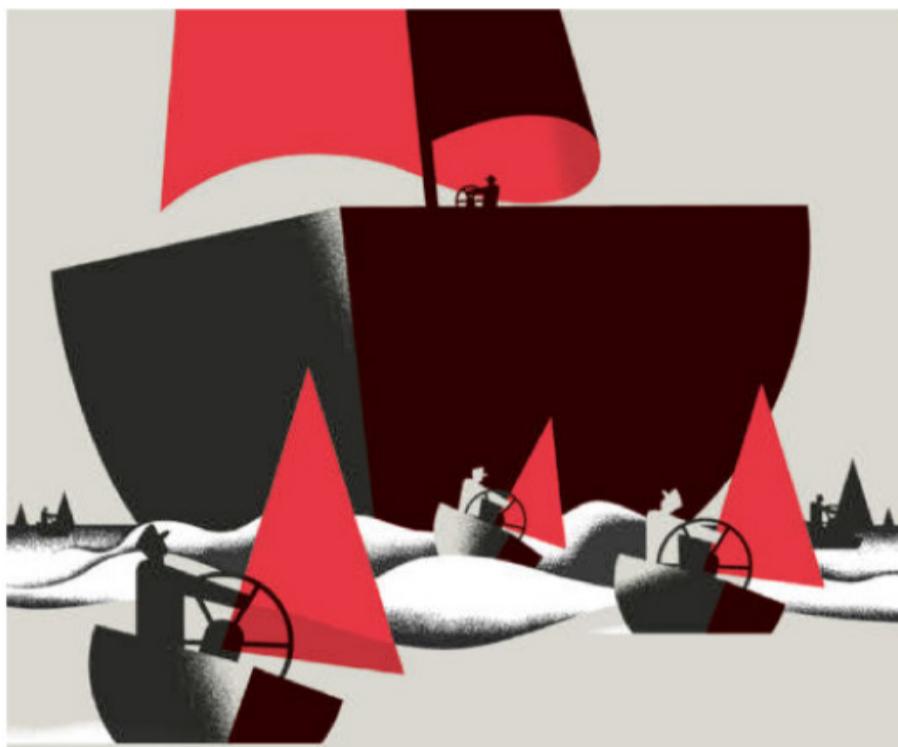
The impact of rising rates is likely to be much greater in the syndicated-loan and private-debt markets, which typically issue floating-rate debt (though some of that rate risk may have been hedged). They have also seen explosive growth. Between 2015 and 2021 the value of outstanding high-yield bonds rose by 15%. By contrast, leveraged loans, a risky subset of syndicated loans, grew by around 50%. Private credit has more than doubled in size (see chart 2).

John Kline of New Mountain, a private-credit firm, argues that the growing market share of private credit is a reflection of the fact that it offers issuers price certainty and is "much easier to deal with" than slicing up a bank loan through a syndication process, or issuing a bond. He points out that the barbarian days of private-equity shops leveraging firms at debt-to-total-value ratios of 85% are long gone. The average debt-to-value ratio for private-equity deals last year was closer to 50%.

Still, that ratio is less reassuring once you consider how far private-equity valuations might have fallen this year (the formal figures are revised infrequently, unlike public-market valuations). And with growth seems to have come fresh risk. Compared with the earnings of the firms they bought, debt levels look much higher: equal to an average of six times gross operating profit, a little higher than the record set in 2019 or in any of the past 20 years. "Whenever a market grows quickly, there can be a sort of reckoning if the environment changes," says Mr Beinstein. The challenge, he adds, is getting hold of any details or data on private deals. In the bright lights of public markets it is easy enough to find evidence suggesting that companies do not face an imminent crisis. The problem is that a chunk of the debt lurks in the shadows. ■

Free exchange | Levelling down

Not every central bank is behind the curve. The third in our series on the central-bank pivot



IN AMERICA AND Europe, central banks turned only recently from encouraging economic recovery to battling stubborn inflation. In some emerging markets this shift began much earlier. Brazil's central bank raised interest rates by three-quarters of a percentage point back in March 2021, 15 months before the Federal Reserve did the same. It foresaw that fiscal stimulus in the rich world raised the risk of inflation, which would upset financial markets and complicate life for emerging economies. The governor of Russia's central bank, Elvira Nabiullina, warned over a year ago that the prospect of sustained inflation was likelier "than perceived at first glance". The pandemic had changed spending patterns, she pointed out. No one knew if the shift would last. But that very uncertainty was discouraging firms from investing to meet demand.

These kinds of comments look prudent and prescient in hindsight. Indeed, with some notable exceptions, central banks in emerging markets have won increased respect in recent years. Their monetary-policy frameworks have improved, according to a new index (based on 225 criteria) developed by the IMF. Their frameworks are more coherent (their targets serve sensible objectives), transparent (they say what they are doing) and consistent (they do what they say). According to calculations by the World Bank, expectations of inflation in emerging markets in 2005-18 were about as well-anchored as they had been in rich countries in 1990-2004. Inflation also became less sensitive to falls in the exchange rate. Your columnist remembers a sign outside a café in the Malaysian state of Penang in 2015. "Don't worry!" it said. "As our ringgit falls, coffee price remains the same."

More people expected emerging markets to succeed in their fight against inflation, which in turn made success more likely. This enhanced credibility raised enticing possibilities. Perhaps their central banks, like those in the rich world, would not need to worry about each depreciation and every inflation spike. If so, perhaps they could pay less slavish attention to two forces that had bedevilled them in the past: namely, the global price of capital, which is dictated by the Fed, and that of commodities.

When the Fed tightens monetary policy, trouble has often followed for emerging markets. In 2013, for example, Ben Bernanke's talk about reducing (or tapering) the pace of the Fed's bond-buying

sparked the "taper tantrum", a big sell-off in Brazil, India, Indonesia, South Africa and Turkey. Things are different in the rich world. When the Fed tightens, central banks in Britain, the euro area and Japan do not feel obliged to raise interest rates. Their currencies may fall. But unless these depreciations look likely to raise inflation persistently above their targets, they are ignored. Likewise, when the price of oil goes up, so does the cost of living. Yet consumer prices need not go on rising, unless people demand higher wages in response, putting further upward pressure on prices in a self-reinforcing spiral. In both cases, central banks can ignore a one-time increase in prices. The more securely inflation expectations are anchored, the more leeway central banks enjoy.

The past year has subjected emerging-market anchors to one severe test after another. Global interest rates have risen in anticipation of a faster pace of tightening in America, as the Fed wrestles with a credibility test of its own. And emerging markets have suffered remorseless increases in the prices of food and fuel, which make up more of their consumers' shopping bills than they do in the rich world. According to the World Bank, food and energy account for over 60% of South Asia's consumer-price index.

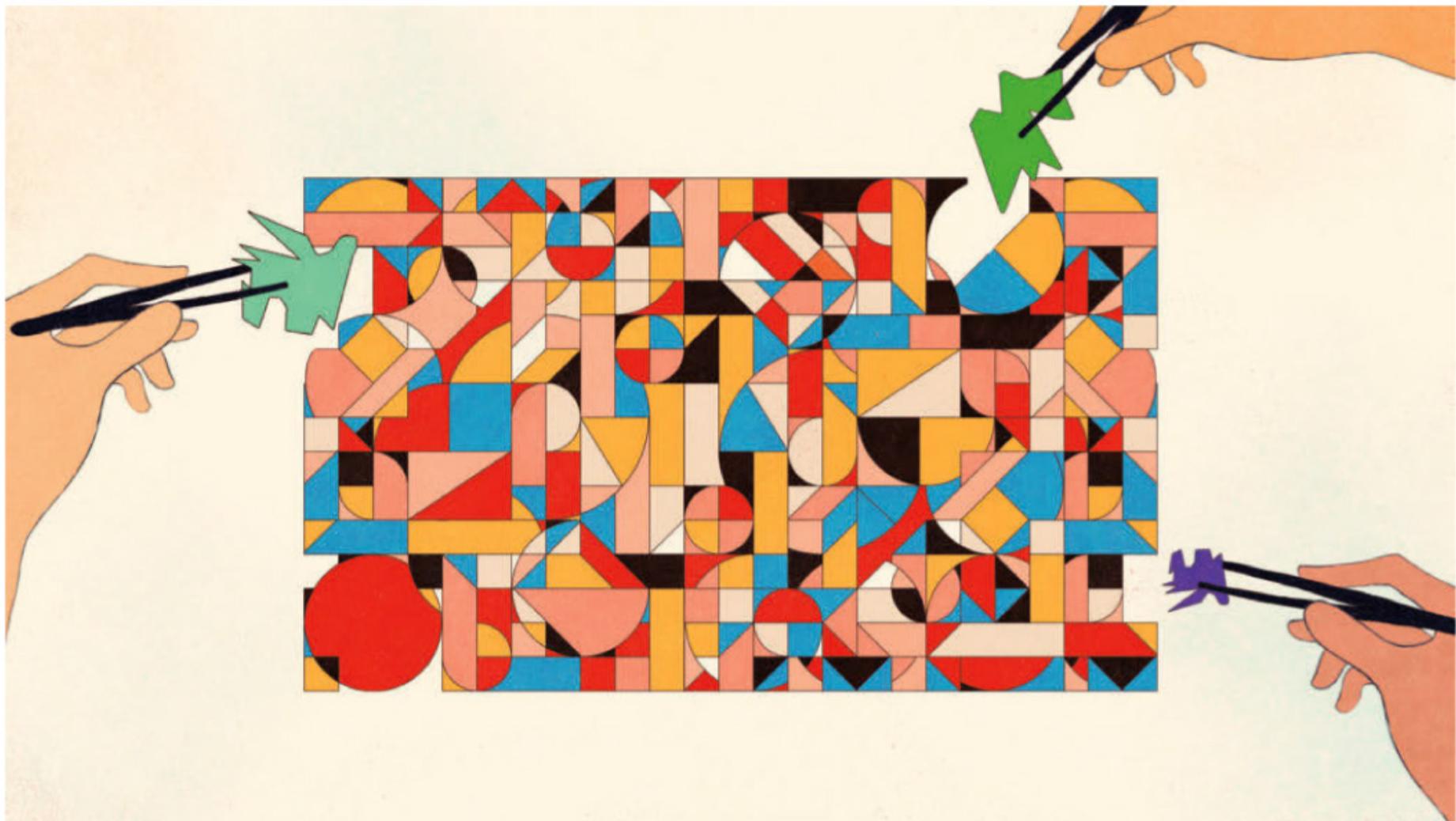
Some central banks have been able to "look through" the rise in food and fuel prices. One example is Thailand's central bank, which has done nothing even as inflation has surged. It insists that "medium-term inflation expectations remain anchored," and it wants to make sure the economic recovery gains traction. But other emerging markets, including Mexico and Brazil, felt compelled to raise interest rates forcefully long before their economies fully recovered. They were quicker to respond than their counterparts in mature economies, point out Lucila Bonilla and Gabriel Sterne of Oxford Economics. But "that's partly because they had to be." Much of their tightening had to keep up with a worrying rise in inflation expectations. They have stayed ahead of the curve. But the curve has been brutally steep.

The Fed has been a "somewhat less dominant" force in this emerging-market tightening cycle than in the past, note Andrew Tilton and his colleagues at Goldman Sachs. Fears of a second taper tantrum have not been realised. One reason may be that a lot of footloose foreign capital had already left during the pandemic. Moreover, some of the countries that might otherwise be vulnerable to Fed tightening, especially those in Latin America, are also big commodity exporters that have benefited from higher prices for their wares, point out Ms Bonilla and Mr Sterne.

Following the leader

The Fed, however, is far from finished. And inflation, already rising in emerging markets, may become more sensitive to any falls in domestic currencies. "It's like adding combustible material to a fire," says David Lubin of Citigroup, a bank. A depreciation may not be enough to ignite inflation. But once it is already burning, a weaker exchange rate could make it hotter. A Malaysian café that is already revising its prices to keep up with costlier commodities may be more likely to factor in a weaker ringgit.

Much therefore depends on how far the Fed has to go to restore its anti-inflation credentials and contain price pressures in America. The harder the Fed must work to meet the test of its own credibility, the more trouble emerging markets will face. Their hawkish pivot began much earlier than in America, but it probably cannot end much sooner. This year has reminded emerging markets that for all their progress, they are not yet blessed with fully credible central banks. It has taught America the same lesson. ■



The new physics

Beyond the Standard Model

GENEVA

Ten years after the Higgs boson's discovery, what is next for fundamental physics?

I WAS ACTUALLY shaking," said Mitesh Patel, a particle physicist at Imperial College, London, as he describes the moment he saw the results. "I realised this was probably the most exciting thing I've done in my 20 years in particle physics."

Dr Patel is one of the leaders of LHCb, an experiment at CERN, in Geneva. CERN is the world's largest particle-physics laboratory, and the "LHC" bit of the experiment's name stands for "Large Hadron Collider", which is likewise the world's biggest particle accelerator. This machine, which collides packets of high-speed protons (examples of a type of subatomic particle called a hadron) was switched on again on July 5th, after a three-and-a-half-year upgrade, for what is known as "Run 3". In the interim Dr Patel and his colleagues have been crunching data collected from previous runs. It is the results of these crunchings that are giving him palpitations.

The LHCb team has spent the best part of a decade measuring how subatomic particles known as Λ mesons decay into lighter particles. Λ mesons come in many varieties, but all have a constituent called a

bottom antiquark. One way in which these mesons decay is by the transformation of the bottom antiquark into a so-called "strange" antiquark and a pair of leptons, a different class of fundamental particle that includes electrons and their more massive cousins, muons. According to the accepted rules of particle physics, such decays should yield as many muons as they do electrons. For the forces that govern them, there is no difference between the two, an idea called "lepton universality".

But that is not what the tallies counted by the LHCb showed. Instead, Dr Patel's team found that only 85 muons were emitted for every 100 electrons.

Physics wobbles

To the person in the street this may not sound a big deal. To a physicist it is practically an invitation to book a flight to Stockholm. A violation of lepton universality would be a crack in what is called the Standard Model, and therefore Nobel prizewinning stuff. This model has, with assistance from the general theory of relativity developed earlier by Albert Einstein, held phys-

ics together for around half a century.

Nor is the Λ meson anomaly, as it is known, the only recent result that might attract the attention of the prize-awards at Sweden's Royal Academy of Science. Two other Standard Model-violating results, from CERN's American frenemy Fermilab, have also been published recently. After a long period in the doldrums, the sails of the ship of physics are rustling in the breeze. The LHC's latest run may provide the wind needed to fill them properly.

Fermilab's contributions to the anomaly list, announced respectively in the Aprils of 2021 and 2022, are that the magnetic properties of muons wobble around at frequencies which do not match predictions; and that the mass of another Standard Model particle, the w boson, which carries the weak nuclear force that is responsible for a form of radioactivity called beta decay, seems larger than predicted.

Once is happenstance. Twice is coincidence. The third time, as Ian Fleming opined through the mouth of Auric Goldfinger, does look like enemy action. None of these results, it must be said, yet quite reaches the gold standard of confirmation, known as 5-sigma (ie, five standard deviations from the mean) which particle physicists normally demand before they will call something a "discovery". Five-sigma equates to a probability of around one in a million that something of interest in fact happened by chance. But all of them are close enough to this threshold to be eye-catching (Dr Patel's, for example, is 3.1-►

► sigma), and thus worthy of further work to attempt to reach the magic value of five.

If they do survive scrutiny, these three findings may go into future textbooks as the keys which unlocked the door marked "Physics beyond the Standard Model". Practitioners have been battering on this portal since the Model was put together in the 1960s and 1970s, to no avail. Their ultimate goal is to unify the Standard Model and general relativity into an overarching "theory of everything". That is some way off. But there was until recently a widespread belief that lurking behind this door would be a predicted step on the journey, called Supersymmetry. That is not what these results suggest.

Un peu d'histoire

The Standard Model describes two broad classes of particles—fermions and bosons. Fermions are the stuff of matter. Bosons carry the forces which hold that stuff together, or sometimes push it apart.

Fermions divide into leptons, quarks and their antimatter equivalents, which are identical to normal matter but with opposite electrical charges. Bosons include photons, which carry the electromagnetic force (and are the particles of light), the aforementioned w boson, the gluons that hold atomic nuclei together via a second, strong nuclear force, and the Higgs. The discovery of this, in 2012, using the then recently opened LHC, was a triumph of scientific prediction, the particle having been described theoretically by the eponymous Peter Higgs in 1964. The field associated with it confers mass on the other particles, and ties the Standard Model together.

But, though it is one of the most tested, most successful scientific ideas of all time, the Standard Model is not a complete description of the universe. Not only does it fail to account for gravity (this is the purview of general relativity), it cannot explain why matter is more abundant than antimatter. Neither does it say anything about two other important but obscure phenomena: dark matter and dark energy.

Dark matter is stuff that interacts with gravity but not electromagnetism, so can be felt, but not seen. Its abundance can be calculated from its effects on visible matter—than which, the sums suggest, it is six times more plentiful. And, though it is invisible, its influence is profound. Galaxies, for example, are held together largely by the gravitational fields of their dark matter.

Dark energy is even weirder. Belief in it depends on calculations about the speed at which the universe is expanding, for dark energy is the stuff that propels this expansion. And, to show how little physicists really understand the cosmos, it is worth noting that, together, dark matter and dark energy make up more than 95% of it, and the familiar stuff of stars, planets and hu-

man beings themselves less than 5%.

Nor is the Model itself quite as elegant as it is sometimes made out to be. It is, rather, a thing of sealing-wax and string, held together by arbitrary mathematical assumptions. Until recently, this was not a cause of great worry. Supersymmetry, people thought, would ride to the rescue. Susy, as this theory is known for short, got rid of the arbitrary assumptions by predicting a set of heavier (and as-yet-unseen) particles, a "superpartner" for each known fermion and boson. These "sparticles" would be too massive for older, less powerful, machines to find (mass being, as per Einstein's $E=mc^2$, an embodiment of energy) but not, it was hoped, for the LHC. It was Susy's smiling face that people expected to greet them when the "physics beyond the Standard Model" door eventually opened.

Run 2 of the LHC, however, found no evidence of sparticles. If Run 3 also fails to reveal Susy, some of her supporters will no doubt tweak the numbers to try to explain why. But there is now a whiff of desperation in the air about the theory, and it would be sensible to assume that even if Susy is not dead, she is missing in action. And that will leave physicists scrabbling around for a replacement.

The kit they have to conduct their search with is a yet-more-powerful version of the collider that found the Higgs boson a decade ago. Since the machine paused operations in December 2018, dozens of its superconducting magnets have been replaced with stronger ones and the injection system, which packs 120bn protons into bunches the size of a human hair and then accelerates them before they enter the LHC itself, has been upgraded. The new version of the machine will thus collide more protons, more often and at higher energies than previous incarnations.

The four experiments that sit around its 27km ring and analyse the results of those collisions have also been given a once-ov-

er. The LHCb detector in particular has been almost entirely rebuilt. According to Chris Parkes, a physicist from the University of Manchester who acts as the detector's spokesman, something like 90% of the sensitive elements which do the actual detecting have been changed.

Collisions happen so fast and abundantly within the experiments that software known as a trigger system is normally used to decide, quickly, which data to keep and which to delete. A new trigger system at LHCb will permit retention of data from almost all the 40m collisions occurring per second in the upgraded detector, so that more intelligent decisions can be made later about which to retain and analyse.

Flavours of the month

The first job will be to gather more data on the b meson anomaly, in search of that precious 5-sigma status. Theoreticians, meanwhile, have been busy devising ways to extend the Standard Model to try to explain those mesons' anomalous decays.

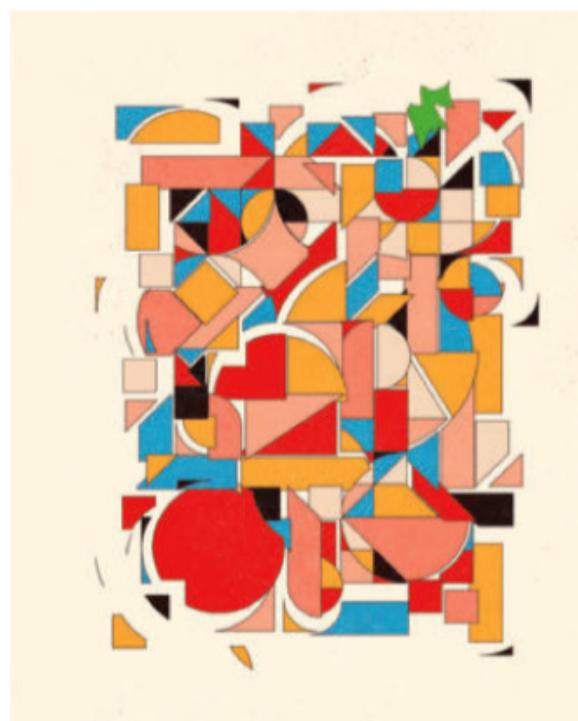
One approach starts with the idea of a fundamental particle's "flavour". This term was invented in 1971, by Murray Gell-Mann, an architect of the Standard Model, and his student Harald Fritzsch as they sat eating ice cream at a Baskin-Robbins store in Pasadena, California. They wanted a way to label the different types of quarks that had so far been found inside atomic nuclei. Up and down quarks are the constituents of protons and neutrons, but there are two further pairs (or "generations") of quarks of different flavours: charm and strange, and top and bottom (also known as truth and beauty). Each successive generation is heavier than the previous.

Leptons are similar. The lightest generation contains the electron; a second, heavier, generation, the muon; the third and heaviest, the tau. Each generation also sports an associated neutrino.

It is ingrained within the Standard Model that its fundamental forces—electromagnetic, weak nuclear and strong nuclear—do not distinguish between flavours. Photons, carriers of the electromagnetic force, interact with electrons, muons and taus in identical ways. Similarly, the gluons of the strong force bind with the same strength to all flavours of quark.

The b meson anomaly challenges this idea. "To me that looks like there's a picture developing where a lot of things are pointing in the same direction. To a beyond-the-Standard Model theorist, that's exciting," says Ben Allanach, a professor of theoretical physics at Cambridge University. "What it means is there could be additional interactions within the b meson, that's breaking it up with the wrong frequencies."

By "frequencies", Dr Allanach means the rates at which electrons and muons are emitted when b mesons decay. The hypo- ►



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► thetical new interaction could be what he and his colleagues call the flavour force—a fifth fundamental force of nature besides gravity and the three of the Standard Model. This would act more strongly on muons than it does on electrons. Like Standard Model forces, this force would have a particle associated with it, which they call the z' (pronounced "z prime") boson.

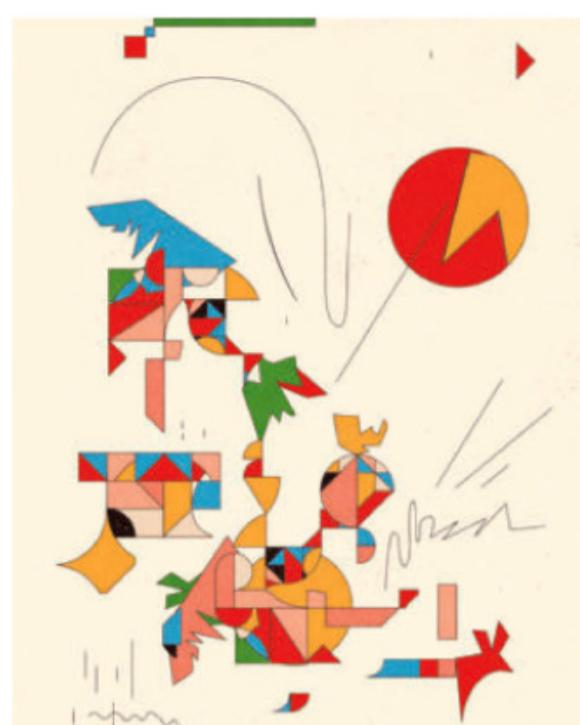
The idea of a force that discriminates between flavours is not in itself new—such theories have been invoked in the past to fill other gaps in the Standard Model. But in all previous versions the force-carrying particle was so heavy that no particle collider was or is powerful enough to create it. Theory suggests that Dr Allanach's particle, if it exists, should have a mass less than 8,000 times that of a proton. This may sound quite big but it puts it squarely in the sights of Run 3.

Others, though, have a different explanation for the b meson decay anomaly—a proposed new particle called a leptoquark. This theory says that, at a deeper level of nature, quarks and leptons are actually the same thing. What are seen as electrons, muons, top quarks, bottom quarks and so on are actually different faces of the same underlying entity. The leptoquark force that this theory posits would be able to transform quarks into leptons, and vice versa. Crucially, it would also interact at different strengths with the different generations of fermions. In interacting with this force, b mesons would therefore emit electrons and muons at different rates.

Unity is strength

Unifying quarks and leptons in this way could explain other things, too. One is why protons and electrons have exactly the same electric charges (though of opposite polarity), even though protons weigh more than 1,000 times as much as electrons do. It is this exact match which allows atoms to exist. The charges of the orbiting electrons are perfectly balanced by those of the protons in the nucleus, which get them from their constituent quarks. "But if these two objects are the same thing, you could understand it," says Gino Isidori of the University of Zurich, who is a leading proponent of the leptoquark hypothesis.

Looking for exchanges of leptoquarks between known particles could be possible during Run 3. The leptoquark itself would be too heavy for the collider to produce, says Dr Isidori. But "if we are lucky with the Run 3, we will start to see a more consistent series of deviations in the high-energy collisions". That would be an unambiguous sign of the exchange of leptoquarks. Collisions of protons, for example, can (rarely but predictably) give rise to pairs of tau particles. If the number of taus appearing in Run 3 begins to grow, compared with the predictions of the Standard Model, as the



energy is cranked up, Dr Isidori says "This would be a striking signal."

Both the z' particle and the leptoquark could also go some way towards explaining the discrepancy discovered by Fermilab between its measurement of the mass of the w boson and the mass that the Standard Model predicts. This result will need to be checked further by independent experiments but, assuming it stands, Dr Allanach says, "One of the things that can affect the prediction of [the w boson] is a z' of exactly the kind that we've introduced."

The Standard Model does not predict the w boson's mass directly. Instead, it predicts the ratio of its mass to that of a z boson, the other weak-nuclear-force carrier. The z' boson of the flavour force would interact with the z boson of the weak nuclear force and thus alter the predicted ratio. Put the z boson's mass, which has been measured experimentally, into the altered ratio, says Dr Allanach, and out comes a w boson mass prediction that is much closer to the Fermilab measurement.

The third Model-breaking anomaly came from an experiment called Muon g-2. Like other leptons, muons contain a tiny internal magnet. When placed in a strong magnetic field, the direction in which this magnet points wobbles around like the axis of a spinning top.

The strength of the magnet—a number known as the g-factor—determines the size of this wobble. The g-factor, and therefore the amount of wobble, is also influenced by a muon's interactions with any particles that briefly pop into and out of existence around it from the vacuum of space. (This happens because of the uncertainties inherent in quantum mechanics.) The Standard Model can take all of these factors and all known particles and forces into account to make a precise prediction of how much a muon's internal magnet should be wobbling. The measurements from Fermilab, which tallied the motions

of 8bn muons, showed a deviation from the Standard Model's prediction. The result had a statistical significance of 4.2-sigma, about a one in 40,000 chance that the result is a fluke.

A tweaked version of the flavour force could ride to the rescue here, as well. This time the z' boson would have to be lighter than the one used to explain the b meson anomaly—only a thousand times more massive than a proton—but it would also interact preferentially with muons. Muons might randomly emit and reabsorb these lighter z' bosons, and that would change the frequency of their magnetic wobbles enough to match the data seen at Fermilab.

As well as investigating these anomalies, Run 3 will poke and prod all the known fundamental particles in ever more detail. "The Standard Model makes very clear predictions about how the Higgs boson should interact with different particles," says Dr Parkes. "If you were to see some deviation of how the Higgs boson is interacting with particles in nature, and compare that with the Standard Model and see some differences, that will be another way of taking you on a journey beyond. But even at the moment, it's telling you about the confidence you have in our current theory. It's telling you about the level at which that theory is a reliable description of the fundamental particles and forces in nature."

Tip top

Physicists have other things, too, in their sights for Run 3. One is the top quark, the heaviest of the lot, of which only a few hundred had been made before the LHC was built. Two of CERN's detectors—ATLAS and CMS—have recently announced hints of excesses in the production of this and other heavy fermions, notably bottom quarks and tau leptons. These things will all need to be investigated.

What physics no longer has, though, is an all-embracing model of the future to try to fit everything into. Perhaps, just perhaps, Susy will still show up at the party as the collisions get more energetic—possibly she will be wearing one of the disguises that those who have not yet abandoned her are trying to dress her up in. But don't bet on it. For the moment, fundamental physics is back a pragmatic phase, gathering more pieces of the jigsaw in the hope of fitting them together later. Physicists have by no means abandoned the lofty goal of unifying forces and creating a grand theory that encompasses everything. But they need a new map to get them there. ■

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Art and aristocracy

Hearts of stone

MILAN

The Torlonia Marbles, a unique collection of classical statuary, have been hidden from public view for decades. Until now

A BOATMAN MANOEUVRES his tiny vessel alongside a towering cargo ship. In a butcher's shop bedecked with disembowelled animals, an incongruously elegant lady sits at the counter, yanking a dead goose towards her by the neck. Elsewhere, two impish characters marvel at their discovery: that the sleeping figure beneath a sheet they have lifted is a hermaphrodite.

The people in these scenes lived—if they lived at all—around 2,000 years ago. But they have survived, trapped in marble, alongside Roman emperors and the heroes and deities of mythology in the world's largest private collection of classical statuary. In the 18th and 19th centuries the princely Torlonia family acquired well over 1,000 works. Some are considered essential to an understanding of Roman art.

Yet they have been almost entirely hidden from view since the second world war. Only now, with difficulty, are some being edged into the light: after decades of occasionally rancorous negotiation between the family and the Italian state, 96 marbles and a bronze are on display in Milan. The story of the Torlonia Marbles shows how

the art the public sees can depend on politics and caprice (or, in some cases, crime). “Salvator Mundi”, ascribed to Leonardo da Vinci, vanished after being sold for a world-record \$450m in 2017. Johannes Vermeer’s “The Concert”, valued at \$250m, has not been seen since it was stolen from a museum in Boston in 1990.

The Torlonia Marbles were never particularly accessible. In 1875 Prince Alessandro Torlonia created a museum that came to host 620 pieces (several hundred others have remained ever since at Villa Albani, the family's residence in Rome, where they can be viewed by appointment). But even illustrious travellers struggled to get into

the museum. The prince and, until very recently, his descendants seem to have regarded the collection as personal property—a stance that outraged critics and connoisseurs who saw it as part of Italy's cultural heritage.

The museum closed during the second world war and became even more impenetrable. Even a senior government official had to disguise himself as a workman to get a peek at such celebrated works as the “Girl from Vulci”, whose smile, as enigmatic as the Mona Lisa's, was known almost entirely from photographs. In 1976 the busts, statues and sarcophaguses were moved into storage so the building could be split into flats. The marbles continued to accumulate dust and grime for over 40 years, much to the frustration of art lovers.

At different times, government representatives offered to buy—and threatened to confiscate—the contents of the former museum from the head of the family, a descendant and namesake of the original Prince Alessandro. Things may have been further complicated by an inheritance battle in the Torlonia clan. Before the modern-day Alessandro died in 2017, he was sued by his oldest son, Carlo, who has since brought a suit against his siblings. He has claimed, and they have denied, that they tried selling the former museum's contents to the Getty Museum in America.

Still, in 2014 the marbles from the museum were entrusted to a foundation headed by one of the younger Torlonias. And the foundation concluded a deal with the cul-

→ Also in this section

80 Gaming the haj

81 Chinese challah

81 Chris Patten on Hong Kong

82 Higgs and his boson

83 Back Story: Zelensky's lives

ture and heritage ministry for the display of part of the collection.

It first went on show in Rome in 2020. Writing in the *American Journal of Archaeology*, Elizabeth Bartman, an art scholar, hailed the exhibition as “one of the most significant museological contributions to the study of ancient art in our time”. But the gallery was cramped, and a covid-19 lockdown meant few could admire the treasures. The new show runs until mid-September in the Palazzo Brentani, part of the Gallerie d’Italia in Milan.

“Here [the exhibits] get all the air and space they need to flourish,” says the director of the Torlonia Foundation, Carlotta Loverini Botta. She sweeps a hand around the central hall in which the busts, mostly of Roman emperors, stand on pedestals encircling the sole bronze: a life-size figure of the imperial general, Germanicus.

Among the most historically valuable pieces is an imposing statue—a Roman copy of a Greek bronze—generally believed to portray Hestia, or Vesta, the goddess of the hearth. Another is a bust, known as the “Old Man from Otricoli”, which unblinkingly depicts the aged features of a patrician from the first century BC. Perhaps the most singular work is a sculpture of a resting goat. It was restored in the 17th century by the great Baroque sculptor Gian Lorenzo Bernini, who gave the animal a new head and a winningly human expression.

The boatman and the butcher feature in separate bas-reliefs, one of which offers a detailed view of Portus, the artificial harbour that served ancient Rome. As with most Roman sculptures, it was originally painted. Cleaning brought to light the colours used for two of the relief’s features: an intense scarlet for the flame that bursts from a lighthouse and a light blue for sea.

Another discovery came during preparatory research. Two outstanding pieces show a nymph gracefully removing a sandal and a satyr with a percussion instrument. Juxtaposed, they form a couple in which the satyr appears to be inviting the nymph to join him in a dance—a scene that was apparently a common motif since it also figures on two coins found in Asia Minor. Whether the two sculptures were a pair is uncertain. The research disclosed that they had been excavated in the same location, making it highly likely they were.

After Milan, an international tour is planned. But that too is the subject of painstaking and protracted discussion. And a new permanent home for the Torlonias’ extraordinary collection has yet to be chosen. Salvatore Settis, one of the show’s curators, says the Palazzo Silvestri-Rivaldi near the Forum, now being renovated at public expense, would be ideal. It even has a gallery adorned with 16th-century frescoes of the Roman emperors. “Nothing could be more appropriate,” he says. ■

Gaming the haj

To be a pilgrim

A role-play game allows everyone to imagine one of the world’s great journeys

FOR MUSLIMS making the *haj* pilgrimage, which this year runs from July 7th to July 12th, the first leg is easy enough: hop on a plane to the dedicated terminal in Jeddah. After that, they catch a bus or taxi for the last 85km to Mecca. But for generations of pilgrims the journey was difficult, expensive and fraught with dangers. The trek often took months. Not everyone made it.

Tyler Kynn, a teacher of Islamic history now at Central Connecticut State University, was looking for a way to bring the past to life when he remembered a computer game from his youth. “The Oregon Trail”, first released in 1971, introduced a generation of American schoolchildren to frontier life in the mid-19th century. Revolving around a band of settlers travelling in covered wagons from Missouri to Oregon, it forced players to think about finding supplies and water, conducting trade and simply staying alive. The masses of American millennials who played the game will remember the many, many ways to die on the trip.

Working with a friend, and using travelogues by 17th-century Ottoman pilgrims, Mr Kynn developed “The Haj Trail”. It is a browser-based strategy game crammed with historical detail. Players can choose the role of one of five characters, from an Ottoman princess (the easiest) to an impoverished widow (the hardest). Travelling companions provide assistance, as do soldiers for hire and

animals encountered along the way, such as the White Gyrfalcon (pictured). As in “The Oregon Trail”, the challenges are many. Bandits steal pilgrims’ food, money and goods; water purity is unreliable; bad trades can cause bankruptcy.

Despite the sometimes frustrating difficulty of the game, Mr Kynn’s undergraduates were soon hooked. Gameplay made 17th-century travel more accessible than “giving them a book and saying: read these 100 pages of an account where the guy says ‘I get robbed here.’” Teachers from as far afield as Malaysia and Anatolia have stumbled on the game online and used it in their classes. Mr Kynn’s goal is to make the role-play widely available for educational use at no cost.

The appeal arises not from fancy graphics but from the game’s multi-layered texture. At each stop, players have the chance to explore local shrines. They can gossip in coffeehouses, picking up valuable tips on the route ahead, or go to the local market to barter goods. They frequently confront trade-offs in time, risks and supplies.

This year Saudi Arabia has limited the number of people allowed to make the real *haj* pilgrimage to just 1m, far below the pre-pandemic peak of 2.5m. And for non-Muslims interested in the Islamic world, the *haj* will forever be forbidden. “The Haj Trail” offers a way to experience some of the magic, and dangers, of one of the world’s greatest journeys, albeit from the comfort of home.



With a little help from your friends



World in a dish

The braids of a loaf

NEW YORK

A Chinese-flavoured challah tells a timeless human story

ON A FRIDAY afternoon, in the Platonic ideal of an Ashkenazi Jewish kitchen, a chicken roasts in the oven as a *challah* bakes beside it. Technically, *challah* refers to any bread that has been ritually sanctified, but most people know it as a sweet, leavened, egg-enriched braided loaf. It is a cousin to brioche, but because it is often served with meat, it eschews the French version's butter (Jewish dietary law forbids the consumption of milk and meat at the same meal). The result is better for the omission, lighter and cleaner-tasting.

Challah differs from baker to baker, but even so, Molly Yeh's is unusual. Ms Yeh, a cookery writer and television presenter, is Jewish and Chinese. So is her *challah*. After the dough rises, it gets divided into three logs, which are flattened, brushed with sesame oil and sprinkled with spring onions, salt, chilli flakes and pepper, before being rolled up and braided. The flavours come from *cong you bing*, an unleavened fried Chinese bread, known in the West as a scallion pancake.

Ms Yeh's bread testifies to American Jews' long-standing affection for Chinese cuisine. An old joke captures this affinity. If it is now the year 5782 in the Jewish calendar, and Chinese civilisation is reputedly 5,000 years old, what on Earth did Jews eat for nearly eight centuries?

In part, the link between the two American minorities is sociological. Neither group is Christian, and both have felt themselves to be outside the American mainstream. Jews were long comfortable in Chinese restaurants in ways that anti-

Semitism prevented elsewhere. Partly the connection is spatial: the Lower East Side, once home to hundreds of thousands of Jewish immigrants, abuts Manhattan's Chinatown. And part of it is just good sense: Chinese food is delicious.

Traditionally, *challah* is eaten at the Shabbat table. Ms Yeh's is best consumed straight from the oven—the better to jump up and down at how deliciously the classic Chinese pairing of sesame and spring onions cuts through the *challah*'s sweetness. It makes a delightfully non-traditional accompaniment to Yemenite-Jewish chicken soup, itself spiced with turmeric and cardamom and served with *zhoug*, a dip typically made with chillies and herbs.

A Friday-night purist might proclaim Ms Yeh's *challah* to be inauthentic and so unpalatable; ditto the idea of serving Chinese-seasoned eastern European bread with a dish from Yemen. This is a spiritually impoverished way to approach meals. No sensible diner, and no real food-lover, should fret over ossified customs and categories or reject innovation. Better to see, in the complementary bread and main course, the compression of a natural phenomenon that spans human history.

Traders brought chillies from the New World to Yemen. Spring onions found their way into Ms Yeh's bread because a mix of drive, luck, opportunity and tragedy brought European Jews and Chinese people into proximity in America. People move, and food reflects the mixing and adaptations that ensue. The world is richer for it, and so is the dinner table. ■

Britain and Hong Kong

Perfidious Albion

The Hong Kong Diaries. By Chris Patten.
Allen Lane; 560 pages; £30

IT IS APRIL 1st 1997, just three months before Britain is due to hand Hong Kong back to China. As they prepare to leave, the territory's colonial rulers go through their files to determine which documents to send back to London and which to destroy. Chris Patten, the governor, notes in his diary a "fascinating" find: decade-old telegrams that showed what he and many others had always suspected. A few years before he took over, a British-backed effort to consult people in Hong Kong about introducing more democracy had been manipulated to produce a result that China would like and to justify delaying reform. "I suppose that I've always hoped that it wasn't true," Lord Patten reflects.

During his five years as Britain's last chief in Hong Kong, there is little about the thuggery of China's Communist rulers that appears to surprise Lord Patten, a former senior politician of the then-ruling Conservative Party who had got the job after losing his parliamentary seat in a general election. In his newly published book, "The Hong Kong Diaries", his abhorrence of the Communists' politics and of their disdain for Hong Kong's freedoms is frequently and vividly expressed. Negotiating with Chinese officials, he says, is like "trying to shake hands with a bacon slicer".

In a postscript, Lord Patten describes China's recent moves to "destroy the autonomy and way of life" of Hong Kong, including the imposition in 2020 of a draconian national-security law and sweeping arrests and jailings of pro-democracy activists who were involved in an explosion of unrest a year earlier. He calls this "the destruction of one of the freest societies in Asia by communist tyranny". Lord Patten says he had "never believed that the Communist Party would hesitate for a second to throttle [Hong Kong] if they thought this was important to the party's continued control of the country". But in his diary the unwillingness of some British officials to stand up to China appears to prey on his mind as much as the party's behaviour.

Lord Patten notes Britain's decision not ➤

 Listen to the podcast

To hear our interview with Chris Patten, go to economist.com/hk-pod



Somewhere towards the end

► to demand an “arbitration mechanism” to resolve any disputes with China over implementation of the Joint Declaration (the two countries’ treaty of 1984 concerning Hong Kong’s future). British officials argued this was unnecessary because the development of democracy would help protect Hong Kong. But the “phoney” effort to consult the public about this, which purported to show that Hong Kongers wanted to put off the introduction of direct elections to the legislature, resulted in a big delay. Lord Patten says Britain made a “strategic error” in the mid-1980s by seeming “to concede the point that everything we did before 1997 had to converge with whatever the Chinese wanted to do afterwards”.

The postscript says the absence of an arbitration mechanism was among the factors that “sabotaged Hong Kong’s chances”. But Lord Patten does not make clear whether he thinks that an earlier, more assertive approach by Britain to the introduction of democracy in Hong Kong would have helped to avoid the tumult of 2019 and the subsequent clampdown. Under Chinese rule, the lack of democracy has been a catalyst of Hong Kong’s large-scale protest movements. But the party was never likely to conclude—as Lord Patten tried to persuade Chinese officials—that more democracy could help ensure stability. Especially since the Tiananmen Square upheaval of 1989, it has viewed political liberalisation as a threat to its survival.

Lord Patten spent much of his time in Hong Kong struggling against British officials and members of the local elite who believed it was not worth trying to push China to accept more democracy in pre-handover Hong Kong—much less expanding it without China’s approval. Some of the most riveting detail in this rich volume relates to these tensions.

He names several of the senior bureaucrats and businessmen who were enemies

of his political reforms and revels in pointing out their cravenness and hypocrisy (the party-praising, patriotic-sounding locals who criticise him often have foreign passports). But he reserves particular contempt for Sir Percy Cradock, a British diplomat who had retired by the time Lord Patten took up his post in 1992. He says Cradock’s “cloven hoof” was not difficult to spot on those “smoking gun” telegrams uncovered shortly before the handover. “But even at my age I’m capable of being shocked.”

The author’s entertaining language brings these diaries to life. They were clearly written (or dictated) for a wide audience as well as his close circle. The escapades of his Norfolk terriers, Whisky and Soda, are as keenly observed as the machinations of his critics. As he sails off on the Royal yacht, *Britannia*, after a handover ceremony attended by the “coelacanths of Leninism” (who had given up on the idea of outcompeting *Britannia* by arriving in their own vast boat), his enemies are still on his tail: Chinese intelligence ships that “must have been mystified by the amount of ‘face’ being given to the departed colonial governor”. ■

Peter Higgs and his boson

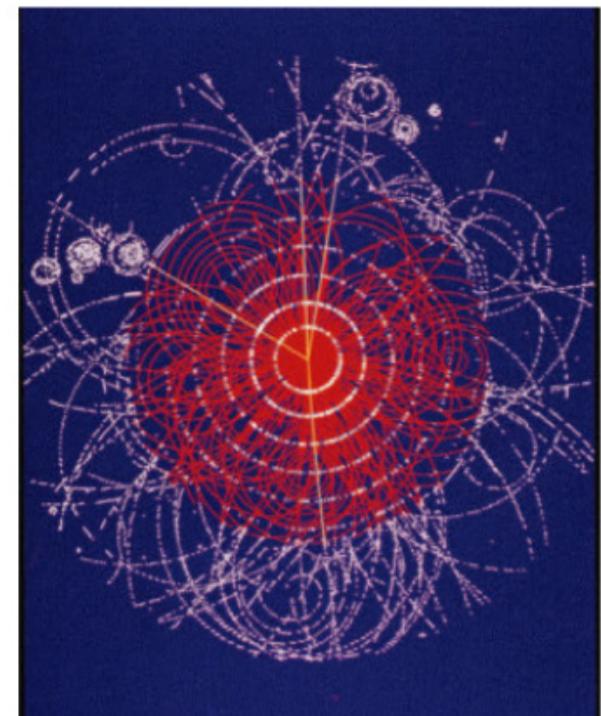
Hide and seek

Elusive. By Frank Close. Basic Books; 304 pages; \$26. Allen Lane; £25

ON THE MORNING of October 8th 2013, no one could find Peter Higgs. The Royal Swedish Academy of Sciences had been trying to get hold of him on the phone for hours—its custom being to try to speak to the winners of a Nobel prize in the moments before making the decision known to the world. Despite delaying proceedings that day until past lunchtime, the Swedes could not locate Mr Higgs and had to press on with the announcement of that year’s physics prize without his knowledge.

Frank Close’s new book tells Mr Higgs’s side of that story. He had spent a year preparing to disappear, it turns out. First, he threw journalists off the scent—they thought he had planned a jaunt to the Scottish Highlands that day. On the morning itself Mr Higgs discreetly left his flat in Edinburgh, took a five-kilometre bus ride to Leith and vanished for a few hours.

It is an apt anecdote with which to open a book called “*Elusive*”. “There are some who revel in fame and public adulation,” writes Mr Close. “Higgs is not one of them.” That shyness is reflected in the particle



A boson in the wild

named after him—the Higgs boson. Its existence was predicted in 1964, but it did not show its face to the world until 2012.

The Higgs boson is the cornerstone of the Standard Model of particle physics, the quantum mechanical description of all known elementary particles. In the theory’s earliest years in the 1950s and 1960s, one of its many open questions was: where did the mass of the various particles come from? If subatomic particles did not have any mass, they would zoom around the universe at the speed of light for eternity, never slowing down enough to coalesce into atoms, people, planets or stars.

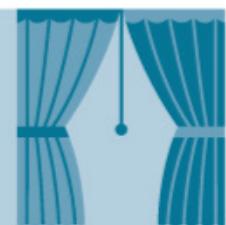
In 1964 Mr Higgs had worked it out. He proposed that the universe is permeated by an invisible force field. How strongly an elementary particle interacts with this Higgs field, as it came to be known, is what is commonly interpreted as its mass.

Mr Close is among today’s best writers on the history of quantum mechanics and its associated field theories, and his book is more a biography of the boson than of the man. He rattles through Mr Higgs’s life story in the first few chapters. He was a sickly child and missed the first year of school. Thanks to a library at home, he went on to teach himself basic trigonometry, algebra and calculus.

When Mr Higgs started at Cotham Secondary School in Bristol, he discovered that one of the alumni was Paul Dirac, a pioneer of quantum mechanics and the school’s first Nobel laureate. Mr Higgs’s physics teacher, Mr Willis, had also taught Dirac 30 years earlier. Nevertheless, Mr Higgs found the school physics syllabus “very boring” and admitted, “I never won a prize for physics at school.”

Mr Higgs was not the only scientist to predict the mass-giving force field in 1964 but, crucially, he was the only one to add, at the last minute and as an afterthought, a short paragraph at the end of one of his pa-

Back Story The lives of Zelensky



A book about Ukraine's president measures the gulf between before and now

FATE TURNED on a comedy show televised from Moscow in December 1997. In the grand final of KVN, an improv contest dating to Soviet times, a group of Armenian comics took on a team from Ukraine. The Ukrainian troupe brought together Volodymyr Zelensky, some of his future business partners and a writer of "Servant of the People"—the TV satire in which he would play a teacher who accidentally becomes president, a hit that was the launch-pad for his real-life election victory. If not for that night in Moscow, who knows?

So wonders Serhii Rudenko in "Zelensky", the first book in English about Ukraine's comedian-turned-president-turned-war leader. Along with such twists of fate, his account highlights the overlap between showbiz and politics, and, above all, the way the emergency of war can clarify people and priorities.

Ukraine was already a battlefield state when Mr Zelensky took office in 2019. Besides the Russian land-grabs in Donbas and Crimea, his country lay on the front lines of a series of 21st-century struggles: between democracy and authoritarianism, elections and oligarchy, the rule of law and corruption, facts and fakery. Dark money and propaganda coursed through the body politic; too many politicians saw the state as a cash trough, their aim being to gobble what they could before being shunted aside. As Mr Rudenko observes, Mr Zelensky and his novice crew faced these challenges with more memes in their armoury than policies. Then, this February, came a war of national survival.

Yet he also had assets, which dipped in value before rising sharply again. "An ordinary person can't become president in this country," says his character Holoborodko at the start of "Servant of the

People". He was right: in a cliquish system patrolled by billionaires, the barriers to entry were high. Perhaps only an A-list star could have levitated over them (if with a boost from the network behind the show, controlled by Ihor Kolomoisky, a controversial tycoon). Celebrity leaders carry risks, as America has learned, but on the upside, they can appeal across divides, regional or political. Mr Zelensky won 73% of the vote in a fractious electorate, even more than his TV alter ego.

"I am not your opponent," he told Petro Poroshenko, the predecessor he would defeat. "I am your verdict." In office, his talent for zingers and impish charm soon seemed meretricious. That is, until the war. Mr Zelensky, notes Mr Rudenko, may or may not have told Washington that he needed "ammo, not a ride". Either way, it is an immortal line. Alluding to Churchill in his speech to Britain's Parliament, or to Martin Luther King when he was beamed into Congress, he displayed the same actorly feel for audience and mood as in his stoical messages to his compatriots.

These are a performer's gifts. But in a



deeper sense, the show is over. Before the invasion, says Mr Rudenko, the president's "pauses, facial expressions, tone of voice and gestures" recalled his screen persona. These days he speaks to and for his nation in khaki, weary and unshaven, without makeup or lighting. Wartime leaders rely on rhetoric and bravado; yet with its life-and-death stakes, war is the coldest, hardest of realities, and calls for virtues that are the opposite of acting. As Mr Rudenko reflects, Mr Zelensky's is "unembellished courage".

Billed as a biography, this book is really a jumble of vignettes, often involving factions or grudges that readers may find baffling. Mostly written before the war, it has been hastily updated and translated from Ukrainian. That, though, is its main service: to measure the gulf between before and now.

The pre-war disparagements of Mr Zelensky as a creature of Mr Kolomoisky and even of the Kremlin; the splits in his entourage, gripes about his economic amateurishness and alleged cronyism—all these seem as relevant as treaties made by 17th-century tsars. Like Holoborodko, Mr Zelensky was in the past accused of vices he had pledged to abjure; but if you watch "Servant of the People" today, these life-imitates-art ironies seem petty, and you are struck instead by the lovely, heartbreaking opening sequence in which the hero bicycles through a sunny, peaceful Kyiv.

War is a rupture—in a country's life and a leader's. Amid the calamity, Ukrainians have proven lucky in theirs. As Mr Rudenko writes at the close, the man who was "visibly nervous" in his early bouts of diplomacy, the ingénue and clown, now has an experience of statesmanship that no modern Western leader can match, nor would wish to.

pers on how evidence for the invisible force field might be found. If it existed, he wrote, there should be a particle associated with it, a massive boson. The "Higgs boson" was born, and the shy physicist it was named after became a permanent fixture in the world's scientific headlines.

The account of the decades-long search for the boson is one of the best parts of "Elusive". A former particle physicist and then a member of staff at CERN, the European particle physics laboratory, Mr Close offers a pacy insider's story of the ups, downs and international politics of build-

ing cathedral-sized, cutting-edge scientific machines that cost billions of dollars in public money—and have no immediate benefit beyond curiosity. He also describes a transformational time in particle-physics research. Mr Higgs and his theorist colleagues had worked with paper and pencil to come up with the mathematics of the boson, but it took almost half a century of continual effort from thousands of scientists and engineers across the world to find the particle itself. Lone geniuses, if they ever existed, were no more.

The machine built to find the boson,

the Large Hadron Collider, was first mooted at a meeting in 1976. It started collecting data in 2010 and, on July 4th 2012, confirmed the existence of the much-trailed boson. Mr Higgs was in the audience of the seminar at CERN on the day and shed a tear. Fifteen months later came the morning that the Nobel committee decided to award him the most prestigious prize in physics, alongside François Englert, the only other surviving theorist of the six who had originally come up with the mass-giving mechanism back in 1964. Mr Higgs got up early to take a walk. ■

Economic data

	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units		
	% change on year ago latest	quarter*	2022†	% change on year ago latest	2022†	%		% of GDP, 2022†		% of GDP, 2022†		10-yr gov't bonds latest,%	change on year ago, bp	per \$ Jul 6th	% change on year ago	
United States	3.5	Q1	-1.6	2.3	8.6	May	7.8	3.6	May	-4.3	-5.9	2.9	156	-	-	
China	4.8	Q1	5.3	4.0	2.1	May	2.1	5.9	May‡§	2.5	-6.2	2.7	§§	-25.0	6.70	-3.6
Japan	0.4	Q1	-0.5	2.1	2.4	May	2.2	2.6	May	1.4	-6.0	nil	-8.0	136	-18.5	
Britain	8.7	Q1	3.1	3.6	9.1	May	7.3	3.8	Mar††	-2.9	-5.8	2.2	144	0.84	-14.3	
Canada	2.9	Q1	3.1	3.6	7.7	May	6.7	5.1	May	1.2	-3.5	3.2	187	1.31	-4.6	
Euro area	5.4	Q1	2.5	2.6	8.6	Jun	7.2	6.6	May	2.6	-4.4	1.2	144	0.98	-13.3	
Austria	9.5	Q1	10.0	3.5	8.7	Jun	7.0	4.8	May	-1.3	-4.7	1.8	183	0.98	-13.3	
Belgium	4.9	Q1	2.2	2.0	9.6	Jun	9.2	5.5	May	-1.3	-3.8	1.9	181	0.98	-13.3	
France	4.5	Q1	-0.8	2.2	5.8	Jun	5.5	7.2	May	-1.4	-5.7	1.9	185	0.98	-13.3	
Germany	3.8	Q1	0.9	1.3	7.6	Jun	7.7	2.8	May	6.3	-3.2	1.2	144	0.98	-13.3	
Greece	7.9	Q1	9.7	4.0	11.3	May	8.2	12.7	Apr	-5.9	-5.0	3.3	254	0.98	-13.3	
Italy	6.2	Q1	0.5	2.7	8.0	Jun	6.5	8.1	May	1.0	-5.9	3.3	251	0.98	-13.3	
Netherlands	6.7	Q1	1.7	2.4	8.8	May	10.4	3.3	May	8.7	-3.4	1.6	174	0.98	-13.3	
Spain	6.3	Q1	0.8	4.0	10.2	Jun	7.2	13.1	May	0.8	-5.7	2.4	202	0.98	-13.3	
Czech Republic	5.1	Q1	3.5	2.2	16.0	May	11.9	2.5	May‡	-2.5	-4.8	4.7	288	24.3	-10.9	
Denmark	6.3	Q1	-1.9	2.1	7.4	May	6.9	2.4	Apr	8.2	1.0	1.6	151	7.30	-13.8	
Norway	4.8	Q1	-3.8	3.2	5.7	May	4.8	3.2	Apr‡‡	16.4	8.7	1.4	76.0	10.1	-14.1	
Poland	9.4	Q1	10.4	4.5	15.6	Jun	13.5	4.9	Jun§	-2.5	-3.7	6.7	501	4.70	-18.9	
Russia	3.5	Q1	na	-10.0	17.1	May	21.0	3.9	May§	9.9	-4.4	8.9	174	63.2	17.8	
Sweden	3.1	Q1	-3.2	1.8	7.3	May	6.9	8.5	May§	3.0	-0.3	1.6	125	10.5	-18.6	
Switzerland	4.4	Q1	1.9	2.4	3.4	Jun	2.5	2.2	May	6.3	nil	0.8	100	0.97	-5.2	
Turkey	7.3	Q1	4.9	3.0	78.6	Jun	62.2	10.6	Apr§	-4.2	-3.6	18.1	116	17.2	-49.5	
Australia	3.3	Q1	3.1	3.0	5.1	Q1	5.0	3.9	May	3.1	-3.2	3.4	199	1.48	-10.1	
Hong Kong	-4.0	Q1	-11.4	0.8	1.3	May	3.0	5.1	May‡‡	0.9	-6.7	2.8	165	7.85	-1.0	
India	4.1	Q1	1.9	6.9	7.0	May	7.3	7.8	Jun	-1.5	-6.6	7.3	111	79.3	-6.0	
Indonesia	5.0	Q1	na	5.2	4.3	Jun	5.3	5.8	Q1§	0.4	-4.8	7.2	68.0	14,994	-3.5	
Malaysia	5.0	Q1	na	5.0	2.8	May	3.1	3.9	Apr§	2.5	-6.2	4.1	92.0	4.42	-5.9	
Pakistan	6.2	2022**	na	6.2	21.3	Jun	16.1	6.3	2021	-5.3	-7.1	13.2	†††	342	208	-23.8
Philippines	8.3	Q1	7.8	7.1	6.1	Jun	4.7	5.7	Q2§	-3.0	-7.7	6.9	292	55.7	-11.0	
Singapore	3.7	Q1	2.8	3.6	5.6	May	5.8	2.2	Q1	18.0	-0.9	2.8	129	1.41	-4.3	
South Korea	3.0	Q1	2.6	2.7	6.0	Jun	4.9	3.0	May§	3.1	-2.4	3.3	116	1,306	-13.5	
Taiwan	3.1	Q1	4.3	4.4	3.6	Jun	3.8	3.7	May	13.9	-1.2	1.2	75.0	29.8	-6.4	
Thailand	2.2	Q1	4.7	2.9	7.7	Jun	5.7	1.5	Dec§	0.1	-5.0	2.8	127	36.1	-10.8	
Argentina	6.0	Q1	3.5	4.3	60.7	May	64.1	7.0	Q1§	-0.1	-4.8	na	na	126	-24.1	
Brazil	1.7	Q1	4.0	1.3	11.7	May	10.4	9.8	May§‡‡	nil	-6.7	13.2	385	5.43	-4.2	
Chile	7.2	Q1	-3.0	2.1	11.5	May	10.2	7.8	May§‡‡	-4.5	-3.4	6.3	131	970	-23.4	
Colombia	8.2	Q1	4.0	4.2	9.7	Jun	9.8	10.6	May§	-3.7	-4.8	11.4	433	4,355	-12.8	
Mexico	1.8	Q1	4.1	1.9	7.7	May	7.6	3.4	May	-0.6	-3.2	8.9	191	20.8	-3.7	
Peru	3.8	Q1	8.1	2.5	8.8	Jun	7.1	6.3	May§	-3.3	-2.5	7.8	227	3.87	2.1	
Egypt	5.4	Q1	na	5.9	13.5	May	12.9	7.2	Q1§	-6.0	-5.9	na	na	18.9	-16.9	
Israel	9.5	Q1	-1.9	5.1	4.1	May	4.3	3.7	May	3.1	-1.3	2.6	155	3.49	-6.3	
Saudi Arabia	3.2	2021	na	7.5	2.2	May	2.5	6.0	Q1	15.4	10.6	na	na	3.75	nil	
South Africa	3.0	Q1	8.0	1.9	6.6	May	6.0	34.5	Q1§	-1.1	-6.1	10.7	179	16.8	-14.4	

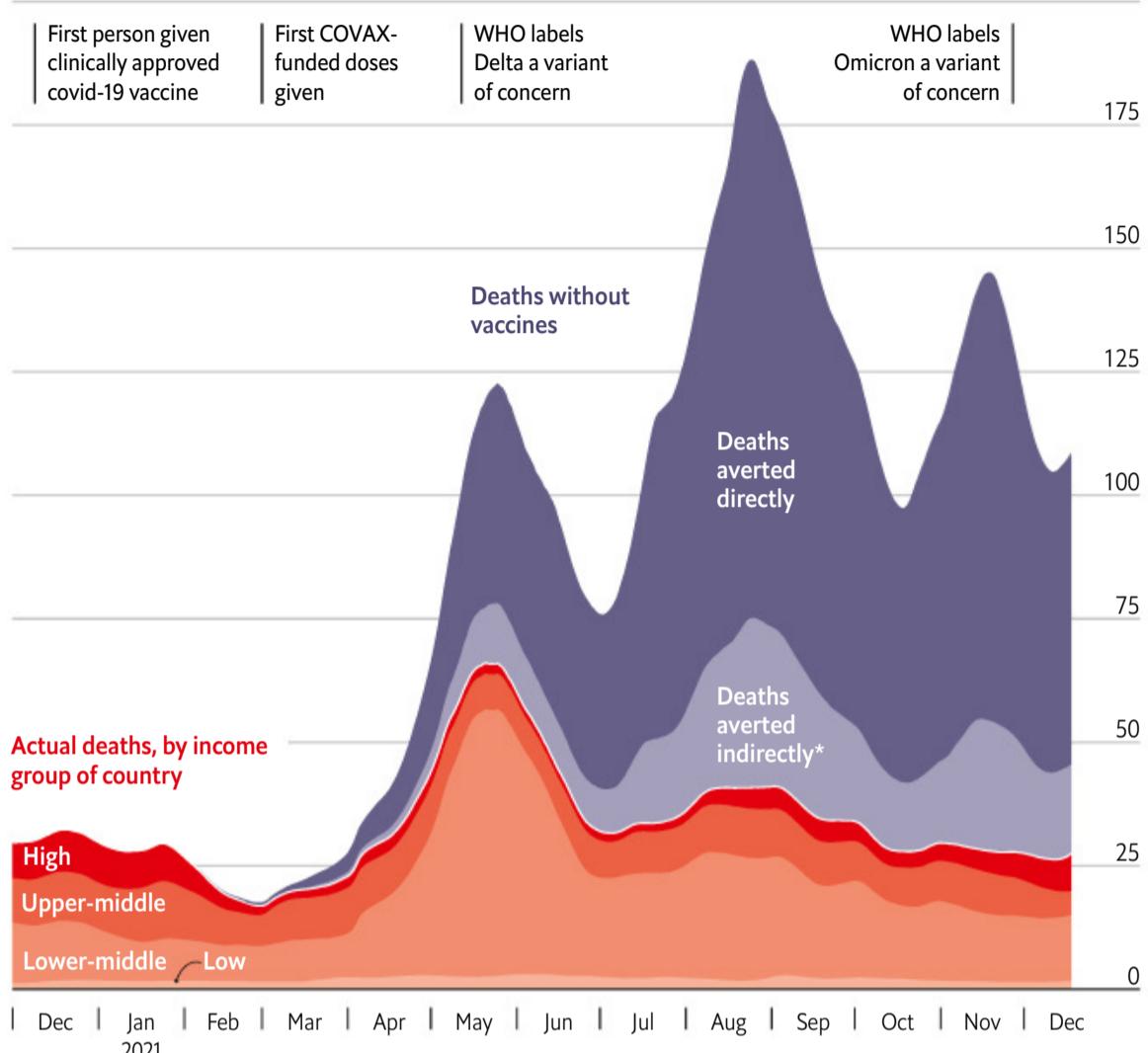
Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. #3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

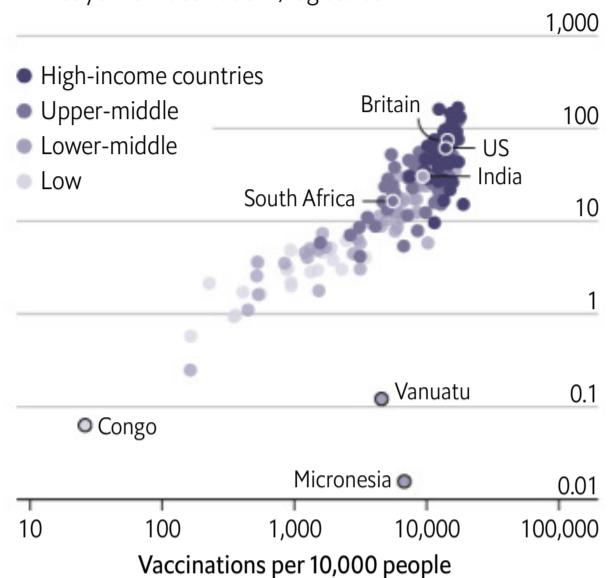
In local currency	Index	% change on:			index	% change on:			Basis points	latest	Dec 31st 2021
		Jul 6th	one week	Dec 31st 2021		Jul 6th	one week	Dec 31st 2021			
United States S&P 500	3,845.1	0.7	-19.3		41,159.8	-0.3	-7.7				
United States NAScomp	11,361.9	1.6	-27.4		3,103.7	-1.0	-0.6				
China Shanghai Comp	3,355.4	-0.2	-7.8		2,292.0	-3.6	-23.0				
China Shenzhen Comp	2,207.2	0.6	-12.8		13,985.5	-8.2	-23.2				
Japan Nikkei 225	26,107.7	-2.6	-9.3		1,541.8	-2.8	-7.0				
Japan Topix	1,856.0	-2.0	-6.8		95,075.9	7.9	13.9				
Britain FTSE 100	7,107.8	-2.8	-3.7		98,719.0	-0.9	-5.8				
Canada S&P TSX	18,729.7	-1.8	-11.7		47,722.3	-0.7	-10.4				
Euro area EURO STOXX 50	3,421.8	-2.6	-20.4		8,670.1	-6.0	-27.2				
France CAC 40	5,912.4	-2.0	-17.3		1,882.7	-2.3	-9.2				
Germany DAX*	12,594.5	-3.1	-20.7		11,416.5	-2.6	0.7				
Italy FTSE/MIB	20,921.0	-4.2	-23.5		65,756.4	-2.9	-1				

Without vaccines, the Delta- and Omicron-variant waves would have been three times deadlier

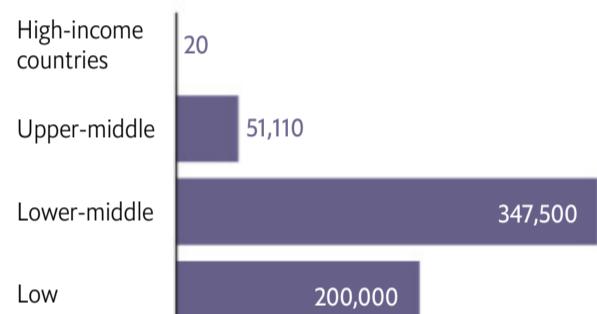
Estimated daily excess deaths
'000



Average deaths averted per 10,000 people
In first year of vaccination[†], log scales



Additional deaths that would have been averted
If all countries had reached 40% vaccination[†]



*Among individuals who avoided infection thanks to other people's vaccinations †Dec 8th 2020-Dec 7th 2021
Source: "Global impact of the first year of covid-19 vaccination", by O.J. Watson et al., *The Lancet Infectious Diseases*, 2022

It could have been worse

Covid-19 vaccines saved an estimated 20m lives during their first year

THE DEVELOPMENT of covid-19 vaccines was a scientific triumph. Converting it into medical benefits has required getting shots into the arms of as many people as possible, a process fraught with political and logistical hurdles. Nonetheless, a new study finds that jabs cut the disease's death toll by 63% during their first year.

To calculate the number of lives saved by vaccines, researchers at Imperial College London needed to estimate how many people would have died without the jabs. They simulated this scenario using an epidemiological model, which calculates the shares of the population that are susceptible to a disease; get exposed; get infected; die or recover; and are vulnerable to reinfection. Each of these rates depends on factors like the transmissibility and severity of the pathogen, how much people interact with each other, demography, health-care quality and, crucially, vaccination.

Such models can simulate any disease. The authors customised theirs for covid by finding the mix of impacts of these variables that yielded the best predictions of deaths in each country in each week. Because official tallies tend to undercount mortality caused by covid, the study relied on *The Economist's* model of excess deaths, which estimates how many more people have died of all causes during the pandemic than normally would have.

The authors then used this model to predict how many additional deaths would have occurred during the year starting on December 8th 2020—the day of the first jab—if no vaccines had been given, but all other factors remained the same. Excluding countries with tiny populations and China, where our excess-mortality figures are highly uncertain, the answer was 19.1m–20.4m, 170% more than our estimate of the actual death toll during this period.

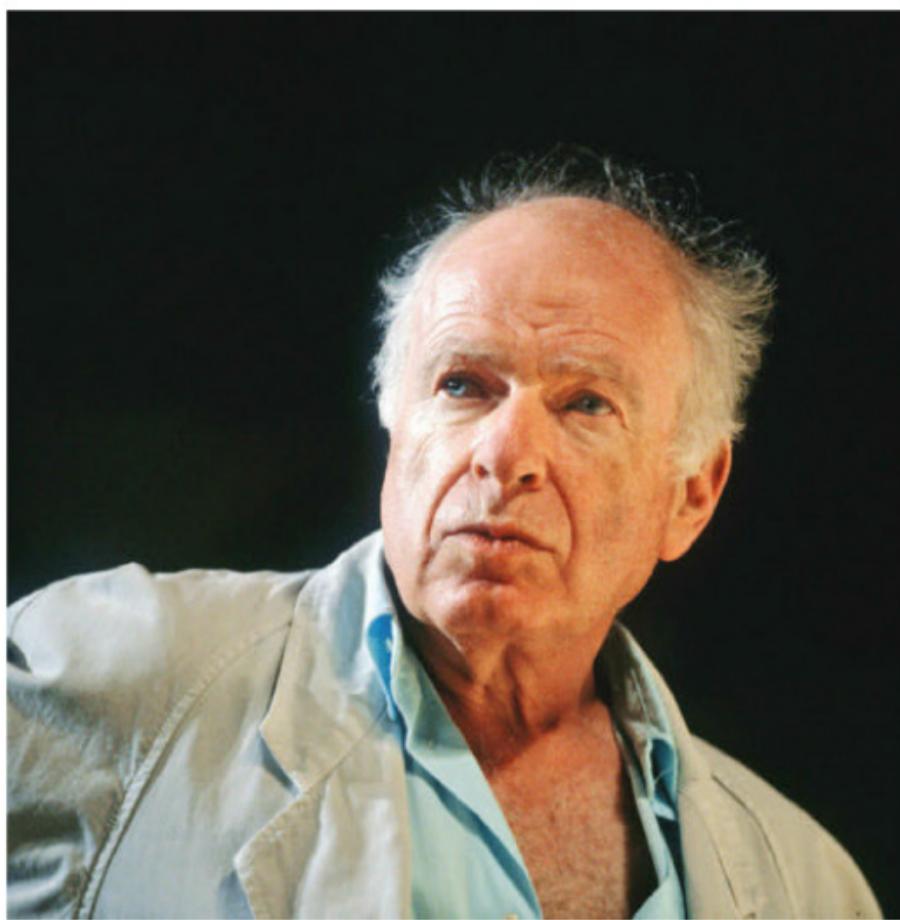
The study also found that vaccines helped rich and poor alike. Rich countries gobbled up 2.5 times as many doses per person as did the poor ones covered by COVAX, a jab-distribution scheme, but the paper found that nearly as many deaths were prevented in the COVAX countries (around 7m) as in rich ones (roughly 8m). This is proportional to the number of people in

these groups of countries aged at least 65, who are most at risk from covid.

However, these calculations rely on a tenuous foundation. Because the authors could not obtain breakdowns of vaccine recipients by age group for the entire world, they assumed that all countries vaccinated their oldest residents first. In Africa, where just 3.5% of people are aged at least 65, this implies that a mere 5% vaccination rate would be enough to protect the bulk of the continent's most vulnerable people. Any sizeable deviation from an age-based distribution would cause their estimate of lives saved in poor countries to fall, and make the distribution of jabs look less fair.

The paper also assumed that people's behaviour and the evolution of viral variants would have been identical in a vaccine-less world. In fact, without the jabs, individuals might have taken more precautions, and governments would probably have imposed longer lockdowns.

Yet as China's struggle to sustain a zero-covid policy shows, public tolerance of lockdowns has limits, and new variants of SARS-CoV-2 are so contagious that no intervention can keep them at bay. As bad as the past 18 months have been, they would have been worse without vaccines—perhaps about 2.7 times worse. ■



The mystic of the stage

Peter Brook, a revolutionary theatre director, died on July 2nd, aged 97

NOT LONG after the second world war, as he walked through the ruins of Hamburg, Peter Brook saw a crowd of children pushing through the door of a nightclub. He followed them. Inside was a dilapidated stage with a backdrop of blue sky, and in front of it two sad clowns sitting on a cloud. The clowns were on a visit to the Queen of Heaven, and were listing which foods, all scarce in the starving city, to ask her for. As they mentioned various delicious things, the children grew quiet. Then, as he remembered it, the silence became different. They were transfixed. That silence became what he most desired to generate in the theatre.

That seemed a severe contradiction. For the best part of the next two decades he was known not for silence, but for noise. For his staging of Seneca's "Oedipus", the actors practised primal screams for hours and imitated beasts. In Shakespeare's "Titus Andronicus", murder-screams set off bursts of scarlet ribbons. In "US" in 1966, a happening to protest against the Vietnam war, the audience was asked to imagine being napalmed in their gardens. Most famously, in "Marat/Sade" two years earlier, the inmates of the Charenton asylum were shown staging the murder of Marat in 1793 and the king's execution, rampaging round the guillotine with pots of thick red and blue blood. Explicitly, he had wanted the whole cast to break down as they rehearsed.

There was method, though, in this madness. The British theatre world as he came into it, having decided not to be a film director, was one of stultifying conservatism, hidebound practices and polite plays for middle-class people. In a word, deadly. His father had been a revolutionary in Latvia; now he, too, felt that fire, and was ready to go through the West End breaking shop windows.

Amid the deadliness, Shakespeare still stood out. Yet despite a glorious roster of English actors (Laurence Olivier, Edith Evans, Ralph Richardson, John Gielgud) the plays were produced as dully and dutifully as ever. He was having none of that. His version of "A

Midsummer Night's Dream" in 1970 was set in a white cube with swings, trapezes and jugglers, through which the mazed lovers raced like butterflies. His "Lear" was a brooding, ironclad reflection on the power and emptiness of nothing. "Hamlet" in his hands was stripped down to a third of its characters and half its length, and acted out on a cloth square with cushions.

Stripping down became his hallmark, but it was a gradual change. His first big Shakespeare production, "Love's Labour's Lost", was a froth of costumes and sets based on Watteau. Even much later, in his nine-hour version of the Hindu "Mahabharata" in 1985, he did not shy away from sumptuousness in lighting, costumes and props. Yet the theatre he most liked was rough and ready: done on carts, in barns, or simply in the empty space that one man crossed while another one watched. His base in France, after he had left England in 1970, was a battered old Parisian theatre with scorched walls, Les Bouffes du Nord; his base in Glasgow was a mothballed tram depot. On a tour of Africa his troupe went from village to village, often improvising plays that had no text, theme or name. He loved to perform for people who had no idea what to expect, and to register their reactions.

Increasingly he was convinced that the richest tool he could use in theatre was the human being. In acting, an actor was his own field of work: his hands, his eyes, his heart. If a man or woman were simply to pour out all the emotion and imagination inside them, if they could make every moment count as theatre demanded, the audience would need nothing else.

For that reason his rehearsals were long, exhausting and expensive: too expensive for him to stay in England without lavish subsidies, hence his move to France. In rehearsal each actor had to move from the first inner tremor of characterisation to full possession, but do it for themselves. He set tasks, and then sat in silence. When he told them to cross a carpet as if it were a tightrope, and to fall if their feet strayed, a mischievous smile still lingered in his sharp blue eyes. He was sympathising, but he would not intervene. He did not direct, but distilled. The moment he was waiting for came when the actor was suddenly free, feeling the flow, imagination fully expanded, opening to life beyond life.

His ultimate aim was to get to the very nub of acting, the communication of thought. Words bothered him, because they had moved too far from the original impulse. In exercises he derived from Meyerhold and from Artaud's Theatre of Cruelty, his actors practised sending complex ideas to each other with one finger or one cry. In 1971 he collaborated with the poet Ted Hughes to produce a play, "Orghast", composed in invented language. Events like this baffled the critics but were, to him, essential.

Immediacy also preoccupied him. He disliked tours, even long runs, because performance settled and soon began to die. Instead he fostered the invisible connection that could give the visible "a burning and fleeting taste of another world". Though he liked to film his productions, and in 1963 directed William Golding's "Lord of the Flies" with great success for cinema, he was concerned that film could present only images from the past. He was equally suspicious of "happenings" in the present, so often vacuous: a summons to wake up, but to what? To live, but how?

For some time he had followed the writings and practised the sacred dances of Gurdjieff, who taught that humans were in a state of waking sleep. They could be roused to higher consciousness only by working on themselves from zero, as he asked his actors to. In turn, those actors could snap audiences out of their day-dreams. He had felt the effect himself, leaving Samuel Beckett's most "negative" plays in a state of irrational joy. He had experienced it as a child, when in a toy cardboard theatre he had found a world more convincing than the one outside. And he had known it in his own productions, as a silence more acute than silence descended on the audience. Theatre thus became, as it had for those children in Hamburg, transcendent and holy. That hush of revelation and self-revelation was better than any applause. ■

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