The Economist

Turkey trifles with the lira

How betting markets see 2022

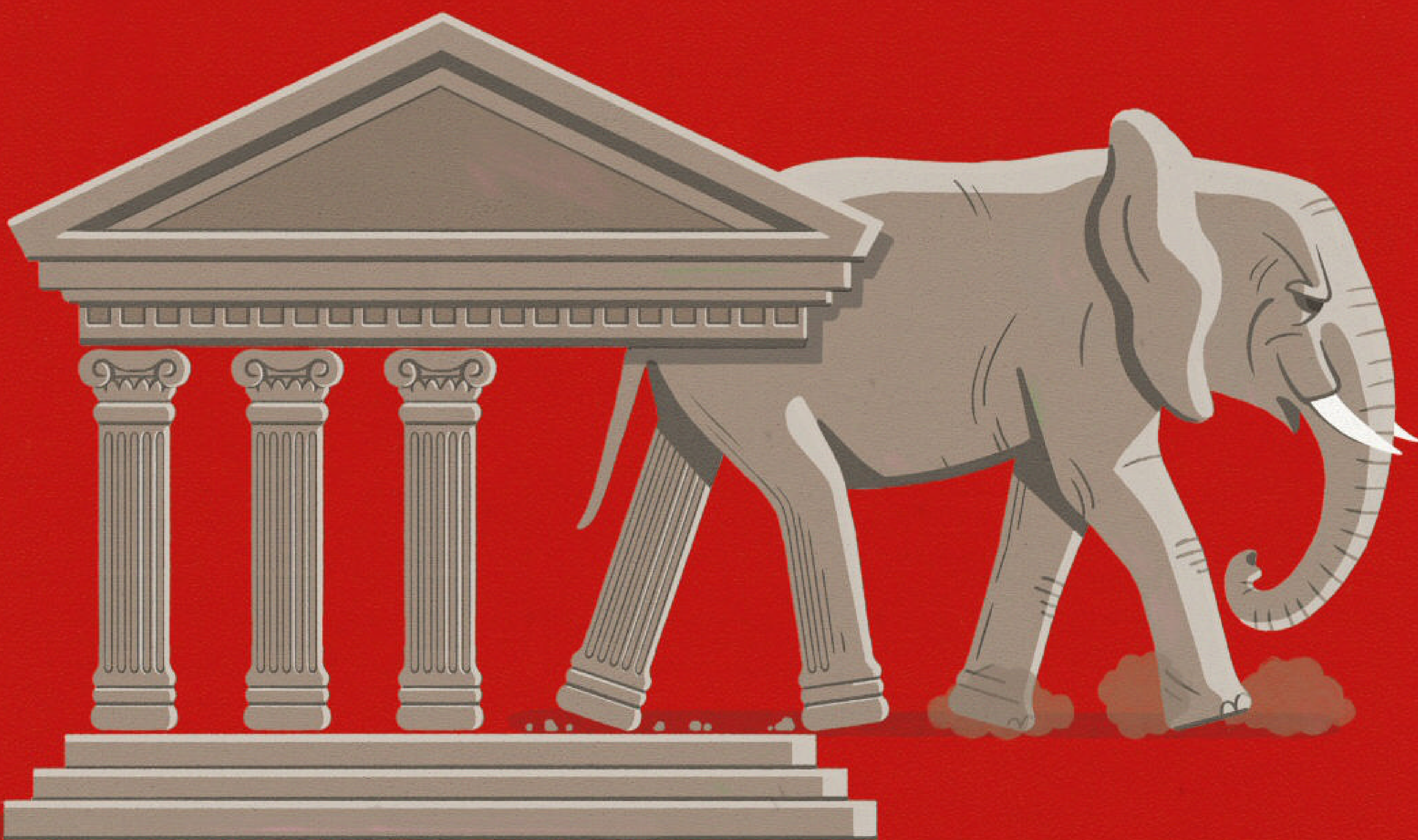
Are video games addictive?

Bumper profits for big law

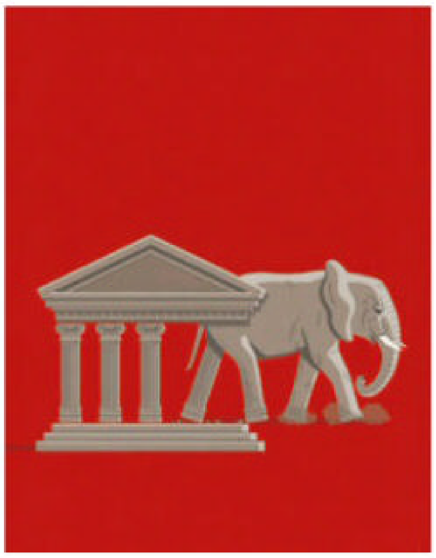
JANUARY 1ST–7TH 2022

Walking away

The Republican Party and democracy



Contents



On the cover

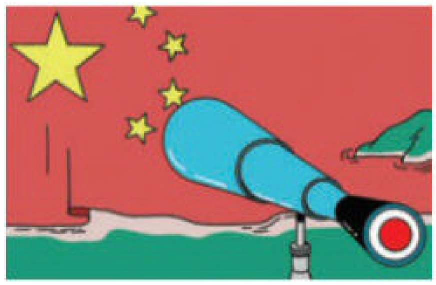
The Republicans' Trump infatuation is alarming, but that must not lead to fatalism: leader, *page 9*. The party is in denial about the former president's abuses and well-placed to regain power: briefing, *page 16*. What Chicago says about racial politics in America: Lexington, *page 24*

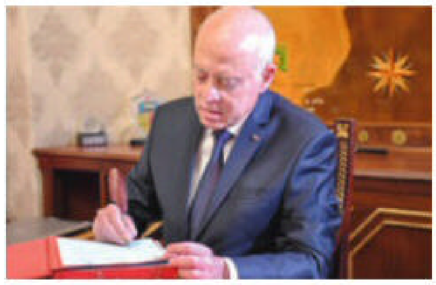
Turkey trifles with the lira
A kooky foreign-exchange scheme piles on the risks: leader, *page 10*. The president, Recep Tayyip Erdogan, is scrambling to prop up the currency he has debased, *page 39*. As the lira collapses, the bill for big national projects rockets, *page 41*

How betting markets see 2022
The coming year in probabilities: graphic detail, *page 65*

Are video games addictive?
The games-makers' latest business models have bolstered the idea that they may be, *page 46*. How to help researchers settle the case: leader, *page 10*

Bumper profits for big law
As firms get bigger, they look ever more like their corporate clients, *page 48*



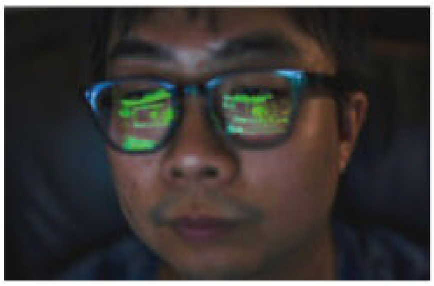


▸▸ Contents continues overleaf

Europe

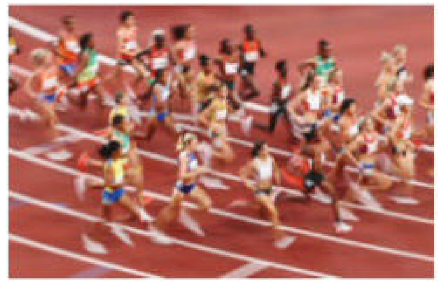
Britain

International



Business

Finance & economics



Science & technology

Books & arts

Economic & financial indicators

Graphic detail

Obituary

The Economist

Volume 442 Number 9277

Published since September 1843
to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

Editorial offices in London and also:
Amsterdam, Beijing, Berlin, Brussels, Chicago, Dakar, Dallas, Dubai, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, New Delhi, New York, Paris, San Francisco, São Paulo, Seoul, Shanghai, Singapore, Tokyo, Washington DC

Subscription service
For our full range of subscription offers, including digital only or print and digital bundled, visit: **Economist.com/offers**

If you are experiencing problems when trying to subscribe, please visit our Help pages at: **www.economist.com/help** for troubleshooting advice.

To manage your account online, please visit my.economist.com where you can also access our live chat service which is available 24/7. To call us, contact our dedicated service centre on:

North America: +1 888 815 0215
Latin America & Mexico: +1 646 248 5983

Please recycle

PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified by PEFC
www.pefc.org

PEFC/29-31-58

The world this week

Archbishop Desmond Tutu, a giant of the anti-apartheid struggle, died, aged 90. Archbishop Tutu's moral leadership and his opposition to violence earned him the Nobel peace prize in 1984. He later presided over the Truth and Reconciliation Commission, a ground-breaking exercise in restorative justice, and condemned the corruption of South Africa's post-apartheid governments, especially President Jacob Zuma's.

Somalia's president, Mohamed Abdullahi Mohamed, suspended the powers of the prime minister, Hussein Roble, for alleged graft. Mr Roble said he would remain in office and accused the president of trying to stage a coup.

A presidential election in **Libya** scheduled for December 24th was postponed, raising doubts about a UN-backed peace process. Rival factions could not agree on a legal framework for the vote or who should be eligible to run. The electoral commission proposed a new date of January 24th, but some politicians want a longer delay.

With covid-19 cases rising, a government panel in **Israel** recommended a fourth dose of vaccine for people aged 60 and over, health-care workers and those with weaker immunity. Also in Israel, the government approved a $317m development plan that aims to double the population in the occupied **Golan Heights**, which it captured from Syria in 1967.

Typhoon Rai tore through the **Philippines** on December 16th, killing nearly 400 people, leaving half a million displaced and causing $400m in damage. Torrential downpours in **Malaysia** led to flooding that displaced 70,000 people and left many without food or clean water.

India declined to renew a licence for the Missionaries of Charity, a Catholic organisation founded by Mother Teresa, that allows it to receive foreign funding. Based in Kolkata, the charity cares for orphans, lepers and the poor. Extremist Hindu groups have accused it of trying to convert Hindus. The decision comes amid a rise in attacks on Christian groups in India.

Xi'an, a city of 13m people in western **China**, was tightly locked down in response to a small outbreak of covid-19. Residents were told to stay at home. Movement in and out of the city without permission was banned.

China's central bank cut one of its main interest rates for the first time since the start of the pandemic. The cut was small, but suggests a move towards a loosening of monetary policy, just as other countries embark on a course of tightening.

The Communist Party chief of the Chinese region of **Xinjiang**, Chen Quanguo, was replaced. He had overseen the creation of a network of "vocational education centres" where about 1m Uyghurs have been detained for "deradicalisation". Mr Chen remains a member of the Politburo. Meanwhile, Joe Biden signed a law that bans imports from Xinjiang, unless the manufacturer can prove they were made without forced labour.

Gabriel Boric, a former student leader, won **Chile's** presidential election on December 19th. Mr Boric will be 36 when he becomes president in March, the youngest for two centuries. Although he moderated his hard-left manifesto ahead of the vote, uncertainty remains about how radical Mr Boric will be when he is sworn into office.

The **Turkish lira** resumed its long slide after a sharp recovery. A new scheme announced by Turkey's president, Recep Tayyip Erdogan, insures some lira deposits against currency depreciation, at a potentially vast cost to taxpayers. Markets are nervous because of very high inflation and Mr Erdogan's unconventional passion for low interest rates.

Russia's supreme court banned Memorial, the country's oldest human-rights organisation. The group, launched in the 1980s, documents the history of Soviet atrocities and protests against abuses by today's Russian government. The government said it had created a "false image" of the Soviet Union's "glorious history".

Democrats in the United States Senate vowed to press ahead with Joe Biden's $1.7trn **social-spending bill** despite losing the support of Joe Manchin, a centrist Democrat whose vote is crucial in the evenly split chamber. The Senate parliamentarian is also raking over the legislation, creating another hurdle for it.

Harry Reid died, aged 82. Mr Reid was the Democratic leader of the Senate for most of Barack Obama's presidency. He was best known for steering Obamacare, an attempt to make health insurance universal, through the chamber. He also midwifed big bills on bank regulation and stimulus packages in the wake of the financial crash.

America's Supreme Court is to hold a special hearing on January 7th that will decide the fate of Mr Biden's **vaccine mandates** on large companies and health-care workers.

"Spider-Man: No Way Home" became the biggest box-office hit of 2021. Released in mid-December, the film has already taken more than $1bn in ticket sales, overtaking "The Battle at Lake Changjin" and "Hi, Mom" (both Chinese productions) and "No Time To Die".


COLLECTION
Ladybird
BLANCPAIN
JB 1735
BLANCPAIN
MANUFACTURE DE HAUTE HORLOGERIE
BEIJING · DUBAI · GENEVA · KUALA LUMPUR · LAS VEGAS · LONDON · MACAU · MADRID
MUNICH · NEW YORK · PARIS · SEOUL · SHANGHAI · SHENZHEN · SINGAPORE · TAIPEI · TOKYO · ZURICH

Walking away

The Republican Party's Trump infatuation is alarming. It must not lead to fatalism

AMERICANS ARE anxious about the stability of their democracy. Roughly 40% of the politically active say that members of the other tribe are evil; 60% believe they are a threat to the country. More than 80% think the system needs "major changes" or "complete reform". Jeremiads from pundits about the decay of political life no longer seem to match the gravity of the threat. Some scholars have gone so far as to warn of the risk of civil war.

All this became dangerously real in the attack by Trump supporters on the Capitol a year ago, which injured 140 police officers, in an attempt to prevent the certification of their champion's defeat. After a fleeting moment of clarity, the majority of Republican lawmakers reverted to making excuses for Donald Trump because his lies had rapidly taken hold. Today, fully 70% of Republican voters still believe that the election was stolen. In head-to-head polling the former president is one point behind Mr Biden, well within the margin of error and, thanks to the electoral college, possibly ahead in a theoretical match-up.

Extreme partisanship and the Republican refusal to accept the results of the election are indeed a dangerous combination. Yet easily lost in the daily diet of outrage is a fundamental truth about two-party politics: Democrats and Republicans need each other for the system to function. Renewal therefore must flow through the Republican Party. That will be hard—but not as hard as the catastrophists say.

The threats to the system are real. The greatest is that in several key states the administration of voting has been dragged into the partisan arena. In Arizona some of the candidates running to replace the Republican incumbent, Doug Ducey, this year will argue that he ought to have somehow engineered a victory there for Mr Trump. In Georgia Republicans have weakened the office of secretary of state, after Brad Raffensperger refused to change the results of the elections in 2020 to suit Mr Trump. In Michigan and Pennsylvania Republican candidates who claim that the last presidential election was stolen are running for positions administering and certifying the next one.

The mid-term elections in November and the general election of 2024 will take place under this shadow (see Briefing). Republicans are poised to win control of one or both chambers of Congress. Mr Trump could legitimately retake the White House in 2024. The results of any of these races could be disputed by either side, especially in the next presidential election, which is likely to be close. If Democrats win, Republicans could well exploit the election machinery now infected by partisanship to try to block them from taking office. If Republicans win, Democrats could believe that disputed races have been stolen. Many would conclude that voter suppression had tipped the balance, and also note how often victors in the popular vote fail to win office. The loser's concession, central to the transfer of power, might be withheld for a second time. Contempt for electoral legitimacy would become a bipartisan, and disastrous, conviction.

The best response would be to protect democracy today by shoring up the voting system before it is too late. However, although Americans say they want voting reform, different sides mean different things by it. Given that Democrats would like to make it easier for people to vote and Republicans are concerned with fraud and how results are verified, a compromise guaranteeing both ought to be possible. An election-security law of this type should be at the top of the agenda for 2022. And yet the passing of legislation assumes the very bipartisanship whose absence is at the root of America's democratic decay.

This is where the future of the Republican Party comes in. Catastrophists reckon that democracy's defenders are unequal to its assailants partly because one of the country's two great parties is turning into something that is more like Fidesz, the ruling party in Hungary, than the Republican Party of old. Consider how far-fetched it would have been to suppose that the administrations of the Bushes or Ronald Reagan would act as the vehicle of one man lying about a stolen election.

It is true that the party is dominated by America-First Republicans who set out to deter immigration, limit foreign trade and end entanglements abroad. Their ascendancy helps explain why those Republicans who voted to impeach Mr Trump for betraying his oath of office are now being ejected from the party.

However, even the Trump-addled incarnation of the Republican Party is made up of competing factions. Country-club Republicans like Glenn Youngkin, who won the governorship of Virginia in November, want to pay less tax and not be bossed around by Democrats. Just now they see Trumpism as the only available vehicle to further their interests.

That calculation may well prove to be mistaken. Anyone who thinks they can steer Mr Trump seems to end up discarded and disdained by him. However, people who object to the attempt to undermine the election result, including Mitch McConnell and Mr Raffensperger, are still in office. Although they refrain from condemning Mr Trump in public, only in the crucible of a crisis will you find out how they would choose between having their side in power and the survival of their democracy.

Such people matter. Republican renewal, if it comes, will not be in the form of some Reaganite renaissance. Voters picking candidates for 2022 will be as many years distant from the Reagan revolution as Reagan was from FDR. And renewal is less likely from a conservative who stood up to Mr Trump than from someone who has enabled him by cowering in his slipstream, but who shares neither his reality-distorting powers nor his belief that the only legitimate result is the one where he wins.

Crucially, this person will be in charge of a party that still contains a large number of decent, patriotic voters who have been manipulated by a cynical group of leaders and propagandists into believing that, in saying the election was stolen, they are defending democracy. To presume that these people can be permanently treated as dupes would be a mistake.

Renewal is impossible for as long as Mr Trump remains the Republican Party's leader. However, that is another way of saying that the direction of the party is tied up with the fate of one man. And that means it can change. ■

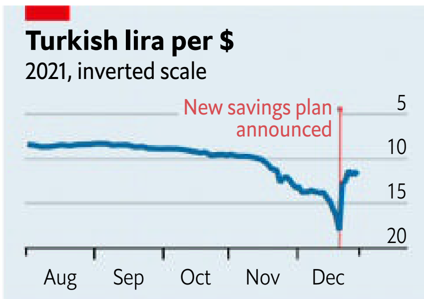
Turkey's currency crisis

Erdogan v economics

A scheme to save the lira piles on the risks instead

Men tend to grow stubborn with age, and Recep Tayyip Erdogan was hardly pliable to start with. During 19 years in power in Turkey, first as prime minister and then as president, he has locked up thousands of dissidents and critics: secular military officers, protesters, Kurdish activists, members of the Gulen religious movement. He has silenced or purged civil-society groups, the independent media and the judiciary. With every challenge that he survives—the Gezi Park protests of 2013, an attempted coup in 2016—his ego has grown. Sensible advisers have quit, leaving him surrounded by relatives and yes-men.

A leader as powerful as Mr Erdogan can silence voices he does not wish to hear. But he cannot wish away the reality they describe. Since September, he has been trying to defy the laws of economics, over which he has no veto. As some emerging economies raised interest rates to fight inflation, Turkey went in the other direction. Despite inflation topping 21% in November, its president pressed the central bank to cut interest rates by five percentage points, to 14%, in keeping with his ludicrous belief that higher rates cause inflation rather than fight it. In response, Turks switched more deposits out of lira into dollars and euros. That fuelled a currency crisis: the lira fell from eight to the dollar in August to 18 in late December.



In the past that might have scared Mr Erdogan straight; not now. On December 20th he announced a peculiar scheme to lure depositors back (see Europe section). If Turks tie up their money in lira deposits for at least three months, the treasury will compensate them (in lira) for any losses from further currency drops. After this, the lira briefly rallied and Mr Erdogan declared victory. But it was not long before it started to fall again.

Officials say Turks have shifted about $3bn into currency-protected lira deposits since the announcement. But that is too little to account for the rally. The main factor was intervention by Turkey's central and state-owned banks, which bought about $7bn-worth of lira over two days. That pace of buying is unsustainable. When it stops, the scheme will have to stand on its own two feet. Turks may decide to go along with Mr Erdogan's ploy. More likely, they will not.

Even if the scheme succeeds in stabilising the lira, it will not end Turkey's problems. The inflationary momentum from past depreciation, cheap credit and rises in the minimum wage will continue to lift Turkish prices. If the currency remains stable, the rising cost of Turkish goods would not be offset by a cheaper lira. That would erode Turkey's competitiveness, undermine its trade balance and leave it dangerously reliant on foreign borrowing to bridge the gap between its imports and exports.

Should it fail, the consequences could be still worse. Turkey's taxpayers will be on the hook for bailing out its depositors. That could require painful cuts elsewhere—an exercise in austerity for the benefit of the relatively prosperous Turks who have savings. Alternatively, if the government cannot tolerate that choice, it will have to print more money. If so, a scheme to compensate people for currency debasement would end up only debasing it further.

Mr Erdogan dismisses anyone who explains such things as part of an "interest-rate lobby" controlled by foreign powers. Like all populists, he ascribes setbacks to plots by his enemies. He is right that the obstacles to his economic fantasies are people: his own people, and their efforts to cope with his misguided policies. But perhaps the president is not aware of that. At the peak of his power in 2014, Mr Erdogan moved into a new 1,100-room presidential palace. His constituents' cries of desperation must be hard to hear from inside its $600m walls. ■

Gaming

Share the data

It's the best way to determine whether video games are addictive

No business would welcome being compared to Big Tobacco or gambling. Yet that is what is happening to makers of video games. For years parents have casually complained that their offspring are "addicted" to their PlayStations and smartphones. Today, however, ever more doctors are using the term literally.

On January 1st "gaming disorder"—in which games are played compulsively, despite causing harm—gains recognition from the World Health Organisation (WHO), as the newest edition of its diagnostic manual comes into force. A few months ago China, the world's biggest gaming market, announced new rules limiting children to just a single hour of play a day on Friday, Saturday and Sunday, and none the rest of the week. Western politicians worry publicly about some games' similarity to gambling. Clinics are sprouting around the world, promising to cure patients of their habit in the same way they might cure them of an addiction to alcohol or cocaine.

Are games really addictive? Psychologists are split (see International section). The case for the defence is that this is just another moral panic. Killjoys of yore issued similarly dire warnings about television, rock 'n' roll, jazz, comic books, novels and even crossword puzzles. As the newest form of mass media, gaming is merely enduring its own time in the stocks before it eventually ceases to be controversial. Furthermore, defenders argue, the criteria used to diagnose gaming addiction are too loose. Obsessive gaming, they suggest, is as likely to be a symptom (of depression, say) as a disorder in its own right. ▸▸

The prosecution retorts that, unlike rock bands or novelists, games developers have both the motive and the means to engineer their products to make them irresistible. The motive arises from a business-model shift. In the old days games were bought for a one-off, upfront cost. These days, many use a "freemium" model, in which the game is free and money is made from purchases of in-game goods. That ties playtime directly to revenue.

The means is a combination of psychological theory and data that helps games-makers maximise that playtime. Psychologists already know quite a lot about the sorts of things that animals, including humans, find rewarding (thanks to a long line of experiments, stretching back decades to those conducted on rats and pigeons by B.F. Skinner). Smartphones and modern consoles use their permanent internet connections to funnel gameplay data back to developers. That allows products to be constantly fine-tuned and tweaked to boost spending. The industry is even beginning to use the argot of the gambling business. The biggest spenders are known as "whales"—a term that originated in casinos.

While psychologists argue the finer points of what exactly counts as addiction, and whether gaming's design tricks cross the line, the industry should recognise that, in the real world, it has a problem, and that problem is growing. Now that gaming addiction comes with an official WHO code, diagnoses will become more common. Clinics are already reporting booming business, as lockdowns have given gamers more time to spend with their hobby. The regulatory climate for tech is getting chillier. And being lumped in the public mind, fairly or not, with gambling and tobacco will not do the industry any favours.

Self-interest on many levels

It would be wise to get ahead of the discussion. A good place to start would be with hard data. Many of the studies underpinning the contention that games are addictive in a medical sense are woolly: they rely on self-reported symptoms, contested diagnostic criteria, skewed samples and so on. Even basic questions about the amount of time and money spent by users are hard to answer. The industry has an abundance of data that could help. But gaming firms mostly keep details of how gamers behave secret, citing commercial sensitivity.

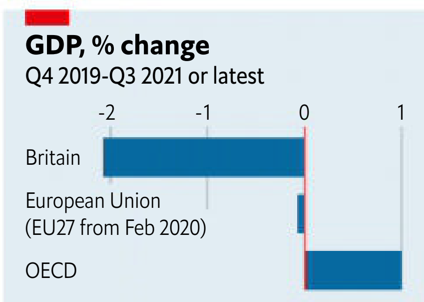
In the long run, that will prove unwise. Gaming firms should make more of their data hoard available to researchers. If—as seems likely—worries about addictiveness are overblown, it is hard to think of a clearer way of showing it. And if not, it is better for firms to recognise the problem now, and do something about it voluntarily. The alternative is that regulators will force them to act. And as China has shown, once a government is seized by a fit of moral panic, it can lash out. ■

Britain's future

Time to choose

Brexit's many contradictions are coming to a head

A YEAR AGO, as Boris Johnson prepared to take Britain out of the European Union's trading arrangements after an 11-month transition, he was on top of the world. The trade and co-operation agreement he had signed with the EU was, he crowed, "cakeist"—his term for deals that combine the having and eating of cake, in this case decent access to the single market and freedom to diverge from its rules. But as 2021 ended, little cake was to be had. A backbench rebellion, a stunning by-election loss and public anger at revelations that the prime minister and his colleagues partied during lockdowns in 2020 have hit his poll ratings. The year's final blow came on December 18th, when David Frost, his chief EU negotiator, resigned, citing his frustration at the government's failure to make progress on an ambitious post-Brexit agenda.



Some of Mr Johnson's difficulties are tied to his personal flaws: arrogance, sloppiness and a belief that rules are for little people. But Lord Frost, for all that his bellicose approach to the EU made progress harder, was right about his central charge. On Brexit, which the Conservatives promised would kick-start a national renewal, the government is adrift (see Britain section). Growth has been sluggish and ejection from the single market has, as expected, harmed the country's prospects: government forecasters put the long-run hit to productivity at around 4%. So far the government has failed to identify policies that could come close to making up for that. To regain momentum it must make tough choices and face up to their consequences.

The problem is less the type of Brexit that Britain opted for than a refusal to accept what flows from it. That is clearest in Northern Ireland. Britain chose to maximise sovereignty and national control, at the cost of leaving the EU's trading system. The EU, mindful of Northern Ireland's fragile peace, offered a special deal whereby the province remained, in effect, in the single market and customs union so as to avoid a destabilising hard border with the Republic of Ireland. That meant customs checks in the Irish Sea—an outcome spelt out in the treaty that Britain chose to sign, but which Lord Frost subsequently declared unacceptable and tried, fruitlessly, to unpick.

A similar failure to make a choice and stick to it is evident in Britain's vacillations between the two options of either escaping the EU's regulatory pull or staying in tight orbit around the single market and its rules. The reason is partly electoral. Brexit's most ardent salesmen dreamed of lighter taxes and looser regulations—of Britain becoming Singapore-on-Thames. But many voters rather like the EU's social-democratic model. Indeed, since leaving the EU, Britain has in some ways become more European. It has raised the minimum wage sharply and increased taxes to pay for social care. If Mr Johnson's promise to "level up" Britain means anything, it is European-style industrial policy and grand public works.

A dose of realism is needed. On Northern Ireland, that means accepting that for the province to be both inside and outside the EU's trading arrangements is impossible, and moving on. Britain and the EU can then work to minimise the downsides, such as onerous customs checks—and to maximise the upsides by helping businesses in one of the United Kingdom's poorest regions profit from their privileged access to the EU's giant market.

On when to diverge from Europe, Britain needs to assess the costs and benefits, and then move decisively. Often, that will mean concluding that bespoke national regulations, no matter how objectively better than EU ones, are impractical, pointless or impossible to sell to voters. EU regulations on data protection are de facto global standards. In the chemicals industry so much of British trade is with the EU that many British firms have to follow its rules to the letter. When it comes to food safety and animal welfare, Britons like the EU's high standards and will oppose any relaxation great enough to boost productivity.

In other cases Britain can diverge from the EU in a way that packs a punch. It would not be hard to craft something better than the EU's wasteful and environmentally damaging common agricultural policy. Competition policy and state-aid rules can also offer opportunities. Nimbler regulation, tax policies and visa rules can help London thrive as a global financial hub.

Taking the cake

Some of the biggest boosts to growth, however, would come from policies that were possible within the EU, such as market-driven reforms to the health service and looser planning rules. These will be hard to sell in the prosperous Tory shires and working-class northern constituencies that voted Conservative in 2019 to "get Brexit done". Mr Johnson's cake-based campaign made no mention of tough choices. But unless his government starts making some, Brexit's future will hold little but crumbs. ■

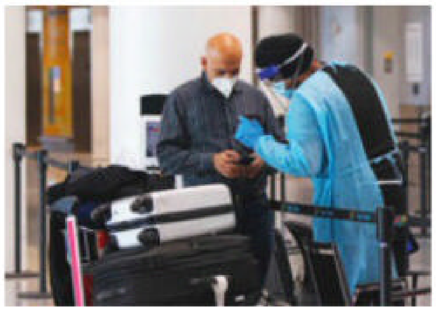
Covid-19

Keep moving

Travel bans are usually the wrong way to curb Omicron

On December 31st 2019 the World Health Organisation was told about a cluster of what appeared to be pneumonia cases in a Chinese city called Wuhan. Over the next few weeks and months first cities, then countries and finally the entire planet shut down. Humanity has learned a lot about the coronavirus in the past two years. Masks, social distancing and, most of all, vaccines have proved effective in curbing its spread. Yet one lesson has not sunk in: long-lasting travel restrictions are mostly futile.

In November, when South Africa announced the discovery of a fast-spreading new variant, Omicron, many countries' first response was to slap entry bans or onerous hotel-quarantine requirements on travellers from southern Africa. Some, such as Japan and Israel, closed their borders to all foreigners. Others that were in the process of reopening, such as Singapore, South Korea and Thailand, quickly changed their minds. Obstacles to travel were re-erected even within Europe's supposedly borderless Schengen area.



Rapidly imposed travel restrictions make sense in the early stages of an outbreak, when infections of a variant are few and test-and-trace systems are still able to follow the paths of contagion. When imported cases account for more than 10% of infections, bans can have a big impact on the growth of the epidemic. They can thus buy time to find out about a new variant, prepare hospitals or roll out vaccinations.

But travel bans have a habit of sticking around even though, once a virus or variant is circulating freely in a country, they are largely pointless. By the time France banned non-essential travel from Britain on December 16th, hoping to keep out Omicron, it was already recording a daily average of over 50,000 infections, 10% higher than its peak during the Delta wave earlier in the year. Any imported infections would, by that point, have made little difference to the burden of disease—certainly not enough to justify the economic and social disruption caused by the travel ban.

One reason travel restrictions tend not to have lasting benefits is that most of them are leaky. With very few exceptions, countries let citizens, residents, their families, essential workers, diplomats, important businesspeople or some combination of those cross borders. The countries that impose successful long-term travel bans, as Australia and New Zealand did, must do so at enormous cost not just to their global links but also to their own citizens. For much of 2021 Australians struggled to get back into their own country and had to pay exorbitant amounts for flights and quarantine-hotels to do so. To keep covid-19 out, such measures must be reinforced by draconian curbs at home, too. Australians have not been allowed to cross state borders for most of the past two years; the city of Melbourne was locked down for 262 days in 2021.

Such policies can save lives, and they are less leaky on islands. But few democracies are willing to tolerate them for very long. Indeed, the only country still pursuing a strict zero-covid policy is China, which is taking increasingly desperate measures to contain recent outbreaks of the virus. In Xi'an, a city of about 13m where daily infections have risen from zero to over 100 in December, authorities have imposed a ferocious lockdown, are repeatedly mass-testing the population and have shoved some 30,000 people into hotel quarantine. Such methods are popular in China, where people credit their stern rulers for keeping them safe. But it is far from clear whether China's zero-covid policy is sustainable, given the high transmissibility of Omicron, nor how China will eventually move beyond it to live with the disease (see China section).

For the rest of the world, the best approach is for governments to promote the most cost-effective policies, especially vaccines and boosters, while resisting the urge to ban things just to create the illusion of decisiveness. Britain and America have displayed admirable common sense of late. Both countries removed travel restrictions on southern African countries once it was clear that the variant was circulating at home. America shortened the window during which a negative covid test must be obtained before travelling. Britain asked incoming travellers to take a test within two days of arrival and to self-isolate until they receive a negative result. Even then, such measures should aim to be proportionate and minimally disruptive. ■

NATO
OTAN

Deputy Legal Adviser

The Office of Legal Affairs (OLA) plays a key part in NATO's success and its ability to provide legal advice and legal services to the Secretary General, the International Staff, the North Atlantic Council, and other NATO Committees. As an Alliance of 30 nations, the Legal Office is essential in advising on legal matters both domestic and international, impacting the responsibilities, functions, operations and other activities of NATO.

Deputy Legal Adviser reports directly to the Legal Adviser. S/he manages and contributes to the whole range of legal issues and activities handled by the Legal Office. S/he supervises lawyers, allocates and coordinates work while appreciating the relationship between legal and policy issues. Working in the Legal Office and across the organisation, s/he would be facilitating the reaching of consensus among Allies on strategic legal issues. S/he would be responsible for a wide range of tasks, from international defence to developing associated policies and facilitating consensus.

For additional information and to apply please visit NATO's Recruitment website (**https://www.nato.int/cps/en/natolive/recruit-wide.htm**).

The closing date for applications is the **the 16th of January at 23:59 CET Brussels Time.**

UNICC
International Computing Centre

PROGRAMME DIRECTOR (D1) - UN System Digital ID Programme

United Nations International Computing Center (UNICC), Geneva

Under the Executive Sponsorship of Under Secretary-General, UN DMSPC, the UN High-level Committee on Management has approved a transformative UN Digital ID programme to provide its workforce with a universal, system-wide identity. Following a successful pilot, UNICC has been tasked with moving this solution to production.

UNICC therefore welcomes applications for the role of Programme Director (D1). The position aims to provide strategic and operational leadership and oversight to the programme, and to ensure successful rollout and adoption of the Digital ID solution for all personnel across multiple UN Agencies.

We are looking for candidates who have:

- 15 or more years of progressive leadership and programme management experience in a fast-paced, international environment.
- Successful track record as programme manager and/or senior management position, preferably in the field of Human Resources or Information Technology.
- Experience in managing and delivering in a complex multi-stakeholder setting.

How to apply?

Check the vacancy notice and complete your application here:
https://www.unicc.org/working-with-us/

The closing date for applications is **31st January 2022**.

UNICC is committed to achieving workforce diversity in terms of gender, nationality and culture. Women, individuals from minority groups, indigenous groups and persons with disabilities are therefore strongly encouraged to apply.

FEDERAL MINISTRY OF ENVIRONMENT - HEADQUARTERS, MABUSHI ABUJA

ADVERTISEMENT FOR THE APPOINTMENT OF PROJECT COORDINATOR
HYDROCARBON POLLUTION REMEDIATION PROJECT (HYPREP)
FEDERAL MINISTRY OF ENVIRONMENT

Applications are hereby invited for the position of Project Coordinator for Hydrocarbon Pollution Remediation Project (HYPREP), Federal Ministry of Environment. HYPREP is a project established under the Federal Ministry of Environment with mandate to implement various recommendations of the United Nations Environment Programme (UNEP) Report on Environmental Assessment of Ogoniland.

ROLES AND RESPONSIBILITIES

The Project Coordinator shall preside over the Project Coordination Office in line with the Federal Ministry of Environment Official Gazette of 2017, and shall:

a. provide leadership and requisite supervision to ensure the successful execution of the HYPREP;
b. be accountable for the overall delivery of the execution of the HYPREP, including annual plans, delivery by the contractors and with agreed budget;
c. develop project plan and budget provisions for the execution of the HYPREP;
d. supervise contractors to ensure timely and qualitative project delivery;
e. provide periodic risk and project updates to the HYPREP Governing Council and the Board of Trustees;
f. maintain repository of all project documents;
g. ensure compliance with existing applicable Laws and Governance or Control Framework;
h. ensure that procurement and tendering processes are in line with the Public Procurement Act 2007 and consistent with the international best practices; and
I. manage and execute all aspects of contracting relations with the highest standards of integrity and ethical behaviour and comply with all applicable Laws and Regulations.

QUALIFICATION

Applicants must possess a minimum of Masters Degree in Earth Sciences, or Environmental Sciences and Engineering, with at least fifteen (15) years cognate experience in design, execution and management of Environmental Remediation Projects for Hydrocarbon Impacted Soil and Groundwater.

SUBMISSION OF APPLICATION

Applicants are required to submit two (2) hard copies of their application and Curriculum Vitae in a sealed plain envelope marked "Appointment of HYPREP Project Coordinator" and addressed to:
The Honourable Minister of Environment
Federal Ministry of Environment,
Mabushi, Abuja.

All applications are to be delivered either by hand or registered mail to the Office of the Honourable Minister, Federal Ministry of Environment not later than 12:00 noon of 17th January, 2022.

NOTE

- The Governing Council, HYPREP shall verify all documents and claims made by applicants and shall disqualify any applicant whose claims are found to be false; and
- Documents submitted after the deadline for submission will not be entertained.

Signed:
Honourable Minister,
Federal Ministry of Environment,
Mabushi, Abuja.

WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

The World Intellectual Property Organization (WIPO)
is seeking applications for five positions on its
Independent Advisory Oversight Committee (IAOC)

WIPO is a specialized agency of the United Nations, dedicated to the promotion of innovation and creativity through a balanced and effective international intellectual property system, through cooperation among States and, where appropriate, in collaboration with other international organizations, with its headquarters in Geneva, Switzerland.

The **IAOC** is an independent, expert advisory and external oversight body, which assists WIPO's Member States in their role of oversight and better exercise of their governance responsibilities regarding WIPO's various operations.

The IAOC is composed of seven members, representing each of the seven geographical regions of WIPO Member States. IAOC members serve in an independent, non-executive, personal capacity for a three-year term, renewable once.

WIPO is seeking **applications for five positions** on the IAOC, with priority being given to candidates from the Member States that are listed in the Vacancy Announcement.

Service on the IAOC is unremunerated, but members shall be provided with travel and subsistence entitlements pursuant to WIPO's travel policy to attend quarterly meetings in Geneva.

Applicants should have relevant qualifications and experience at the senior level, as set out in the Vacancy Announcement located under "Staff Vacancies" at **www.wipo.int/jobs/en/**. Additional information on the IAOC can be found at **www.wipo.int/about-wipo/en/oversight/iaoc/**.

Deadline for receipt of applications: January 28, 2022.

FHI 360 is an international nonprofit working to improve the health and well-being of people in the United States and around the world. We partner with governments, the private sector and civil society to bring about positive social change and provide lifesaving health care, quality education and opportunities for meaningful economic participation. We do this by using research and evidence to design and deliver innovative programs that change behaviors, increase access to services and improve lives.

fhi360

THE SCIENCE OF IMPROVING LIVES

Managing Director, FHI Partners

fhi PARTNERS

FHI 360 is seeking a seasoned fundraising professional who has experience working in a complex international nonprofit organization across multiple lines of business to serve as the Managing Director of its subsidiary, FHI Partners.

FHI Partners LLC was established to work with corporations and foundations through a flexible, client-focused business model. FHI Partners connects the FHI 360 family's impressive assets, including our technical experts, country offices and research, with a wider variety of partners, making the value and effectiveness of FHI 360's impact more accessible for corporations and foundations.

The Managing Director will report directly to the CEO and work in close collaboration with the C-Suite officers, the Director of Business Development and Diversification, and the technical and geographic business unit leadership.

The person selected for this executive leadership role will leverage FHI 360's broad and deep technical expertise to build innovative programs with potential funders in areas such as: pandemic preparedness, global health security, and climate change and conflict. The objectives of these programs are to close equity gaps in critical human development services around the world, accelerate the introduction of emerging technologies and expand opportunities for meaningful economic participation and access to health and education services.

The Managing Director will be responsible for building upon the organizational vision to strategically identify, build, and cultivate long-term relationships through membership and participation with private sector, multinationals, foundations, ultra-high net worth individuals (UHNWI), and social enterprises to maximize program impact on key human development and equity challenges in the US and overseas.

The successful candidate will be a compelling connector and communicator with leaders in business, government, and the funding, civic and nonprofit communities.

We invite you to submit your resume and cover letter to: **leadershipsearch@fhi360.org**.

FHI 360 is committed to creating a vibrant and inclusive work culture that is equitable for employees of all backgrounds, cultures and levels.

www.fhi360.org **www.fhipartners.org**

At FHI 360, we envision an environment where our differences are celebrated and embraced and where our team, partners and community members feel valued and respected. We are committed to building and nurturing a diverse, equitable and inclusive workforce and workplace.

Antitrust in perspective

"In tech we don't trust" (November 27th) spoke of Joe Biden's "reinvigoration of antitrust" and quoted Barry Lynn saying that the president "grew up under anti-monopoly enforcement regimes that were extremely aggressive". Antitrust policy in the United States never fitted Mr Lynn's description. Advocates of reform assume the decades immediately following the second world war constituted antitrust's golden era. However, Richard Hofstadter was already describing antitrust in a well-known essay from 1964 as a "faded passion".

In 1966 Art Buchwald, a newspaper humourist, forecast that in 1978 America's two remaining corporations would merge, and that if the resulting corporation sought to buy the United States the Justice Department would "naturally study this merger to see if it violates our strong antitrust laws". So, if Mr Biden really does "go big on big tech" in the manner you describe, his actions would be more novel than you suggest.

BRIAN CHEFFINS
Professor of corporate law
University of Cambridge

The potential of European tech startups is huge, especially if they play to Europe's strengths and demonstrate to sceptics that they can be category leaders ("Renaissance", November 27th). This is especially true in disruptive technologies, like smart mobility, smart manufacturing, digital health and especially energy transition.

That said, the weight of the success of Europe's entrepreneurial renaissance shouldn't rest solely on the shoulders of the startups themselves. Governments, regulators and companies need to play their part in creating the right environment to nurture and invest in innovation. If not, the fizzy potential of the current startup market will quickly fall flat.

JEAN-MARC OLLAGNIER
Chief executive
Europe, Accenture
Paris

Flocking to Beijing

There is growing public interest in birds and biodiversity in Beijing ("Shout it from the rooftops", November 27th). The Chinese capital is situated on the East Asian-Australasian Flyway, a superhighway for migratory birds flying from breeding grounds in Siberia to non-breeding grounds in China, South-East Asia, Australasia and Africa. Beijing is a service station on this highway and thus has a responsibility to provide a variety of habitats to support this epic twice-yearly migration.

Most smaller species migrate at night, unseen as the city's residents sleep. The project to record nocturnal bird calls from the roof of the Asian Infrastructure Investment Bank is designed to gain an insight into the volume, species diversity and timing of this invisible migration, providing useful data for the management of Beijing's green spaces. Manicured parks may appeal to a traditional aesthetic, but they are of little value to birds and other wildlife.

To ensure Beijing plays its role in ensuring safe passage for migratory birds, more varied flora is needed, including a variety of native or near-native habitats. This means not only forest but also grassland and scrub. With enlightened land management policies Beijing could become a capital of biodiversity.

HUA FANGYUAN
Assistant professor of conservation ecology
Peking University
TERRY TOWNSHEND
Wildlife conservationist
Beijing

Dodgy dealers

My only quibble with Bartleby's excellent musings on the lessons from Theranos (December 11th) is whether the syndrome of the charismatic leader that sells empty promises is a phenomenon of the Silicon Valley community. Albert Dunlap, Bernard Ebbers and Jeffrey Skilling are all relatively recent examples of charismatic charlatans who bamboozled the investment community. To paraphrase Mike in David Mamet's "House of Games", a confidence trick is a fair exchange: you give me your money, and I give you my confidence.

JONATHAN CATHERWOOD
Middleburg, Virginia

Brussels does good

Charlemagne's column "On bullshit: Brussels edition" (December 4th) was a snide and distorted caricature of Brussels. Yes, there is a lot of bureaucracy, although the establishment serving nearly 450m people is about as large as the local authority serving Birmingham. Yes, it often does take many hours to reach consensus among 27 independent member states, although agreement is no doubt a bit easier now that those traditional troublemakers, the British, have left.

It is easy to laugh at the Global Gateway initiative without analysis. So what if some of it relates to existing commitments? And what is wrong with a "Team Europe approach"? There was no mention of the billions of euros poured each year by the European Investment Bank into infrastructure and a wide range of other projects both within the EU and, to a lesser extent, in developing countries. No mention either of the remarkable solidity and coherence throughout the EU in the protracted Brexit negotiations with Britain. No mention of the massive €750m ($850m) grant-and-loan recovery programme to counter the effects of the pandemic. This, also, was agreed to only after hours and hours of tedious negotiation, but it commanded the crucial assent of Germany to a significant element of mutualised debt, a concession which there is a good prospect of the new German government maintaining.

No mention of the fact that although the commission was slow off the blocks in establishing an EU-wide vaccination scheme that was fair to all member states, the EU has now largely caught up with Britain. And finally, no mention that, even in the case of Poland and Hungary, no member state shows any sign of wishing to follow Britain and exit the EU.

SIR BRIAN UNWIN
President of the European Investment Bank, 1993-2000
Dorking, Surrey

Historical revisionism

I thank Bello (December 4th) for raising the issue of the *mestizo* (mixed race) culture in the Spanish-speaking world. *Mestizaje* (mixing) has probably been the most important factor in nation-building for Latin American countries and the notion that binds us all together. Yet the woke battlefields have reached our region, with the usual tactics of manipulation and denial. As a recent example, the government of Mexico City has decided to remove a statue of Columbus from the main avenue, replacing it with one of an indigenous woman. Children's history books present the pre-Columbian civilisations as noble savages who lived peacefully until the arrival of the Conquistadors.

It is undeniable that racism and classism prevail in Latin America, but the woke left's sectarian vision only adds fuel to a fire that needs to be controlled with a conciliatory yet critical vision of our past.

AURELIO ORTIZ CAMACHO
La Paz, Mexico

Some random humour

Regarding the article on randomness ("Flipping heck!", December 4th), it should be noted that according to Robert Coveyou, the generation of random numbers is too important to be left to chance.

BILL STONE
Santa Rosa, California

Letters are welcome and should be addressed to the Editor at
The Economist, The Adelphi Building,
1-11 John Adam Street, London WC2N 6HT
Email: letters@economist.com
More letters are available at:
Economist.com/letters

In his image

WASHINGTON, DC

The Republican Party remains in hock to Donald Trump, in denial about his abuses and well-placed to regain power

DICK CHENEY, Wyoming's sole member of the House of Representatives during Ronald Reagan's presidency, was rarely inconvenienced by its voters. In his memoirs, the former vice-president described a typical campaign interaction in the deeply conservative state. "An old cowboy at the bar looked me over and asked, 'Son, are you a Democrat?' I said, 'No sir.' 'Are you a lawyer?' he asked. I said nope, and he said, 'Then I'll vote for you!'"

When Mr Cheney's daughter and political mini-me, Liz Cheney, decided to contest her father's old seat in 2016 she had even less trouble. She won over 60% of the vote, despite having a law degree. But Wyoming conservatives have lately adopted a new political standard—Do you agree with Donald Trump that the general election was stolen?—which she has flunked.

A vocal critic of the former president's Big Lie from the start, she was one of ten Republican House members who voted to impeach him over the attack on the Capitol it inspired. "Republicans must decide whether we are going to choose truth and fidelity to the Constitution...[or] abandon the rule of law," she wrote after he was exonerated by Republican senators. Even after she received death threats and was demoted from the party leadership, she held firm.

It was an unprecedented stance. Some senior Republicans, such as Mitt Romney, a senator from Utah, have selectively criticised Mr Trump. Others, such as Jeff Flake, a former senator from Arizona, have quit politics because of him. Ms Cheney was the first to plant her flag and invite other conservatives to rally to it. After Mr Trump endorsed a primary challenge to her by Harriet Hageman, another lawyer, Ms Cheney tweeted: "Bring it".

Not won, not done

Wyoming's Republican primary is more than seven months away. But already it looks as if the Cheney dynasty is over. "I've never seen a politician hated in her own state as much as she is," says a veteran Republican strategist. Ms Cheney has been expelled from the state Republican Party and hardly appeared in public in months. The biggest cheers at Wyoming's State Fair Parade last August—a great family occasion over which a Cheney has often presided—were for a hot-rodded car with "Fuck Liz Cheney" daubed on the windscreen. Backed by a team of Trump operatives, Ms Hageman is touring the state to crowds chanting: "Trump won, Liz Cheney done!" The only way she may be able to avoid that fate is if Wyoming's beleaguered Democrats turn out in the Republican primary to save her.

Immediately after the insurrection of January 6th 2021, during which a Trumpist mob occupied the Capitol for four hours, it was briefly possible to imagine Mr Trump's party ditching him. Even Kevin McCarthy, the invertebrate Republican House leader, acknowledged Mr Trump's "responsibility" for violence that claimed five lives on the day, would claim another four in police suicides and saw a Confederate flag paraded through the Capitol. But Mr McCarthy turned tail barely a week later, with most elected Republicans in hot pursuit. Mr Trump's lock on the party now appears as strong as ever, and not despite his Big Lie but because of it.

The fiction that Democrats stole the election has become the main instrument of his grip. Over 70% of Republican voters believe it—a number that has hardly changed since the election, despite no supporting evidence having emerged from the many Republican-funded vote audits and legal challenges. Like enraptured millenarians checking their watches as they scan the night sky, over a quarter of Republicans were convinced Mr Trump would be reinstated by the end of 2021.

Most of their elected representatives know all this to be as nonsensical as the ▶▶

idea that covid-19 vaccines are socialist mind-control, or the QAnon fantasies that socialist paedophiles run Washington, which the millenarians also believe. "There weren't thousands upon thousands of under-age voters and dead people who voted," says Brad Raffensperger, the Republican secretary of state of Georgia, who was asked by Mr Trump to falsify the state's election results. "That stuff was just spun up out of whole cloth."

Yet few Republican politicians dare acknowledge this reality. Mr Raffensperger and his family have received many death threats, as have the other nine House Republicans who voted with Ms Cheney to impeach Mr Trump. At least two, Anthony Gonzalez and Adam Kinzinger, are leaving Congress ("Two down, eight to go!" the former president responded). The rest face Trump-backed primary challengers, as does Lisa Murkowski of Alaska, the only one of the seven Republican senators who voted to convict him who is running for re-election this year.

Arm-twisting and culture-warring

A year after the insurrection, three things can be said about the Republicans with confidence. First, though Mr Trump has not said whether he intends to run for president again in 2024, it looks fairly likely that he will and even likelier that the party will nominate him if he does. Second, even in the absence of a new Trump candidacy, the party will not revert to anything like its pre-Trump state. Grievance and conspiracy-theorising have seized the Republican base to an extent that no mainstream conservative—a phrase that still describes most of the party's leadership—appears able to confront. Third, the party retains the support of roughly half the electorate. Given Mr Biden's unpopularity and the narrowness of the Democratic majorities, that should be sufficient for the Republicans to win back at least one congressional chamber in November, and maybe both. With or without him at the helm the party will remain both extremist and highly competitive.

It is by no means clear that Mr Trump will run. The Trump Organisation, his main business vehicle, is under criminal investigation. He will be 78 in November 2024. Some indications that Mr Trump will run—his relentless fundraising, rallies in Iowa and Ohio and teasing statements—should be treated sceptically. Having raked in well over $100m from this routine he will keep it up no matter what.

But other indicators are more persuasive. He has arm-twisted potential rivals to get them to say they would not stand against him. Nikki Haley, a former governor of South Carolina, and Tim Scott, a senator from South Carolina, have done so publicly. Governor Ron DeSantis of Florida is said to have given that assurance in private. Under Bill Stepien, his efficient campaign manager, Mr Trump has also kept much of his political team on the books.

Most important—given that he clearly wants to regain the presidency—polls and betting markets suggest there is a strong chance he could do so.

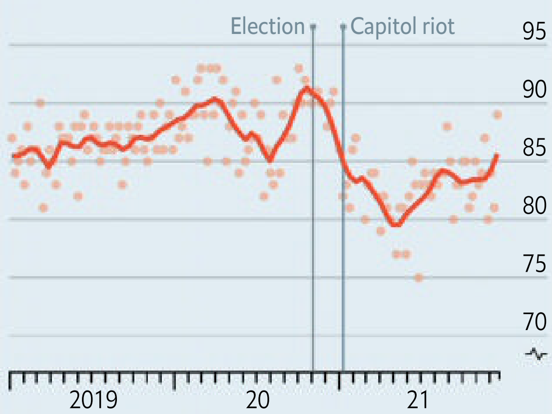
History would be against such success. The last president to win a second term four years after losing at the end of his first was Grover Cleveland, 130 years ago. But given that most Republicans consider Mr Trump to be undefeated, history might not apply. Around half of Republican voters say they would renominate him tomorrow. And if that suggests he could be vulnerable to a strong challenge on behalf of the other half, it makes him so formidable that such a challenge might not arise.

"History is made by intense, compact minorities," wrote the columnist George Will. The Republicans' gun-rights and fossil-fuel lobbies have long illustrated that truth on discrete issues. Mr Trump's success in subordinating the party to its most radical faction works the same way. Backed by Fox News and other conservative outlets, the Trumpists are more organised and aggressive than the many Republicans who have misgivings about him. And most of those Trump-sceptical conservatives will vote for him against a Democrat anyway. That is how he won 74m votes in 2020—11m more than he won in 2016—despite his deranged handling of covid-19.

Even the minority of Republicans who accept that he lost therefore do not appear to consider Trumpism a losing strategy. And given the party's demographic advantage in the ageing, heavily white Midwest—where general elections tend to be lost and won—they might be right. Recent surveys of five key states by Mr Trump's respected pollster, Tony Fabrizio, put him ahead of Mr Biden everywhere. Mr Trump leads the president in Michigan by 12 points and Wisconsin by ten. Such figures suggest Mr DeSantis, who at 43 has time on his side, might want to sit this one out.

Insurrection? What insurrection?

Donald Trump, favourability among Republican voters, %



Source: YouGov/*The Economist*

In fact, he and most other ambitious Republicans do not appear to be trying to present an alternative to Mr Trump so much as emulate him. Mr DeSantis is a well-educated (Harvard and Yale) policy wonk who once made an interesting push on the environment. Yet he is popular with Republicans because of his livid attacks on the media, mask-wearing, vaccine mandates and Anthony Fauci. The country's most prominent infectious-disease expert is indeed such a hate figure on the right that in November a Fox News commentator compared him to Josef Mengele. Senators Tom Cotton, Ted Cruz and Rand Paul, three other presidential hopefuls, have demanded he face prosecution. A senior Republican describes such grandstanding as the phoniest of phoney primaries: a scrimmage for Mr Trump's approval in the hope of securing his endorsement if the former president decides not to run.

Mr Trump's influence can also be seen in the only significant policy debate within the party: that between a minority which embraces in-work benefits, industrial policy and other forms of state activism and the Reaganite majority. The so-called "national conservatism" of the activist group, led by Senators Marco Rubio and Josh Hawley, is an intellectual development of Mr Trump's populism; it is at the same time interesting in theory and very probably irrelevant. Mr Trump showed no interest in economic populism in office beyond his protectionism. He understood that his supporters wanted invective against Democrats and immigrants, not Medicaid expansions from which Democrats and immigrants might benefit.

That leaves the national conservatives with no obvious constituency—apart from the Democrats, who support much of what they advocate. Yet Mr Rubio and the rest are outlandish partisans. The senator from Florida, an advocate of paid family-leave and increased infrastructure investment, denounced Mr Biden's spending plans, which include paid family-leave and infrastructure investment, as deficit-busting "Marxism". Performative deficit-worrying—which Republicans have for decades forgotten in government and remembered in opposition—is a familiar source of party unity and bar to fresh thinking.

Better indications of the party's direction include the new blood it is attracting, the campaigns Republicans are running and the priorities of Republican state legislatures up and down the country.

The first is not quite a one-way street. Governor-elect Glenn Youngkin's victory in Virginia last November provided a big fillip to mainstream conservatives. A successful financier with a wholesome family, he is as reassuringly country-club as they come. His admirers therefore hope his campaign method could be a template for

navigating the Trumpist tide. Mr Youngkin provided just enough phoney populism to get through his primary (he called "election integrity" the "most important issue"). He then kept Mr Trump at arm's length, served up small-government rhetoric and culture-warring against woke teaching and sailed to victory in a state that Mr Biden had won by ten points.

"It's what I call a Trump-tolerant path," says Senator Pat Toomey of Pennsylvania approvingly. "You don't pick a fight with him, but you're not sycophantic towards him." There is little doubt Mr Youngkin's approach could be hugely successful elsewhere. It would speak to moderates in both parties in a way that Mr Biden, a weak leader beset by multiple crises, has failed to. Yet the Virginian looks like an outlier. He got through his primary because he was too unknown to attract much populist derision, rich enough to pay his own way and, most important, because Mr Trump, fearing that the race was unwinnable, largely ignored it.

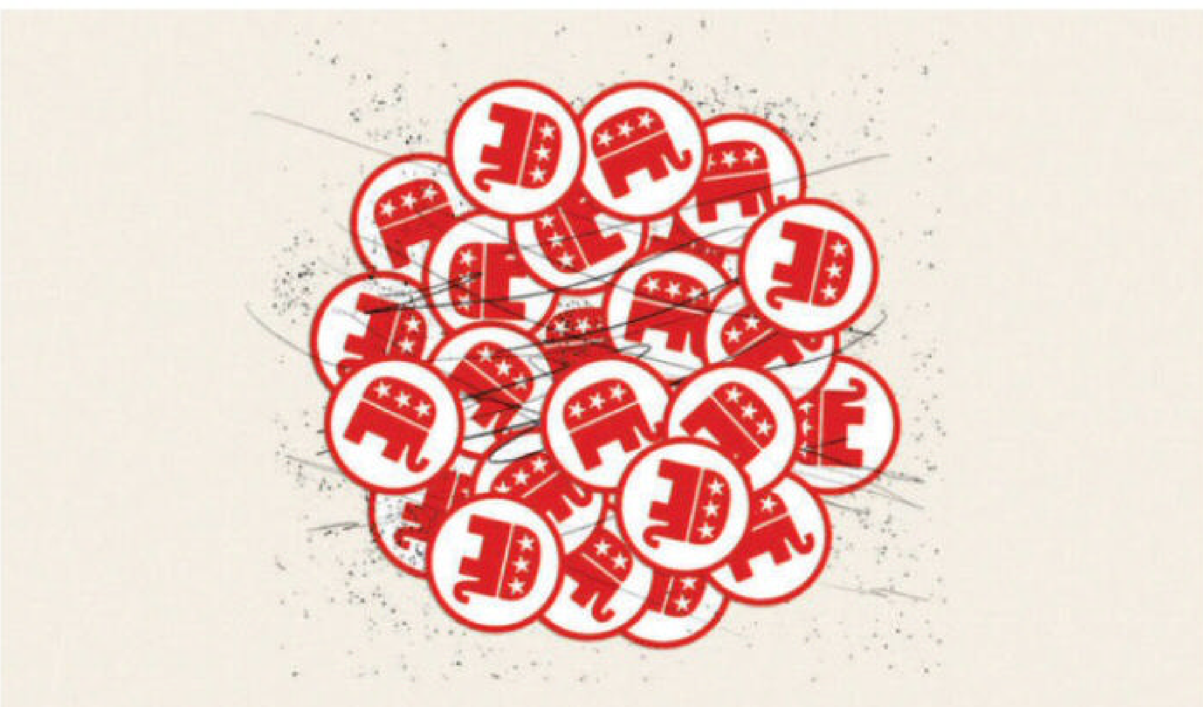
Senator Toomey himself, meanwhile, is quitting politics, as are other prominent non-Trumpists, including Senators Richard Burr and Rob Portman, of North Carolina and Ohio respectively, and Governor Charlie Baker of Massachusetts. The primary candidates vying to succeed them in office help illustrate why. The Republican favourite to succeed Mr Portman in Ohio, Josh Mandel, compares vaccine mandates to Nazism; his closest challenger, J.D. Vance, praises the "good decisions" and "manly virtue" of Kyle Rittenhouse, a teenage vigilante who shot dead two people and wounded a third at a Black Lives Matter protest in Wisconsin.

The Trumpist contingent in the House is wilder. It includes Paul Gosar of Arizona, a speaker at white-supremacist gatherings. In November he tweeted an animated depiction of himself killing a Democratic congresswoman, Alexandria Ocasio-Cortez, a charismatic left-winger with whom Trumpists are obsessed. The House has had plenty of right-wing maniacs before—including in the Tea Party influx of 2010. In the past, though, Republican leaders tried to control them. Mr McCarthy is resolutely pro-maniac. Ms Cheney and Mr Kinzinger were the only House Republicans to support a Democratic motion to censure Mr Gosar for inciting violence against Ms Ocasio-Cortez. They are also the only two serving on a House inquiry into the insurrection, with which Mr McCarthy refuses to co-operate.

Restoration tragedies

Most worrying for those who fear the party's anti-democratic drift is the way it is being driven by Republicans in state legislatures—bodies which have huge power over general elections. Republican lawmakers were responsible for vote audits in Arizona, Wisconsin and Pennsylvania. They have passed dozens of laws to make voting harder and, in at least 16 states, have arrogated to themselves power previously vested in non-partisan election authorities. Mr Raffensperger might be unable to reprise his role as the thumb in the dyke of American democracy, because he no longer controls the state's election board. The Republican legislature does—a change which was clearly made as a reprisal for Mr Raffensperger's opposition to Mr Trump.

Anyone hoping the party would "snap back" to its pre-Trump state will be disappointed. They might also be misremembering what that state was. The party has been shifting towards aggrieved extremism at least since Barack Obama's first election. In 2012 the political scientists Thomas Mann and Norm Ornstein wrote: "The Republican Party has become an insurgent outlier—ideologically extreme; contemptuous of the inherited social and economic regime; scornful of compromise; unpersuaded by conventional understanding of facts, evidence and science; and dismissive of the legitimacy of its political opposition." Mr Trump was not the instigator, but rather a beneficiary and powerful accelerant of that long-standing drift.



The Democrats have also grown more hardline, and for some of the same reasons. Discontent with globalisation and inequality have boosted populism of both stripes. America's primary system and the rise of non-competitive districts have reduced the rewards of moderation. Yet the Democrats' shift is so much more modest as to be almost incomparable—a situation Messrs Mann and Ornstein termed "asymmetric polarisation". The centre-left still runs their party, the left supports most of the centre-left's objectives (even if begrudgingly) and Democrats are not threatening democratic norms.

The Republicans' far greater extremism reflects their different coalition and philosophy. The Democrats are a multi-ethnic alliance of interest groups, whose diversity and commitment to policy goals foster pragmatism. The Republicans are much more racially homogenous and ideological. This makes them more unified and reactionary. Traditional conservatives fear progressive policies, while Trumpian populists fear immigrants—yet both see themselves struggling to hold back a liberal tide.

While Democrats see politics as an opportunity to implement policies, notes Matt Grossman, a political scientist, Republicans therefore see it as an existential battle between right and left. Notwithstanding his appalling treatment, Mr Raffensperger has no qualms about remaining a Republican: "I'm a conservative and so I will always be in the conservative party." This is why so few Republicans consider Mr Trump's unfitness to be a deal-breaker. He may be a bastard, but he is theirs.

That also explains why the party is so good at opposition politics. In government, its uninterest in policy is exposed: given an opportunity to "repeal and replace" Obamacare when, after Mr Trump's election, they controlled the presidency and both houses of Congress, Republicans turned out not even to understand the health-care policy. Angry opposition is their natural state—and their current one. While the Democrats are consumed by their legislative agenda, the Republicans are halfway to defining Mr Biden as a hapless Bolshevik ahead of the mid-terms.

Every fundamental—including the pandemic and economy, as well as the thermostatic nature of American politics—suggests that those elections will go well for them. How well, may determine whether Mr Trump runs for president again. A poor performance by the no-name outsiders he has backed in many primary races might give him pause. But if he runs, assuredly, he could win. ■

United States

New York politics

Adams eve

NEW YORK

An ex-cop prepares to take over America's biggest city at a difficult time

Mayors in New York are usually inaugurated on the steps of City Hall, where they deliver an uplifting speech laying out their vision for the city. Sometimes those visions are successful: Rudy Giuliani, elected on the back of a decades-long crime wave, vowed to make the city safer, and he did. Michael Bloomberg, elected after the attacks of September 11th 2001, said lower Manhattan must be rebuilt. Today, it is thriving. But David Dinkins never quite managed to be a mayor for all New Yorkers, which may be impossible. Nor did the outgoing mayor, Bill de Blasio, meaningfully reduce economic inequality.

Eric Adams, who will take over from Mr de Blasio on January 1st, planned to hold his inauguration in Flatbush, a working-class neighbourhood in Brooklyn—a nod to both the outer-borough coalition that propelled him into office and to his own upbringing in Brooklyn and Queens. But Omicron put paid to those plans; as cases spiked in New York, Mr Adams cancelled his own celebration. "I don't need an inauguration," he explained. "I just need a mattress and a floor...We don't want to put people in danger." That may be the easiest decision he makes for years to come.

Mr Adams inherits a reeling city. The economic fallout on New York from the September 11th attacks was largely confined to lower Manhattan; the pandemic, by contrast, has shuttered businesses across all five boroughs. New York lost 630,000 jobs in 2020 and has an unemployment rate, 9%, that is more than double the national average. Tourists are staying away. The city has 100,000 fewer restaurant jobs than it did in early 2020, and hotel occupancy rates hover around 50%, compared with 90% before the pandemic.

Subway ridership is only just over half its pre-pandemic levels. Only 28% of Manhattan's office workers are at their desks on any given day, and just 8% come in every day. Midtown is dead. Employment is unlikely to return to pre-pandemic levels until at least 2024. James Parrott of the New School's Centre for New York City Affairs expects that double-digit unemployment rates for the city's African-American and Latino populations could last even longer.

Fortunately, Mr Adams has a better relationship with the city's businesses than did his predecessor, though that is a low bar. Stephen Scherr, the chief financial officer of Goldman Sachs, is on the incoming mayor's transition team, which includes 700 people, compared with Mr de Blasio's team of 60 in 2013. Mr Adams has also created a corporate council of advisers, including executives from the finance, real-estate, hospitality and tech sectors—all focused on encouraging workers to get back to their desks and not leave New York for warmer, lower-tax climes. Mr Adams has grand plans to turn the city into a cybersecurity hub. He also wants to attract cryptocurrency businesses, and has suggested he might be paid in bitcoin.

He also ran on public safety, distinguishing him from his wealthy, liberal Democratic rivals, and boosting his popularity in the city's higher-crime areas. Overall, New York is far less safe than it was before the pandemic, with murders up 50% and non-fatal shootings double what they were two years ago. Unusually, Mr Ad- ▸▸

→ Also in this section

ams paired that campaign with one for police reform. A former officer himself, he often found himself in trouble while in uniform for his vocal criticism of the department. He protested against police brutality on the same streets he patrolled. His pick for top cop, Keechant Sewell, came from outside the department's rank-and-file; she was chief of detectives for Nassau County, on Long Island, and will be the city's first female commissioner.

Reforming the world's biggest police force while also making the city safer will be a difficult task. Already he has enraged progressives by vowing to restore the city's plainclothes anti-crime units, which were notorious for stopping and searching non-white people with inadequate pretexts. Hawk Newsome, a vocal Black Lives Matter activist, warned, "there will be riots, there will be fire and there will be bloodshed" if those units return.

Mr Adams also vowed to restore solitary confinement in the city's jails. If he successfully walks the tightrope he has strung for himself, the city will be better for it. Unlike his predecessor, he has good relations with the state's governor, Kathy Hochul, which will help with funding and reduce turf wars (Mr de Blasio and Andrew Cuomo, who resigned in disgrace, famously loathed each other).

To show support for the city's all-important hospitality industry, Mr Adams intends to hit the town every night. New York has not had a true carousing mayor since Jimmy Walker in the 1920s, who was a fixture at speakeasies and boxing matches. Like Ed Koch, who headed the city during when it was broke in the 1970s and 80s, Mr Adams seems to love being around ordinary New Yorkers. He drew crowds of enthusiastic supporters during the campaign, many of whom shared concerns about crime or stories of economic hardship.

Unlike his two predecessors, Mr Adams is personally familiar with such stories. He talks of carrying his clothes to school in a rubbish bag, afraid his family would be evicted. He has a learning disability, and was beaten by police when he was 15 years old. He joined the police force before serving in the state legislature and as Brooklyn's borough president. Once a Republican, he now considers himself a liberal.

During the campaign, it was unclear where he actually lived: in his office in Brooklyn's Borough Hall, in a basement apartment he owned in the borough or in New Jersey, where his partner lives. One morning after a late night, he was filmed driving on the sidewalk. And he can be prickly and defensive. Questioned over his decision to restore solitary confinement, he sputtered, "I wore a bulletproof vest for 22 years and protected the people of this city. When you do that, then you have the right to question me." None of this bothered voters too much. "His quirks are what make him a beloved figure," says Michael Hendrix of the Manhattan Institute, a conservative think-tank.

Mr Adams had better get used to tough questions. In a democracy, people can challenge or be openly rude to elected officials anytime they like. When Mr Koch walked the streets, he would ask people, "How'm I doin'?" New Yorkers, not known for their restraint, told him. ■

Labs and the law

Scientific suspicion

WASHINGTON, DC

Charles Lieber and the conflict between America and China over science

Charles Lieber, a renowned chemistry professor at Harvard, tried to avoid jail by lying to federal investigators about his work in China over the past decade. It may have seemed a reasonable if unethical gamble; the federal probe was investigating allegations that China was stealing scientific insights. No evidence suggests that Mr Lieber stole anything. But sometimes the cover-up is not just worse than the crime—it is the crime. On December 21st Mr Lieber was found guilty of lying to federal authorities and failing to declare both income earned in China and a Chinese bank account. He could face up to 26 years in prison and $1.2m in fines, though as a first-time offender he will probably not be punished so harshly. Still, Mr Lieber is 62 and has late-stage lymphoma. A few years behind bars could prove a life sentence.

His downfall is a cautionary tale. America's intensifying geopolitical rivalry with China has made previously innocuous relationships with Chinese academics suspect. As in similar cases the Department of Justice (DOJ) has pursued, proving that Mr Lieber or his associates engaged in espionage was a tall order. His hubris made their job easier. Yet as the crackdown on Chinese economic espionage continues apace, American science could suffer.

Ambitious scientists such as Mr Lieber depend on large research budgets and access to top talent. Despite having received more than $15m in grants from the National Institutes of Health (NIH) and the Department of Defence (DOD) between 2008 and 2019, the chance to get significantly more funding, this time from China, proved irresistible. Partnerships with foreign universities, including Chinese ones, were hardly unusual. In 2011, Mr Lieber signed an agreement with the Wuhan University of Technology (WUT) to collaborate on fundamental research in nanotechnology, his area of expertise. He also signed a three-year contract in 2012 to participate in China's Thousand Talents Programme, a government recruitment scheme to attract foreign scientists, that would provide $1.5m in funding for a new lab at WUT. Mr Lieber himself would receive up to $50,000 a month, some of which was deposited in a Chinese bank account, along with compensation for living expenses.

Mr Lieber failed to confess these details, both to the IRS in his tax filings, and to investigators from the DOD and NIH when they came knocking on his door in 2018 and 2019. Although partnerships with foreign universities are legal, America's government requires scientists receiving federal funding to disclose ties to foreign universities. And China's organised efforts to obtain valuable technologies through espionage are no secret. China has committed billions to acquiring them in key sectors identified as priorities, including nanotechnology. While some areas, such

Mr Lieber, alleged deceiver

as green energy, may be largely benign, others such as aerospace and materials science have military applications.

In response, the DOJ launched its "China Initiative" in November 2018, a campaign to prosecute cases of Chinese economic espionage. As Margaret Lewis, a law professor at Seton Hall University, explains, this was an unprecedented effort to target crimes in connection to one country and to focus on "nontraditional" sources of intelligence, such as academics.

The prosecution of Mr Lieber might look like evidence of the China Initiative's success, but that is not necessarily the case. Investigators admitted in court that they chose to pursue Mr Lieber in part because of the presence of ethnic Chinese researchers in his lab, which raises the risk of surveillance of people on the basis of their race—a violation of the DOJ's own guidelines. "This plays directly into Beijing's narrative of anti-Chinese racism," says Emily Weinstein of the Centre for Security and Emerging Technology, a think-tank.

Another worry is the government's heavy-handed approach. Proving economic espionage is difficult: prosecutors must show that any knowledge transferred was indeed a trade secret, and persuade a jury that the defendant acted with the intent to benefit a foreign government. As a result, the DOJ has focused on zealously prosecuting disclosure issues at universities—all its university-related convictions thus far have centred on research-security and tax-fraud cases, not espionage. The government argues, not unreasonably, that contacts with Chinese universities will, by definition, pass on scientific expertise to the Chinese government. But the DOJ may not fully grasp the grantmaking process and the specific technologies at issue. Its case against Anming Hu, a professor at the University of Tennessee, ended in an acquittal based on lack of evidence.

When the FBI came to arrest Mr Lieber in January 2020, he admitted that he "wasn't completely transparent by any stretch of the imagination...I was scared of being arrested, like I am now." Academics watching his case will no doubt take greater care, including by vetting their associates. The suspicion that now clouds any association with China could have a chilling effect. As geopolitical rivalry intensifies, the government rightfully worries that a growing range of technologies could provide China with an economic or military edge. But not delineating which technologies pose risks may lead researchers to shun any collaboration with China at all, even in mutually beneficial areas. American scientists may also refrain from hiring researchers with family ties to China. For a country whose greatest strength is attracting the world's best and brightest, this could prove damaging. ■

Philanthropy

The charity-industrial complex

Bridgespan Group: the most powerful consultants you've never heard of

OVER THE past 18 months, the world has heard a lot about MacKenzie Scott, the billionaire philanthropist formerly married to Amazon's Jeff Bezos. She has given generously to charities on the front line of the pandemic, including food banks, schools and children's health programmes. Relatively unknown, however, is the consultancy that has helped distribute almost $9bn on Ms Scott's behalf: the Bridgespan Group.

A non-profit consultancy, Bridgespan was spun out of Bain & Company, a management consultancy, around 20 years ago by three people, including a former managing partner. What began as a handful of smart people toiling in a small office above the Hard Rock Cafe in Boston is now a 329-person global operation with $59m in operating revenues in 2020.

It has advised some of the world's biggest donors, including the Bill & Melinda Gates Foundation, the Ford Foundation and Bloomberg Philanthropies. The list of non-profit groups it works with is no less impressive, including cutting-edge research centres such as the Johns Hopkins Bloomberg School of Public Health and big-name charities like the YMCA.

Bridgespan has two main lines of business. It advises wealthy donors, learning their interests and helping them create a donation strategy, then researching and doing due diligence on prospective organisations they might donate to. It also helps non-profit groups operate more efficiently. Beyond that, Bridgespan is shrouded in mystery. The only public information on the firm is contained in tax forms and the odd comment from former clients. In December Ms Scott announced plans for a new website with a "searchable database" of her gifts and more detail on her decision-making process. But many wealthy people like their privacy and Bridgespanners know how to keep quiet.

Bridgespan's story is, in part, the story of philanthrocapitalism, a movement that began around the turn of the millennium, as billionaires started applying business principles to their giving. It is now the norm for philanthropists to treat donations like investments, setting up vast foundations, monitoring the projects they fund and quantifying the return on their money. An entire industry has emerged to support this "venture philanthropy", including consultancies, such as Bridgespan, Rockefeller Philanthropy Advisors and Arabella Advisors, as well as researchers, donor networks and data providers, such as Candid and the National Centre for Family Philanthropy (NCFP).

Ms Scott has upended that model. She has held off setting up a foundation, instead outsourcing the entire process of picking grantees, contacting them and dishing out cash. "That signals something dramatically new, which is deploying billions of dollars through intermediaries," says Nick Tedesco, head of the NCFP. For Bridgespan, with great power and bumper contracts comes great responsibility.

The first challenge for any organisation trying to decide who deserves a multi-million-dollar grant is to make sure it has a full picture of all the non-profit groups doing good work in poor communities. Bridgespan trumpets its offices in India and South Africa, filled with local staff. It hires almost twice as many women as men and less than half its staff are white. Nidhi Sahni, who heads Bridgespan's American advisory business, says the firm makes sure it doesn't just settle on the "usual suspects". She is adamant, for instance, that proficiency in English should not determine whether a potential grantee makes it onto the firm's radar.

The next hurdle is dealing with potential conflicts of interest. Consultants that advise rich people on how to donate their money often also work with non-profit groups jostling for funding. William Schambra of the Hudson Institute, a think-tank, worries leaders of such organisations might feel compelled to hire Bridgespan for advice so they might come to mind when the consultancy recommends potential grantees. News that it is advising Ms Scott, who says she plans to give away her fortune of nearly $60bn "until the safe is empty", only adds to that pressure. "If I had a non-profit I would be banging down their door," Mr Schambra says.

Bridgespan's response is simple: "Given the amazing organisations we work with, some of them household names, it would be surprising not to have some of them come to the attention of donors." William Foster, the group's managing partner, is clear that he can't get a non-profit leader a lunch meeting with a big-name donor. In its conflict-of-interest policy, Bridgespan says that it "do[es] not make introductions to donor clients or share confidential information about donor priorities or strategies." Nor does it promote non-profits to potential donors. Even so, one in every 20 groups that has received funding from a philanthropist it advises had also been a client in the five years prior to receiving funding, by its own estimates. The list of organisations Ms Scott has donated money to includes several Bridgespan clients.

There is another tricky clash. Bridgespan, like many middlemen in the world of philanthropy, is itself a non-profit. In some ways, that is surprising. Though Bridgespan does not disclose its pricing model, researchers that cover the philanthropic sector say its rates can be hefty. And it competes for projects with for-profit consultancies such as McKinsey.

Nonetheless, Bridgespan's fees cover only about 75% of costs, and like many non-profits, the group relies on donations to fund the full range of its work. The consequences of this can be rather tangled. Alongside the groups working on education, health, gender equality and gay rights, Ms Scott's list of grantees includes a number of intermediaries in the philanthropic sector—including the Bridgespan Group itself. ■

Male loneliness

Oh man!

WASHINGTON, DC

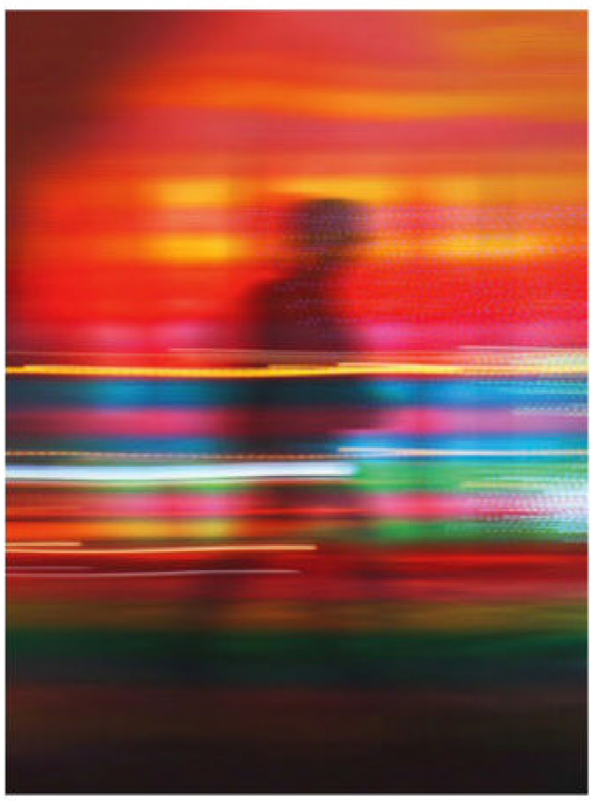
Why men are lonelier in America than elsewhere

ARE ISOLATED men driving American women up the wall? A recent sketch on "Saturday Night Live", which refers to studies concluding that males in America are increasingly friendless, suggests that they are. A young woman, frustrated by her boyfriend's inability to open up to anyone else, takes him by the hand and leads him to a "man park" (like the dog version) where, after a shy start, he finds fellow males to make friends with. Some viewers disliked the likening of men to dogs, but the sketch, which went viral online, illustrates fresh concerns about an old worry: the loneliness of American men.

As people in rich countries work longer hours, marry later and spend more time with their children, not friends, research suggests loneliness is increasing. A study by the University of Pennsylvania found a direct link between social-media usage and loneliness. More time spent online means less time building friendships.

The problem may be particularly severe in America. A large international study by British academics found that people in individualistic countries (a measure on which America scores highest) reported greater loneliness. America also has one of the highest divorce rates; men may be more likely to lose mutual friends after a split. A strong work ethic and geographical mobility (meaning friendships are liable to be lost or weakened as people relocate) is likely to exacerbate the problem.

A survey published in 2021 by the Survey Centre on American Life, part of the American Enterprise Institute, a think-tank, found that friendship groups have shrunk in the past three decades. The decline has been particularly marked among men. In 1990, 55% of American men reported having at least six close friends; today only 27% do. The survey found that 15% of men have no close friendships at all, a five-fold increase since 1990.



I'm a lonely boy

Those who study male loneliness believe that a particularly American version of masculinity is in part to blame. Since 1990 Robert Garfield, a psychotherapist and author of "Breaking the Male Code", has run "friendship labs", men's therapeutic groups, which have shown him that men crave emotional connection. But American boys, says Dr Garfield, who has also run such groups in Europe, are often taught that successful men exhibit particular traits—restraint, independence, competitiveness—at the expense of others.

As women's and LGBT rights have advanced in recent decades, along with more emotional ways of connecting with others, "men are being asked to stretch themselves", Dr Garfield says. Over time, this is likely to have a positive effect on the way men relate to each other, but at the moment, "males are in a fighting phase".

Marc Schapiro, a 24-year-old English teacher from Maryland, agrees. He says he was taught male friendship is "stoic and lacking outward affection". But now he sees a different portrayal of friendship on social media, particularly by women and LGBT people. He would love, he says, to be able to "show more affection and drop the constant snide comments and ribbing", but he finds the disconnect between what he grew up believing about friendship and how he sees other people relating to each other unsettling. The "quasi-socialising" he and his friends do online, via games and various message boards, meets no real need, he adds.

All this comes at a heavy cost. Suicide is more common among young men than young women. Niobe Way, a psychologist at New York University who studies adolescent male friendship and is the author of "Deep Secrets: Boys' Friendships and the Crisis of Connection", says it is no coincidence this divergence begins to happen around the age that many boys move away from close friendships. In childhood, she says, boys tend to be as open as girls about their need for friends. As they get older, they "feel they have to get into a gender straitjacket" and define their masculinity primarily as not being feminine. By the age of 15, many boys start saying they don't need friends and worrying that close friendships will make them seem "girly". This "clash of culture and nature", Dr Way says, is much more marked among white boys than black ones.

The effects are far-reaching. Research has linked loneliness to poor health. It can make men angry and violent. Male loneliness also affects women. Dr Garfield observes that two-thirds of divorces are initiated by women, many of whom complain their husbands are emotionally incompetent. "There's nothing new about that, but women are increasingly unlikely to put up with it," he says. ■

Lexington | Rage against the machine

What Chicago tells you about racial politics in America

Tom Stoppard, a British playwright, once quipped that it was not the voting that makes democracies, but the counting. He was right in more ways than one. In March 2020, even as the then novel, now overly familiar coronavirus was spreading out among Americans, so too were census workers, collecting information on every human being within the country's borders. Over the past six months or so the results of the census have gradually been released. They have enormous political consequences.

One of the biggest stories of the census has been how the big cities of the north-east and Midwest have been losing African-American voters even as they have become far more diverse otherwise. The city of Chicago lost 85,000 black residents in the decade to 2020, or about 10% of the total. That was more than any other city except Detroit. And yet the city also gained 40,500 Hispanic residents and 45,000 Asian ones, as well as 34,500 people of two races and 9,000 whites. The loss of black people, driven by deindustrialisation and opportunity elsewhere, actually slowed compared with the previous decade. But the "exodus" of black residents, as Lori Lightfoot, Chicago's mayor, calls it, is nonetheless obsessing Chicago's black political class. The city provides a lesson in how racialised politics increasingly hinders the Democratic Party.

Race and politics have always been linked in Chicago. From the emergence of the enormous stockyards in the late 19th century, where millions of heads of cattle were herded from across the Midwest to slaughter each year, the city drew black migrants from the South. Facing brutal discrimination which forced them into overcrowded and underserved ghettoes in the south and west of the city, they quickly found a political voice. Real politics happened (and still happens) outside of elections, with power brokers such as church leaders and union leaders picking candidates. This machine has helped elevate black politicians. Decades before Chicago gave America its first black president, it gave Congress its first black committee leader, William Dawson, in the 1950s. In 1983, the election of Harold Washington, a black radical, shook up the Irish-American mafia that controlled the city for most of the 20th century. It inspired a young Columbia University graduate, Barack Obama, to become a community organiser in the city.

Today, the black political power machine in Chicago is looking shakier. The census results require the redrawing of the council ward map. The Hispanic caucus, a relatively new bloc in the city's racial politics, wants two more seats in the 50 seat council, to account for Hispanic population growth. Mostly white members from the north of the city lobbied for the creation of the city's first Asian-American ward, something that almost everyone seemingly agrees on. The black caucus stands to lose two of its 18 black-majority seats, which its members see as an affront. The leader of the Hispanic caucus and members of the black caucus spent November and December trading increasingly personal barbs.

The result is likely to be a referendum. That will drag the argument out for months, and cost millions. And many Chicagoans might reasonably ask, what is it really all about? When you look at the voting record of council members (known as aldermen), Chicago's ethnic caucuses matter less than they used to, says Dick Simpson, a former alderman and academic expert on Chicago's politics. Chicago now has five members of the Democratic Socialists of America, and its Democratic progressive caucus has 18 members. Nowadays blocs like those matter as much as racial ones. Indeed, the rise of these groups offers hope that one day Chicago's rather imperial mayors may face more public scrutiny and accountability than they used to. Ms Lightfoot has already found it trickier to get her measures through than past mayors.

So why is race, not ideology, at the core of the ward map debate? The problem, suggests Ms Lightfoot, is that while the machine matters less to actual policy, it matters as much as ever in the election of members. Despite some improvement, Chicago remains hyper-segregated, which enables racial gerrymandering. Ms Lightfoot recounts how in the council wars of the 1980s, aldermen had to wait over a dot-matrix printer for hours to try to estimate the electoral results of different maps. Now they can create projections for any hypothetical ward almost instantly. Members worry about any dilution of "their" racial bloc vote, and with it, the chance of their losing an election. "The basic blood sport of redistricting hasn't changed but the stakes are higher," she says. When it comes down to it, aldermen will put their cushy positions ahead of a more principled politics. Otherwise, they lose.

An idea whose time has passed

It would be better if Chicago, and America, could do away with this racialised politics. Most Hispanic and black voters, and indeed a lot of white people, share the same interests: lower crime, better jobs, better services and greater investment in their neighbourhoods. Ethnic voting blocs are better suited to portioning out a pot of city jobs and money to cronies than to improving things for all voters. The black and Hispanic caucuses did not create this machine, and segregation meant they needed to win a seat at the table. But that does not make it good. "I don't think in my lifetime we'll get beyond the influence of race in politics," says Ms Lightfoot, who is 59. Nevertheless, she says it has to be worth trying.

In Washington the Black Congressional Caucus has become less keen on racial gerrymandering in recent years. After decades of accepting a Devil's pact, in which black Democrats got safer seats and Republicans got more seats, a few of its members are now pushing for their seats to be split up, diluting the black vote but improving Democrat chances. America's inequality, its violence and its urban blight may affect black people disproportionately. But it affects voters of all colours. In the long run, counting up voters and packing them into districts by the pigment of their skin is not a good way to fix it. ■

Illegal drugs

A new narconomics

ASUNCION, LIMA, MEXICO CITY AND QUITO

Latin America's gangs have had a good pandemic

THE EVENT had all the trappings of a new-year celebration. Fireworks lit up the sky. Young men danced arm-in-arm, singing, waving flags and blasting music. Only it was not an end-of-year party, but an evening in July. The fireworks were accompanied by rounds of gunshots. And the revellers in Santiago, the capital of Chile, were mourning a young man with alleged ties to drug traffickers during what was supposed to be a national lockdown.

Chile has long been considered one of Latin America's safest countries. Yet between May 2019 and December 2020 criminal gangs held nearly 800 so-called *narco-funerales*, according to the country's chief of national police. Normally such grandiose affairs are associated with Mexican drug lords, but they have become ever more popular in a place which is becoming ever more violent (prison murders in Chile reached a four-year high of at least 61 in 2020). It is just one sign that gangs are gaining clout across Latin America.

In some ways this is surprising. Covid-19 hit Latin America hard. Many people expected it to hurt drug traffickers, too. They were already under pressure, thanks to the legalisation of marijuana in many places and the incarceration of various kingpins in the United States and elsewhere. When covid stopped young people from clubbing, demand for party drugs like cocaine and ecstasy was expected to fall. As the global shutdown affected the supply of everyday goods, many observers thought it might make it harder for gangs to lay hands on the raw materials to make drugs, or to ship their wares across borders.

Instead the pandemic has confirmed that the drug business is resilient and adaptable. Although supply chains were initially affected, many have bounced back. Gangs have exploited the chaos of covid to attract fresh recruits, luring out-of-school children in Colombia to pick coca and hiring young "cyber-mules" to move profits around in cryptocurrencies. They have also branched out into other crimes.

As the industry has changed, so too has the policy of the United States towards it. For half a century American administrations have tried, without success, to stem the flow of drugs. Now President Joe Biden's policy appears to prioritise stemming the flow of drug money. On December 15th he signed two executive orders: one creating a national council to fight transnational organised crime and another imposing sanctions on 24 groups involved in the drug trade. How much difference this will make remains to be seen.

The crystal shipping route

The profits from selling illegal drugs are so vast that dreaming up creative ways around the law is just a cost of business. Prohibition has so far proven ineffective at every step in the supply chain. In Colombia, which produces over 60% of the world's cocaine, the army eradicated record amounts of coca in 2020 by hand. But coca-growers simply planted new bushes. So despite the eradication campaign and early disruptions caused by covid, cocaine production reached record highs (see chart on next page).

Similarly in Peru, the world's second-biggest producer, coca-leaf prices, at \$1.40 a kilo, are half of what they were two years ago. Yet it remains more profitable than other crops, says Marianne Zavala of the ▸▸

national group of coca growers. (A small legal market exists there for coca leaf.)

Gangs, used to shipping their wares covertly across borders, responded to national lockdowns more innovatively than most. Mexican ones dug tunnels and flew drones across the border to keep supplying cocaine and other drugs to the United States, says Irene Mia at the International Institute for Strategic Studies, a think-tank in London. (Ms Mia formerly worked for *The Economist*'s sister company.)

Others were more brazen: in September 2021 one Brazilian gang stole three planes from an airport, including one belonging to Almir Sater, a country singer. The First Capital Command, a Brazilian criminal network founded by prisoners in the 1990s which tops Mr Biden's list of groups to be sanctioned, relied upon corrupt highway and port officials to keep business going, says Marcos Alan Ferreira at the Federal University of Paraíba, in João Pessoa.

Move that dope

As roads closed and commercial flights were cancelled, traffickers increased the proportion of drugs they moved by river, lake and sea. Like other businesses, they were frustrated by lengthy shipping delays and soaring shipping costs; even before the pandemic, Brazil and Colombia had some of the highest costs in the world. So many increased the size of their cargo in shipping containers. This has led, in turn, to record hauls of cocaine being seized. Others hired yachts and submarines.

The pandemic also sped up existing trends. According to the US Drug Enforcement Administration criminal groups now mostly deal with customers through social media or messenger apps, rather than using the dark web (although such markets are still worth around $315m annually). Digitisation has increased in other areas. Cryptocurrencies such as Bitcoin, which is now legal tender in El Salvador, make it easier to launder money.

For years gangs have been moving into newer synthetic highs, such as methamphetamines and fentanyl, and more potent pot strains. This trend appears to have accelerated. According to figures released by Mexico's defence department in December, 3,500kg of fentanyl, a synthetic opioid, were seized between 2019-20, compared with 560kg between 2016-18.

In November the US attorney's office announced that the largest haul of the past two years of meth and fentanyl had been found in a truck near San Diego. Fentanyl is more potent than heroin; tens of thousands of Americans die each year from overdoses of it.

Just as legitimate companies are contemplating more post-pandemic "reshoring", so too can gangs make these drugs nearer to home, says Scott Stewart, a security analyst. Mexican gangs increasingly produce what they used to import from Europe, sourcing raw materials from China. In 2020 Brazil's First Capital Command used 38 medical and dental clinics as fronts to procure chemical precursors, one police investigation found. During a pandemic, it hardly looks suspicious for such places to be stocking up.

In addition to diversifying the drugs they sell, traffickers are expanding into other industries. Some steal cars or fuel from pipelines, or money from banks. It helps when police are staying at home to avoid catching covid.

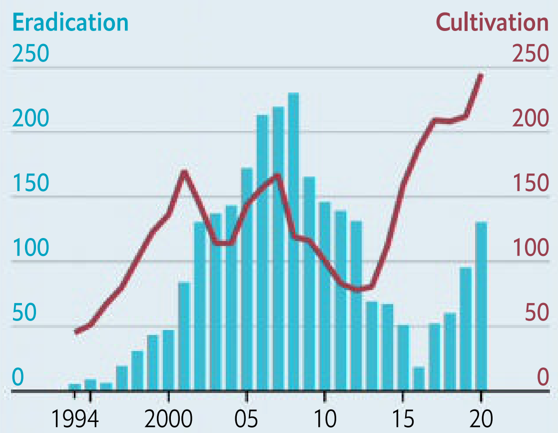
Once a gang has established a monopoly of violence on its turf, it can control or demand a cut from all the illegal activity that takes place on it. It can also extort money from legal businesses. Mexican gangs do all this, and also prey on the migrants who flee illegally from Central America to the United States. They are reckoned to make up to $5bn per year from helping migrants across borders, often robbing them en route. Covid has prompted governments to close some borders almost entirely. This creates an opportunity for gangs, who charge high fees to smuggle people and goods, for example between Venezuela and Colombia.

The criminal groups that have done best out of the pandemic are those with strong international networks. Mexican gangs, some of which had been using the Chilean port of Valparaíso to ship drugs before the pandemic, were well-placed to increase activities there during it. But the nature of such partnerships is changing. Criminal networks are relying less on the rigid control of traditional Colombian and Mexican kingpins. To use management jargon, they are decentralising. The First Capital Command outsources "contract work" to Paraguayan subsidiaries.

Such regional expansion has increased violence across the Americas. Mexican gangs have stirred up trouble in central Chile to distract attention from their activities in the ports. Turf wars between rival groups in Mexico or between Brazilian gangs for access to trafficking routes and natural resources in the Amazon are flaring up. In Tulum, a Mexican beach resort, there have been three gang battles in the past three months, including one in which two tourists were killed in the crossfire.

Growing confidence

Colombia, coca, '000 hectares



Sources: UNODC; US ONDCP

Pockets of violence can be found across the region. Amambay, a Paraguayan department on the drug route controlled by the First Capital Command, has just 2.4% of the country's population, but in 2020 accounted for nearly a third of its murders.

In Ecuador President Guillermo Lasso declared a state of emergency in October 2021 to combat drug violence, following a prison riot which killed 119 inmates. The beheading of six people during the riots, and a nationwide surge in street crime alongside the killings, were taken as evidence that two Mexican gangs, Sinaloa and Jalisco New Generation, were fighting a proxy war to control supply chains. Such extreme violence is rare outside Mexico. But Christian Zurita, a local reporter, thinks it is more likely that the brutality represents a domestic struggle for market share, caused by the splintering of Ecuador's biggest gang, Los Choneros.

When polled, most Chileans now say that fighting drug-trafficking is the most important national-security issue, above covid and climate change. Such concerns pushed José Antonio Kast, a hard-right candidate who had promised to ban *narco-funerales*, into Chile's presidential run-off; a contest he lost on December 19th.

These fears can be found across the region. According to a recent report from Gallup, a pollster, people in Latin America are, with those in sub-Saharan Africa, the least likely to feel secure in their neighbourhoods, as measured by trust in the police and feeling safe walking home.

The needle and the damage done

Most businesses have been forced to adapt to the strange pandemic world: whether by grappling with the mute button on Zoom or dealing with shortages of basic goods. Similarly, covid forced the First Capital Command to become more sophisticated, thinks Ryan Berg of the Centre for Strategic and International Studies, a think-tank in Washington. The group expanded into legitimate areas—making hand sanitiser, for example—and found new ways to launder money. Other gangs are likely to expand into legal industries, thinks Ms Mia.

But drugs remain the easiest source of profits for gangs, and will be so long as they remain illegal. The pandemic appears not to have curbed demand for most highs. Nor have lockdowns prevented suppliers from satisfying the ravenous demand for them. Whatever global calamities buffet drug gangs, the rewards of their trade give them a powerful spur to adapt. ■

The new left

Boric acid or placid?

SANTIAGO

Chile's millennial president-elect has promised to end "neoliberalism"

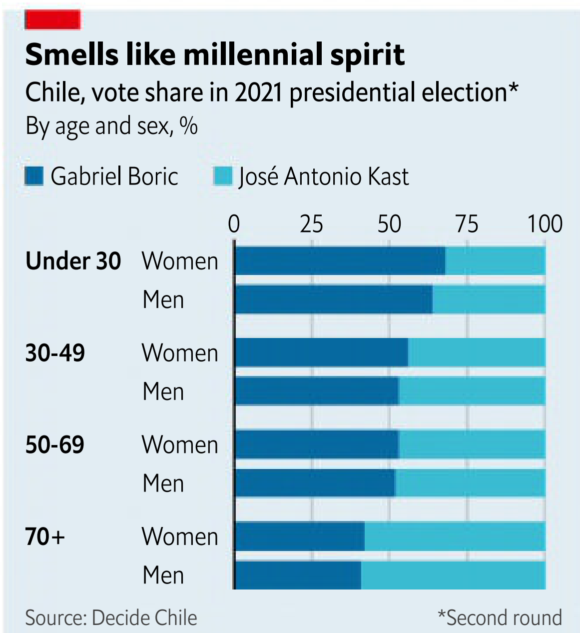
LEFTISTS CHEERED and investors trembled when Gabriel Boric, a former student protester whose political coalition includes the Communist Party, won Chile's presidential election on December 19th. Contrary to expectations, he beat José Antonio Kast, a hard-right candidate, by a hefty 11 percentage points.

When Mr Boric is inaugurated in March, he will be, at 36, Chile's youngest president in two centuries. Preliminary analysis suggests that much of his vote came from younger people, particularly women, who feel fed up with establishment politics (see chart). But how radical will he be when in office?

Despite his grand plans to change Chile, for much of his first year Mr Boric will be constrained by three forces. He will govern alongside an assembly that is rewriting the country's constitution, a process that started in response to violent riots against inequality in 2019. He will be limited by Chile's Congress, which is fragmented among 22 parties. And he will pay a price if he spooks markets too much. The relationship between the presidency, the constitution-writers and legislators will determine how far the country lurches to the left.

When he started out in politics, Mr Boric made a name for himself railing against the centrist parties that have governed the country since the end of Augusto Pinochet's military dictatorship in 1990. He called the former centre-left president Ricardo Lagos a "producer of discontent" and claimed the Christian Democratic party had done little but "torpedo transformations", ignoring the fact that such centrist parties oversaw years of impressive growth and a big reduction in poverty. The country grew at an average of 5% per year between 1990 and 2018, and poverty fell from 36% in 2000 to 9% in 2018. (Poverty now stands at 11%.)

Since becoming a national deputy in 2014 Mr Boric has ruffled Congress by showing up with a mohawk, tattoos and—most shocking to some—without wearing a tie. More worryingly, in 2018 he visited a former Communist paramilitary exiled in France who is charged with assassinating Jaime Guzmán, the author of the country's dictatorship-era constitution (he later apologised for the visit). His initial presidential manifesto included proposals to revise free-trade agreements and require companies to give half their board seats to workers. On the campaign trail he promised that "If Chile was the cradle of neoliberalism, it will also be its grave."



But after losing the first round to Mr Kast, Mr Boric tempered his tone. He began to work with the centre-left parties and tweaked his manifesto after consulting a group of centrist economists. He promised to be tough on crime and recruited Izkia Siches, the popular head of the doctors' union, to lead his campaign. He smartened up with a suit and new haircut. Having won, he vowed to be the president "of all Chileans" and to implement reforms "with fiscal responsibility".

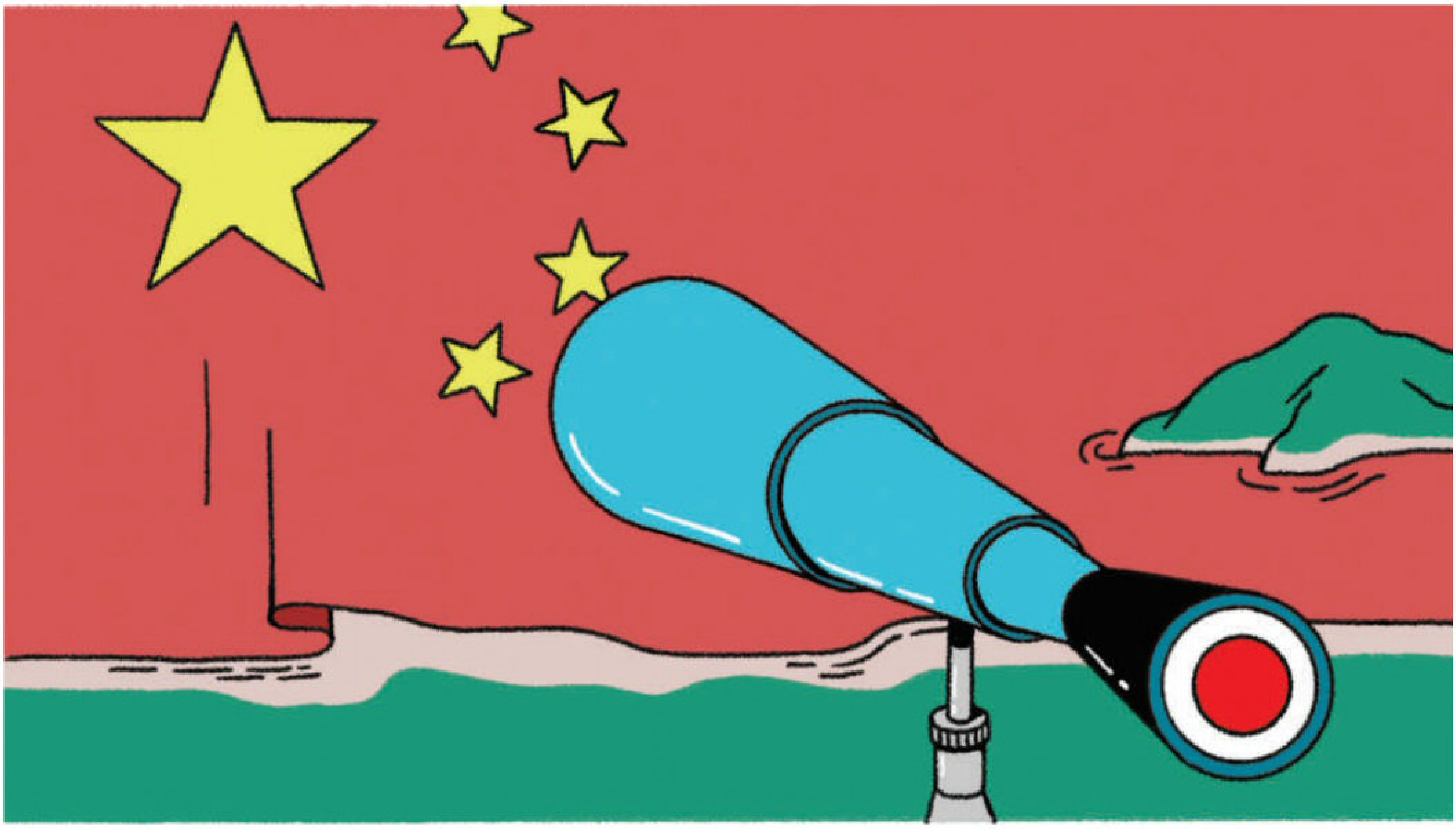
Many are unconvinced. His platform remains radical. He vows to raise taxes by 8% of GDP over two four-year terms and abolish private pension funds. He makes grand promises, such as free public transport for all and universal health care funded by a 7% levy on all workers, but shows less enthusiasm for fostering the economic activity that might help pay for such things. His original manifesto, which declared itself to be a feminist document, mentions "gender" 90 times but "economic growth" only ten.

On December 20th he promised to cancel a big mining project on environmental grounds. He also supported a policy that would have let Chileans withdraw 10% of their pension savings for the fourth time in a year. This would have caused long-term damage to pension pots and increased inflation—which, at 6.7%, is already more than double the central bank's target.

Growing pains

Much depends on the two political bodies that could limit Mr Boric's plans. The constitutional convention already skews to the left, although it will choose new leaders on January 4th that could temper its radicalism. The institution that is most likely to constrain him is Congress. A general election in November left the Senate split evenly between parties of the left and right; Mr Boric's coalition commands only five seats. The lower house is also almost tied, and Mr Boric's coalition has only 37 of 155 seats. This should force him to seek broad support for his proposals.

Mr Boric claims he is different from old-guard leftists in the region. He calls himself a social democrat and has criticised leftist dictatorships in Cuba, Venezuela and Nicaragua. Some hope that his government will be similar to that of Brazil's Luiz Inácio da Silva, or Lula, who moved from the left to the centre when president from 2003 to 2010. Moderates are holding their breath. ■



East Asian relations

The view from Tokyo

TOKYO

What Japan makes of China

THE FIRST reliable records of an official mission from Japan to China date to 238AD, when Himiko, a Japanese queen, dispatched a delegation to China's Wei kingdom, offering as tribute ten slaves and two 20-foot-long textiles. By the 7th century the Yamato, a clan that ruled much of Japan at the time, was regularly sending envoys with tributes to the Sui and Tang courts. Japan adopted China's system of writing; Japanese monks and scholars absorbed China's religions.

Japan has remained a close, if wary, observer of its bigger neighbour over the centuries. In the late 1970s and 1980s, motivated in part by guilt over wartime atrocities, Japan helped China modernise. Japanese firms were among the first to tap into its growing market. Japanese leaders also raised early alarms over Chinese expansionism, especially after the two clashed between 2010 and 2012 over some uninhabited rocks in the East China Sea, which Japan calls the Senkaku Islands and China calls Diaoyu. "We warned the US: this is not a small compartmentalised issue between Japan and China, but a sign of a growing power in the region," says Sasae Kenichiro, a former Japanese ambassador to America.

Such views fell on deaf ears in America and Europe, where leaders were focused on the benefits of integrating China into the global economy. Yet in recent years Chinese aggression in Hong Kong, repression in Xinjiang and sabre-rattling around Taiwan have made many Western governments more suspicious, too. As they enter an era of competition with China, Japan's perspective is being sought anew. Some prominent American and British officials have begun to talk of bringing Japan (and others in the region, including South Korea) into the Five Eyes, an Anglophone intelligence-sharing network, in the hopes of improving their understanding of China. "Fifteen years ago, if I talked to [Western colleagues] about the negative aspects of China, I was treated as a right-wing, China-hating, Japanese scholar," says Matsuda Yasuhiro, a China specialist at the University of Tokyo. "Now people listen to us."

Japanese observers of China now speak of three worrying trends. The first is Chinese overconfidence. "They truly believe that the West is in decline," says Kanehara Nobukatsu, a former Japanese deputy national-security adviser. Japanese scholars reckon that Chinese leaders are not posturing when they claim their political system is superior to America's messy democracy. Some notice worrying parallels with Japan's own cocksure stance in the run-up to the second world war. "We are always reminding them of our past mistakes before the war," says one former senior Japanese diplomat. "They say, 'Are you joking, we are totally different.' But in our eyes there are increasing similarities."

The second is a shift from collective to individual leadership under Xi Jinping, China's president. Japanese officials fret that in its dependence on the decisions of one man, China is becoming more like North Korea. Indeed, Mr Xi, in this view, may be even more isolated than the Swiss-educated Kim Jong Un, North Korea's dictator. "Xi doesn't know the free world at all—I'm sure that Kim knows our world better," says Mr Kanehara.

Lastly, there is the state of the Chinese economy. Mr Xi's recent crackdown on large private companies amid a push for ▸▸

"common prosperity" has left many in Tokyo worried about the future of Chinese growth. "The Chinese are coming to us and encouraging us to invest more, they are saying don't miss the boat," says an adviser to a major Japanese bank. "But when the Chinese say this, it means they have a problem." China's support for overseas infrastructure projects through its signature Belt and Road Initiative has dropped dramatically in recent years—a sign the Chinese economy faces "serious problems" at home, argues Maeda Tadashi, governor of the Japan Bank for International Cooperation, the state-owned overseas development-finance body.

A slowdown in China would have drastic implications for Japan's own economy: China sucks in 22% of its exports, more than any other country. Japanese China-watchers fear it may also push Mr Xi to divert attention from a faltering economy by stirring up nationalist passions with adventurism around Taiwan or the Senkaku/Diaoyu Islands. Still, many Japanese scholars remain more sceptical than those in America that war over Taiwan is imminent, says Aoyama Rumi of Waseda University in Tokyo. Japanese experts assume Mr Xi will not endanger his own power by launching a risky all-out invasion of Taiwan's main island any time soon.

As elsewhere, military and security types tend to be more worried than political analysts about Mr Xi's possible willingness to use force to take Taiwan. Yet even they tend to be more equivocal than their American counterparts. "The timeframe could range significantly," says General Yoshida Yoshihide, chief of staff of Japan's ground forces. "It's difficult to say something definite, like 'within six years'," as one American admiral suggested to Congress in 2021. Japanese observers worry more about "grey zone" activities that fall short of a full-on invasion, from cyber-attacks to incursions into Taiwan's waters by the Chinese coast guard or a land-grab of Taiwan's outlying islands.

Those worries have fuelled a shift in Japan's own China policy. Before the pandemic, Japan and China had been enjoying a period of relative bonhomie. Abe Shinzo, Japan's prime minister at the time, sought to stabilise relations after the Senkaku/Diaoyu clashes, and invited Mr Xi for a state visit in April 2020. Covid-19 halted those plans. Kishida Fumio, Japan's new prime minister, has tried to tread carefully, but has nonetheless taken several hawkish early steps. His cabinet includes a new minister for "economic security", charged in part with lessening reliance on China for critical supplies. He also appointed Nakatani Gen, a former defence minister known as a China hawk, as a human-rights tsar, with an eye towards taking a tougher stance on Chinese abuses in Xinjiang and Hong Kong. A stimulus package passed in November included an unusual ¥774bn ($6.8bn) earmarked for additional defence spending to accelerate purchases of new missiles and aircraft.

In 2022 Japan and China will mark the 50th anniversary of the normalisation of post-war relations. There is little appetite for celebrations. In 2021 some 71% of Japanese said China posed a "threat", up from 63% in 2020. Likewise, 66% of Chinese had negative views of Japan, up from 53%.

The two militaries agreed this week to improve their communications channels—a welcome step, but also a sign of how worrying tensions have become. Mr Kishida has demurred at a visit by Mr Xi, while stopping short of officially rescinding the invitation. He also decided that Japan will not send any cabinet ministers to the Beijing Olympics in February, only a handful of sporting officials. Japan will not call the move a "diplomatic boycott", as America and other allies have. But no one in China will mistake the slimmed-down delegation for the tributary missions of yore. The next phase of Japan's and China's long history is likely to be turbulent. ■

Cooking with cannabis

Pot cuisine

PRACHINBURI

THC is the new MSG

BAN LAO RUENG does not resemble a den of iniquity. A two-hour drive from Bangkok, the Thai capital, the restaurant caters to families and old folk. Gauzy curtains frame the windows and doilies decorate bags of cookies on sale at the counter. The menu features such classics as *tom yum* soup and *khanom pang na moo* (crispy pork toast). Yet a closer look reveals the presence of an illicit ingredient: cannabis.

Illicit, that is, until recently. For decades Thailand, like many other Asian countries, harshly punished anyone caught with the demon weed. But the government has turned over a new leaf. In 2019 the country became the first in Asia to legalise pot for medical purposes. A year later the government announced that parts of the plant containing less than 0.2% THC, the psychoactive compound in cannabis, could legally be used in cosmetics and food. In November last year Ban Lao Rueng became the first restaurant in the country to serve cannabis-infused dishes. At least a dozen more have since sprung up.

Mum always said to eat leafy greens

What accounts for the reversal? There is growing awareness in government that Thailand's punitive drug-control regime is ineffective. Relaxing cannabis laws was also politically expedient. In order to make up the numbers to form a coalition, Thailand's ruling party needed the support of Anutin Charnvirakul, the leader of a small party that campaigned to have the green stuff partially decriminalised. He was appointed deputy prime minister and health minister, and allowed to keep his promise.

There is a long tradition in Thailand of cooking with cannabis. Thais began mixing the plant, which is native to Asia, into herbal remedies and then food centuries ago. Even after it was criminalised in 1934, many Thais carried on cooking with it. Chakree Lapboonruang, a 30-something Bangkokian, says his father regularly tossed cannabis leaves into the *pad gaprao* (basil chicken stir-fry) he cooked for the family. "When you have something tasty, [cannabis] makes it better," Mr Chakree says. "It's just like MSG, except it's natural."

Food-and-drink companies are seeing green. In April Ichitan, Thailand's biggest teamaker, launched two drinks infused with terpene, a compound responsible for cannabis's pong. The Pizza Company, a Thai fast-food chain, recently introduced "Crazy Happy Pizza"; its toppings include one deep-fried cannabis leaf. Weed is good for business, says Mr Chakree, an owner of Kiew Kai Ka, a trendy restaurant in Bangkok. There is not enough THC in the food to make people high. Yet when customers eat dishes from his restaurant's cannabis menu, he laughs, they "get hungrier".

Climate change

Prayin' won't do you no good

MANILA AND SINGAPORE

Extreme weather in Malaysia and the Philippines is a sign of worse to come

On December 16th Typhoon Rai made landfall in Siargao in the south-eastern Philippines. With sustained winds of 195kph and gusts of up to 240kph, the storm barged westward and slightly northward, the eye making eight more landfalls in the Philippine archipelago, where it is known as Typhoon Odette, before sweeping out over the South China Sea, spinning just as violently as when it first hit land. It was the strongest storm to batter the Philippines in 2021.

The blasts of wind and the storm surges they whipped up onto the seashore, along with drenching rain that turned watercourses into torrents, flooding lowlands and setting off landslides, combined to gouge out a path of death and destruction across the southern and western Philippines. Half a million homes were damaged: flimsily built buildings were blown down; more sturdy structures had their roofs wrenched off. Trees were uprooted, crops flattened and livestock killed. Fishing boats were smashed. Bridges were washed away and roads covered in debris. Water, power and phone lines were cut off.

By December 29th Typhoon Rai had disrupted the lives of 4.2m people. The storm had spurred more than 720,000 people to flee their homes, and 560,000 were still displaced. Nearly 400 people had been killed and more than 1,100 injured. Another 83 remained missing. Official estimates put the cost of damage to infrastructure at 16.7bn pesos (about $330m) and to agriculture at 5.3bn pesos.

Meanwhile, Malaysia is experiencing its worst flooding in decades. Torrential rain since December 16th has caused rivers to overflow their banks, leaving vast tracts submerged, houses damaged and people stranded without food, medical attention or, ironically, water. The floods have left nearly 70,000 people displaced in 430 evacuation centres in eight states and had killed at least 48 by December 28th. An official at the environment ministry described the downpour as something that "only occurs once every hundred years".

The two events are not directly related. The floods in Malaysia were caused by a mix of a tropical depression, the seasonal monsoon and Typhoon Rai, Azizan Abu Samah, a meteorologist at Universiti Malaya in Kuala Lumpur, told ChannelNewsAsia, a regional news website and channel.

But Philippine typhoons and Malaysian floods are connected in that both are likely to become more intense. As climate change causes temperatures to rise, the warming atmosphere will hold more moisture, leading to more rain and making floods more common. Typhoons, which draw their strength from energy stored as heat in the oceans below them, will intensify too: most of the heat gained by the planet as a result of climate change is stored in the oceans. The latest report by the Intergovernmental Panel on Climate Change, a UN-backed body, found that it was likely that the proportion of storms in categories 3, 4 and 5 has increased over the past 40 years. The trend is projected to worsen as the earth warms.

Yet the reaction in both countries has, depressingly, centred more on political point-scoring than preparing for future disasters. In Malaysia an opposition lawmaker claimed that a motion to discuss the floods in the lower house had been rejected. The speaker denies ever having received such a motion in the first place.

In the Philippines Rodrigo Duterte, the president, visited Siargao and warned locals not to trust politicians who visited to be photographed against the backdrop of destruction and suffering. (An election to choose his successor is due in May.) He jokingly urged displaced islanders to squat on private property and scavenge wood from coconut trees felled by the storm to build new homes. His speech drew cheers and laughter from his audience.

Yet in all likelihood, Filipinos living along the path carved by Typhoon Rai will soon set about doing just what Mr Duterte suggested, and what many in the south have done before: rummaging through the debris for materials to build new homes strong enough to last only until the next typhoon comes along to blow them down. ■

What Typhoon Rai left behind

Politics in South Korea

Merciful Moon

A presidential pardon catches South Korea by surprise

Office workers around Gwanghwamun Square in central Seoul breathed a collective sigh of relief just before Christmas. Ever since Park Geun-hye, a former president, was sent to prison for corruption and abuse of power in 2017 her supporters had been staging noisy protests in the middle of South Korea's capital, calling for her release. Even after mass rallies were banned in a bid to stem the spread of covid-19, lone protesters with megaphones or speakers mounted on vans continued to make the rounds of the square. Now silence prevails. On December 24th Moon Jae-in, Ms Park's successor as president, announced he would pardon her and set her free on New Year's Eve.

Few observers expected Mr Moon to make that decision. The president, who has only a couple of months left in office before his successor is elected on March 9th, was swept into power in 2017 after months of protests against Ms Park's administration. The protests, known as the candlelight movement, led to her being impeached as well as indicted for such offences as extorting bribes from conglomerates and pressing a university into admitting a close friend's daughter.

When Mr Moon took office, he promised to honour the spirit of the movement and break with the old ways of the political establishment, including abandoning the custom of pardoning former presidents who had been convicted of corruption. He stuck to the promise for most of his term in office, pardoning people more sparingly than his predecessors.

Yet Ms Park's deteriorating health and the approaching end of his term seem to have prompted Mr Moon to change his mind. His office said he hoped the decision would heal political divisions and help usher in an era of national unity, and asked those who opposed the pardon for their understanding, given Ms Park's ailments.

As it turned out, the left-wing base in Mr Moon's Minjoo Party showed little such understanding. Left-wing newspaper editorials and spokespeople for organisations that led the protests against Ms Park accused him of betraying the candlelight movement. His party, which was apparently not privy to the decision before it was announced, issued a terse statement noting that pardons were the president's prerogative. Lee Jae-myung, the Minjoo party candidate to succeed Mr Moon, who had ▸▸

been noisily against a pardon, said that while there was no point in opposing a decision that had already been made, Ms Park ought to apologise once more to those who were harmed by her crimes.

The conservative opposition welcomed the pardon. But it complained that Mr Moon had also released Lee Seok-ki, a pro-North Korean firebrand who was serving time for treason, and restored the civic rights of Han Myeong-sook, a former left-wing prime minister who served a two-year sentence for bribery from 2015 to 2017.

Despite the taint to Mr Moon's legacy as the "candlelight president", the political benefits for the outgoing president and his camp may well end up outweighing the costs of pardoning Ms Park. Reports of the disgraced former president's ill health are credible; she is likely to remain in hospital for several weeks before being sent home. Had she died a prisoner on Mr Moon's watch just a few weeks before the presidential election, the resulting outrage might well have tipped the scales against his party's candidate.

Besides the fate of his political successors, Mr Moon may also have had his own future in mind. South Korean presidents often find themselves being investigated for corruption after leaving office. Lee Myung-bak, Ms Park's predecessor, is in prison serving a long sentence for graft. Roh Moo-hyun, who preceded him, committed suicide shortly after leaving office, during a corruption probe into close aides and family members. Mr Moon's efforts to curb the power of the prosecution service have not endeared him to prosecutors, one of whom is now the presidential candidate for the opposition. He may be hoping his successor remembers his act of mercy. ■

Banyan Caste away

Why Brahmins lead Western firms but rarely Indian ones

WHAT DO THE chief executives of Adobe, Alphabet, IBM, Match Group (which owns Tinder), Microsoft, OnlyFans (a subscription service featuring content creators in various stages of undress) and Twitter have in common? All seven happen to be of Indian origin. That is not surprising considering the abundance of subcontinental talent drifting into Western companies: in recent years Indians have been granted well over two-thirds of America's H-1B visas for highly skilled workers.

But these particular bosses share something else, too. They are all top-caste Hindus. Four are Brahmins. Traditionally associated with the priesthood and learning, this pinnacle of the caste pyramid's 25,000-plus sub-groups makes up just 50m or so of India's 1.4bn people. The other three CEOs come from castes traditionally associated with commerce or "scribal" professions such as book-keeping. These groups account for a similarly slim section of the pyramid's capstone: the 30% of Hindus that the government classes as "forward" castes, as opposed to the 70% who fall among such categories as "backward" or "scheduled" castes (Dalits, formerly known as untouchables) and "scheduled tribes".

And that is surprising, because across India's own boardrooms it is not Brahmins who predominate. Members of the former priestly caste tend to excel less in business than in fields such as academia, science and the law. A quarter of Supreme Court judges in the past 15 years have been Brahmins, and three of India's four Nobel prizes in science have been won not just by Brahmins, but by a smaller subset of Tamil Brahmins.

India's business bigwigs have instead come largely from traditional trading communities of the Vaishya or merchant castes. Consider the first 20 entries in the *Forbes* list of India's wealthiest in 2021. Twelve happen to be Banias, a Vaishya sub-caste of Hindu or Jain moneylenders and traders from north-western India that accounts for less than 1% of the country's population. Five of those Bania billionaires also happen to be Marwaris, a tightly intermarried group of merchant families, originally from Rajasthan, that includes many of India's earliest industrialists.

Of the non-Banias, nearly all come from groups with a similarly long association with commerce. Three of the top 20 are Parsis (Zoroastrians), a tiny minority that has long packed an oversized entrepreneurial punch. Among them is Cyrus Poonawalla, whose Serum Institute of India is the world's biggest maker of vaccines. The sole Muslim on the list (and India's most generous philanthropist), Azim Premji, also comes from a traditional merchant group, the Khojas, Nizari Ismaili Shias originally from Gujarat. Only one, India's third-richest man, Shiv Nadar, is from an officially "backward" class, but his rural South Indian Nadar caste has been upwardly mobile for a century, having long ago shed its traditional association with tapping palm wine.

The hold of traditional merchant groups extends deeper into India's business world than the top tier. A study from 2010 of the country's 1,000 biggest companies found that some 93% of board members came from "forward" castes. Fully 46% were Vaishyas. Another study in 2016, looking at a database of 1,530 listed companies, revealed that just five upper-caste, mostly Vaishya, surnames accounted for a tenth of 10,078 company directors. After eliminating repetitions and adjusting for varied spelling, the researchers found that some 500 were either Agrawals or Guptas, among the two most common Bania surnames.

So why are Indian Brahmins doing better in business abroad? One answer is that because business in India favours those with established networks, talented Brahmins have tended to emigrate. A tradition of bookishness has made it easier for them to pass exams and enter the countries with the greatest opportunities. Affirmative action in India has pushed them away, too. When the mother of Kamala Harris, America's vice-president, was seeking a college education, quotas for lower castes had made it far harder for Tamil Brahmins to gain admission. So she applied for a scholarship in America, earned a PhD and became a cancer researcher.

If India has conferred on other countries an immense amount of talent, it has also exported some of the most troubling aspects of caste. For the past 18 months a California court has been hearing a suit filed by a Dalit employee at a Silicon Valley firm, demanding compensation for alleged discriminatory treatment by higher-caste bosses.

Covid-19 in Xi'an

The price of zero

Millions are being confined to their homes in one of China's biggest cities. Such lockdowns could become commoner, and costly

For much of the pandemic, the lives of most people in China have remained relatively normal except for hassles caused by tough border controls and occasional disruptions to internal travel. For the 13m residents of the western city of Xi'an, that changed on December 23rd when officials imposed one of the country's biggest lockdowns since the covid-19 pandemic began. Four days later the rules were tightened further. Residents can leave home only to be tested for the disease. No one may leave or enter Xi'an without approval.

The measures are in response to a tiny outbreak in the city. As *The Economist* went to press, fewer than 1,000 people had tested positive. But China has a "zero-covid" policy: any case is leapt upon, with harsh local lockdowns to make sure there is no spread. The authorities have not reported any infections involving the Omicron variant in Xi'an (they believe the outbreak began early in December with a case imported from Pakistan). Only a handful of cases of Omicron have been reported elsewhere in China. They must be nervous about it, however. The variant spreads faster than Delta, which has been the main type detected recently in China. Omicron can evade the antibodies which the immune system produces in response to vaccination and infection. Officials are anxious to avoid any covid-related disruptions to the Winter Olympics, which are due to be held in and around Beijing in February.

Cases of any variant have been rare: America currently records more in a day than China has discovered throughout the pandemic. Extraordinary levels of testing, the mobilisation of armies of quarantine enforcers and contact-tracing apps have helped. Officials are punished if cases are discovered in their areas. Twenty-six have been disciplined in Xi'an. On December 27th the city began testing its entire population for the virus, taking 6.4m samples in just one day. Other countries are trying to come to terms with the idea that SARS-CoV-2, thanks to growing immunity against it, is becoming just another respiratory virus with which all must live. China is still trying to crush it.

China's worries are compounded by the performance of locally made vaccines, which are the only ones available in the country. Earlier in December China said more than 80% of its people were fully jabbed. But a study by Hong Kong's medical schools, published on December 23rd, found that antibodies produced in response to CoronaVac, one of the commonly used vaccines, do not prevent infection with Omicron after either a second dose or a booster. (Boosters commonly used in the West are more effective.) This means China's high vaccination rate will do little to tamp Omicron's spread. Like other vaccines, however, those used in China should offer good protection against severe disease and death.

In America, Europe and South Africa, Omicron has driven growth in cases that is more rapid than any since the pandemic began. Omicron's high transmissibility is likely to force China to play more whack-a-mole by locking down cities.

Even before the cases in Xi'an, precautions surrounding the Winter Olympics were intense. The government had banned non-essential attendees, such as foreign fans, and imposed strict "closed-loop" protocols for athletes, trainers and support ▸▸

staff to prevent contact with other people. An outbreak seeded by someone who enters China for the games, or disruption of the event by domestically transmitted cases, would be bad news for a government that prides itself on its covid-controlling expertise. Xi'an's travails will put the country on even higher alert.

For China, there is no clear path towards a more relaxed approach. Around 250m of its people have still not received two jabs, even though China is now vaccinating children as young as three. No matter how long China keeps its borders closed, the virus is not going to disappear. When the country opens up again, whatever variant is circulating will find its way in, creating what is often called an "exit wave"—an upsurge of cases caused by a relaxation of covid-related restrictions.

Two things may help China manage the transition, says Ben Cowling, an epidemiologist at the University of Hong Kong. One is its possible development of new vaccines that confer higher levels of immunity. If China could revaccinate a large number of its people with such drugs, it could reduce the impact of the exit wave. But as yet no such vaccine is on the horizon.

Nature itself may also lend a hand. If SARS-CoV-2 evolves to become less likely to cause serious illness, an exit wave will no longer be so worrying. Omicron shows hints of this property. It causes asymptomatic disease at a greater rate than previous variants. Four independent laboratory studies from around the world have shown that Omicron replicates very poorly in lung tissue compared with older variants, but is much better at doing so in the upper airways. This suggests a virus that is more transmissible, but less dangerous.

Western hospital systems are watching their patient numbers closely, looking for indications that Omicron does indeed pose less of a danger. One promising sign is that the proportion of covid patients admitted to hospital in London who need ventilation is lower than at any other time during the pandemic. But a big wave of less severe disease could still be a disaster for China if it does not improve its own vaccines, or abandon its politically motivated opposition to importing better ones.

China has been waging what it calls a "people's war" against the virus. In one sense this has worked. Even accounting for dodgy statistics and state control of information, China has got through the first two years of the pandemic with only a tiny proportion of the death and disease seen in other countries, and without suffering long-term economic damage. An exit wave, however big, is unlikely to bring China's death toll up to levels seen elsewhere. But it might undermine the Communist Party's efforts to present itself as uniquely capable of controlling a terrible scourge. ■

Classified directives

Decoding Xi

NEW YORK

Even in secret, China's leaders are wont to be cryptic

IN NOVEMBER 2022 Xi Jinping will have served for ten years as China's leader. In the coming months, state media will be filled with fawning tributes to his decade in power. Yet they will give little inkling of how he makes decisions or interacts with colleagues. Even more than his predecessors, Mr Xi operates in the shadows. China has published many volumes of excerpts from his speeches. Only recently, however, has a rare leak of secret versions offered a glimpse of how Mr Xi communicates behind the scenes at a time of crisis, and how the bureaucracy responds.

The cache comprises four talks, all delivered in 2014. They relate to the party's campaign against the "three evil forces" of terrorism, separatism and religious extremism in the far-western region of Xinjiang, where nearly half of the population of 26m people—which is about the size of Australia's—belongs to a mostly Muslim ethnic group, the Uyghurs.

Copies were obtained in 2019 by the *New York Times*, along with numerous other classified documents about Xinjiang. The newspaper described it as "one of the most significant leaks of government papers from inside China's ruling Communist Party in decades". But it did not release the full texts. Only in recent weeks have these emerged. They were submitted by an unknown source to a group in London investigating human-rights abuses in Xinjiang, known as the Uyghur Tribunal.

There can be little doubt about their authenticity. Several Western scholars have testified to their credibility, including Adrian Zenz, a German academic. Mr Zenz has been at the forefront of research into China's establishment in Xinjiang of a network of "vocational education training" centres in which perhaps 1m Uyghurs have been held captive, without any legal process, since 2017.

Most analysis of the four speeches, which contain a total of about 36,000 Chinese characters, has focused on what they suggest about Mr Xi's role in the decision-making that led to the building of these camps. They provide no proof that, in 2014, he was thinking about creating a gulag into which so many people would be tossed, often for trivial signs of devotion to their faith or culture, such as praying too much. But they did call for much tougher action against the three evil forces.

On March 1st 2014 a group of eight Uyghurs armed with knives had stormed a train station in Kunming, a city in the south-west, killing 31 people. State media had compared the shock caused by this bloodshed to the September 11th attacks in America. On May 22nd five Uyghurs drove two SUVs into a market in Urumqi, the capital of Xinjiang, and detonated explosives, killing 43 people.

One of the speeches was delivered in Beijing just six days after the violence in Urumqi at a meeting of leaders to discuss policy on Xinjiang. At the time, state media published only a few quotations from it, but they clearly reflected Mr Xi's rage. They quoted him as calling for "walls made of copper and steel" and "nets spread from the earth to the sky" to catch terrorists as if they were "rats in the street".

The classified text of that speech as well as of the three others, which were delivered by Mr Xi during a tour of Xinjiang in April 2014, contain the outlines of a strategy for curbing the violence. But they are not an explicit blueprint. In them, Mr Xi did not directly call for the measures that have unfolded since 2017 and have prompted America to accuse China of genocide. In addition to the internments, these have included forced sterilisations and the pressing of hundreds of thousands of Uyghurs into forced labour. On December 23rd America's president, Joe Biden, signed into law a ban on all imports from Xinjiang unless they can be proven not to have involved such coercion (see Business).

The paucity of specific prescriptions is typical of speeches by the general secretary that are circulated at lower levels of the bureaucracy. These ones were included in a classified publication called *Zhongban Tongbao*, or *"General Office Circular"*. Even in this restricted forum, speeches may be edited, leaving almost as much room for interpretation as those released publicly (official translations of Mr Xi's speeches, for consumption by foreigners, are stripped of sensitive content with particular rigour). The ones delivered in April 2014 were reissued two-and-a-half years later for distribution to all party committees in Xinjiang at the level of county or urban district—a relatively wide circulation not used for the most secretive directives.

Officials at lower levels have to read between the lines. In the versions that are now available, Mr Xi's speeches do not make this easy. They include sweeping, hardline calls to action ("show no mercy"). But they are surprisingly leavened with appeals for tolerance and respect for Uyghurs and their religion. Any outsider reading them in 2014, or the three that were republished in 2016 on the eve of the gulag's opening, would not have imagined the degree and scale of repression to come.

It is likely that other orders transmitted through the bureaucracy by different means—such as directives given by propaganda officials, the security services and Xinjiang's party boss, Chen Quanguo—would have steered officials to seize on Mr Xi's harshest words, as he probably intended (Mr Chen was replaced on December 25th by the governor of Guangdong province, Ma Xingrui, but kept his other job as a member of the ruling Politburo).

Mr Xi's occasional more moderate or even progressive-sounding statements—such as those condemning discrimination against Uyghurs—were downplayed. They never appeared in state-controlled media or in public reports of speeches by senior officials in Xinjiang.

Hammer them hard

Over time bureaucrats, and Mr Xi himself, have preferred and rewarded the most draconian interpretation of his vision. Such was the case following another secret speech by Mr Xi that was subsequently leaked. Delivered shortly after he took power in 2012, it was a warning against ideological laxity. The Soviet Union, he said, had collapsed because nobody had been "man enough to stand up and resist". A fierce clampdown on dissent ensued.

When Mr Xi gave his speeches about Xinjiang, officials there would already have sensed a hardening mood. Earlier that year Ilham Tohti, a Uyghur academic who had called for greater protection of his eth-


对这个问题，可以从3个方面来分析。其一，发展和稳定是相辅相成的，稳定是发展的前提，没有稳定的局面，社会动荡不安，发展就无从谈起，一切事情都办不成，发展成果也保不住。世界上一些国家和地区因为陷入动乱，发展停滞不前，甚至大幅度倒退的例证就在眼前，对我们是重要警示。其二，事物矛盾总是有主有次，善于抓住主要矛盾才能促进其他矛盾的解决。当前，新疆稳定对新疆全局、全国大局的影响很大，是新疆的主要矛盾，自然应该作为新疆工作的着眼点和着力点。其三，强调把维护稳定作为新疆工作的重中之重，并不是说新疆发展不重要了，可有可无了，而是要通过维护稳定营造良好发展环境，促进新疆更好更快发展。没有一个稳定的环境，外国人就不来投资，本来在这里安居乐业的生产者、创业者也不得不离开。

总之，中央关于新疆工作的定位，是着眼战略、着眼全局、着眼新疆各族人民根本利益的。在工作中，要始终把工作的着眼点和着力点放到社会稳定和长治久安上，发展经济、改善民生、改革开放、民族宗教、对口援疆、党的建设等都要围绕这个总目标来发力。我们通过对历史、现实、未来的分析，综合各种情况看，新疆维稳是一项长期任务，把这项任务牢牢抓住了，抓好了，其他工作就可以有序开展。这个前提没有了，其他工作都无从谈起。

4月9日，我去了武警特警学院，实地观摩了"猎鹰突击队"反恐演练，实际上我就是要向外传递一个信息，党和

nic group's identity, had been arrested in Beijing (later in 2014 he was sentenced to life in prison for separatism). Surveillance of Uyghurs was becoming more intense, with ubiquitous police checkpoints. Tolerance was not the watchword.

Mr Xi's words provided the cue. He said the three forces had deep roots and that an "extremely fierce" fight was needed to eradicate them. "Three feet of ice does not come from a day of cold," Mr Xi said. He lamented weaknesses in China's intelligence-gathering, calling for improvements in the use of "big data technology" as well as of "grassroots" informants. "Bin Laden was found with the help of informers," he said. He urged officials to be forever "chasing and fighting, pressing and fighting, digging and fighting, not giving violent terrorists any chance to breathe". And, he thundered, "Those who should be seized should be seized, those who should be sentenced should be sentenced. There must be no one above the law."

At the time, the laws in Xinjiang provided no obvious basis for putting Uyghurs in camps to "deradicalise" them, as officials describe one of their aims. But Mr Xi told the authorities in Xinjiang to draft local regulations to fight terrorism. They duly promulgated new rules in 2017. These were revised the following year to make the point clearer, specifically calling for the establishment of "education and training centres". Mr Xi said people in Xinjiang must develop "immunity" against the "infection" of religious extremism. As Mr Zenz notes, this metaphor was later adopted by officials when justifying the camps.

Mr Xi's warnings against "chauvinism" by ethnic-Han Chinese towards Uyghurs made sense. "If people feel they are not included or respected, it will create a feeling of dissatisfaction or alienation. In the extreme it can lead to racial animosity," he said in one speech. "If this happens, wouldn't we fall into the very trap that hostile forces have deliberately set?" He cited examples in history of ethnic groups disappearing, and declared it would be "a great political mistake" to try to cause this.

But it is not clear how sincere Mr Xi was in urging tolerance. The party has a long record of declaring how enlightened it is, even as it ruthlessly crushes dissent. He urged that Han Chinese officials spend time with Uyghurs in their homes, in positive language that encouraged bonding between ethnicities. This instruction turned into a terrifying programme of billeting Han officials with Uyghur families to spy on and intimidate them. He called for the "optimisation" of the population ratio of southern Xinjiang, apparently meaning there should be a more even balance of Han Chinese and Uyghurs. His wording suggested he meant that more Han Chinese should settle in the region. What followed was a campaign involving forced sterilisations that caused a sharp reduction in the birth rate of Uyghurs.

Mr Xi presumably intended to give Uyghurs a bashing when, in 2016, he appointed Mr Chen, the official who has just been replaced, as party chief in Xinjiang. This was a recognition of Mr Chen's past success in imposing draconian security measures as party boss in Tibet. Mr Chen was promoted to the Politburo the following year, as the camps in Xinjiang were filling. Mr Xi has said nothing in public about these facilities. But at a meeting in 2019 with an approving Donald Trump, Mr Xi attempted to justify their existence, wrote John Bolton, the American president's national security adviser at the time, in a memoir. China's official news agency, Xinhua, has said Mr Chen will be given another job. A promotion is possible.

Officials who may have felt tempted to play up Mr Xi's more moderate-sounding remarks would soon have thought twice. As Xinjiang's chief, Mr Chen purged thousands of local officials for being "two-faced"—that is, failing to fight the three forces vigorously enough.

One of them was Wang Yongzhi, the party secretary of Yarkand, a county in southern Xinjiang. Mr Wang was detained in 2017 after he had "illegally" released thousands of detainees from the camps, according to the documents obtained by the Uyghur Tribunal. He confessed that by releasing these inmates, he had planted "time bombs" threatening social stability. A secret government report said he had refused "to arrest all those who should be arrested". As he should have remembered, Mr Xi had ordered as much. ■

The Xinjiang documents referred to in this article can be found at uyghurtribunal.com

Arab autocracy

Charter fights

DUBAI

Autocrats in the Middle East and north Africa love writing (and ignoring) constitutions

KAIS SAIED's birthday is not until February, but his speech on December 13th contained an early gift to himself. Tunisia has been in crisis since July, when Mr Saied, the president, suspended parliament and much of the constitution. He told his constituents that Tunisia's democracy was broken (many of them agreed) and portrayed himself as a sort of Carthaginian Cincinnatus, called on to save the state in its hour of need.

Mr Saied (pictured) promised two votes in 2022: a constitutional referendum in July and a parliamentary election in December. First, though, he will oversee changes to the national charter. A constitutional-law professor before he was president, Mr Saied has long dreamed of remaking Tunisia as an indirect democracy. Now he has arrogated to himself the power to do so.

Thomas Jefferson once wrote that a country should remake its constitution every 19 years; to sustain it longer would be "an act of force". In the Arab world, 19 years now seems an eternity. Egypt is on its third constitution in a decade. Tunisia will soon join it. Syria and Libya are both meant to be writing new charters.

Some of these were sincere exercises, as newly democratic countries rewrote authoritarian charters. Lately, though, it is authoritarian-minded rulers doing the writing. Far from being inviolable statements of national principles, constitutions have become a cynical tool.

Mr Saied's obsession at least seems rooted in sincere belief. For most Tunisians, though, a new constitution ranks low on their list of priorities. Voters are more concerned about a sluggish economy and an 18% unemployment rate. A growing pile of debt (now 88% of GDP) threatens to push the country into insolvency. Tunisia can ill afford a year of inaction—yet the president, like the elected parliament he suspended, seems to have few ideas for fixing the economy.

Elsewhere, motives are more cynical. Like Tunisia, Egypt decided to write a new constitution after its revolution in 2011. A 100-member committee began drafting it the following year. Though it promised transparency, much of its work was done in secret. Still, enough leaked out to make for a fascinating exercise. There were heated debates over the role of *sharia* (Islamic law) and the rights of women.

Debate over the constitution would last longer than the constitution itself. Abdel-Fattah al-Sisi, an army general, seized power in 2013, barely six months after the constitution was adopted. The armed forces oversaw the writing of a new one.

During his second term as president, though, Mr Sisi ran into a problem: the constitution forbade him from seeking re-election. His regime found a creative solution. Mr Sisi's four-year term was retroactively extended to six. The two-term limit was preserved—but since his first lasted for only four years, it was discounted, allowing him to seek a third. The amendments were a mockery of constitutional law. But they served their purpose. Nearly 90% of voters approved them in a referendum (it helped that no one was allowed to campaign against the changes). Mr Sisi can claim a popular mandate to rule until 2030.

More cynical yet is Bashar al-Assad, the Syrian dictator. Since 2019 the UN has overseen a committee meant to draft a new constitution for his war-hobbled country. ▸▸

Its 150 members were chosen equally by the regime, the opposition and the UN. The effort has gone as expected. It took two years of bickering for members to agree that they should start writing.

If a document does emerge from this process, no one expects Mr Assad to follow it. The current constitution, after all, begins by declaring Syria a "democratic state with full sovereignty". In fact he runs a bloodthirsty dictatorship in which he allows his foreign backers to run amok. Later articles guarantee freedom of expression, which may come as a surprise to thousands of protesters languishing in squalid dungeons. For Mr Assad, the committee is a way to pretend he is serious about political reform; for his opponents, it is a way to pretend they are still relevant.

Where they enshrine the rights of citizens, constitutions are routinely ignored. Egypt's also guarantees freedom of speech, which has not stopped judges from jailing countless critics of the regime. On December 20th a court sentenced two bloggers and a lawyer to five years in prison on nonsensical charges of "spreading false news".

The political elite seem to think constitutions are there to protect them. Take Lebanon, where citizens are meant to vote for a new parliament in May. The election comes amid a punishing economic crisis that has seen much of the population pushed into poverty. There is widespread fury at the political class. Campaigners have urged the sprawling diaspora to register, hoping expats will feel less loyalty to traditional parties. Almost 245,000 Lebanese abroad signed up, compared with 93,000 in the previous election.

Michel Aoun, the president, worries this may hurt the Free Patriotic Movement (FPM), the Christian party he founded. Under the current electoral law, expats vote like any other Lebanese, in their home districts. The FPM sought instead to carve out six seats for the diaspora, limiting their votes to a small corner of the 128-member parliament. When lawmakers rejected the proposal, Mr Aoun turned to the constitutional council, arguing that the system deprived the diaspora of its right to representation. (His appeal failed.) He has shown rather less concern for other constitutional rights, like freedom of expression. Over the summer he endorsed criminal penalties for people who insult politicians.

Then there is Libya, which spent much of 2021 debating whether to write a new constitution or elect a new president first. It decided on the latter, with the vote scheduled for December 24th. After months of uncertainty, the election was delayed at the last minute—in part because it is hard to have a proper electoral law without a constitution. Having too many charters is bad, but perhaps having none at all is worse. ■

Israel and the Golan Heights

There to stay

JERUSALEM

A quiet annexation encounters little resistance

MEVO HAMA has magnificent views of three countries. On its western side is a sheer cliff dropping down to the Sea of Galilee and northern Israel. To the south is another steep drop, into Jordan. And across the mountain plateau to the east is Syria (see map). The kibbutz was established shortly after Israel seized most of the Golan Heights from Syria during the Six-Day War in 1967.

On December 26th the Israeli cabinet posed in front of the stunning views after a special meeting in Mevo Hama. The government, led by Naftali Bennet, the nationalist prime minister, had just approved a plan to spend 1bn shekels ($317m) on thousands of new homes and infrastructure in the Golan, with the aim of doubling its population (currently 52,000) by the end of the decade.

The Golan is one of four territories grabbed by Israel during the six-day war. It handed the Sinai peninsula back to Egypt after agreeing to a peace deal in 1978. It withdrew from the Gaza Strip in 2005 (though it occasionally returns in force). And the final status of the West Bank has not yet been determined.

But Israel has long justified its position in the Golan by claiming self-defence. Syria had sometimes used the high ground to shell Israeli farms in the Galilee below. After Israel took over, it expelled some Syrians, established Jewish settlements and built army and intelligence posts. In 1981 it formally annexed 1,800 square kilometres of the strategically valuable territory. Nevertheless, there were negotiations to return it to Syria, as part of a broader peace deal, in the 1990s. They went nowhere.

Most of the world believes that Israel's

In the Heights

annexation of the Golan is illegal. Yet only the Syrian regime of Bashar al-Assad and Israeli environmental groups, concerned about the region's flora and fauna, loudly objected to the new development plan. Few countries want to see the Golan returned to the murderous Mr Assad, even if they are uncomfortable with the precedent being set. Ministers from Labour and Meretz, left-wing parties that in the past supported a deal with Syria, voted in favour of the building plans.

About half of the Golan's population are Druze Arabs, who receive Israeli services and can request citizenship. Still, most have retained their Syrian identity, often as an insurance policy in case Israeli rule does end. Ordinary Israelis tend to view the Golan as a holiday destination. It is home to the country's only ski resort. And whereas many Israelis fear going to the occupied West Bank, terror attacks in the Golan are rare. Attempts by Iran and its proxies to enlist the Druze in their fight against Israel have had little success.

Mr Bennet said the development plan was prompted, in part, by America. In 2019 it became the first big country to recognise Israeli sovereignty in the Golan. Donald Trump, the president at the time, justified the decision using Israel's logic of self-defence—though it also seemed timed to benefit Binyamin Netanyahu, then Israel's prime minister, who was in a tough race for re-election. In gratitude, Israel named a settlement in the Golan after Mr Trump.

Messrs Trump and Netanyahu have since been voted out of office, and most of the golden letters on the sign for "Trump Heights" have been torn off, probably by vandals. But the Biden administration shows no signs of reversing Mr Trump's decision. Whether Mr Bennet plans to spend a few of those billion shekels on new lettering is less clear. ■

Africa's economy

Bean counters

MITYANA

Uganda's coffee trade shows why middlemen matter

As a child Sowedi Lwanga used to collect and sell the loose coffee that had fallen outside the hulling factory where he lived in Mityana, central Uganda. He started a trading business when he was still in secondary school. Coffee is a "common man's charter", he says. "You jump out from your bed, you [pick up] your weighing scales and money, and you go." He has come a long way: last year he bought and processed 27 tonnes of coffee, which he sold to an exporter.

Middlemen like Mr Lwanga are the human infrastructure of African economies. Big cash crops, such as coffee, cocoa and cashew nuts, are grown on small, scattered farms, often far from any tarmac. Somehow they must reach the warehouses of a few giant companies, before being shipped abroad. By solving this conundrum, middlemen help turn the harvest of a million gardens into cappuccinos and chocolate bars enjoyed thousands of miles away.

In the colonial era, and for a long time afterwards, the state dominated. In many African countries export monopolies for cash crops were granted to state marketing boards, which bought from farmer co-operatives. That system acted like a heavy tax on farmers, who were paid poorly for their produce and were often barred from selling to anyone else. It was also prone to corruption. In the 1980s, as a condition for loans, the World Bank and IMF pushed African governments to stop acting as overmighty agricultural middlemen.

Few countries embraced the new orthodoxy as enthusiastically as Uganda. The coffee marketing board was stripped of its export monopoly, co-operatives collapsed and multinational firms rushed in. The share of the coffee export price that went to farmers rose from just 20% in 1989 to around 75% today, though they were no longer insulated from wild swings in the price itself. The reforms also restructured rural life. The reign of the bureaucrat was over; the rise of the middleman had begun.

The Ugandan coffee trade is now a free-for-all, built on trust and treachery. More than a million farmers keep coffee trees, typically grown alongside other crops in plots smaller than a football field. They usually sell to middlemen on motorcycles, who sell to larger traders with trucks, in a chain that stretches to the foreign-owned firms which dominate exports.

Stories of fraud abound. Middlemen often mix well-dried coffee with moister beans, which are less desirable. Another trick is to cheat the exporters by bulking out sacks with waste husks, then bribing testers to look the other way. Mr Lwanga says that he used to prise open his weighing scales and slip a coin into the mechanism, so that he could take more coffee from farmers than he paid them for. These days he has forsaken such deceit. "In business you have to be trustworthy," he says.

Reputation matters because middlemen seal deals with little more than a handshake. In the absence of strong agricultural banks, they often double as moneylenders, paying cash in advance. Sometimes a middleman will pre-buy an entire field at a knockdown price when the trees have only just flowered. That reflects fierce competition for coffee. But the relationships thus established may also keep clients loyal. Joseph Kisitu, a farmer, says that he usually goes to the same trader, even if others offer a better price, because the man has always been there with instant cash when he needs to sell in a hurry.

And farmers do need money quickly, for emergencies like hospital bills. That weakens their bargaining power. By contrast, big traders can obtain credit from exporters, which cascades down the chain to the smallest of middlemen. This flow of capital only partly "fills the gap" in rural finance, says Michael Mugisha, a researcher who previously worked at a coffee exporter. It also traps farmers in a "pervasive process of indebtedness", leaving them with little surplus at the end of the season to invest in improving productivity.

Middlemen are driven by volumes, not quality. Some buy coffee before it is ready, says Apollo Kamugisha, an official at the coffee regulator, which is trying to impose stricter sanctions on traders who deal in unripe cherries. A similar challenge arises in many countries, notes Paul Stewart of TechnoServe, a non-profit that works across Africa. Farmers need incentives to deliver good coffee, "and often the only way to do that is to shorten the chain".

One solution is to organise farmers into groups. The Uganda Coffee Farmers Alliance, a producer body, is trying to revive co-operatives. But the leaders of a group in Mityana district complain that traders slightly outbid them for their members' coffee, and thus reap the rewards of the fertiliser and training the co-operative has provided. It takes co-operatives a fortnight or more to pay for the coffee they receive. Some are poorly managed.

An alternative model is for big exporters to buy directly from farmers. They increasingly source Arabica coffee this way, because the premium for certified, single-origin beans more than covers the transaction costs. But for cheaper Robusta varieties, which make up 78% of Ugandan coffee, cutting out the middleman is usually more trouble than it's worth. "You can't be everywhere," says an executive at one foreign-owned exporter.

Traders themselves feel they deserve recognition as the lifeblood of a system which, if nothing else, is unusually efficient. More than 3,000 of them are now members of an association which aims to raise standards and eliminate sharp practice. "We are not here to spoil the game," argues Amos Kasigi, its chairman. "It is the middleman who has been supporting the farmers to keep the industry running." ■

From here to your local Starbucks

Turkey's voodoo economics

Smoke, mirrors and lira

ISTANBUL

President Erdogan is scrambling to prop up the currency he has debased

In times of trouble, it is good to have something to lean on. For a currency this can be a central bank capable of keeping inflation at bay, or a stable and predictable government to reassure nervous investors. Since today's Turkey has neither, its swooning currency, the lira, has had to look elsewhere for help. On December 20th President Recep Tayyip Erdogan announced an unorthodox plan to rescue Turkey's economy from the crisis his policies have caused. It involves the government insuring some lira deposits against swings in the exchange rate.

In the short term the scheme seemed to have worked. The day after Mr Erdogan's announcement the lira staged a record rebound, quickly erasing a month's worth of losses. Yet the main factor in the rally was not the deposit-insurance programme but the central bank, which spent billions of dollars from its shrinking reserves to buy lira. The currency's recovery has bought some time for Mr Erdogan, who had been in deep political trouble. But it has only obscured, or even heightened, the risks to Turkey's economy.

The immediate source of those risks is Mr Erdogan's obsession with low interest rates. For years he has insisted, in defiance of basic economics, that low rates reduce inflation rather than stoke it. Starting in September, with Turkish inflation nearing 20%, Mr Erdogan goaded the central bank into cutting its base rate four times, from 19% down to 14%. That triggered a currency crash. Even after its recent rally, the lira has lost almost 40% against the dollar in 2021, more than any other major currency.

Mr Erdogan maintains that a weak lira will be good for Turkey's economy, boosting exports and attracting investors. Few Turks agree. In a recent poll, 94% said depreciation has had a negative impact. About two in three said they could not meet basic needs without taking out loans. Even more think inflation is far higher than the officially reported rate of 21%.

Fast-rising food and energy prices hit the poor especially hard, since they spend a bigger share of their earnings on necessities. There are long queues at shops selling subsidised bread. Real wages have plummeted. Turkey's middle class, which swelled during Mr Erdogan's first decade in power, is shrinking. One chef at an Istanbul restaurant says he took out a cash loan in September to stock up on nappies for his infant child, fearing they would soon be unaffordable. Since then their price has more than doubled.

Mr Erdogan would never describe it as such, but his scheme to save the lira is in effect an indirect rate rise for savers. Under the plan, Turkey's government will compensate holders of fixed-term lira deposits when the currency's depreciation against hard currencies exceeds the interest rate offered by their banks. Were the dollar to strengthen by 30% against the lira in a year, for example, a depositor at a bank with a 14% annual rate would get an additional 16% courtesy of Turkey's treasury. The Turkish taxpayer will end up bailing out the Turkish depositor.

The scheme may have helped prevent a run on the banks. Turks had been converting their savings to dollars at a record pace, contributing to the lira's fall. More than 60% of the country's deposits are now held in foreign currencies. Some were considering fleeing Turkey's banks altogether. ▸▸

→ Also in this section

"People had begun to lose trust in the banking system," says Ozlem Derici Sengul, founding partner at Spinn Consulting in Istanbul. "The decision stopped this."

Yet the rally had less to do with confidence in Mr Erdogan's plan than with interventions by Turkish lenders. Since the start of December, Turkey's central bank has burned through at least $20bn in foreign reserves to prop up the currency, sometimes acting itself and sometimes through state-owned commercial banks. In the two days surrounding Mr Erdogan's announcement Turkish banks bought $7bn-worth of lira.

Regardless of its effectiveness, the new scheme is a big risk for public finances. If a large portion of Turkey's roughly $300bn-worth of private savings moves to guaranteed deposits, a sharply falling currency could put the state on the hook for hundreds of billions of lira. "The system may implode when faced with an exchange-rate or risk-premium shock," says Hakan Kara, the central bank's former chief economist.

Standard economics would have Turkey raise interest rates to bring down inflation and stabilise exchange rates. But that looks less likely than ever. Mr Erdogan has dug in his heels, ignoring pleas from economists and business groups and invoking an Islamic injunction against usury to justify his eccentric policy.

Loyal media outlets have proclaimed Mr Erdogan's move a masterstroke, and the government has ways of discouraging sceptics from speaking up. On December 27th Turkey's banking regulator filed criminal charges against Durmus Yilmaz, a former central-bank governor, and at least 25 others for criticising monetary policy and for other statements it disliked. Mr Yilmaz had accused the president of turning the country into a "laboratory" for crackpot ideas. But other critics are beyond the reach of Mr Erdogan's enforcers. At a press conference on December 23rd, Vladimir Putin defended the Russian central bank's recent rate increases. Without them, he said, "we could end up like Turkey." ■

Russia

Memory hole

Vladimir Putin's latest attack on historical truth

RUSSIAN HISTORY is rich in shameful dates, many of them marking show trials and mass executions—or liquidations, as they were then called. December 28th, 2021, should be added to the calendar. On that day Russia's supreme court "liquidated" Memorial, the country's most vital post-Soviet civic institution, dedicated to the memory of Stalinist repression and the defence of human rights.

Memorial emerged as a group independent of the state in the late 1980s, at the height of Mikhail Gorbachev's policies of *glasnost* (openness) and *perestroika* (reconstruction). One of its founders was Arseny Roginsky, a historian who spent four years in a Soviet prison for publishing a *samizdat* almanac entitled *Pamyat* ("Memory"). Another was Andrei Sakharov, the nuclear scientist who created the first Soviet hydrogen bomb and later campaigned tirelessly for human rights.

The group was formally registered in 1990, a few months after Sakharov's death. The initial goal was historical, to document the crimes under Stalin. Every year Memorial ran a mass reading of the names of some of his millions of victims, read out by thousands of participants. As post-Soviet Russia began to abuse its citizens, first in Chechnya and then throughout the country, Memorial became the country's best human-rights organisation.

Russia's supreme court is Kremlin-controlled, so its decision was expected. In recent years Memorial has increasingly come under attack, its offices vandalised and its staff harassed. But this did not make the court's ruling less significant. Memorial paved the way for post-Soviet Russia, its embrace of human dignity drawing a line that separated the new state from the systemic terror of the old one. The group's liquidation has erased that line, making it easier for Mr Putin to whitewash not only the crimes of the past but also those of the present. A day earlier, on December 27th, a Russian court extended the jail term of Yuri Dmitriev, a historian affiliated to Memorial who had uncovered mass graves in Stalin's gulags, from 13 to 15 years. Prosecutors fabricated charges that he had sexually abused his adopted daughter.

Formally, Memorial was liquidated as a "foreign agent", an old Soviet term for traitors. The trial resurrected language once used by Stalinist prosecutors. "Memorial creates a false image of the Soviet Union as a terrorist state...Why should we, the descendants of the victors, watch attempts to rehabilitate traitors to the motherland and Nazi collaborators? Perhaps because someone is paying them for it," proclaimed Aleksei Zhafyarov, a state prosecutor. "It makes us repent of the Soviet past, instead of remembering its glorious history."

The ruling fell on the centenary of Sakharov's birth and on the 30th anniversary of the Soviet Union's dissolution. In his farewell speech on December 25th, 1991, Mr Gorbachev proclaimed a new era when human rights would be treated as supreme: "We have paid with all our history and our tragic experiences for these democratic achievements—and they must not be abandoned, whatever the circumstances."

Yet unlike the de-Nazification of Germany, the process of de-Stalinisation was never enshrined in law. Nor have the crimes of the Soviet state ever been prosecuted. The KGB was renamed and re-organised, not abolished. The securocrats who rule Russia today wrap themselves in nostalgia for the great empire that defeated Hitler. Meanwhile, they gloss over the way it abused its own citizens, and copy some of its methods.

"The liquidation of Memorial is...a message to the elites: 'Yes, repressions were necessary and useful to the Soviet state in the past, and they are needed today,'" wrote Grigory Okhotin, who founded OVD-Info, a human-rights organisation. The state considers any form of independence a threat. OVD-Info, which uses social media to organise legal help for the victims of repression, has been labelled a foreign agent. Its website has been blocked.

The ruling on Memorial signals a move by the government from limited, targeted repression to something much broader. Internet freedoms are being rolled back. On December 24th a Russian court slapped a $100m fine on Google for "systematic failures to remove banned content"—the largest fine directed at the Western tech giant and the first to be calculated on the basis of its annual revenue. Hours later the court fined Meta Platforms, the parent company of Facebook and Instagram, $27m.

Repression requires an excuse. The Russian government's favourite one is the threat of war. Its build-up of troops on the Ukrainian border in recent months is part of the propaganda offensive. The Kremlin accuses America, NATO and Ukraine of threatening Russia. It labels independent Russian politicians and civil-society groups such as Memorial as Western collaborators. The West is nervously watching for Russian military aggression beyond its borders. But the onslaught inside Russia is well under way, against its own people and their memory. ■

Reform in Spain

A bad bet

MADRID

Hopes for better employment laws and pensions are dashed

SPANIARDS EAGERLY tuned in on December 22nd to watch the annual Christmas lottery, nicknamed *el gordo* ("the fat one"). Punters were hoping for a share of €2.4bn ($2.7bn) in prizes. The European Union, meanwhile, had placed a bet of its own. It hoped Spain's politicians might go out of their way to win a national jackpot of €70bn, the country's share of the EU's €750bn covid recovery fund. The grants were conditional on reforms, especially in two worrisome areas: pensions and the jobs market. The government met the EU's deadline of December 31st. Whether its reforms merit the name is another matter.

Spain's government, made up of the Socialists and the far-left Unidas Podemos grouping, entered office in 2019 on a misguided pledge to repeal an earlier reform from 2012. Those changes had made layoffs cheaper and let unions strike wage deals within individual firms, rather than in industry-wide negotiations. This is thought to have aided Spain's strong recoveries from the euro crisis and the pandemic. The package the government announced on December 23rd stopped short of repeal, but took no great steps forward either.

The government's goal was to make the labour market less unequal. Some Spaniards have good jobs and are nearly unsackable; others have temporary contracts and little security. The new proposal curbs time-limited contracts and tries to stop companies from evading the law by subcontracting. Promisingly, it would make permanent a pandemic-era measure in which the state pays temporarily furloughed workers. Both the unions and the employers' organisation blessed the deal. But it contains no creative solutions to Spain's high structural unemployment.

The other big missed chance was fixing pensions. Spaniards retire young (at 60.7 on average), live long (83.5 years on average) and get generous pensions (80% of pre-retirement earnings against an average of 62% in the OECD, a club mostly of rich countries). Spain has yet to feel the full strain of these promises because its baby boom came late. But the crunch will come. A reform passed earlier this year merely offered inducements to postpone retirement and increased contributions slightly (by 0.1 percentage points of salary paid by workers, and 0.5 paid by employers). That is not nearly enough.

The European Commission is now in theory to judge whether Spain's reforms are sufficient to release the next tranche of money. No one expects a thumbs-down: the commission does not want to deliver a shock to the EU's fourth-biggest economy in the midst of a pandemic. The money will be put to some good uses, primarily greening and digitising the economy. But the chance to use it to fund bigger reforms has been lost, at least for now. Like punters who bet on *el gordo*, the EU must hope future years bring more luck. ■

Turkish infrastructure

Public-private problems

ISTANBUL

The lira's woes raise the bill for Erdogan's big projects

THE OSMANGAZI suspension bridge, one of the world's longest, opened in 2016, stretching nearly 2,700 metres over the Marmara Sea. Combined with a new road, it has halved the travel time between Istanbul and Izmir, Turkey's largest and third-largest cities. But for many Turks, the country's currency crisis has made the crossing unaffordable. A driver making the trip every day for a month would have to pay tolls amounting to twice the minimum wage. The toll will rise again at the start of 2022.

Turkey's president, Recep Tayyip Erdogan, has decked out his country with scores of new bridges, tunnels, airports and hospitals. Most are public-private partnerships (PPPs), deals whereby companies construct and operate infrastructure in exchange for fees from consumers or payments from state coffers. The lira's slide over the past year has dramatically raised the cost of PPPs to taxpayers. The government guarantees companies involved in such projects a minimum level of income, almost invariably in hard currency. Such guarantees amount to a total of $150bn in the coming two decades, estimates Ugur Emek, an academic at Baskent University in Ankara. At the start of 2021, that was equivalent to 1.1trn lira. By late December, it had risen to 1.7trn lira.

PPPs often make economic sense. In Turkey and elsewhere, they have a better record of avoiding delays and cost overruns than conventional public procurement. They have helped Turkish construction companies accumulate knowhow and capital. Many projects, including sprawling hospitals that opened just in time before the covid-19 pandemic, have been a success.

But the same few companies regularly walk away with the biggest contracts. Some projects are white elephants. "There's an overreliance on PPPs," says M. Coskun Cangoz, a former official at the World Bank now with TEPAV, a think-tank in Ankara. "We're doing things in a less transparent way."

For Mr Erdogan, PPPs come with political benefits. He can take credit for launching big projects (a recent exhibit at his palace featured over 800 pairs of scissors and ribbons used for such occasions) and pretend that private companies shoulder the cost, since the investments do not show up as government debt. Defenders of PPPs say Turkey would not have been able to afford the new infrastructure by paying for it directly. But unless Mr Erdogan gets the economy back on track, Turks will pay dearly for his spending spree.

Vertigo-inducing costs

Charlemagne | Everyone else's business

Our departing columnist on why EU politicians now accept they are stuck together

GERMAN IS A thorough language. Almost every concept seems to be covered by a single compound word. There is *Kummerspeck*, or the weight one puts on if sad. *Torschlusspanik* is for the worry that your life is running out and opportunities slipping away. Most satisfyingly, there is *Backpfeifengesicht* for when someone has a slappable face. When it comes to the EU, a compound word pops up repeatedly: *Schicksalsgemeinschaft*, or a community of fate. Olaf Scholz, the new German chancellor, used the phrase when explaining why Germany must help its neighbours in the pandemic. His predecessor, Angela Merkel, was a fan too. Now, however, the concept—if not the tongue-twisting word—is spreading beyond the German-speaking world.

An acceptance among Europe's leaders and voters that the continent's fate is bound together has been the main shift of the two years your departing columnist has spent writing this column. Residual objections to the idea melted during the pandemic. A long-standing refusal to issue common debt was reversed. (Mrs Merkel once said common debt would not happen in her lifetime. She is, at time of writing, fighting fit.) Even the most sovereignty-obsessed governments, such as Poland's, were happy to make the EU responsible for sorting out the continent's vaccines in a new constitutional frontier.

That the problems facing individual countries required a continental response became obvious. An effective climate policy can be orchestrated only at a supranational level. No European country is big enough to deal with China, or even Russia, alone. Most importantly, the acceptance of *Schicksalsgemeinschaft* has transformed European politics. Until recently, leaders trod lightly on each other's turf lest theirs be trampled by others. In a community of fate, however, everything is everyone else's business.

Part of the reason for the shift is simple: money. Supervision is the price for solidarity. In the summer of 2020, leaders signed off a recovery fund of €750bn ($850bn) paid for with common debt, with half of it given as grants rather than loans to needy countries. Dutch taxpayers' money is spent in Italy; German cash is in Polish coffers. It is only natural that they pay attention to how it is spent.

The spectre of *Schicksalsgemeinschaft* has been summoned before. Mrs Merkel used it during the euro-zone crisis, when explaining why loans worth hundreds of billions to stricken southern European economies were necessary. But that was different. Lending a friend money is one thing. Not expecting it back—as is the case with €390bn of the €750bn—is another. Legally, the scheme is a one-off. In principle, however, the red lines have been erased. It has been used once and it can be used again.

When money is shared, so is politics. The EU has become domestic politics by other means. During the pandemic, politicians went over the heads of their peers and started appealing directly to each other's voters. Giuseppe Conte, then Italy's prime minister, appeared in Dutch newspapers begging for aid. Mark Rutte, his Dutch counterpart, appeared in Italian newspapers, explaining why it would not be forthcoming (until he shifted). During the euro-zone crisis, such interventions were a novelty. Now they are the norm. If voters in other countries have a say, it makes sense to try to sway them.

Fears about the EU falling apart are no more. The club will not break apart by accident. If anything, the EU is antifragile: it emerges sturdier from every crisis (by plugging holes already filled in other polities). Nor is leaving an appetising option. Britain, the country that most firmly resisted the idea of any common European destiny, botched its departure. Even the most Eurosceptic politicians have given up on leaving. Questions are no longer existential, but political.

Being stuck together brings problems, of course. Troublesome members, such as Poland, have no intention of leaving. Britain pursued a clean Brexit, ripping up the rules that bound it to the continent; Poland is opting for a dirty remain, hanging around and ignoring strictures it does not like. Grinding out consensus is the only option. The flipside is that bad behaviour can no longer be ignored. Most leaders spent the bulk of the 2010s politely avoiding the topic of democratic backsliding in Hungary and Poland. Now the sight of, say, Dutch politicians chiding Polish ones is common.

Stuck in the middle with EU

A community of fate is not necessarily a community of peace. Rows between EU countries will become nastier as they switch from economics to deeper questions of values. The EU finds itself resolving whether banning a headscarf in a business is a defence of secular values, or an assault on religious freedom. At a summit this summer leaders gave Viktor Orban a tongue-lashing for proposing a homophobic law. It is precisely because they are stuck together that feelings run so high. A family fight is always more painful than one with colleagues.

Those outside the community have an even rougher time. Talk of "Western" values has been replaced by "European" ones. Leaders such as Emmanuel Macron play up transatlantic splits. The differences between Europe and America are so large, he suggests, that they are best thought of as separate civilisations with distinct worldviews, whether on capitalism or *le wokisme*. A club that was once evangelical is now defensive. An impermeable border, guarded in places by the EU's own border agency, is a policy with universal support among members.

As the EU solidifies into something resembling a normal state, with border guards, debts, currency and, increasingly, shared politics, it will be a civilisation-state rather than a nation-state. Europe has always needed an "other", an outsider to judge itself against. Now it has the rest of the world. Most of the continent's politicians bridle at nationalism. But they are happy with the Europeanism that has replaced it. ■

Brexit

Happy now?

How a year outside the EU's legal and trading arrangements has changed Britain—and Britons

On December 24th 2020 Boris Johnson hailed a trade and co-operation agreement (TCA) with the European Union. Eleven months had passed since Britain formally left the European Union, and just a week remained before it would be ejected from the customs union and single market. The prime minister painted the deal in glowing terms. There would be no tariff or non-tariff trade barriers between Britain and the bloc. Britain could set standards for the benefit of its own businesses, rather than abiding by compromises bashed out between the EU's members. Exporters might even do more business than previously with their European neighbours, Mr Johnson gushed, adding that European countries should be pleased to have a "contented" Britain on their doorstep.

Was he right? The pandemic has muddied trade and demographic data: lockdowns affected the movement of both goods and people. And in Northern Ireland, which in effect remained in the single market and customs union to avoid a hard border on the island of Ireland, politicians are arguing over whether to rewrite the deal with the EU or tear it up entirely. But it is possible to offer a preliminary judgment on how Brexit is panning out.

In some ways, as badly as critics expected. Promises of more trade and of regulations fine-tuned to suit British companies never seemed realistic, given the friction-free nature of the single market and its regulatory dominance worldwide. And indeed, the evidence suggests both were oversold. The Office for Budget Responsibility, a government watchdog, expects Brexit to sap Britain's productivity by around 4% in the long run. But dire predictions of goods shortages and a hollowed-out City of London did not come to pass. And in a surprising twist, a new consensus is emerging over one of the most contentious aspects of Brexit: immigration policy. Even though most Britons still characterise themselves as Remainers or Leavers, some of the heat has gone out of the argument.

→ Also in this section
— Bagehot is away
— Read more at: Economist.com/Britain

The economic hit is clearest in trade in goods with the bloc, which is now subject to a host of new conditions. These include sanitary checks, import and export declarations, and rules of origin, which set out when products are eligible for tariff-free entry. According to John Springford of the Centre for European Reform, a think-tank, Britain's total combined imports and exports have been depressed by 11-16% relative to its peers since the beginning of 2021 (see chart 1 on next page). Imports have been hit hardest—surprisingly, because Britain postponed customs checks until January 2022, whereas the EU did not.

One reason may be that EU exporters are more willing to forgo the hassle of sending goods to Britain's much smaller market (although a survey by the British Federation of Small Businesses, an industry group, found that 17% of exporting businesses had stopped exporting to the EU, at least temporarily). The British government has also spent heavily on helping exporters navigate the difficulties that Brexit created. Since 2018, £84m ($113m) has gone on supporting customs agents who help clients ▸▸

handle paperwork—and deal with their EU counterparts. One is Garth Young of Wellmark Customs and Logistics, who reports that the Germans are officious, the Dutch finicky and the French hard to get hold of. Sometimes customers complain that they did not vote for this hassle. He responds: "This is what sovereign borders look like."

It all means higher costs for businesses. During the first 11 months of 2021, customs payments came to £3.9bn, 25% more in cash terms than during the same period in 2019. Logjams have affected trade with the rest of the world. According to Freightos, an online shipping marketplace, early in 2021 the cost of sending a container from Shanghai to Felixstowe or Southampton overtook that of sending one from Asia to northern Europe.

Freight is also becoming less efficient. The share of heavy-goods vehicles travelling empty from mainland Britain to the EU was around ten percentage points higher in 2021 than in 2018, according to the National Audit Office, an official watchdog. The government was spared the embarrassment of long lorry queues at the beginning of 2021 only because businesses stockpiled, and because of a temporary "pre-check" scheme ensuring that lorry drivers had the right paperwork before they could reach the British border.

Put asunder

Anecdotes abound of British companies shifting operations to the EU rather than continuing to supply the continent from Britain. Tim Doggett of the Chemical Business Association, a trade body, reports that some members have taken their businesses into Europe or set up European entities.

In its half-yearly results JD Sports, a clothing retailer, outlined how it had reduced exposure to the consequences of Brexit by using a new warehouse in Belgium, and said it would expand operations in France and the Netherlands. Marks & Spencer announced a step-up in local sourcing in the Irish Republic and a restructuring of operations in continental Europe to offset new border costs. Surveys suggest that at least 8% of British manufacturing businesses, and 12% in the wholesale and retail trade, had altered their supply chains because of Britain's new trading arrangements. Of the latter group, around half said their costs had risen.

All that is bad enough, but services, which were almost entirely excluded from the TCA, have probably suffered more. The UK Trade Policy Observatory, a think-tank, estimates that during the first half of 2021 the deal depressed services imports into Britain and exports to the EU by 37% and 11.5% respectively. For the period from January to July, it calculates that goods imports from the EU were depressed by 29%, and exports to the EU by 6%.

A side arrangement allows data to flow freely between Britain and the EU, but the EU could scrap it at any time. British qualifications in fields such as architecture, accountancy and auditing are no longer recognised in the EU. New immigration rules have also caused problems. British businesspeople who used to be able to travel and work in other EU states according to a single, permissive set of rules must now handle 27 less generous regimes.

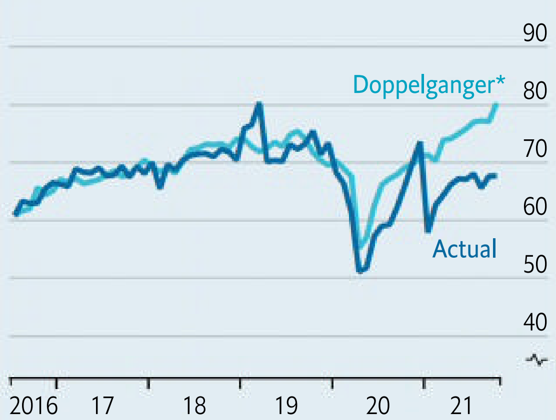
For financial services Brexit was an almost complete rupture: they were unceremoniously excluded from the TCA. Even "equivalence", a declaration by the EU that a regulatory regime is sufficiently similar to its own for products to be granted market access, has been largely denied—and would, in any case, have been a poor basis for business planning, since it can be unilaterally withdrawn with 30 days' notice. The sole exception is clearing, which British firms can carry out for EU clients until June 2022 (this deadline is likely to be extended). A similar exemption for settlement services expired in June 2021.

The immediate turmoil was limited, since financial institutions started to plan for the worst straight after the referendum. One banker describes how his firm assumed from June 2016 that Brexit would be diamond-hard, and started beefing up its continental operations. Its European entities applied for new licences that would allow them to continue offering services across the EU, based on supervision by a non-British regulator.

One result is that the City of London, once a crucial element of Europe's financial plumbing, is increasingly being bypassed. In mid-2020 over 40% of euro swaps, a commonly used derivative, were traded in London. That has plunged to below 10%. Amsterdam is taking over from the City as the trading capital for European shares. The Office for National Statistics estimates that financial-services exports to the EU in the second quarter of 2021 had fallen by 31%, or £2bn, compared with the same quarter in 2019. Those to the rest of the world had risen by 5%.

Shadow self

Britain, exports plus imports, £bn



*A composite created from 22 countries to match Britain's economy

Source: ONS

Capital and people have shifted too, though neither in the quantity feared after the vote. EY, a consultancy, reckons that since the referendum financial firms have moved assets worth £1.3trn to the continent. This was a one-time-only move: the figure has held steady throughout 2021. New Financial, a think-tank, estimated in April that around £900bn was due to banks moving regulatory capital from British entities to European ones, however. This is dead money, set aside to guard against insolvency in a crisis, not a meaningful loss.

Staying put

It has not taken the relocation of many people to satisfy European regulators. EY puts the number of roles that financial firms have moved from Britain to the EU as a result of Brexit at just 7,400. That is a small fraction of the 190,000 jobs in the City and 1.1m in financial services countrywide. But few in the Square Mile expect European regulators to remain so relaxed indefinitely. They expect a crackdown on practices such as "chaperoning", which allows a British financier to advise an EU client provided an EU-regulated person is also present. And trades entered into by EU entities will increasingly need to be held on their books, not transferred to London. For the City of London, as for many other sectors, Brexit is a slow puncture with much more air to come out.

What, then, of Brexit's vaunted opportunities? When it comes to regulatory rewards, the past year has mostly been spent working out what they might be, rather than seizing them. In May the government created a "Brexit Opportunities Unit" in the Cabinet Office and in June a taskforce on "innovation, growth and regulatory reform" recommended relaxing "burdensome" disclosure requirements for some financial products, and replacing the EU's General Data Protection Regulation with a UK Framework of Citizen Data Rights.

Some clear blue water is already opening up between Britain and the continent. UK in a Changing Europe, a think-tank, has identified 38 examples of disharmony between British and EU regulation. In some, for example a planned state-aid regime, which aims to be more nimble and less bureaucratic, Britain is pulling away. In others, the movement is on the EU side.

But even when Britain offers producers bespoke regulation to match their needs, they do not always want it. The Chemical Industries Association, an industry body, says that the importance of chemicals trade with the EU limits appetite for divergence. Half of British exporters surveyed by the British Chambers of Commerce said they wanted to stick with the EU's system of safety and quality product marks.

Gradually, and almost imperceptibly,

Britain has separated from the rest of Europe over the past year. But a more positive change has taken place in people's minds. The internal chasm between Leavers and Remainers, which transformed politics and drove many people somewhat barmy, is starting to seem less daunting.

Even before the 2016 referendum, Britons had been sorting into two groups—one university-educated, ethnically varied and liberal, the other older, whiter and culturally conservative. But these groups were not yet self-aware. Will Jennings of Southampton University has studied the writings of ordinary people who recorded their thoughts on the referendum for Mass Observation, a research outfit. Many were ambivalent or confused, "in a complete fog" or "not too bothered" about the result.

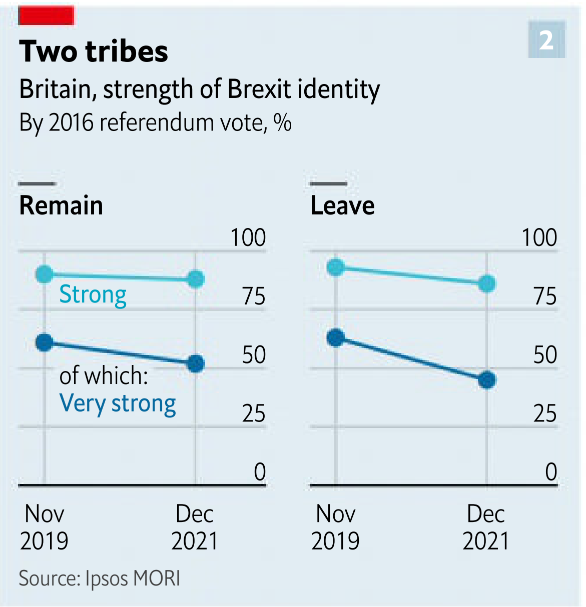
That changed when the results came in. The referendum pinned labels on the two groups and set them against each other. Brexit identities became stronger than party-political ones. A few months later the British Election Study found that only 21% of Conservatives used the word "we" for their fellow Conservatives, whereas 56% of Leavers used it for other Leavers. The Tories won the 2019 election largely because they hogged the Leave vote, while Remainers split between Labour, the Greens, Liberal Democrats and Scottish National Party.

Few people have changed their minds about whether Brexit was wise or foolish. "The country was divided down the middle in 2016 and it is still divided," says Sir John Curtice, a political scientist at the University of Strathclyde. A polling average suggests that 51% would vote to remain in or rejoin the EU today, up only slightly from the 48% Remainers scored in 2016.

But in some ways the country has started coming together again. The most obvious change is that Brexit has become less salient. Every month Ipsos MORI, a pollster, asks people which are the most important issues facing the country. From 2016 to 2019 Brexit was without exception either the most mentioned or second-most mentioned. In 2020 covid-19 forced its way to the top. Then the economy rose, followed in autumn 2021 by the environment.

So Brexit has more competition for people's concerns. But there is also reason to think that some of the heat has dissipated. Fewer people now call themselves "very strong" Leavers or Remainers (see chart 2). Colin Gordon of Oxford for Europe, a Remainer group in a pro-Remain city, recently returned to campaigning following a covid-induced hiatus. He found locals less fervent: Remainers muttered that it was too late; Leavers looked displeased but did not remonstrate. "There was a lot of avoidance of eye contact," he says. "People rushed past without engaging."

Britons are also converging in their views of how Brexit is being handled,



largely because Leavers have grown more critical. Perhaps they have been influenced by shortages of fuel and groceries, which are blamed on a shortage of European lorry drivers. The halo effect of the government's pandemic response may have dimmed, too. Britain took an early lead in vaccinating against covid, and fended off complaints from continental European politicians that it had acquired more than its rightful share of doses—a spat that may have reinforced the view that Britain was better off out. But by August other European countries had caught up.

Come together

Perhaps the most surprising change in public opinion is over immigration—the topic that, more than any other, propelled the Leave campaign to victory in 2016. Britons are angry about asylum-seekers crossing the Channel in inflatable boats. But they are increasingly relaxed about other kinds of immigration.

Leavers have changed more than Remainers. Polling by Ipsos MORI for British Future, a think-tank, found that between October 2016 and July 2021 the share of Leavers who think immigrants have a negative impact on Britain fell from 53% to 42%. Since the share of Remainers who concur is low and steady, at 14-15%, the gap has narrowed.

Perhaps Leave voters feel they have made their point; perhaps people are calmer because covid has suppressed economic migration. Whatever the explanation, a government dominated by Leavers has created an immigration system that Jonathan Portes of King's College London describes as "pretty liberal". Jobs paying over £25,600 a year requiring at least A-level skills (around half of full-time jobs) can be filled by people from anywhere; rules governing care workers are being relaxed. Britain has welcomed almost 100,000 Hong Kongers with minimal fuss.

Remainers, who dislike almost everything about the post-Brexit settlement, are likely to come round on this, at least. In 2019 and 2020, when free movement with the EU was still in effect, Sir John and others ran a "deliberative poll", a cross between an opinion poll and a focus group. Beforehand, Leavers and Remainers were far apart on whether Europeans should have to apply to come to Britain: 85% of Leavers and 41% of Remainers agreed. Afterwards, the share of Leavers who agreed had fallen slightly to 82%, while the share of Remainers who did rose to 57%. "What voters want is immigration control in the country's interest," says Sir John.

So Britain enters 2022 still split over Brexit, though a little calmer than it used to be. Fewer Leavers believe Brexit is going swimmingly; many Remainers seem amenable to the idea of controlling immigration from Europe. If Mr Johnson leads his party into the next election—and he is the most likely person to do so, despite his falling political stock—he may choose to fight it much like the last one, by posing as the Leavers' champion. But that would say more about the limits of his political imagination than about voters' wishes. ■


The verdict's not in yet

Addictive behaviour

Can you get hooked on video games?

Games-makers' latest business models have bolstered the case that you can

When China's government censors books, bars "effeminate men" from television or spoon-feeds Communist Party dogma to schoolchildren, liberals agree that its behaviour is shockingly repressive. But when in August it banned children from playing video games for most of the week, liberals who happened to be parents were in two minds. Yes, restricting the under-18s to an hour of gaming a day, on only three nights a week, was rather drastic. But perhaps it might be good for them?

China's government argues that video games are addictive. This fear is not new. Two decades ago players of "Everquest", an early online game, ruefully dubbed their hobby "Evercrack". Gaming-addiction clinics have spread from China and South Korea to the West (Britain's ritzy Priory clinic treats gaming addiction as well as staples such as sex, shopping and cocaine).

Now the World Health Organisation (WHO) has lent support to the Chinese position. On January 1st the latest edition of its International Classification of Diseases (ICD), a manual widely used by doctors and health-insurance firms, comes into force. For the first time it recognises an affliction it calls "gaming disorder".

It is tempting to dismiss all this as just another moral panic about an arriviste form of entertainment. Twenty years ago games were condemned for making players violent, when there is no evidence that they do. But the argument matters, and not just to parents exasperated by their offspring's preference for "Fortnite" over maths or old-fashioned social interaction. Newzoo, a consultancy, puts global video-game revenues at $170bn in 2020, far ahead of music or cinema, and growing quickly.

The idea that computer games can be addictive stems from a change in how psychologists understand addiction. For many years it required a physical substance, such as nicotine or morphine, on which a patient could become hooked, says Rune Nielsen, a psychologist at the IT University of Copenhagen. That began to change in the late 1990s, with the idea that people could become addicted to pleasurable behaviours as well as drugs.

For one such behaviour, that definition is fairly uncontroversial. "Not many people these days dispute the idea that you can become addicted to gambling," says Mark Griffiths, a psychologist at Nottingham Trent University. But, he says, that line of thinking also "opens the theoretical floodgates" to defining all sorts of other fun activities as "addictive" in ways that stretch most people's understanding of the term. Besides gaming, Dr Griffiths studies addictions to exercise, sex and work. One paper, published in 2013 (not written by Dr Griffiths) surveyed keen tango-dancers and found that around 40% might qualify as "addicts" under the new paradigm.

Besides gambling, which was already included in the ICD, video-gaming is the only behavioural addiction on the WHO's list. Diagnosis relies on compulsive use and negative consequences. Like other junkies, those suffering from "gaming disorder" put their next hit over most other activities, even if that it causes harm in other parts of their lives.

That a few players develop unhealthy relationships with their pastimes seems hard to argue with. Psychologists describe gamers who forgo sleep, offline relationships and work. Rows with families are common. Many call themselves addicts, and struggle to kick their habits. Hilarie Cash, the clinical director of reSTART, a game-addiction clinic near Seattle, says many of her patients arrive having been expelled from school or university, after gaming swamped their schoolwork. The vast majority, she says, are male. "I get phone calls from people saying that video games have ruined their life just as much as gambling," says Dr Griffiths, who says that the evidence on video-gaming is much stronger than for other behavioural addictions, such as to sex or work.

But the concept is still fuzzy. And even researchers who agree that games can be addictive in a medical sense disagree over how common such addiction is. Dr Cash reckons 10% of Americans may meet some of the diagnostic criteria. Dr Griffiths says that even a rate of 1% is surely far too high. "If that were right, there would be a clinic in every city," he says. Rune Mentzoni of the University of Bergen in Norway thinks that games probably can be addictive, yet he worries that some diagnostic questionnaires rely on loaded questions. "Sometimes you're asked if you play games to get a break from negative thoughts or feelings," he says. "But for other pastimes, like painting or exercise, that would be seen as a perfectly healthy behaviour!"

One possibility is that obsessive gaming is a symptom, or coping mechanism, rather than a disorder in its own right. "At least half those with gaming problems have a depressive disorder. Another third have anxiety," says Andrew Przybylski of the Oxford Internet Institute. "There have always been people who are a bit socially awkward, and interested in systems rather than other people," says Dr Nielsen. In the past they might have taken up chess or model railways, he says. That does not mean either activity is addictive in itself.

The new rules of the game

While psychologists argue about terminology, it is also worth looking at incentives. Buying a video game used to be a one-off transaction. Developers had no insight into how—or even whether—customers played their games. But these days, many of the most popular games rely on a "freemium" business model, in which the game itself is cheap or free and money is made from in-game purchases of things like extra lives or virtual clothing. Newzoo reckons 73% of the industry's revenues in 2020 came from free-to-play games (see chart).

That model ties revenue directly to playtime. Many such games are therefore designed—often with the help of professional psychologists—to be as compelling as possible. Designers speak of building games up by nesting and layering smaller "gameplay loops". These are quick-fire tasks—like shooting an enemy or constructing a new building—that reward players with points, in-game items or even just a quick glow of satisfaction.

Developers mine the psychological literature for insights. One well-known result, first shown in rats in the 1950s, is that semi-random rewards (where completing a task may sometimes provide nothing, sometimes a small payout and occasionally a big one), are more compelling than predictable ones. That insight is used in almost all game design. "Candy Crush Saga", a popular pattern-matching game, gives players extra rewards for finding unusual combinations on the board, providing an unpredictable but enjoyable reward when the tiles fall in the right place.

A more overt tactic is to punish players who do not log in regularly. "Adopt Me", a subgame in "Roblox", in which players care for virtual pets, provides in-game benefits to players who log in at least every 15 hours. In "Farmville", players who neglect their virtual crops will see them wither—though they can be revived for a price.

Other tricks are designed to persuade players to convert playtime into purchases. Virtual items are bought with in-game currencies, such as gold, crystals or the v-Bucks used in "Fortnite". Studies of people using foreign currencies suggest that unfamiliarity helps them spend more freely. (This is one reason, says Dr Mentzoni, why casinos use chips.) Players who run out of lives in "Candy Crush" can wait half an hour before playing again, or pay money to dive straight back in. In 2018 King, the developer of "Candy Crush", told Britain's Parliament that one player had spent $2,600 on lives and other in-game perks in a single day (though, to be fair, the digital goodies did last him seven months).

The analogy with gambling can be seen most clearly with "loot boxes"—virtual treasure-chests that contain a randomised assortment of in-game goods. The "FIFA" series, for instance, offers a mode in which players build a football squad from players they find in virtual packs of cards that can be bought with real money. Dr Mentzoni has calculated that, assuming average luck, in the 2018 edition of the game it would take around €10,800 ($12,200) to assemble the best possible team.

Some firms load the dice with user-retention in mind. In "Hearthstone", from Activision-Blizzard, a big game publisher, players again collect cards, this time representing dragons, orcs and the like, with which they do battle. Unlucky players will have the odds adjusted behind the scenes to boost their chances in future purchases.

Moreover, all these features can be tweaked using analytics data, harvested from a game's players. Developers can run experiments with everything from difficulty curves to the price of different in-game items and see the effects on user-retention or revenue. King extols the use of data to help "make our titles irresistible".

From the few not the many

Hard data are tough to come by. But for most players, the impact of this psychological engineering seems limited. Most freemium gamers spend nothing. Documents from a recent court case show that 70% of revenues on Apple's App Store came from games. Most of that, in turn, comes from a small cohort of big spenders. And the video-game industry is hardly the only one to use psychological hacks to boost sales. "It's not an accident that the milk is always at the back of the supermarket while the chocolate bars are near the tills," notes one games-industry veteran.

Nonetheless, politicians—and not just in China—are beginning to worry. Belgium and the Netherlands have declared that loot boxes should be regulated as gambling. New rules in Britain, the world's fifth-largest market, require protection for players under the age of 18. WHO recognition is likely to boost diagnoses of gaming disorder, regardless of its true prevalence, because it gives doctors an official diagnostic code to record it.

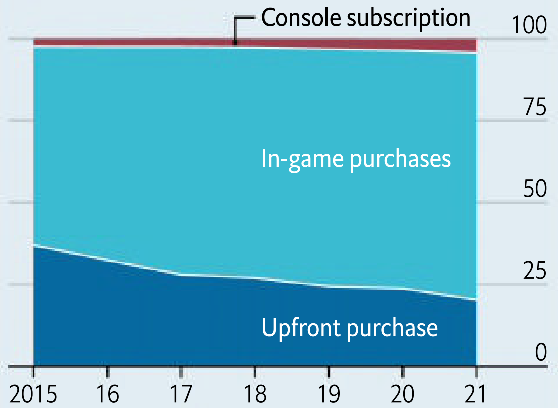
A few developers will quietly confess to unease about how their products work. In a talk at the Game Developers Conference in 2019, the Oxford Internet Institute's Dr Przybylski worried about the industry's defensiveness, and warned his audience to brace for new rules, sin taxes and fines. He has argued—with limited success so far—that games firms should give academics access to internal data, hoping this might settle the question of whether games really can be "addictive" in a medical sense.

In the meantime, there are tentative efforts at self-regulation. The Entertainment Software Association, an American trade body, points to parental controls offered by smartphone firms like Apple and Google, which can limit play time or spending. UK Interactive Entertainment, another trade body, runs an education campaign called "Get Smart About PLAY". The problem with self-regulation, of course, is that it can be interpreted as admitting that at least a few customers do have a problem. ■

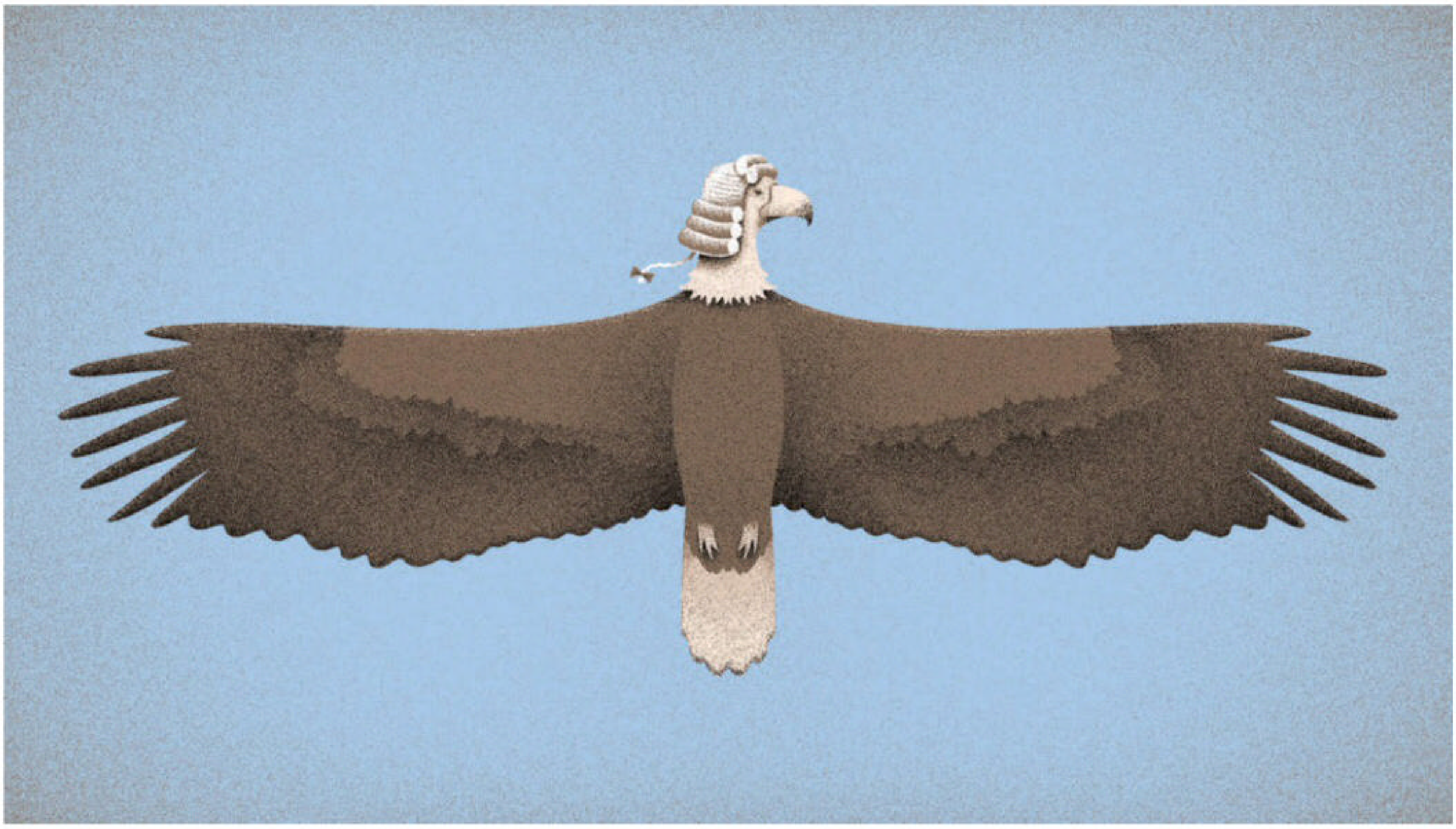
Pay up, pay up and play the game

Global video-games-market revenue

By type of spending, %



Source: Newzoo



Global law firms

Soliciting success

NEW YORK

As big law gets bigger, it looks ever more like its corporate clients

A MESSY WORLD is great news for those whose business it is to sort through a mess. One group in particular has had a fabulous time of late. "Business demand across every market has been strong," beams Elliott Portnoy, chief executive of Dentons, the world's fourth-biggest law firm by revenues. In 2021 Dentons, a product of a series of combinations, including one six years ago with Dacheng, a large Chinese practice, may bring in over $3bn in gross billings. In the past 12 months it has added 1,000 or so lawyers to its head count, which now numbers over 12,000, and opened offices around the world. It has to turn away business for lack of capacity.

Dentons is not an isolated exhibit. Big law is on a tear. The 100 biggest global firms look on track handily to surpass their combined revenues of $128bn in 2020 (see chart on next page). Kirkland & Ellis, an American giant which has topped the rankings in recent years, is expected to rake in annual billings of more than $5bn, more than twice as much as in 2015. Profits for each equity partner, an industry benchmark, have risen by more than 6% at over half of the 300 biggest global firms, estimates Peter Zeughauser, a consultant who advises many of them. At the fastest-growing 75 they have shot up by double digits. Equity partners at America's top 100 firms could take home as much as $2.5m each on average. "Every law firm I know, every one, has had a record profit," marvels David Wilkins of Harvard Law School, whose seminar on the legal business is popular with big-law chiefs. And this breakneck growth is coinciding with significant changes in the profession's time-honoured ways.

The bonanza is the result of ballooning demand for legal services and falling costs. Thanks to pandemic-era restrictions, variable expenses such as travel and entertaining clients have plummeted. Despite their starchy reputations many firms have displayed managerial flexibility. The accoutrements of the legal professions—from leather-bound tomes and yellow pads to dark suits—were readily discarded in favour of Zoom, Google docs and sweatpants. Working from home became a convenient pretext to bill around the clock.

Even as overheads have declined, demand for lawyerly advice has swelled. Firms bracing for a repeat of the drought that followed the global financial crisis of 2007-09, when only bankruptcy practices did brisk business, have instead found themselves swamped. Mergers and acquisitions (M&A), the biggest money-spinners for lawyers, will exceed $5trn in value in 2021, obliterating the previous record of $4.2trn in 2015. Private-equity deals, from fundraising to divestments, are booming. So are stockmarket listings (including via complex special-purpose acquisition companies, or SPACs), as well as delistings (particularly of Chinese companies from American exchanges) and relistings (of those same companies in Hong Kong or Shanghai, at the tacit behest of the Communist Party).

At the same time the law firms' non-transaction business, which has historically been more placid, is picking up. Governments around the world are preparing to regulate areas from data and diversity to climate. The European Union may soon pass two sweeping laws governing digital markets and services, which could ensnare rich clients such as Apple, Alphabet and ▸▸

→ Also in this section

Meta. American trustbusters are rediscovering their pep under President Joe Biden. His Chinese counterpart, Xi Jinping, is cracking down on the private sector across the board.

A global deal to make multinational companies pay more taxes and to divvy up the spoils more equitably between countries is expected to be approved in the next few months. Businesses are also under growing pressure from investors to conform to environmental, social and governance standards, which involve new legal instruments. On top of that, Dentons foresees a "very busy trial year" in 2022. Lawyers report that the prosecution of Elizabeth Holmes, accused of fraud at her blood-testing startup, Theranos, has prompted entrepreneurs and firms touting imperfect products to seek legal advice. Ms Holmes denies the charges. If she is convicted, law firms expect such consultations to intensify.

All these "are challenges for businesses and bright spots for lawyers", says Jeroen Ouwehand, global senior partner of Clifford Chance, a big London firm. To make the most of the brightness, law firms are shaking up their management model. In many ways, they increasingly look an awful lot like their large corporate clients.

Culturally, the biggest shake-up is taking place in the area of compensation. Large firms have historically doled out pay to partners based on seniority. The approach has many virtues, not least promoting collegiality among many people who live to argue. But it requires the richest practices such as M&A to cross-subsidise less lucrative ones. And, as one partner at a global firm puts it, "It only works if all the partners work like maniacs, and everyone is making a ridiculous amount of money."

Pay scales of justice

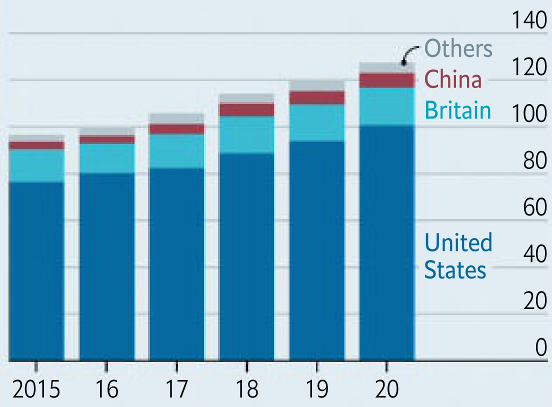
For the rainmakers, it increasingly does not work. Plenty of firms' top performers are only too happy to jump ship if offered better terms. The partner says he receives a couple of emails from headhunters every week. Kirkland & Ellis and Latham & Watkins have climbed their way to the apex of the American market in part by poaching successful lawyers with the promise of paying them based on the profits they bring in. The performance-based approach, common in the corporate world (and known as "eat what you kill" in lawyerly circles), is spreading. In December Cravath, Swaine & Moore, a New York firm, and Linklaters, a London one, both stepped away from the seniority system.

Law also resembles other sectors in the way firms configure their operations. Clifford Chance runs a research-and-development office, which studies matters like how best to administer far-flung global cases (with an experienced case manager rather than a lawyer) to the feasibility of shifting financial transactions onto blockchains (the jury is out). What used to be a senior partner's well-timed whisper to the client company's board is coalescing into formal practices in new non-transaction areas. That sort of work doesn't provide the same billing rates as complicated deals, but it is consistent and growing, says Alastair Morrison, head of strategy at Pinsent Masons, a big London firm. Ashurst, an Anglo-Australian firm, has created an in-house consultancy with 60 people (including ten partners) doing anti-fraud, compliance and "remediation" (crisis management in plain English) work that used to be the preserve of accountants and consultants. In 2021 Dentons teamed up with the Albright Stonebridge Group, an advisory firm founded by Madeleine Albright, an American former secretary of state, to launch a consulting outfit. Dentons also employs 15-20 people just to seek out and manage such combinations, as well as those with other law firms.

Bill back better

World, top 100 law firms*, total revenues

By country of largest practice, $bn



Source: Law.com

*By revenue

Most such deals are international—the third way in which law firms look ever more like other global businesses. Lawyers used to follow their multinational clients to new jurisdictions. Now many are expanding pre-emptively, opening offices in erstwhile legal backwaters, both to serve customers and cut costs. Clifford Chance has moved some operations from expensive legal hubs such as London and New York to cheaper places like Delhi and, more recently, Newcastle. Ashurst now has as many lawyers in Australia as in Britain. It does some simpler work from Brisbane and Glasgow rather than Sydney or London. Baker McKenzie, a Chicago firm that was early to the trend, now operates in 46 countries. Dentons boasts over 200 offices in 82 countries; it praises the virtues of places once sniffed at by big-shot lawyers, such as Milwaukee.

At the heart of operations like Baker McKenzie's or Dentons' is a structure known as a Swiss verein (voluntary society). Branches in different countries operate under a similar name but enjoy substantial autonomy in how they are run. Firms structured this way look like an assortment of fast-food franchises rather than a unitary organisation with a strong culture; critics sometimes still deride Baker McKenzie as Baker McDonald's. But like the fast-food chain, vereins are at once more global and more local than more centralised rivals.

Dentons has pushed the verein approach particularly hard in recent years. Its name was deliberately chosen as the most memorable and easiest to pronounce from among 67 permutations of the names of former partners. In the past 12 months it has forged ties with firms in North America, Latin America and Africa, and is about to close a deal with a Vietnamese one. It has also opened new offices in Bolivia, Grenada and Uruguay. "The more global the firm, the higher the demand," says Mr Portnoy. He refers to Dentons as "polycentric": with no dominant culture, no standard pay scale, no instructions on whom to hire and, most of all, no "colonisation". It even dispenses with a headquarters. Every time you Zoom with Mr Portnoy or Joe Andrew, Dentons' global chairmen, they appear to be in a different place.

Firm footing

Being on the ground has proved especially useful for Dentons and others during the pandemic, when travel restrictions limited where and how easily partners could move around. It has been especially handy for firms to have a large presence in America and China, with their vast domestic markets and relatively rapid economic rebound from covid-19. The biggest American firms, like Ellis & Kirkland or Latham & Watkins, have consolidated their position. Big Chinese ones like Yingke or King & Wood Mallesons (as well as Dentons, whose most numerous practice is in China) remain scarce in a field dominated by America, which accounts for four in five of the top 100 firms. But they have rocketed up the revenue rankings.

The growth of vereins is making the legal profession resemble other businesses in another way. Big law is becoming not just bigger but also more concentrated. In 2020 the three biggest earners accounted for nearly 10% of the gross billings at the top 100 global firms, up from 8% five years earlier. A handful of superstar firms like Kirkland & Ellis or Dentons may increasingly dominate the league tables. They are better able to serve clients wherever and in whatever capacity they need serving, to deal with an inevitable uptick in overheads as the world puts the pandemic behind it, and to poach talent from weaker rivals. If corporate history is a guide, the high-flying legal eagles are unlikely to have their wings clipped soon. ■

Metaverse landlords

Virtually there

DECENTRALAND

Digital-property prices are going through the roof

"RIDICULOUS AND cool." That is the architectural brief for a new office tower under construction in the Crypto Valley, a business district of Decentraland, a virtual platform built on the Ethereum blockchain. The edifice—owned by Tokens.com, a blockchain investor—will be a cross between a nightclub in Ibiza and the Bellagio resort in Las Vegas. In a fantasy world unencumbered by something as pedestrian as physics, a rotating company logo will float above the tower as nearby clouds shoot out company-branded thunderbolts. The tower's purpose—to provide office leases for firms and event space for crypto conferences—is humdrum by comparison.

Gamers have traded pixelated property and other digital assets for years. Now the activity has been turbocharged by the growth of unique digital artefacts known as non-fungible tokens (NFTS), and by the hype around the metaverse—a emerging virtual market which could, depending on whom you ask, ultimately generate revenues of between $1trn and $30trn.

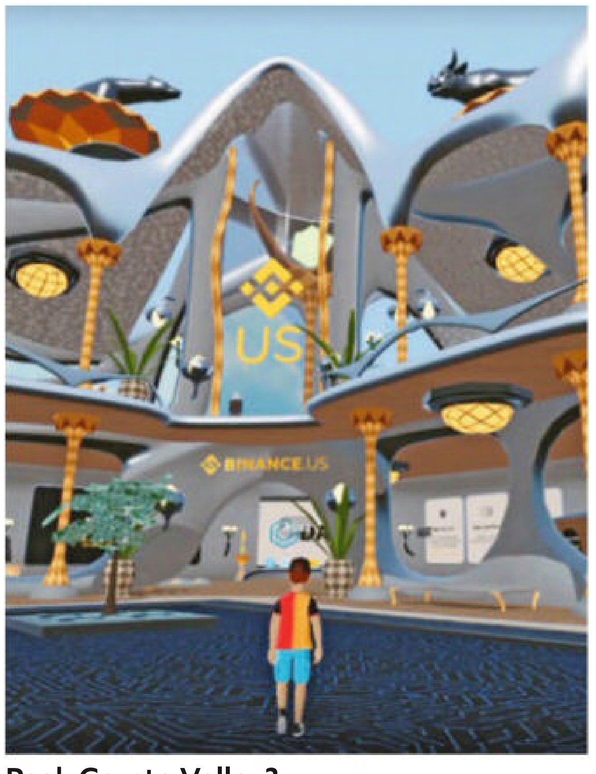
Real money is changing hands. Some sales involve replicas of the physical world. Users of Legacy, an NFT-powered recreation of London, have spent $54m on plots of land in the game (which is still in development with no launch date). SuperWorld, a virtual planet where people can buy digital versions of any place on Earth, says the average user spends some $3,000 on property purchases. The Taj Mahal and the Eiffel Tower are selling for the cryptocurrency equivalent of around $200,000 and $400,000, respectively. Their current owners paid under $400 each.

Wholly invented worlds are also drawing investors. In November Republic Realm, a company that manages and develops digital real estate, paid $4.3m for land in a platform called the Sandbox, the biggest virtual-property investment to date. That same month Tokens.com spent $2.4m for a plot in Decentraland's Fashion Street district. Nightclubs and casinos where users can win virtual money line the streets of the gambling district. In its art district Sotheby's, a real-world auction house, has opened a virtual gallery. Smaller parcels that fetched around $20 apiece when Decentraland launched in 2017 can now sell for as much as $100,000. Somnium Space, a competing platform, reported more than $1.8m of land sales by its users over a 30-day period in November. In other virtual worlds, concert halls stream performances by the digital avatars of pop stars such as Justin Bieber and Ariana Grande. Empty virtual shops could soon be leased by fashion houses such as Gucci, Dolce & Gabbana, Burberry and Balenciaga, all of which have sold branded items in one metaverse or other.

Will the digital-property boom last? As in the physical world, profits depend on footfall and people's willingness to spend real money. For that to happen at scale the user experience must improve. Popular metaverse platforms such as Decentraland and the Sandbox are clunky. The average user may not want to shell out on the graphics cards, virtual-reality headsets and superfast broadband that gamers use to make cyberspace feel more real.

The second risk is volatility. Virtual-property sales typically involve the exchange of the cryptocurrency unique to a given metaverse. Decentraland has MANA; Sandbox uses digital tokens known as SAND. The price of these can swing wildly, even relative to established crypto monies such as bitcoin or ether, themselves hardly a predictable asset class. They could crash to zero if a particular metaverse bombs.

To lower the risk, early investors such as Republic Realm are diversifying their holdings. The firm says it owns land in 23 metaverse platforms. But unlike physical land, the value of which is in part a function of its scarcity, each virtual realm is in effect limitless. So, in principle, is their number. Hundreds of wannabe metaverses already exist and more will emerge as crypto technology improves. That points to a paradox. Soaring virtual-property prices are predicated on the metaverse taking off. But a booming metaverse means less scarcity and lower prices. The laws of physics may prove easier to work around than the law of supply and demand. ■



Peak Crypto Valley?

Sino-American commerce

The quiet Americans

NEW YORK

A new American law poses more dilemmas for Western firms in China

MOST COMPANIES prefer to talk about corporate social responsibility than to act on such pronouncements. The Uyghur Forced Labour Prevention Act, which President Joe Biden signed into law on December 23rd, is leading many to do the opposite. American businesses may be happier to try to comply with it than to admit publicly they are doing so.

The law, which goes into effect in June, was a rare victory for human-rights groups and reflects a bipartisan China hawkishness in Washington. It bans imports of products from the region of Xinjiang in China on the presumption they are made with the forced labour of Uyghurs, a mostly Muslim ethnic group enduring horrific repression. Goods from Xinjiang can be brought to America only if importers can prove that forced labour was not used in their production. That is usually rather difficult, since China (which denies the existence of forced labour) does not allow proper inspection of supply chains in the region. Suppliers outside Xinjiang can also be blacklisted if they are judged to be using forced labour.

Xinjiang does not export all that much directly to America: $596m-worth of goods in 2020, or 0.1% of total American imports from China. But some of the region's more specialist products, such as nitrogen heterocyclic compounds used in cancer drugs, will be hard to replace quickly. And many regional products make their way into American goods along complex global supply chains. Cotton from the region, an important export, is used in textiles made in other countries, such as Vietnam. Forensic technology exists to identify cotton's origin but it is finicky and not yet widespread. Xinjiang's abundant tomatoes still end up in ketchup around the world.

Now American firms must make a greater effort to rid their supply chains of any hint of Xinjiang. Those trying to do so, owing to existing import restrictions (Xinjiang cotton and tomatoes have been barred from America for the past year) and in anticipation of the new law, have had some success. The value of Xinjiang's direct exports to America sank to less than $8m in September, down by nearly 90% year on year, according to the Observatory of Economic Complexity, a data provider.

A knottier problem for American firms is that they cannot be seen as endorsing their government's tough stance in China, ▶▶

a huge and important market. Those that helped craft the forced-labour law prefer not to be identified, says a former Congressional staffer. Many big American clothing brands that are believed to have stopped bringing in products made with Xinjiang cotton have not been trumpeting this, fearing a backlash and boycotts. When Intel, a chipmaker, wrote to suppliers in mid-December stating that they must keep products free of goods or labour from Xinjiang, this sparked a nationalist furore in China, fuelled further by state media. Intel deleted the offending phrase from its letter and on December 22nd apologised on Chinese social media, saying it had not been making a political statement (see Bartleby). The same week Walmart, a supermarket giant, faced local social-media opprobrium from shoppers unable to find Xinjiang products in its Chinese online store.

The new law will not end all American imports from Xinjiang. Those of the cancer-drug components have actually risen this year. In other cases, for example polysilicon used in solar panels, American firms may simply shift to suppliers in other parts of China—hardly a rebuke to the government in Beijing, which has sent tens of thousands of Uyghurs, if not more, to other regions to work under what are believed to be coercive conditions. Although other democracies, including France and Germany, have passed laws that force companies to monitor their supply chains for human-rights violations, goods from Xinjiang once destined for the West can still be sold in China or exported to places with laxer rules. In the first nine months of 2021 Xinjiang's global exports added up to \$13.5bn, nearly as much as the \$13.9bn recorded in all of 2020. ■

Bartleby Apology inflation

The trouble with saying you are sorry. A memo from a boss

DEAR TOP TABLE, We have discussed many of the risks that threaten us in the coming year: the pandemic, our supply-chain troubles and staff retention. But I want to raise a more personal concern: the possibility that I will have to make a public apology. Everywhere I looked over the past 12 months, executives were grovelling. The thought of promising to work on becoming a better person makes me feel physically sick.

Let me be clear. I'm not against apologies when they are warranted. Bad behaviour needs to be brought to light and investigated, however damaging the fallout. But there are reasons why firestorms have become more common. Technology records our every action. Employees have become activists. It's harder to avoid controversy in China.

Start with technology. Almost everything we do now as leaders leaves a digital trace that can come back to haunt us. Vishal Garg's recent decision to fire 900 members of staff at Better.com over Zoom was a terrible call, and not just for them. Private messages are liable to become public. Chris Kempczinski, the boss of McDonald's, apologised in November after a freedom-of-information request revealed the contents of thoughtless text messages he had sent to the mayor of Chicago about two shootings in the city. (Let's not even mention his predecessor's personal correspondence.)

Outrage is everywhere. The boss of Sweetgreen, a salad chain, suffered a backlash earlier in the year when he wrote that hospitalisations caused by covid-19 raised questions about levels of obesity in America. He ended up apologising for his insensitivity—or, as some people like to call it, use of data—and described the episode as an opportunity to "learn forward". Ugh.

Staff are behaving differently. According to a survey of 7,000 employees conducted by Edelman, a public-relations firm, workers now apparently think that they matter more than customers to the long-term success of their organisations. As if that were not bad enough, six in ten employees say they choose where they work based on their beliefs. The line between company and crusade has blurred.

If workers see something they do not like, they are more likely to let the world know about it. Just think about the past year. A group of Netflix employees staged a very public walkout in the autumn over a Dave Chapelle special that they regarded as transphobic. (This was handled pretty well, by the way: Ted Sarandos, the firm's CO-CEO, apologised for failing to "lead with humanity" but did not back down on artistic freedom.)

Tim Cook lamented the fact that Apple, once known for secrecy, has become more loose-lipped in a memo that was promptly leaked. Bankers at Goldman Sachs, a group of people designed to test the limits of human empathy, circulated a PowerPoint deck complaining about their workloads. A whistle-blowing product manager did huge reputational damage to Meta, Facebook's parent company.

Like many companies, we are looking at how we can tighten the flow of information internally: employees may have to ask for permission to start new Slack channels, for instance. But there is a limit to how far we can go. In April Basecamp, a software company, banned discussion of societal and political issues on its corporate platforms. "We are not a social-impact company," wrote one of the founders. "Our impact is contained to what we do and how we do it." A third of the firm's employees ended up quitting, prompting yet another apology.

China is a problem area, especially for American multinationals trying to navigate choppy geopolitical waters. In late December Intel sparked social-media uproar in China for sending a letter to suppliers telling them not to use components from Xinjiang in its semiconductors. The firm apologised, and made it clear that it was trying to remain in compliance with US laws rather than acting off its own bat.

In November Jamie Dimon expressed regret for joking that JPMorgan Chase would last longer than the Chinese Communist Party. One of the bank boss's two apologies for this unforced error included the line: "It's never right to joke about or denigrate any group of people, whether it's a country, its leadership, or any part of a society and culture." No Netflix comedy special for him.

So to keep the new year as apology-free as possible, remember the following. Nothing we say or do is private. Embrace blandness. Don't criticise China but do act as if you live there. And for God's sake, don't leak this memo.

Schumpeter | Glencore's message to the planet

Sorry, folks. Coal is alive and kicking

In "The coal question", written in 1865, William Stanley Jevons, a British economist, ascribed "miraculous powers" to the fuel source powering the Industrial Revolution. Coal, he wrote, stood entirely above all other commodities. Such were its superpowers, he fretted about the consequences for Britain if it ran out of the stuff. He needn't have worried. Not only has coal proved impossible to exhaust. More than a century and a half later, the largest source of carbon emissions is devilishly hard to kill off.

In 2021 the world, which was meant to "consign coal power to history" during the UN's COP26 climate summit, probably consumed more coal-fired electricity than ever before, the International Energy Agency, the world's pre-eminent energy forecaster, said in December. The strength of demand drove coal prices to record levels in October 2021. The buoyancy is expected to continue into 2022, not least because coal is a substitute for natural gas, whose price around the globe has continued to surge in the run-up to the new year.

What is bad news for the planet has been great for coal producers. With the mineral in the ascendancy, no big Western mining company has done as well for shareholders in the past 12 months as Glencore, the diversified minerals-and-metals producer valued at $66bn that since 2018 has snapped up coal assets divested by peers like Rio Tinto, BHP and Anglo American. Quietly, given coal's increasingly grimy reputation, the Swiss-based firm is one of the unloved mineral's most resolute champions.

That makes a campaign by a tiny activist fund, Bluebell Capital, which is trying to force Glencore to shed its coal assets, an intriguing opportunity to examine shareholder attitudes towards coal. Only a few years ago investors, especially those with environmental, social and governance (ESG) mandates, were virtually united in the opinion that big miners should withdraw from the dirtiest fossil fuel. Now they take a different view. This may be a matter of principle. It is also a sign of how fickle investors can be when ESG goals clash with the objective of maximising financial returns.

Bluebell's diagnosis is straightforward. It says that Glencore's decision to cling on to some coal assets until 2050 is "morally unacceptable and financially flawed". It believes that the firm's exposure to coal has dragged down its valuation, overshadowing the promising role that its other mining assets, such as copper and cobalt, are playing in the clean-energy revolution. It sees the appointment of Gary Nagle, only the fourth CEO in Glencore's 47-year history following Ivan Glasenberg's departure in June, as a unique opportunity to change course. Eliminating the "coal discount" and further simplifying the business could put an extra 40-45% into shareholders' pockets, it reckons.

So far, so simplistic. What it misses, though, is a recent sea change in investor views on the wisdom of owning coal. After Rio Tinto became the first big miner to abandon coal in 2018, its rivals, Glencore included, all laid out plans to curb or terminate their coal exposure. In mid-2021 Anglo took the biggest step by spinning off its South African coal assets into a newly listed company, Thungela Resources. Shareholders applauded every step of the way.

Then the unexpected happened. Thungela's shares, after a rocky start, quadrupled in value in a matter of months. Glencore, shortly after 94% of shareholders had approved its coal-reduction plans, bought out its joint-venture partners Anglo and BHP in a Colombian coal mine that will bolster its overall output from about 104m tonnes in 2021 to 122m tonnes within two years. BHP has reportedly put its retreat from thermal coal under review because of rising prices and changing investor attitudes. In a sign of the times, Bravus Mining and Resources, a subsidiary of the Adani Group, an Indian conglomerate, said on December 27th that it was about to export coal from the Carmichael mine in Australia for the first time. It has overcome a decade of opposition from environmentalists to bring the project to fruition.

Among investors, the change of heart has come from the top. In 2020 BlackRock, the world's biggest fund manager, set out a commitment to remove mining companies that generated more than a quarter of their revenues from thermal coal from its active investment portfolio. Though it still holds huge passive stakes in coal-miners (including the second biggest in Thungela), it was a powerful divestment signal. Since then, however, some investors, including BlackRock's CEO, Larry Fink, have come to the conclusion that in private hands fossil-fuel assets are likely to be less responsibly managed and more opaque than in the public markets. Mines may be expanded, rather than gradually wound down as Glencore promises to do with its coal assets. Its defenders say this is one of the main reasons Bluebell's campaign appears to have fallen on deaf ears.

They have a point. Yet as long as the strength of the coal price is adding billions to Glencore's cashflow and lining shareholders' pockets, the argument is also self-serving. It is not clear investors would be so magnanimous were prices to plunge.

Indeed, it is a fair bet that Glencore is more committed to coal than its shareholders are. Whereas many people concerned about climate change see the energy transition as a one-way street from coal power, possibly via natural gas, towards zero-carbon sources of electricity, the firm is bracingly pragmatic. It views coal as a "vital transition fuel", especially in Asia, where China and India account for two-thirds of global coal consumption.

Pitstop

Glencore is right to be a realist. However much the world worries about coal, many developing countries will favour cheap energy over the clean sort if forced to choose. Glencore says it would spin out coal if shareholders demanded it. But it clearly prefers not to. Only concerted government action to tax carbon emissions and redesign energy systems will kill off king coal. ■

The economic hit from covid-19

Winners and losers

SAN FRANCISCO

Our analysis of which economies have done best and worst during the pandemic

THE SPEED of the economic bounce-back from the enormous recession of 2020 has taken many forecasters by surprise. Output across the 38 mostly rich OECD countries combined probably surpassed its pre-pandemic level a few months ago. The average unemployment rate across the club, at 5.7%, is in line with the post-war average. And aggregate household income, adjusted for inflation, is above its pre-covid level. The overall picture has been remarkably benign, even as several variants of the coronavirus have emerged. But it hides stark differences beneath. The pandemic has created winners and losers—and the dispersion between them is likely to persist in 2022.

In order to assess these differences, *The Economist* has gathered data on five economic and financial indicators—GDP, household incomes, stockmarket performance, capital spending and government indebtedness—for 23 rich countries. We have ranked each economy according to how well it has performed on each measure, creating an overall score (the table on the next page shows the overall ranking, and four of our five indicators). Some countries remain in the economic pits, while others are faring better than they were before the pandemic on almost every measure. Denmark, Norway and Sweden are all near the top, and America has also performed reasonably well. Many big European countries, however, such as Britain, Germany and Italy, have fared worse. Spain has done worst of all.

The change in headline GDP since the end of 2019, our first indicator, offers a snapshot of economic health. Some countries always looked vulnerable to travel bans and a collapse in services spending—in particular those in southern Europe, which rely heavily on tourism. Other places, including Belgium and Britain, suffered high levels of covid-19 infections and deaths, which limited consumer spending.

Granular data help fill in the picture. The change in household income gives a sense of how well families have done, as it includes not just earnings from employment but also handouts from governments. Our measure is in real terms, which adjusts for reduced purchasing power as a result of recent surges in inflation.

In some countries, especially those where the impact of the virus was relatively slight, labour markets did not suffer too much, allowing people to continue to earn. Japan's unemployment rate has barely budged since the pandemic began. By contrast, Spain's rate rose by three percentage points between February and August 2020.

Some governments more than made up for people's lost labour income by sending them vast amounts of money. That was America's strategy: although unemployment soared as the economy locked down, households received more than $2trn in government transfers in 2020 and 2021, in the form of topped-up unemployment benefits and stimulus cheques. Canada did something similar. Other countries, however, such as the Baltics, focused their fiscal firepower on protecting firms' cashflow or expanding health-care capacity. Austria and Spain seemed neither to preserve jobs nor compensate the losers: in both countries real household income is still around 6% below its pre-pandemic level.

What about companies? Stockmarket performance hints at their health, as well as a country's attractiveness to foreign investors. Share prices in Britain are slightly lower today than on the eve of the pandemic—a reflection, perhaps, of Brexit-induced uncertainty. Britain also hosts fewer companies in the higher-growth sectors that have benefited from pandemic-induced technology adoption and lower interest rates. America, which has more such ▸▸

League table of nations

OECD countries, % change during the covid-19 pandemic*

Selected countries (Ranking out of 23†)	GDP	Household income per person	Share prices‡	Investment
Denmark (1)	2.1	3.4	57.3	12.1
Sweden (3)	2.1	2.0	50.4	5.6
Norway (4)	3.5	4.0	31.3	-8.5
United States (10)	1.4	6.2	24.4	3.6
Canada (=11)	-1.4	9.4	25.9	0.7
France (=15)	-0.1	0.7	17.4	1.3
Italy (=15)	-1.3	-0.2	18.5	6.9
Germany (=20)	-1.1	-0.9	15.6	-1.9
Japan (=20)	-1.9	1.2	17.4	-3.8
Britain (22)	-2.1	-2.3	-2.2	-7.4
Spain (23)	-6.6	-6.3	-7.2	-6.5

*Compares Q3 2021, or latest available data, with Q4 2019. Share-price data are monthly figures †Average score of five indicators: changes in real GDP, real household income per person, share prices, gross fixed capital formation, public debt to GDP ‡National all-share or broad index
Sources: OECD; IMF; World Bank; national statistics; *The Economist*

firms, has seen its stockmarket jump. But it has nothing on the bourses of northern Europe, where prices have soared. Three of the ten biggest firms by market capitalisation on the Danish market are in health care, decent stocks to hold in a pandemic.

Capital spending, our fourth measure, provides a gauge of businesses' optimism about the future. Some countries are in the middle of a capex boom: in America, for instance, entrepreneurs are spotting opportunities created by the pandemic, and companies are spending big on technologies that make working from home more efficient. In October Goldman Sachs, a bank, forecast that S&P 500 companies would spend 18% more on capex and research and development in 2022 than they did in 2019. Investment in some other places, by contrast, is more sedate. Norway has seen cuts to oil-and-gas capex.

Our last indicator is public indebtedness. All else equal, a big rise in government debt is worse than a small one, since it could indicate potentially larger tax rises and spending cuts in the future. Not every country has amassed enormous debts during the pandemic, even if America, Britain, Canada and others certainly have. Swedish public debt has risen by just six percentage points as a share of GDP. This is a reflection, perhaps, of the fact that the country largely avoided strict lockdowns, necessitating less fiscal support.

The spread of the Omicron variant is likely to curtail growth in early 2022 (see next story). But the economic recovery is still likely to continue over the year, and the overall picture will probably mask variation again. The OECD expects some of the worst performers to start catching up: Italy is forecast to grow by 4.6% in 2022, above the average pace for the club of 3.9%.

But the laggards have a long way to go. By the end of next year, the OECD expects the combined GDP of our three highest-ranked countries to be 5% higher than its pre-pandemic level. Output for the three worst performers, meanwhile, is expected to be just 1% higher than it was before covid-19. The uneven effects of the pandemic, in other words, will endure. ■

Real-time data

Omicron omens

The economic effects of the rapidly spreading variant

What is the economic impact of Omicron? The latest variant of the coronavirus has let rip at such a ferocious pace that forecasters are still catching their breath, and it will be some time before its economic effects become apparent in the official data, which are published with a lag. But a number of speedier, albeit partial, indicators can provide some insight into how consumers and workers may be adjusting their behaviour.

Consider first people's willingness to go out and about. A mobility index using real-time data from Google and constructed by *The Economist* includes visits to workplaces, retail and recreation sites, and transport hubs. This measure has been reasonably stable in America, albeit at levels below pre-pandemic norms, and has fallen a little in Britain and Germany in recent days. But underlying those headline figures are bigger differences depending on the kind of activity. The return to the office seems to have stalled. In America and Germany journeys to workplaces fell to about 25% and 16% below pre-pandemic levels, respectively, in the week to December 23rd. In Britain, where the government has issued guidance to work from home, they were 30% lower (see chart 1). By contrast, retail- and recreation-related activity has continued to recover in all three countries. This suggests that people may have become more discriminating about when to leave the house, especially as the festive season began. It might also indicate that people who can easily work from home were doing so, a sign of the economy's increased adaptability to new variants.

Other measures show that the hospitality industry is taking a knock. Fewer people are eating at restaurants than in 2019, according to data from OpenTable, a booking platform. In America and Britain there were 12-15% fewer diners in the week to December 20th than in the same period in 2019 (see chart 2 on next page).

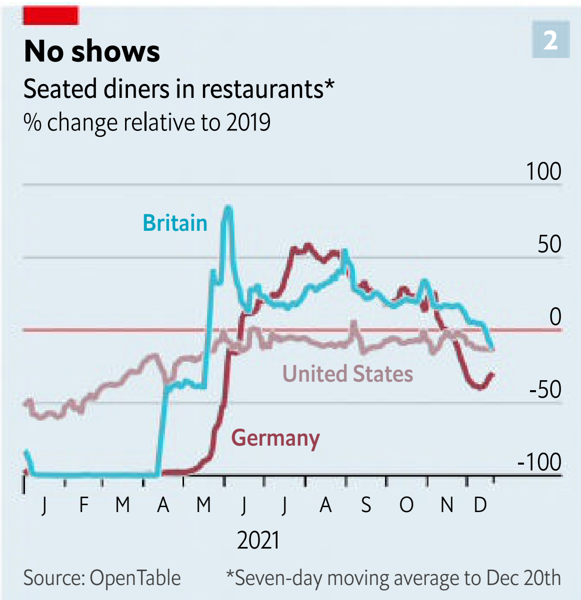
Omicron also seems to have contributed to travel disruptions. That has been most notable in America and China, where domestic air travel had more or less returned to normal. In the week to December 26th some 3,500 domestic and international flights that started or finished in America were cancelled, according to FlightAware, a data firm—about 2.5% of the total number of flights. That compares with a cancellation rate of 0.7% in the same week in 2019. American airlines have blamed covid-related staff shortages and bad weather for the cancellations. The number of passengers passing through American airports on December 22nd and 23rd slightly exceeded that in the same period in 2019. But only 3.2m made journeys on the 24th and 25th, compared with more than 5m in 2019.

These indicators give only a limited view of the economy. But they may well capture the areas that are most likely to be affected by fresh outbreaks of covid-19. Analysts at Moody's, a rating agency, have revised down their estimates of growth in America in early 2022 partly because of re-

Stay in or go out? 1

Britain, mobility index*, % change relative to pre-pandemic baseline

*Seven-day moving average †Visits to sites of retail and recreation, workplaces and transit stations ‡To Dec 23rd
Sources: Our World in Data; Google; *The Economist*



duced spending on travel. Economists at Pantheon Macroeconomics, a consultancy, expect the pain in Britain to be concentrated in the hospitality, entertainment and travel industries, while other sectors remain unaffected. That points to a smaller overall economic impact this time round, compared with previous waves. But with infections still surging and governments pondering fresh restrictions on activity, the full effect of Omicron could be yet to come. As covid-19 enters its third year, every forecaster knows by now to brace for the unexpected. ■

Crypto-finance

Build block better

SAN FRANCISCO

The difficulties of making blockchains green, fast and truly decentralised

CRYPTO IS THE key to paradise, particularly the financial kind. That, at least, is what the fans argue. Greedy intermediaries, such as banks, will be replaced by smart contracts (self-executing rules) that run on blockchains (distributed databases). This will give rise to efficient and innovative financial services, collectively called "decentralised finance" (DeFi).

The foundations of this edifice are shaky, however. Today's blockchains may be masterworks of coding, but they are also fiendishly complex, energy-hungry and, perhaps counterintuitively, centralised. Despite years of work, crypto developers are still trying to fully overcome the trade-offs inherent in the technology.

You can think of banks as maintaining big, opaque databases that contain information on customers' accounts and the money in them. Depositors have to trust that these institutions act in their interests. Sometimes, however, banks may not do so: they might make bad investments and collapse; or they might freeze depositors' accounts at a government's behest.

To their proponents, blockchains provide the basis for a type of finance that avoids such problems. Account databases would be maintained not by a central authority, but by the computers of those who use them. An account could be frozen only if a certain majority of those maintaining the blockchain agrees to do so.

For the system to work, publicly accessible blockchains have two special features. One is a "consensus mechanism", a way for users to agree on how to write new transactions in the database. The other is a set of incentives that keeps the system alive. Rewards need to draw in enough users to help maintain the blockchain. And penalties have to dissuade them from attacking it, say by mimicking lots of fake users in order to overwhelm the system.

In the case of the Bitcoin blockchain, the carrot is newly minted coins. Every ten minutes or so, hundreds of thousands of specialised computers called "miners" participate in a lottery to solve a mathematical puzzle. The computer that first finds a solution alerts the other miners and if they confirm the result, it updates the blockchain and is paid (every puzzle solved is rewarded with 6.25 coins, which at the time of writing was worth $308,270). The number-crunching also acts as a stick: the greater miners want their chances of winning the lottery to be, the more they have to invest in computing gear and electricity. To rewrite the blockchain in their favour, say by faking a transaction, they would have to control more than half the mining power. Yet engineering such an attack would be expensive, and would probably bring down the system they seek to profit from.

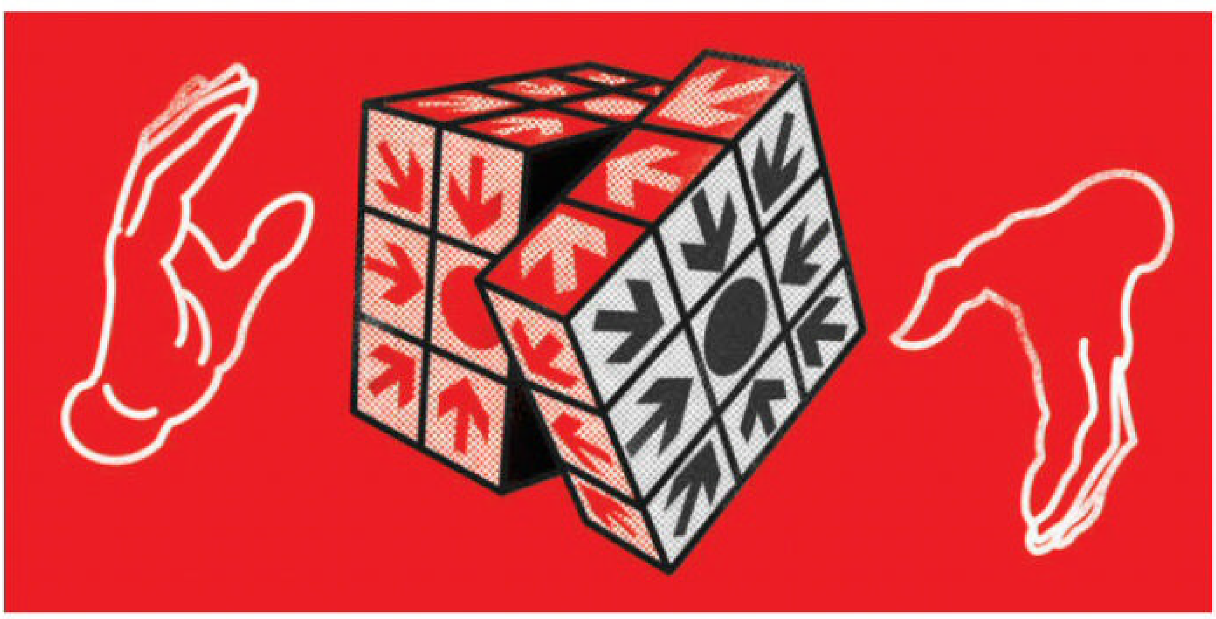
This approach, called "proof of work", is simple (as far as blockchains go) and has yet to be really hacked. But it has several big drawbacks. For one, it does not scale up. Bitcoin can only handle up to seven transactions per second and fees can be high. The system has also developed some forms of centralisation. Most puzzle-solving is done by a few big "pools". These allow miners to combine their resources and increase the odds of winning the reward, but also give them the power to influence the evolution of the system (as changes are often put to a vote of sorts). Furthermore, proof of work guzzles energy. According to some estimates, Bitcoin's electricity use is approaching that of Italy.

Power hunger and centralisation follow from the increasing returns to scale of proof of work. These push miners to keep expanding. The more computing power they have, the higher the chance that they win a reward. The bigger they are, the more they earn and the more they can expand.

Hence the quest to come up with better blockchains. Chia, for instance, is a system based on "proof of space and time". As with Bitcoin, the carrot is that participating users earn coins. Yet the stick is different: instead of wasting computing power, Chia wastes digital storage. It is not yet clear, though, whether Chia will prove more sustainable and less centralised than Bitcoin if it becomes widely used.

The smart digital money is therefore on another approach: proof of stake. Here decisions about updating the blockchain are made not through a computing arms race, but by a vote among the holders of a cryptocurrency. Voting power as well as the share of the rewards depend on how much holders are willing to bet on the outcome. This stake can be destroyed if a participant misbehaves. In this system both carrot and stick are the cryptocurrency itself.

Proof of stake does use much less energy. And its latest incarnations are much faster than Bitcoin: Avalanche, a blockchain that uses the approach, processes thousands of transactions a second. But it still has big problems. Coders have been attempting to shift Ethereum, the preferred blockchain for DeFi apps, from proof of work to proof of stake. Even Vitalik Buterin, one of the inventors of Ethereum, admits that proof of stake is "surprisingly complex". That means that lots can go wrong, especially when nearly $100bn in ▸▸



capital in DeFi apps must switch over. After several delays, the coders hope to make the move in 2022.

Yet this system would still tend towards centralisation. Bigger holders can reap more rewards, increasing their holdings further. This concentrates power among early buyers of a cryptocurrency and could allow them to take control of the blockchain. Newer projects that use proof of stake are trying to find ways to avoid this. Hedera Hashgraph is governed by a consortium, much like the one that runs Visa, a credit-card network. Avalanche and Tezos seek to ensure decentralisation by making it easy for "validators", participants who maintain the blockchain, to join.

To critics, centralisation is inevitable, even if energy inefficiency and complexity are not. The problem of increasing returns to scale will raise its head for any popular blockchain, predicts David Rosenthal, an early practitioner. "You waste all these resources only to end up with a system that is controlled by people you have even less reason to trust than those who run conventional financial institutions," he says.

To others, a degree of centralisation may simply be a price to pay for the other advantages of blockchains. Emin Gün Sirer of Cornell University, who co-founded Ava Labs, which created Avalanche, says that the main benefit is that governments will find it harder to influence blockchains than they do conventional banks. Kevin Werbach of the Wharton School of the University of Pennsylvania says that the openness of blockchains makes it easier to develop innovative financial services. Still, if the quest to come up with better blockchains shows one thing, it is that even in crypto-paradise there is no free lunch. ■

Buttonwood Feast to famine

Why capital will become scarcer in the 2020s

The trouble with the 12-month outlook, an obligation at this time of year, is that the forecasts will be wrong. Of course they will. In financial markets there are so many ways to err—on direction, timing or speed of change. A year is both too long and too short. Too long, because the blistering pace of the current financial-business cycle means even a well-identified idea plays out in a matter of weeks. Too short, because deep trends may take years to become fully apparent.

So let us shelve the immediate outlook and ask instead how things might change over the next decade or so. Today capital is abundant. A middle-aged global workforce has lots of savings to put to work. Low long-term interest rates and expensive assets point to a scarcity of worthwhile ways to deploy those savings. New businesses are often ideas-based and do not need a lot of capital. It can be hard to imagine this state of affairs ending. But over time capital is bound to become less abundant. Greater demand for it will come from three sources in particular: economic populism; shorter supply-chains; and the energy transition.

Start with economic populism. Thirty years ago two academic economists, Sebastian Edwards and Rudiger Dornbusch, sketched out its key elements. Above all, it is an approach that sees no constraints—such as borrowing limits or inflation—on economic growth. The Latin American populists studied by the scholars printed money to pay for public-spending binges. This ended badly. But economic populism lives on. It is in its purest form in Venezuela. Turkey seems hell-bent on embracing a version of it. Argentina never quite threw it off.

A diluted form of economic populism is becoming more evident in rich countries, too. One sign is a revival of discretionary fiscal policy. The $1.9trn package signed in March by President Joe Biden is the crowning example. The EU's €750bn ($900bn) recovery fund is more modest but still significant. Fiscal stimulus is back in favour because of a realisation that policy constraints, such as budget deficits, bind less when interest rates are low. But over time deficit-financed spending will start to absorb excess savings. There has also been a shift in monetary policy. You see this in a change in targets and in personnel. The old-style central banker—aloof from politics, paranoid about inflation—is all but extinct in the rich world. A new breed frets about inequality and finds reasons to be sanguine about inflation risks. Marko Papic of Clocktower Group, an investment firm, calls the shift towards stimulus the "Buenos Aires Consensus", in contrast with the Washington Consensus, which counsels prudence.

A second factor is rising investment in business continuity. Global value chains are likely to shorten somewhat. In part this is to avoid the bottlenecks that

weighed on output in 2021. Even modest near-shoring will require more capital. A general increase in working capital seems likely. Companies lost sales during the pandemic for want of stock. The interest cost of carrying inventory is now far lower than it was when business practice shifted towards lean stock levels and just-in-time supply. A national-security imperative also favours greater redundancy in supply chains, as Mr Papic points out. Rivalry between America and China is leading each country to duplicate capacity in certain key industries, such as semiconductors. Such duplication will soak up capital.

A third reason to expect capital scarcity is climate change. The transition to greener energy is essentially a capital-spending problem, argue Eric Lonergan and Corinne Sawers in a forthcoming book. Any serious attempt to arrest the climb in the global temperature requires junking the assets underpinning the carbon economy—oil rigs, coal-fired power stations, petrol forecourts—and building a new infrastructure based on electric vehicles, wind and solar power and battery storage. A lot of capital has to be deployed to create these assets.

None of these three trends is the kind that plays out fully over a calendar year. Indeed, such are the ironies of forecasting that 2022 may furnish evidence against the capital-scarcity thesis. If the Federal Reserve raises interest rates, it will do so quite early in the business cycle, belying the idea of a populist policy tilt. Mr Biden's "Build Back Better" spending bill may gather dust. As bottlenecks ease, security of supply may slip down companies' lists of priorities. But today's capital abundance cannot last for ever. Wait long enough and some forecasts are almost bound to be right.

Free exchange | Lose-lose ordeal

New research counts the costs of the Sino-American trade war

THE INITIAL two-year segment of the "phase one" trade deal between America and China comes to an end on December 31st. Neither country is in a mood to mark the occasion. Mutual antagonism is as fierce as ever; a new American law banning goods made with forced labour in Xinjiang is the latest flashpoint. Still, it is a good moment to take stock of the economic outcomes of the Sino-American trade war. The verdict is unremittingly negative for both countries—with one important exception.

Start with the most glaring failure. As part of the phase-one deal, signed on January 15th 2020, China promised to import dramatically more from America, by buying an additional $200bn in goods and services in 2020 and 2021, compared with 2017 levels. Having long complained about China's manipulation of its economy, America demanded that it manipulate trade flows. As it turns out, Chinese officials lacked either the willingness or the ability to get it done. China will reach barely a tenth of its purchase target for goods, according to data compiled by Chad Bown of the Peterson Institute for International Economics, a think-tank. Even allowing for pandemic-related disruptions, America's strategy of browbeating China into buying more of its wares has underwhelmed.

More broadly, the trade war has hurt both the Chinese and American economies, as a growing body of research shows. The superpowers started hitting each other with tariffs in early 2018, giving economists two full pre-covid years of numbers to crunch. During that time average American tariffs on Chinese imports soared from 3% to 19%, while average Chinese tariffs on American imports went from 8% to 21%. It is hard to overstate how big a shock this was to the world's biggest bilateral trading relationship. Pablo Fajgelbaum of Princeton University and Amit Khandelwal of Columbia University calculate that the tariffs were applied to even more trade as a share of American GDP than were the notorious Smoot-Hawley levies of 1930, which led to a spiral of international retaliation and may have worsened the Depression. Mercifully, the Sino-American trade war has precipitated no such disaster. The global economy was in much better shape to begin with. And price effects have been muffled by complex supply chains.

At the onset of the trade war, a common assumption was that both sides would bear the costs of the tariffs: Chinese suppliers would charge a little less for their goods, and American importers would pay a bit more. Yet an early study by economists including Gita Gopinath, now of the IMF, found that American importers in fact bore more than 90% of the cost of America's tariffs. The obvious explanation was that they had little choice but to rely on Chinese suppliers, at least in the short run, and could not negotiate lower prices. In addition, prices to consumers barely budged, suggesting that retailers absorbed the costs through thinner profits.

This could not last, wrote Ms Gopinath and her colleagues: at some point American importers would pass higher costs on to customers. Chinese economists might gleefully point to America's current surge in inflation to argue that this is now happening. At the margin they are surely right that tariffs can be inflationary, as even Janet Yellen, America's treasury secretary, has conceded. But dislocations stemming from the pandemic—from microchip shortages to a quintupling of shipping costs—are far bigger factors in driving up prices. The trade war only adds to the headache.

One reason why America levied tariffs was to encourage manufacturers to relocate there. Yet trade friction has in fact depressed business investment in America, suggests research by Mary Amiti of the Federal Reserve Bank of New York and others. The share prices of companies trading with China fared especially badly after tariff announcements. This reflected lower returns to capital and, by extension, weaker incentives to invest. All told, the annual investment growth of listed American firms was likely to have shrunk by 1.9 percentage points by the end of 2020. Aaron Flaaen and Justin Pierce of the Federal Reserve Board estimate that exposure to higher tariffs was associated with a decline in American manufacturing employment of 1.4%. The burden of higher import costs and retaliatory levies outweighed the benefits of being sheltered from foreign competition.

So far all this might sound like a win for China. But more recent papers show that it too has taken some blows. Because of a lack of granular official Chinese data, Davin Chor of the Tuck School of Business and Li Bingjing of the University of Hong Kong studied satellite images of night-time lights to gauge economic activity. The bulk of China's population, they found, would have been oblivious to the trade war. But for the directly affected export-intensive parts of the country, they estimated that the tariffs led to a 2.5% contraction in GDP per person. Another approach by economists including Xu Mingzhi of Peking University was to look at data from 51job.com, a Chinese job platform. Firms more exposed to American tariffs posted roughly 3% less ads in the six months following tariff increases, and reduced salary offers by 0.5% on average. Chinese officials like to talk about bilateral co-operation as "win-win". The trade war has been lose-lose.

Eggs in more baskets

The trade war has been constructive in one respect, however. America's imports from China are fractionally lower than before it implemented tariffs. By contrast, its imports from Vietnam have doubled, and those from Mexico have risen by 20%. Viewed narrowly, this may be a sign that trade is being diverted from more efficient producers in China to slightly less efficient ones.

But as a matter of business strategy, this looks sensible. One of the lessons of the supply-chain snarls of the past year is the danger of over-reliance on a single source. American firms can thank the trade war for getting them started on the messy business of rethinking their supply chains. The trajectory of Sino-American relations suggests they have every reason to hasten the shift. ■

Space exploration

Everyone's going to the Moon

This coming year, a Moonrush will begin in earnest

DURING THE cold-war space race between the Soviet Union and America, the latter's Apollo Moon missions were mostly about making a political and technological point. Having made it, they duly ceased. Now, approaching half a century after astronauts last walked on the Moon, a new age of lunar exploration is dawning. This time the goal is not just to get people and machines on or near to Earth's satellite, but also to sustain operations there.

More people are in on the action, too. South Korea's first lunar spacecraft, an orbiter, is to be launched this summer. The United Arab Emirates (UAE) hopes to become, in the autumn, the first Arab country to operate a craft on the Moon. Though this project involves other countries, *Rashid*, the rover in question, is being built by the UAE Space Agency in Dubai. It will carry a device called a Langmuir probe to study, in another first, the plasma of charged particles caused by the arrival at the Moon's surface of the solar wind. And Israel may also soon be represented, by SpaceIL, a philanthropically sponsored organisation that intends, in a couple of years' time, to land a probe on the far side of the Moon—a feat accomplished so far only by China.

The UAE's rover will be delivered by HAKUTO-R, a landing craft built by ispace, a Japanese firm, that is launched on a rocket from SpaceX, an American one. HAKUTO-R will also carry a baseball-sized rover (pictured on a subsequent page) from Japan's space agency, JAXA. This will trundle, Star Wars-droid style, over the lunar surface. India likewise plans to put a spacecraft on the Moon in this coming year—its first attempt having (as did a previous try by SpaceIL) crashed into the lunar surface in 2019. Russia is another hopeful. It last landed a vehicle, Luna-24, on the Moon in 1976, when it was part of the Soviet Union. Luna-25 is to blast off in the coming year, too.

The most ambitious Moon efforts, though, are America's. Its space agency, NASA, aims to return people there by the middle of the decade. Instead of flying direct from Earth. as Apollo did, the plan this time is to build a lunar-orbiting space station, known as *Gateway*. This will host a shuttle called the Human Landing System (HLS) into which astronauts will transfer for descent to the surface—where, eventually, an outpost will be established. After years of delay this project, dubbed Artemis, after the Moon goddess who was the twin of the Sun god Apollo, is beginning to move. The coming year should see at least 18 NASA-sponsored lunar missions, some of which will deliver equipment and supplies for later use. *Gateway* itself is scheduled for 2024.

Heaven can't wait

The protective outer shell of the Habitation and Logistics Outpost (HALO), as *Gateway*'s living space is called, is being built in Turin by Thales Alenia Space, a Franco-Italian firm, as a contribution from ESA, the European Space Agency. It will be shipped to America in October. After this casing has been fitted to the rest of HALO, and HALO in turn connected to a Power and Propulsion Element (PPE), the whole caboodle will be lifted into Earth orbit. The PPE will then draw energy from huge solar arrays to power ion thrusters that will push it slowly away from Earth, until, 11 months later, it arrives in orbit around the Moon.

ESA is also chipping in ESPRIT, a module that will allow *Gateway* to be refuelled once it is in lunar orbit. Canada is making the station's "external robotic system", a mechanical arm. And Thales Alenia Space ▸▸

is at work on a second habitable module, I-HAB—a joint project by JAXA and ESA that will likewise be attached after the station core is safely in place.

Others are expected to join in, too. For, besides kudos, participation earns access to HALO for a country's astronauts. Dave Oberg, who manages HALO operations at Northrop Grumman, NASA's prime contractor for the unit, thus describes HALO as "the first SpaceBnB" for lunar orbit.

To start with, the station will be inhabited for just a month a year. Automated and remotely controlled systems will run it at other times. But before long, Mr Fuller says, it should be possible to increase that period to two months. Some might reckon this brief. The International Space Station (ISS) has been continuously inhabited for more than 21 years. But the ISS orbits a mere 400km or so above Earth. Distant lunar operations will be far harder to sustain, not least because *Gateway* and any putative surface base will be outside the radiation-deflecting embrace of Earth's magnetic field, and will thus need heavy shielding.

Ignition sequence start

Artemis I, the project's first big launch, is supposed to lift off from Cape Canaveral in a few months' time. Its scientific payload is modest: 13 small "cubesats" to gather data about things like the abundance of lunar water. But its real purpose is to evaluate NASA's massive Space Launch System (SLS) rocket and an associated crew capsule, called Orion, that is being built by Lockheed Martin. On this mission an Orion capsule will fly, uncrewed, 64,000km beyond the Moon, before returning to Earth and splashing down in the Pacific Ocean.

The follow-up to that, Artemis II, is scheduled for 2024. An SLS will launch an Orion capsule with a service module built by ESA attached to it. This will carry four astronauts, one of them Canadian, into orbit around Earth. After circling twice, to gain speed, and thus altitude, the spacecraft will shed its last stage. The crew will then conduct manoeuvres near this jettisoned stage to give them a feel for how the capsule actually handles, as well as a bit of practice for "rendezvous and proximity" operations like docking. On this mission, it will carry astronauts some 7,400km beyond the Moon, farther from Earth than people have ever previously ventured.

Artemis II's flight will probably last ten days, though it might be extended to as much as three weeks. And if everything goes well the door will thereby open for Artemis III, a Moon landing, in 2025—probably near the lunar south pole with a crew of four who will stay for six days.

NASA says Artemis III will help it establish a permanent "first foothold on the lunar frontier". Artemis Base Camp, as this will be named, should one day boast an unpressurised rover (for short drives with spacesuits on), a pressurised "habitable mobility platform" (for longer trips), and living quarters that are not part of a lunar lander. Eventually, it should be able sustain four people for a month or two.

That, at least, is the plan. However, the SLS—already years late and shockingly over budget—may be beaten to its maiden flight by SpaceX's Starship system. The reuseable booster of this is more powerful and much cheaper than the SLS. And a version of the crewed Starship itself has been worked into the Artemis programme as the first HLS. Contingency plans are also being laid for the crew transfer from the Orion capsule to the Starship HLS to be made directly, rather than via *Gateway*, in case the station is not ready in time.

Starship's existence raises questions about the whole Artemis project. One is whether the SLS is the right launcher. Another is the value of circumlunar infrastructure like *Gateway*. Cynics see both as being as much conduits for piping money to influential aerospace firms and politically important constituencies as they are means for returning to the Moon—a suspicion enhanced by the fact they are, in large measure, continuations of previous, cancelled, human-capable programmes, and have cost billions of dollars. If Starship proves itself in 2022 the contrast will be stark, and an alternative approach using it or some rival private-enterprise system, and cutting out *Gateway* altogether, may look quite attractive.

Whichever way things turn out, however, America is not alone in its desire to operate outposts on and in orbit around the Moon. In a remarkable development, China and Russia announced in June 2021 their intention to build a joint Moonbase and space station in lunar orbit—though, according to officials, the International Lunar Research Station, as these orbital and surface outposts are collectively to be known, will not end up with people on board until at least 2036.

Luna-25 and two follow-on missions are now part of this effort. So are China's increasingly complex Chang'e missions, named, like Artemis, after a Moon goddess. The Chang'e programme's accomplishments go well beyond its operations on the Moon's far side. China has used radar to probe beneath the lunar surface. In 2020 Chang'e 5 brought some samples home. In 2024 Chang'e 6 is to begin establishing a robotic research station on the Moon.

A notable obstacle to doing all this is radiation, for it is not just people who are harmed by it. Equipment is, too. As a consequence, components developed for use in satellites operating near Earth, and thus shielded by the planet's magnetic field, are likely to fail rapidly when exposed to the rigours of deeper space. To illustrate the point, Timothy Cichan, Lockheed Martin's top designer for space exploration, observes that, despite heavy shielding, an Orion's electronics need to include so much fail-safe redundancy that the capsule's computers are actually quite slow.

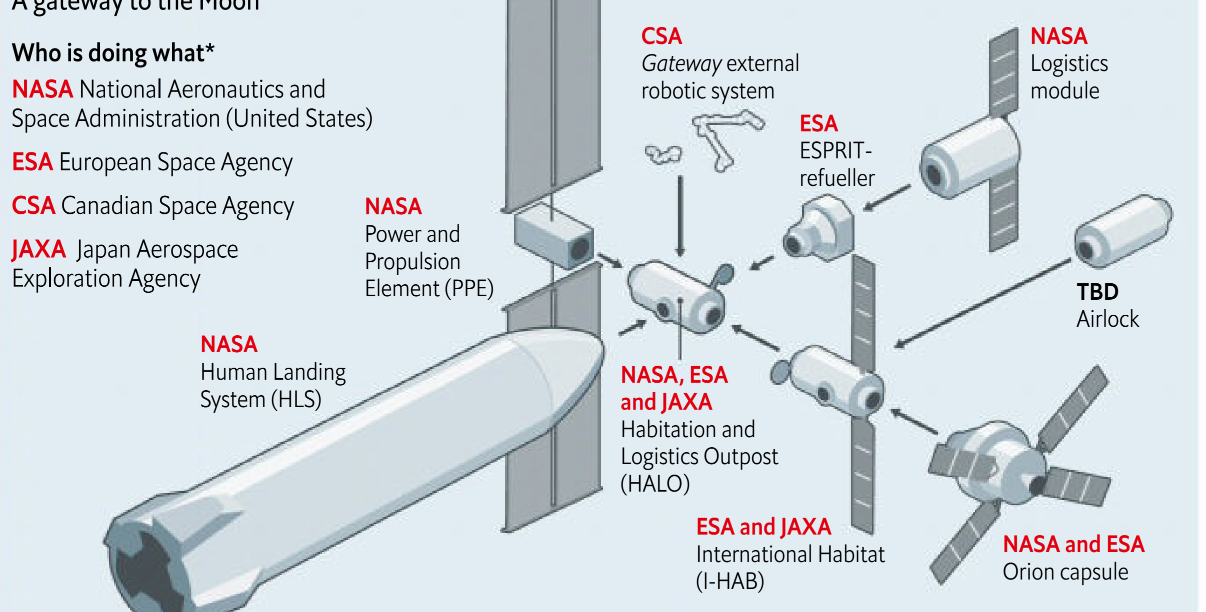
A higher rivalry

At one level, all of this is impressive. But both the American and the joint Chinese-Russian efforts will create little more than lunar toeholds. For something substantial and durable, local resources will be needed. Two, in particular, might be useful.

The first is water. Its presence, in the form of ice, was confirmed in 2008 by spectroscopic analysis of a plume of material ejected from the lunar surface by an Indian "impact probe". The Moon's ice is concentrated at its poles, which are home to the largest number of places enjoying the permanent shadow required to stop ice evaporating. But an analysis published in 2020 suggests such refuges are also scattered

Bits and pieces

A gateway to the Moon



Source: NASA

*Proposed configuration at December 2021 across the entire lunar surface.

Water is good for more than drinking. It is scientifically interesting, because working out the dates of its arrival on the Moon, courtesy of incoming comets, will help illuminate the history of the solar system. And its molecules can be split into oxygen and hydrogen. The former is, literally, vital. The latter might be employed as rocket fuel. And bringing water from Earth would be expensive. At the moment, the cost of getting a kilogram of material from there to the Moon's surface is about $1.6m.

That cost is also pertinent to the second resource, the Moon's surface itself. This crushed rock, called regolith, crushed further still and perhaps mixed with appropriate liquids, might be turned into "ink" suitable for the 3D printing of buildings.

Chang'e 8, scheduled for 2027, will test that idea. One problem is that, in the vacuum of space, liquids rapidly boil. To overcome this, ESA has run tests on Earth. These have found that sticking a printer's nozzle beneath a layer of untreated regolith, which can then be brushed away after the ink has set, seems to protect the squirted ink long enough for it to consolidate.

An alternative approach is to do away with the liquids altogether. Some 3D printing techniques involve sintering dry powders using lasers or microwaves rather than solidifying slurrified inks. ICON, a company in Austin, Texas, is being paid by NASA to test this approach using a terrestrial knock-off of lunar regolith.

Such efforts raise a question. Can lunar resources be owned? The Outer Space Treaty, which dates back to 1967 and has been ratified by 111 countries, including America, bans claims of sovereignty over heavenly bodies. But sovereignty and ownership are not the same thing. So America and several other countries argue that useful lunar materials are there for the taking.

There is a catch, though. The treaty stipulates space exploration be "for the benefit and in the interests of all countries". Some see this to mean merely that exploration must be peaceable. Others push for a broader interpretation—that benefits from off-world resources must be divvied up to include non-spacefaring countries as well.

A talking shop called the Hague Space Resources Governance Working Group has discussed the matter regularly since 2016. Rather than wait for its conclusions, though, some have opted for action. Over the years, the governments of America, the UAE and Luxembourg (a country that plays host to many companies involved in space businesses, despite its small size) have passed legislation granting firms the right to extract extraterrestrial resources. In June 2021 Japan's parliament followed suit.

And America, at least, is turning words into action. NASA has signed a contract with Lunar Outpost, a robotics company in Colorado, to provide communications and hardware such as rovers on the Moon. If all goes well, in late 2022 a Lunar Outpost rover carrying 4G communications gear for Artemis will land near the Moon's south pole. In a side deal, it will also scoop up a shovelful of regolith, take a picture of this, and transmit that image back to NASA. This act, it is claimed, will transfer ownership of the Moon dust to the agency—for which Lunar Outpost will be paid the princely sum of 80 cents. Julian Cyrus, the firm's head of operations, says the transaction will be the first sale of resources in space. Not to mention a marketing coup.

JAXA's Moondroid

America wants to get the private sector excited about an emerging "cislunar" economy. So far, this hinges mostly on government spending. But that could change. Just as the past decade has seen an expansion of commercial opportunities in orbit around Earth, so some people hope something similar will happen on the Moon. Not long ago, developing a robotic mission to the Moon took about seven years. Now three or four years is common, says Erick Dupuis, head of space-exploration development at the Canadian Space Agency. He is in charge of a kitty of C$150m ($117m) intended to help Canadian aerospace firms dip their bread in the lunar gravy.

Celestial spheres of influence

The Moonrush, then, brings opportunity. But it also brings geopolitical jostling. Among Europe's spacefarers, scientific goals still carry weight. Elsewhere, missions are more about power-flaunting of a sub-Apollo kind. Xavier Pasco, head of the Foundation for Strategic Research, a Parisian think-tank, reckons India, in particular, shapes its space exploration to gain an edge over its neighbours and rivals, Pakistan and China. China's desire to erode America's technological lead in space is no secret. As for Russia, Pavel Luzin, an expert on space policy and security in St Petersburg, says his country sees space prowess as a pillar of national power overtopped only by its nuclear weapons and UN Security Council veto.

Some observers see the spacefaring world dividing into two increasingly opposed camps. One consists of America and (at the moment) 13 other countries that have joined its Moon programme. These have signed up to the so-called Artemis Accords, a set of motherhood-and-apple-pie principles about the peaceful use of space, data sharing, mutual aid and so on. The other, less formal, camp is led by China, with Russia a junior partner. Marco Aliberti of the European Space Policy Institute, an international quango, says that countries being wooed to join this group include Iran, Pakistan and Saudi Arabia.

There are also military risks. The Outer Space Treaty bans nuclear or other weapons of mass destruction in space. Respect for that, and also for a more general taboo against the placing in space of other types of weaponry, could be challenged by the emerging polarisation of spacefaring countries, says Sa'id Mosteshar of the London Institute of Space Policy and Law.

For its part, DARPA, an American military-research agency, has called cislunar space the "new high ground". That makes it something no power would willingly concede to an opponent. The potential for diplomatic incidents in space, albeit not cislunar on this occasion, was illustrated by a Chinese complaint in December to the UN's Office for Outer Space Affairs about two alleged close encounters between its space station, *Tiangong*, and satellites belonging to SpaceX's Starlink network.

America's Air Force Research Laboratory is thus developing a "Cislunar Highway Patrol System" to assist America's Space Force, the newest branch of its military establishment. Officials are cagey about the details. But this and similar programmes for deeper "space domain awareness" will, says Jaime Stearns, the laboratory's head for space vehicles, help ensure safe passage of hardware to and from the Moon.

NASA seems keen on such ideas. In 2020 it signed an agreement with the Space Force for, among other things, greater protection for lunar spacecraft. Until recently, the force's commanders assumed their responsibilities ended 36,000km from Earth, the altitude of so-called geostationary satellites, which appear to hover in the sky because they have an orbital period of 24 hours. Those days are now over. As the agreement with NASA noted, the push to the Moon multiplies the volume of space the Defence Department must keep an eye on more than a thousandfold. If it ever existed, then, the age of innocence is past. Tentatively, but deliberately, the Final Frontier is now being pushed out. ■

The new covid variant

Omicron causes a less severe illness than earlier variants

But it is spreading fast, and options for treating it are more limited

With its ability to escape immunity induced by past infections and vaccines, the Omicron variant of SARS-CoV-2, first detected in South Africa on November 9th, has been tearing around the world, causing record numbers of cases of covid-19 as it does so. Australia, Britain, Denmark, France, Italy and South Africa are at the forefront of this rising wave of infections. But Omicron has reached at least 113 other countries, too.

Yet despite its ominous-looking clutch of mutations, particularly in the "spike" protein it uses to attach itself to cells when infecting them, the past week has given grounds for hope that the symptoms Omicron causes are less severe than those induced by its predecessors, and that people who do get infected are thus less likely to end up in hospital, or dead. This good news is tempered by the fact that it is far more contagious than those predecessors. It will thus spread widely in coming weeks. And a higher infection rate, even of a less serious illness, could still overwhelm hospitals and cause many deaths.

Hope springs eternal

Omicron's lower severity is probably a result of changes in the virus itself, combined with high levels of immunity (from vaccination or prior infection) that have built up in human populations. A study released on December 21st by the National Institute for Communicable Diseases, in Johannesburg, for example, found, after adjustment for age, illnesses and other factors (including vaccination status and prior infection) which determine the chances of developing severe disease, that Omicron cases are 80% less likely than previous variants to require admission to hospital.

On December 22nd, work published in Britain pointed in a similar direction. Researchers from Imperial College, in London, showed that people in England who had been infected with Omicron were 40-45% less likely than those with its immediate predecessor, Delta, to be admitted to hospital for a day or more. They also had shorter stays.

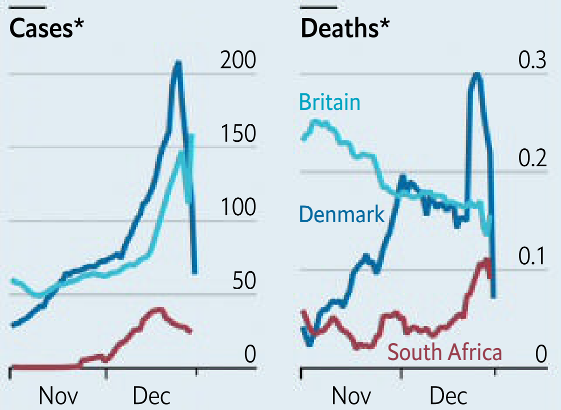
When the researchers dug more deeply they also found that, broadly speaking, people who had had at least two doses of any of the three vaccines (AstraZeneca, Moderna and Pfizer) used in Britain were "substantially protected" against hospital admission, even if protection against actual infection by Omicron had been lost. The next day, Britain's Health Security Agency concluded that those in the country catching Omicron are 55-69% less likely than people infected by Delta to need hospital care, and 31-45% less likely to go to accident and emergency units.

The findings about vaccination put a new complexion on previous concerns that antibodies raised in people jabbed against the original Wuhan strain, or who have been previously infected, will not effectively neutralise Omicron. Clive Dix, a former chairman of Britain's Vaccine Taskforce, said, "we have seen a progressive loss of antibody neutralisation as we moved through Alpha, Beta, Gamma and Delta...but to date the vaccines all protect against severe disease and death." Booster doses of vaccine, given in many countries, will add to protection against both infection and disease. And the Imperial team says that, as more data accumulate, it is possible the risk of the most serious outcomes of Omicron might turn out to be even lower than currently suspected—adding that remaining immune protection against more severe outcomes of infection is expected to be much higher than those against milder disease.

This good news is tempered by caveats. It is based on early data, and therefore only small numbers of hospital admissions. As of December 20th, for example, 132 British patients with Omicron had been recorded as passing through hospital emergency departments. Of these 14 had died with covid within 28 days of diagnosis, though the precise cause of death is not always clear. The victims ranged in age from 52 to 96. Yet in Britain Omicron infections are currently concentrated in 20- to 29-year-olds. If the virus spreads to older cohorts its impact may thus worsen.

A short, sharp shock?

Covid-19, 2021, per 100,000 population



Source: Johns Hopkins University CSSE *Confirmed daily

Moreover, once someone is so sick as to require hospital treatment, doctors may have fewer options available for Omicron than for its antecedents. Previous strains could often be treated with drugs called monoclonal antibodies. Omicron seems oblivious to most of these, and supplies of those that do affect it, newly developed versions made by GlaxoSmithKline and Vir Biotechnology, are limited.

The infectiousness of Omicron and the consequent speed of its spread mean that hospitals around the world are wary of an onslaught of admissions happening at a time when many staff are unavailable because they, too, have been infected. All this could have an effect on care. Scientists advising the British government have warned that covid-related admissions to hospital this winter may match or exceed previous peaks. But there is also hope that these fears may not come true.

In Denmark, for instance, although hospital-admission rates have risen, there are signs this increase is at the low end of the range of projections. And Chris Hopson, boss of NHS Providers, which represents organisations in England's National Health Service, tweeted on December 27th that though the number of patients with covid was rising, it was not doing so "precipitately". Across the country it has gone up by around 30% in a week. But many of these are people who were admitted for other reasons and are actually asymptomatic for covid, their infection having been spotted instead by a routine test. For this reason, Mr Hopson urges caution in over-interpreting admissions data.

Waving Omicron goodbye?

The Omicron wave could also recede quickly. In South Africa there is a feeling that the country may have passed its peak of cases (see chart). At a pre-Christmas meeting Sir Patrick Vallance, Britain's chief scientific adviser, said there was "an apparent slowing of growth rates" of covid. Britain, and also Denmark, are both well vaccinated countries and will be watched closely in the days and weeks to come.

Omicron may do more damage in places that are poorly vaccinated—especially those where "zero-covid" strategies intended to stop infections happening at all mean there is little natural immunity around either. But ultimately, there may be a silver lining. By infecting so many people and thus potentially providing widespread immunity to the next variant of concern, Omicron may accelerate covid's transition from being a dangerous epidemic to something that is an endemic nuisance which people can learn to put up with. ■

Bathhouse culture

Body and soul

ANTAKYA, TRIPOLI AND TUNIS

Covid-19 has accelerated the decline of hammams. Yet the steam still rises

Yeni Hammam in Antakya, Turkey's southernmost city, is hard to find. Would-be bathers must search the maze-like streets for the tell-tale arched entrance. Locals can help; after all, the hammam has been there for over 300 years.

The name means "new bath", and Yeni Hammam is indeed much newer than other bathhouses in Antakya, some of which date back to the Mamluks. Inside, the architecture is lofty and monumental. Customers strip off in the entrance hall, before beginning the ritual of steam, scrub and oil massage, progressing through three marble chambers of gradually increasing humidity. Light from star-shaped chinks in the domed ceilings filters through the vapour. Old hands use the shafts cast on the walls to tell the time of day.

Like many cities, Antakya (Antioch in antiquity) once boasted many more hammams, and before that, lavishly mosaicked Roman baths. Over 2,000 years communal bathing never went out of fashion. Now, though, the tradition is under threat. Yeni is one of only four functioning hammams in Antakya—and in March 2020 it shut for the first time in living memory. Across north Africa and the Levant, from Morocco to Istanbul, covid-19 closed historic bathhouses. Not all have reopened. To survive, they must draw deep on a venerable past.

Historically, hammams fulfilled a practical function as communal washing facilities. They were a fixture of the Islamic urban landscape, built close to mosques and with similar architecture—a place to purify the body before focusing on the soul. Strictly segregated by gender, under Ottoman rule hammams became hubs for business, socialising and gossip. They were vital for women in times when they could not meet freely in public. As Lady Mary Wortley Montagu, a British traveller, rhapsodised in the early 18th century, "'tis the women's coffee-house, where all the news of the town is told [and] scandal invented".

Mariem, a Tunisian student, affirms that, before the pandemic, she and her pals would visit the hammam about once a month for dedicated girl time: wrapped in *foutas* (linen towels), they ate oranges and laughed in the steam. For most clients, the trip is now a treat not a necessity. Bathing in the Hammam Nur al-Din, one of the oldest in Damascus, is a retro thrill, says Bashar, one of its erstwhile patrons. Besides the steam and the massage, "I connect with my roots." His forebears "all washed on these same stones, under these same domes".

When governments forced hammams to close in 2020, the copper boilers simmered down and ran dry. Even between lockdowns, fear kept people away—especially the elderly, often among the most dedicated clients, having grown up with the tradition and benefiting most from assisted washing. Tourists vanished. Even the great hammams of Istanbul felt the pinch. Many operators feared the worst.

But though the pandemic accelerated the decline of hammams, it began much earlier. Since the widespread advent of domestic hot water 70 years ago, their utility and profits have been eroded. Only a few of the poorest clients still rely on them for routine washing; the wealthy have largely forsaken them for Western-style spas. Telephones and the internet undermined their social purpose. In the 20th century many closed across the Middle East (occasionally becoming museums). Of those that survived these changes—as well as wars, earthquakes and revolutions—some have been finished off by the coronavirus.

Legend has it that Cairo once boasted a hammam for each day of the year; today it has fewer than a dozen. Of the 50 in the ancient Medina of Tunis in the 19th century, only half cling on. In Damascus two-thirds have closed since the 1940s. A handful operate in the whole of Lebanon. In Turkey hammam culture remains strong, but the downturn is showing. Yeni Hammam is clean but crumbling. Amid the trickle of water, the eerie green hue of the peeling plaster suggests an underwater cave.

And yet in places such as Tripoli in northern Lebanon, the steam still rises. A worker at Hamman el Abed confides that it ▸▸

→ Also in this section

never closed during lockdown. (The steam kills the virus anyway, he insists.) A fuel and electricity crisis had left many Lebanese without hot water at home—but hammams elsewhere are reviving too. In Antakya attendance is growing as temperatures fall and vaccination rates increase.

One aspect of hammam culture proving resistant to the pressures of both modernity and covid-19 is its role in wedding rituals. Traditionally, brides bathed before weddings, and grooms' mothers came to inspect them: it might be the only chance to see them unveiled. Recently Yeni Hammam hosted a modern-day bridal party. A group of 30, including pensioners and babies, danced in sodden slips and towels, beating drums and singing in the tepid chamber, before piling into the steam room for a scrub by an attendant. (These can be eye-watering: in Syrian Arabic, the word for the scrub—*takyees*—is also used when the regime snatches someone for interrogation.) Aunts washed their nieces' hair amid a cacophony of chatter. In the cooling room, picnic rugs were laid out on the central marble slab.

Bridal parties are an example of the intergenerational socialising hammams have always hosted: mothers brought daughters to the baths, where they could observe the bodies of other women at different stages of life, unselfconscious and unposed. Today these parties, and the male equivalents, are a vital part of both tradition and modern business plans—as, against the odds, enterprising hammams struggle into a post-covid world. No longer an essential part of daily life, they can still connect bathers to their heritage, their cities and a deep part of their identity, which the steam brings out of their pores. ■

Johnson The great vaxxation

This column's word of the year honours scientific ingenuity

IF 2020 WAS the year of the covid-19 explosion, 2021 will go down as the one in which the world struggled to get back to normal. The words of the year—chosen by dictionary publishers, other linguistic outfits and sometimes this column—reflect the disconcerting mix of familiarity and strangeness.

Getting back to business meant, for some, returning to the dreariness of politics. Dictionary.com chose *allyship* as its word of the year, to describe the practice of people outside oppressed groups aiding and trying to understand those in them. Some have detected and decried *woke-washing*, the ruse of polishing a brand—usually a company's—by talking allyship while doing the opposite. Woke-washing is a mutation of the older *virtue-signalling*. Signalling virtue is no bad thing, but the phrase has come to mean merely parading purity and doing little.

For others, "back to business" was more literal. The economy generated several contenders for the word of 2021. In the traditional economy, inflation was the talk of central bankers and commentators, and *transitory* became the buzzword associated with it—until America's Federal Reserve abruptly stopped reassuring people that it would soon pass. People who had never thought much about *supply chains* began doing so as they were disrupted worldwide.

But nontraditional finance produced more new words—or new uses for existing ones—than the boring old economy. *DeFi*, or decentralised finance, is the widest term for a group of phenomena including *blockchains*, *cryptocurrencies* and *non-fungible tokens* or NFTs, a kind of title deed over a digital asset such as an artwork. (Collins, a dictionary publisher, chose NFT as its word of the year.) When the parent company of Facebook changed its name to Meta, the *metaverse*, a parallel digital reality in which users play and work—and can buy and sell in cryptocurrencies—shot up in online searches.

DeFi jargon only gets weirder. *Stonks* and *hodl* are jokey misspellings for stocks and hold; stonks can be a one-word commentary on market gyrations, hodl an expression of willingness to hang on to crypto-assets even as prices drop. Enthusiasts add *laser eyes* to their avatars on Twitter, representing their laser focus on getting rich with crypto, and talk of *diamond hands*, meaning unwillingness to sell in a panic (the opposite of *paper hands*). They are sure their assets are going *to the moon*—a catchphrase invariably followed by two rocket emoji.

Those who don't get it are *right-clickers:* failing to grasp the worth of things like NFTs, they think they can right-click and save a digital image on their computer with the same value. Crypto-adepts revel in obscurity. Take one website's welcome: "$WAGMI embodies the heart and soul of diamond handed apes. No plebs, no jeets, and no rugs—just moon, ser."

But the year's most significant words were once again covid-related. A *pingdemic*, unleashed by Britain's track-and-trace app notifying countless people that they had to self-isolate, showed the frustrating shortcomings of technological fixes. *Variant* made its way into everyday parlance, as the world started learning the Greek alphabet. *Delta* rampaged in the middle of the year, and the highly contagious *Omicron* was on everyone's lips as it ended—albeit with some confusion about how to pronounce it. While some English-speaking classicists put the stress on the second syllable, most people converged on the first syllable favoured by the media (which is closer to how modern Greeks say their 15th letter).

Omicron means "little o", in contrast to omega, "big o", the final letter of the Greek alphabet. Sadly, even the Omega variant is unlikely to be the last. But Johnson's word of 2021 is a brighter one. Oscar-hopeful producers like to release their films at the end of the year, the better to make them fresh in voters' minds at selection time. But the most important word of the past year came right at the start. It is not a new word, but unquestionably 2021's most resonant. Derived from the Latin *vacca* for cow, and named after an early example used to treat cowpox, *vaccines* finally bent the curve of the covid pandemic.

With frequent use comes change: vaccine was shortened to *vax*. That can be used as a verb, especially in participle form (*vaxxed*), and has spawned variations including *double-vaxxed* and *anti-vax*, and portmanteaus like *vaxophobia* or *vaxication* (for people's first trip after getting their jabs). More variations are sure to come in 2022, much like new vaccines themselves—another testament to human irrepressibility.

Economic & financial indicators

Economic data

	Gross domestic product, % change on year ago, latest		quarter*	2021†	Consumer prices, % change on year ago, latest		2021†	Unemployment rate, %		Current-account balance, % of GDP, 2021†	Budget balance, % of GDP, 2021†	Interest rates, 10-yr gov't bonds latest,%		change on year ago, bp	Currency units, per $ Dec 28th	% change on year ago
United States	4.9	Q3	2.3	5.5	6.8	Nov	4.7	4.2	Nov	-3.4	-12.4	1.5		55.0	-	
China	4.9	Q3	0.8	7.9	2.3	Nov	0.9	5.0	Nov‡§	2.4	-4.9	2.6	§§	-37.0	6.37	2.7
Japan	1.2	Q3	-3.6	2.1	0.6	Nov	-0.2	2.8	Nov	3.3	-8.9	nil		-8.0	115	-9.5
Britain	6.8	Q3	4.3	6.7	5.1	Nov	2.7	4.2	Sep††	-2.8	-10.9	0.9		65.0	0.74	nil
Canada	4.0	Q3	5.4	5.0	4.7	Nov	3.2	6.0	Nov	0.8	-9.5	1.5		75.0	1.28	0.8
Euro area	3.9	Q3	9.1	5.0	4.9	Nov	2.5	7.3	Oct	3.0	-7.2	-0.2		34.0	0.89	-7.9
Austria	5.7	Q3	14.6	4.7	4.3	Nov	2.7	5.8	Oct	2.0	-5.8	nil		45.0	0.89	-7.9
Belgium	4.9	Q3	8.4	5.2	5.7	Dec	2.8	6.3	Oct	1.7	-6.6	0.1		48.0	0.89	-7.9
France	3.3	Q3	12.6	6.7	2.8	Nov	2.1	7.6	Oct	-1.3	-8.9	0.1		43.0	0.89	-7.9
Germany	2.6	Q3	6.9	2.7	5.2	Nov	3.3	3.3	Oct	6.1	-6.3	-0.2		34.0	0.89	-7.9
Greece	13.7	Q3	11.3	8.0	4.8	Nov	0.2	12.9	Oct	-4.5	-9.8	1.3		68.0	0.89	-7.9
Italy	3.9	Q3	11.0	6.3	3.7	Nov	1.9	9.4	Oct	3.8	-9.6	1.1		59.0	0.89	-7.9
Netherlands	5.2	Q3	8.7	4.3	5.2	Nov	2.7	2.7	Nov	7.9	-4.7	-0.3		21.0	0.89	-7.9
Spain	3.4	Q3	10.9	4.4	5.5	Nov	2.7	14.5	Oct	1.1	-8.4	0.5		43.0	0.89	-7.9
Czech Republic	2.8	Q3	6.1	3.0	6.0	Nov	3.8	2.6	Oct‡	2.2	-7.1	3.0		170	22.1	-2.5
Denmark	3.7	Q3	4.3	3.2	3.4	Nov	1.7	3.1	Oct	7.5	-0.3	nil		50.0	6.58	-7.5
Norway	5.1	Q3	16.1	4.0	5.1	Nov	3.3	3.6	Oct‡‡	12.5	0.4	1.4		76.0	8.82	-1.8
Poland	5.5	Q3	9.5	5.1	7.8	Nov	4.9	5.4	Nov§	1.1	-5.8	3.5		230	4.07	-9.8
Russia	4.3	Q3	na	4.2	8.4	Nov	6.7	4.3	Oct§	5.3	-0.5	8.4		219	73.8	nil
Sweden	4.5	Q3	8.2	4.1	3.3	Nov	2.2	7.5	Nov§	4.9	-1.9	0.2		22.0	9.06	-8.6
Switzerland	4.1	Q3	6.8	3.6	1.5	Nov	0.5	2.5	Nov	5.4	-3.8	-0.2		33.0	0.92	-3.3
Turkey	7.4	Q3	na	10.0	21.3	Nov	18.6	10.7	Oct§	-1.0	-3.0	23.2		1,073	11.8	-37.4
Australia	3.9	Q3	-7.5	3.8	3.0	Q3	2.7	4.6	Nov	4.1	-5.8	1.6		58.0	1.38	-4.3
Hong Kong	5.4	Q3	0.5	6.5	1.9	Nov	1.6	4.1	Nov‡‡	4.0	-4.6	1.4		65.0	7.80	-0.6
India	8.4	Q3	54.1	9.2	4.9	Nov	5.0	7.0	Nov	-0.8	-7.0	6.5		55.0	74.7	-1.6
Indonesia	3.5	Q3	na	3.1	1.7	Nov	1.7	6.5	Q3§	-0.1	-6.0	6.3		40.0	14,228	-0.5
Malaysia	-4.5	Q3	na	3.0	3.3	Nov	2.3	4.3	Oct§	3.5	-6.5	3.6		89.0	4.18	-3.1
Pakistan	4.7	2021**	na	3.8	11.5	Nov	9.2	6.9	2019	-4.5	-6.9	11.5	†††	157	178	-10.1
Philippines	7.1	Q3	16.1	4.8	4.2	Nov	4.5	7.4	Q4§	-2.0	-7.5	4.8		176	50.5	-4.8
Singapore	7.1	Q3	5.2	6.8	3.9	Nov	2.0	2.6	Q3	18.1	-4.2	1.6		75.0	1.36	-2.2
South Korea	4.0	Q3	1.3	3.9	3.8	Nov	2.4	2.6	Nov§	4.9	-3.1	2.2		52.0	1,188	-7.7
Taiwan	3.7	Q3	1.1	5.7	2.8	Nov	2.0	3.7	Nov	14.7	-1.6	0.7		36.0	27.7	1.6
Thailand	-0.3	Q3	-4.2	1.3	2.7	Nov	1.2	1.5	Dec§	-2.4	-7.7	1.7		52.0	33.5	-10.0
Argentina	11.9	Q3	17.3	9.5	51.2	Nov	48.5	8.2	Q3§	1.7	-4.6	na		na	103	-18.2
Brazil	4.0	Q3	-0.4	4.8	10.7	Nov	8.3	12.1	Oct§‡‡	0.1	-5.8	10.3		319	5.64	-6.0
Chile	17.2	Q3	21.0	11.9	6.7	Nov	4.5	8.1	Oct§‡‡	-2.9	-7.0	5.6		289	856	-17.0
Colombia	12.9	Q3	24.9	9.7	5.3	Nov	3.5	11.8	Oct§	-5.4	-8.5	8.1		318	4,003	-12.7
Mexico	4.5	Q3	-1.7	6.1	7.4	Nov	5.6	3.8	Nov	1.7	-3.3	7.6		239	20.6	-2.4
Peru	11.4	Q3	15.0	14.7	5.7	Nov	3.9	8.6	Nov§	-2.4	-4.0	6.0		244	4.00	-9.8
Egypt	9.8	Q3	na	3.3	5.5	Nov	5.6	7.5	Q3§	-4.3	-7.9	na		na	15.7	-0.1
Israel	4.4	Q3	2.5	6.3	2.4	Nov	1.6	4.5	Nov	4.7	-4.5	1.0		20.0	3.10	3.9
Saudi Arabia	-4.1	2020	na	2.9	1.1	Nov	3.1	6.6	Q3	4.1	-2.3	na		na	3.76	-0.3
South Africa	2.9	Q3	-5.8	4.9	5.5	Nov	4.5	34.9	Q3§	2.7	-8.0	9.4		64.0	15.8	-7.3

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

In local currency	Index Dec 28th	% change on: one week	Dec 31st 2020
United States S&P 500	4,786.4	2.9	27.4
United States NAScomp	15,781.7	2.9	22.5
China Shanghai Comp	3,630.1	0.1	4.5
China Shenzhen Comp	2,514.8	0.4	8.0
Japan Nikkei 225	29,069.2	1.9	5.9
Japan Topix	2,005.0	1.8	11.1
Britain FTSE 100	7,372.1	1.0	14.1
Canada S&P TSX	21,229.7	1.5	21.8
Euro area EURO STOXX 50	4,311.9	3.3	21.4
France CAC 40	7,181.1	3.1	29.4
Germany DAX*	15,963.7	3.3	16.4
Italy FTSE/MIB	27,444.9	3.0	23.4
Netherlands AEX	801.0	3.4	28.2
Spain IBEX 35	8,688.9	3.6	7.6
Poland WIG	68,737.5	2.3	20.5
Russia RTS, $ terms	1,611.8	2.4	16.2
Switzerland SMI	12,970.5	2.3	21.2
Turkey BIST	1,850.5	-2.2	25.3
Australia All Ord.	7,744.7	1.0	13.1
Hong Kong Hang Seng	23,280.6	1.3	-14.5
India BSE	57,897.5	2.8	21.2
Indonesia IDX	6,598.3	0.7	10.4
Malaysia KLSE	1,539.9	3.2	-5.4

	index Dec 28th	% change on: one week	Dec 31st 2020
Pakistan KSE	44,043.7	-0.3	0.7
Singapore STI	3,128.4	1.4	10.0
South Korea KOSPI	3,020.2	1.5	5.1
Taiwan TWI	18,196.8	2.3	23.5
Thailand SET	1,641.5	1.2	13.3
Argentina MERV	82,783.7	-1.6	61.6
Brazil BVSP	104,864.2	-0.6	-11.9
Mexico IPC	53,238.5	2.2	20.8
Egypt EGX 30	11,913.4	3.4	9.8
Israel TA-125	2,057.4	4.1	31.2
Saudi Arabia Tadawul	11,315.3	0.5	30.2
South Africa JSE AS	72,444.5	1.9	21.9
World, dev'd MSCI	3,239.3	2.8	20.4
Emerging markets MSCI	1,227.1	1.9	-5.0

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2020
Investment grade	122	136
High-yield	340	429

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

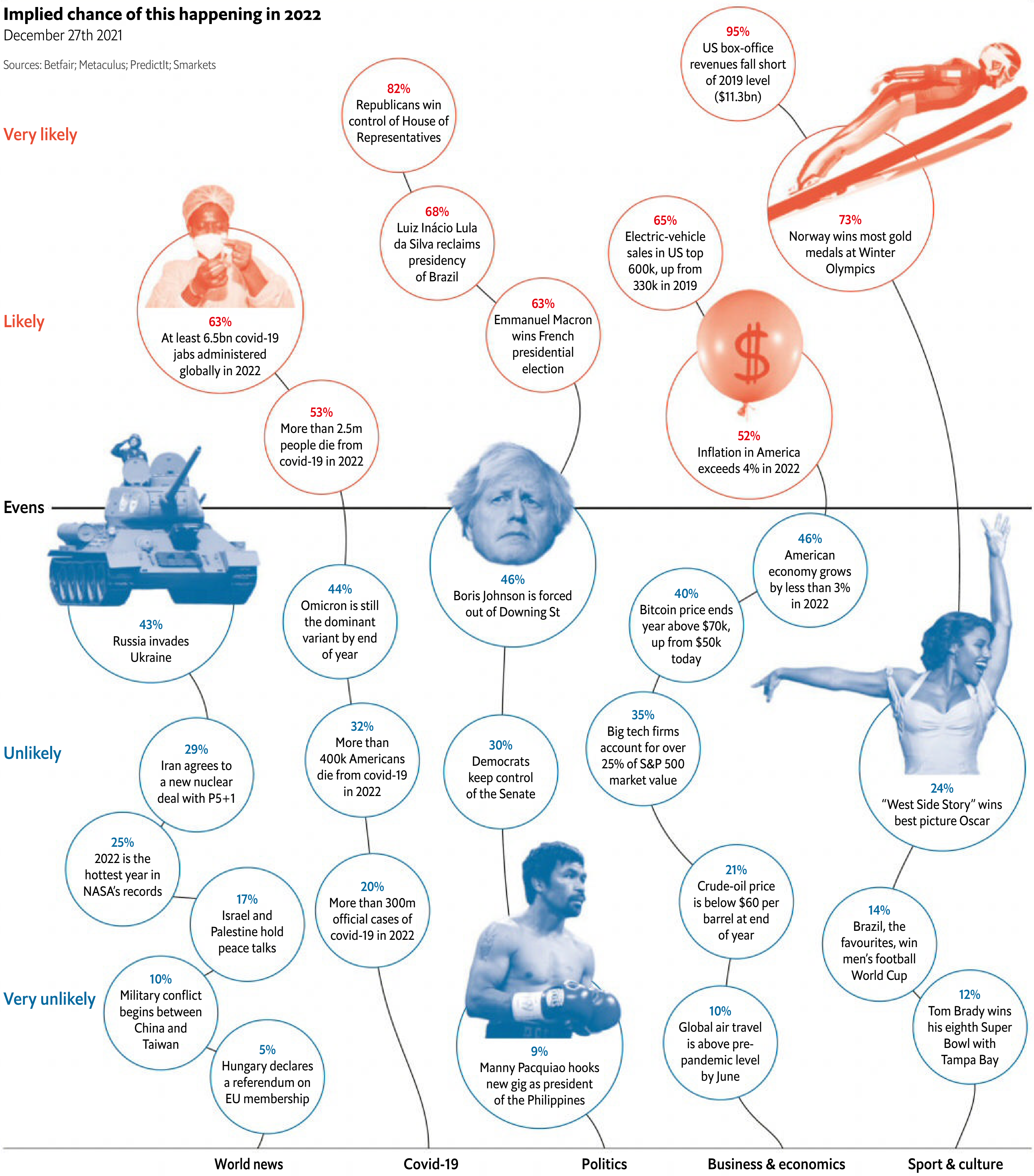
Commodities

The Economist **commodity-price index**

2015=100	Dec 14th	21st	27th*	% change on month	year
Dollar Index					
All Items	156.1	161.4	163.7	8.5	6.3
Food	136.0	137.3	140.9	6.5	18.9
Industrials					
All	174.9	183.9	185.0	10.0	-1.2
Nfa†	159.4	156.2	161.7	7.2	26.7
Metals	179.5	192.1	191.8	10.7	-6.3
Sterling Index					
All items	180.0	186.2	186.2	7.0	6.8
Euro Index					
All items	153.6	158.9	160.4	7.9	14.9
Gold					
$ per oz	1,775.3	1,786.9	1,812.5	1.8	-3.6
West Texas Intermediate					
$ per barrel	73.7	74.1	76.0	3.6	48.4

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

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



Dollar divination

What prediction markets expect will happen in 2022

For much of humanity the new year is a time for reflection on the past. But many minds will also inevitably cast forward. If the fitful past two years of the covid-19 pandemic offer any lesson, it is that the future remains murky and uncertain.

Not to be deterred, we have turned to prediction markets to give us a glimpse of 2022. Pooling data from punters on exchanges like Betfair, Metaculus, PredictIt and Smarkets, can offer a theoretically better guide to the future than plunging headlong into the unknown. Will the pandemic claim millions more? Might Russia invade Ukraine? Could America's high inflation persist? And will Tom Brady win an obscene eighth Super Bowl? Another eventful year awaits. ■

Troublemaker in a cassock

Desmond Tutu, Archbishop of Cape Town and anti-apartheid colossus, died on December 26th, aged 90

There were many times, Desmond Tutu recalled, when the apartheid rulers were strutting like cocks of the walk and his own people were being treated like rubbish, that he wanted to whisper in God's ear, "God, we know that you are in charge. Why don't you make it slightly more obvious?"

For most of his long life, it did not seem obvious at all. He was a black man in a place where skin colour had a cruel and absurd significance. At the height of apartheid, black South Africans were denied citizenship in their own country. They could not vote; their schools were awful; they could not enter white areas except as servants. Inter-racial love was illegal. Anyone who protested against the hundreds of daily injustices might be whipped—or worse.

Yet the diminutive Mr Tutu kept piping up for the voiceless. As a Christian and a priest, he had no choice in the matter. He was God's arms, hands, eyes, ears; when he saw oppression anywhere, God's word burned in his breast until he had to speak out. Even as others picked up *pangas* and guns, he rejected the acid of hatred and preached non-violent resistance.

This was a hard sell, especially to the angry young men in black townships. One day in 1985 he rescued a man who was thought to have been an *impimpi*, or informer, for the South African security police. The crowd was about to put a petrol-filled tyre round his neck to "necklace" him, or burn him to death. Without pausing to think, Mr Tutu waded into the furious mob and ordered them to stop. Only later did he realise what peril he had been in.

He was born poor, in Transvaal province, to a housemaid and a teacher. He grew up amid constant racial slights, dying many deaths when his father was addressed as "Ja, boy," by a mere slip of a white girl in a shop. Yet he learned early on that not everyone was bigoted. When he was nine or ten, a white man in a long cassock doffed his hat to his mother. It was Trevor Huddleston, an Anglican priest who taught that all people were equally children of God.

Huddleston deeply influenced him, to the extent that after teaching for a while he turned to theology, and was ordained himself in 1960. He was sure now that a man of God could also be a man of action, and that the sinister, euphemistic bureaucratese of apartheid could be rebutted with simple truths, plainly expressed. He summed up the anti-apartheid struggle in the clearest words he knew: "God is not mocked! You have already lost!" Then he phrased it more politely: "All we are asking you to do is to recognise that we are humans, too."

He was tear-gassed and arrested for preaching this message. His passport was revoked more than once. And it was not only supporters of apartheid who criticised him. Advocates of gradual reform thought him too hasty when he demanded that apartheid should simply be abolished. Advocates of armed struggle thought his approach too slow. Communists, of whom there were many in the liberation movement, disliked his distaste for their creed.

Yet it was his vision that prevailed. The armed struggle went nowhere. It was economic sanctions and moral ostracism, both of which he championed, that ended apartheid. In 1992 white South Africans voted in a referendum to continue with reforms that led to multiracial democracy. In 1994, at 62, the archbishop cast his first vote. It made him want to sing, cry, laugh, shout "Yippee!", jump and dance, all together.

He could have retired then, a Nobel peace laureate and giant of the struggle. But he said he found it too hard to shut up. Besides, the crimes of the old era needed to be documented, exposed, repented for and—most important—forgiven. In 1995 he was appointed to chair the Truth and Reconciliation Commission, a groundbreaking exercise in restorative, not retributive justice. Perpetrators of atrocities from all sides were invited to tell all and, in exchange for the truth, were given full or partial amnesty. Victims and their families were compensated. The premise, in his view, was simple. People—even those who stood round eating barbecue and drinking beer while a shot black body burned—were not monsters. They could change.

Many griped about the commission's imperfections, and plenty of bigwigs in the new ruling party, the African National Congress, refused to co-operate. As nerves frayed, he even behaved like a prima donna himself. But the commission added volumes to the public's understanding of the truth. That truth hurt, but it was the first necessary step towards forgiveness. And those who forgave, he insisted, were not doormats; they were peacemakers.

He hugely admired Nelson Mandela, South Africa's first black president, and chuckled with delight when foreigners occasionally confused them. But he had stern words for Mandela's successors. The ANC's policy of "black economic empowerment" was enriching a small elite, not the impoverished masses. As for Jacob Zuma's kleptocratic gangsterism, it was worse even than the apartheid regime; because at least, in that case, you expected it.

His urge to agitate for right spilled far outside South Africa's borders. He visited genocide sites in Rwanda, including a dimly lit church in which he found himself walking, trembling with tears, over the year-old bodies of the dead. He campaigned for the Anglican church to let gay people take communion, saying he would not want to worship a homophobic God. On visits to Israel, he loudly pleaded the Palestinian cause.

For all the horrors he saw and heard of, he was certain that human beings were made by Goodness, for goodness. Everyone could repent. Many could forgive. He drew comfort even from the evening headlines: if wrong was the norm, it wouldn't be news. And he loved to turn his pixieish sense of humour on himself. He joked once that, owing to a mix-up at the Pearly Gates, he was sent to hell. A few days later St Peter heard a bang, bang, banging at Heaven's door, and found it was the devil knocking. St Peter said, "Ja jong, what are *you* doing here?!" The devil replied, "Since you sent Tutu down to the warmer place, he's been causing too much trouble! I came here to ask for political asylum." ■


A GLOBAL MEDIA HUB
WITH A DIFFERENCE
• Fully integrated media ecosystem
• Unparalleled standards of livability
• Progressive laws and regulations
• Highly attractive incentives
GREAT LIFESTYLE
INSPIRING CREATIVITY
Changing the future of the Media & Creative Industries...now.
Are you ready to shape the change?
Learn more at NEOM.com
NEOM
MADE TO CHANGE