

Crypto's downfall

Trump v DeSantis: what could go wrong?

Investors' misguided optimism

In defence of Qatar's World Cup

NOVEMBER 19TH–25TH 2022

ASIA'S OVERLOOKED GIANT

Can Indonesia live up to its promise?





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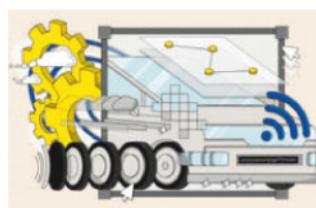
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 to take part in "a severe contest between
*intelligence, which presses forward,
 and an unworthy, timid ignorance
 obstructing our progress."*

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The **G20** summit in Bali concluded with a strongly worded statement condemning Russia's invasion of Ukraine and demanding its immediate withdrawal. Russia managed to insert the phrase that there are "other views and different assessments of the situation" into the document. The Kremlin did, however, publish the statement in full, including the references to war and invasion. Sergei Lavrov, Russia's foreign minister (pictured above), attended the gathering, and criticised it for being too politicised.

A day before the summit, **Joe Biden** met his Chinese counterpart, **Xi Jinping**. After months of tension, they pledged to resume high-level dialogue on issues such as food security and economic affairs. But when it came to more divisive topics, such as Taiwan, there was little agreement.

A missile struck a farm in Poland, close to the border with **Ukraine**, killing two men and sparking fears of an escalation of the war. But NATO reacted cautiously. It now seems likely that the missile was not fired by Russia, but was probably Ukrainian, meant to intercept part of an attack by Russia involving around 100 missiles that was a response to Ukraine's liberation of Kherson.

Britain and France signed a new agreement that will increase the number of migration officers in northern France in the hope of reducing the flow of illegal **migrants** crossing the English Channel. "Irregular entries" have become a problem across the EU

again. Over 280,000 were recorded in the first ten months of 2022, up by 77% compared with 2021. The western Balkans saw the biggest influx of illegal migrants, but the Mediterranean routes also recorded large increases.

The Turkish police said a woman they arrested on suspicion of planting a bomb in a busy street in **Istanbul** is a Syrian national working for Kurdish militants. The explosion killed six people.

China relaxed some of its covid-related restrictions. Quarantine requirements for close contacts and international travellers were reduced, and some cities curtailed mass testing. The changes were made despite a recent surge in cases. An outbreak in the metropolis of Guangzhou led to fears of a city-wide lockdown and a bout of unrest, as people expressed their anger over restrictions.

A cleaner future

Indonesia and nine rich countries announced an agreement designed to curb the archipelago country's dependence on coal. The Just Energy Transition Partnership, brokered by America and Japan, promises to provide Indonesia with \$20bn in public and private finance to help it retire its fleet of coal-fired power stations and shift to renewable energy. Given Indonesia's enormous reliance on coal—it is the world's third-biggest producer—the deal has potentially enormous climate significance.

In **Afghanistan** the Taliban ordered judges to impose strict interpretations of sharia law in cases such as stealing and kidnapping, which could lead to public amputations and executions. The regime is becoming ever more repressive; it recently banned women from entering parks.

Myanmar's ruling junta is releasing almost 6,000 political prisoners to mark a nation-

al holiday, according to state media. Around 15,000 people have been arrested since the coup in February 2021. Kubota Toru, a Japanese documentary maker who was detained in July for filming a protest, was said to be among those being set free.

Ariel Henry, the prime minister of **Haiti**, dismissed the justice minister, interior minister and the government commissioner. He gave no reason for the dismissals. They come a month after America announced that it was imposing sanctions on two separate officials and that it would pull the visas of those it thinks are involved with gangs.



Huge protests took place in **Mexico** against proposed changes to the country's electoral authority by President Andrés Manuel López Obrador. He downplayed the demonstrations, saying that 50,000 people took to the streets "in favour of corruption". The organisers claim 200,000 people turned out, making them the largest demonstrations against the president.

For the first time since mass protests began in **Iran** two months ago, a court sentenced a protester to death, for setting fire to government property. And 227 members of Iran's parliament signed a letter calling for protesters to be executed. Human-rights groups reckon that 15,000 protesters have been detained.

Binjamin Netanyahu, whose Likud party won the most seats in an election on November 1st, was asked by **Israel's** president to form a government. He was said to be reluctant to give

leaders of the far-right all the senior posts they are now demanding as the price for joining a coalition, including the ministry of defence.

Fans began to arrive in Qatar for the football **World Cup**, due to kick off on November 20th, amid controversy over the emirate's human-rights record. Local authorities have been accused of mistreating immigrant labourers and of persecuting homosexuals.

The first humanitarian-aid deliveries since August have been allowed into Tigray. Hundreds of thousands of people are starving in the northern region of **Ethiopia**, which has been blockaded by government forces.

The Democrats retained control of the **Senate**, after late results from America's mid-term elections gave them victory in Arizona and Nevada. The Republicans won control of the **House of Representatives**, but with a tiny majority, far short of expectations. Recriminations began against the Republican leadership. The party in the House nominated Kevin McCarthy for speaker, though 31 colleagues voted against him.

Four more years?

Much of the Republican finger-pointing about what went wrong was aimed at **Donald Trump**. The twice-impeached former president deflected the criticisms when he formally announced that he will run again for the White House. His long-winded speech was a rehash of previous campaign rallies, and also mentioned the criminal investigations into him.

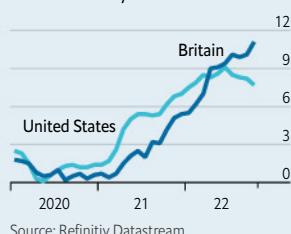
NASA at last launched the first rocket in its **Artemis** project, propelling an unmanned capsule to orbit the Moon for three weeks before it splashes back down to Earth. NASA hopes a successful test will eventually lead to the first manned mission to the Moon since 1972.

Regulators around the world opened investigations into **FTX**, after the crypto exchange and its sprawling network of affiliated firms filed for bankruptcy protection. Traders withdrew \$6bn from the platform in just 72 hours amid claims that it had mishandled customers' investments. FTX could owe money to as many as 1m people. Its spectacular collapse has prompted calls for tougher rules to regulate markets in digital assets. After it declared bankruptcy in America a hacker, possibly an insider, stole around \$470m from the exchange.

Diverging economies

Consumer prices

% increase on a year earlier



Stockmarkets staged their biggest rally in more than two years on November 10th, after figures for American consumer prices were published. Annual **inflation** slowed to 7.7% in October, its lowest level since January. The S&P 500 surged by 5.5%, the NASDAQ by 7.4% and the Dow Jones Industrial Average by 3.7%. There were other signs of cooling inflation in America. A measure of wholesale prices rose by 8%, the smallest increase since July 2021.

In **Britain** inflation headed in the other direction, accelerating to a 41-year high of 11.1%. Food prices rose by 16%, the most in 45 years. The cost of gas and electricity was also up sharply again. The British economy contracted in the third quarter, by 0.2% over the previous three months, on cue for the start of a long recession that the Bank of England has forecast. All food for thought for the British government, as it unveiled its plan to plug a fiscal hole in the public purse.

Japan's economy also shrank in the third quarter, by 0.3%. A weak yen has pushed up the price of imports, curtailing consumption by households and businesses. Even so the contraction was a surprise; most economists were expecting modest growth in the quarter.

China announced a set of measures to boost liquidity in the troubled **property market**, such as extending deadlines for loans to developers. The package is seen as the most significant attempt yet by the Chinese authorities to bail out the sector, which is burdened by debt and falling sales. The prices of stocks and bonds of Chinese property companies rose sharply in response.

Germany nationalised a company that imports **natural gas** and which was owned by Russia's Gazprom until April. It is the second time an energy company has been nationalised in recent months in order to secure gas supplies. Poland made a similar move this week, taking control of a section of a pipeline operated by Gazprom. With colder weather on the horizon, the price of natural gas has started to rise again in Europe, after falling for three months.

Tyson Foods said it would carry out a "thorough review" into the conduct of its chief financial officer, John Randal Tyson, who was recently arrested for being drunk, entering a woman's house and falling asleep in her bed. Mr Tyson is the son of the meatprocessor's chairman, John H. Tyson. Given the circumstances, investors may have preferred the review to be overseen by an independent expert, rather than the board.

America's biggest retailers reported a mixed bag of earnings. **Walmart's** sales in the third quarter were stronger than expected and it raised its outlook for the year. Low-income shoppers are dipping into their savings to fund their spending, according to the company. **Target's** profit fell. It described consumers as "stressed", cutting back on everything. It now expects sales in the Christmas quarter to be lower than in the same three months last year.

SoftBank's share price struggled to recover from the hammering it took after reporting another huge quarterly investment loss at its two Vision Funds, this time of ¥1.38trn (\$9.8bn). The Japanese conglomerate did manage to

make an overall net profit, in part by selling off a large chunk of its stake in Alibaba.

There was more bad news for employees at tech firms, which are culling staff numbers after a period of expansion during the pandemic. One large hedge-fund investor in **Alphabet** called on it to reduce its staff count and cut the salaries it pays to non-engineers. Alphabet hired 36,000 people over the past 12 months, increasing its workforce by 25%. **Amazon** was preparing to lay off 10,000 people, mainly in corporate jobs.

None but the brave

Elon Musk, Twitter's new boss, told staff that they would have to commit to working longer hours if they wanted to remain at the company, giving them a deadline of a few days to do so or face the sack. Around half the staff have already been laid off in the two weeks since his takeover. Mr Musk faced questions about his own working practices at a court hearing into his \$56bn pay package at Tesla, which has upset a shareholder. The carmaker's chairman said Mr Musk needed such vast sums to fuel his ambitions for "interplanetary travel".



Why Indonesia matters

Indonesia is back on the map. In the next decade it will only become more important

THIS WEEK'S G20 meeting took place in Indonesia, the most important country that people routinely overlook. The last time its economy and politics were in the global spotlight was during the mayhem of the 1990s when a crony-capitalist system collapsed amid the Asian financial crisis, causing the fall of the 32-year-long dictatorship of Suharto.

A quarter of a century on, Indonesia matters once again. It is the world's largest Muslim-majority state, its third-biggest democracy and its fourth-most-populous country. With 276m people spread across thousands of islands that stretch from the Indian Ocean to the Pacific, it is caught up in the strategic contest between America and China. And like India and other emerging markets, it is adapting to a new world order in which globalisation and Western supremacy are in retreat.

Over the next quarter-century, the country's clout could increase spectacularly. The economy is one reason. Indonesia is the sixth-biggest emerging market by GDP, and in the past decade has grown faster than any other \$1trn-plus economy bar China and India. A source of dynamism is digital services, which are helping create a more integrated consumer market, with over 100m people collectively spending \$80bn a year on everything from e-payments to apps for on-demand trucking.

Another economic catalyst is Indonesia-specific. With a fifth of global reserves of nickel, used in batteries, the country is a vital link in electric-vehicle (EV) supply chains. As the West, China and India increase subsidies to attract EV investment at home, Indonesia has spotted an opportunity. Rather than seeking to be the Saudi Arabia of the green-metal age, it is pursuing a policy of "downstreaming", banning the export of raw materials to force global firms to build factories in Indonesia. This is unorthodox, but over \$20bn of investment has been secured so far. Coal-fired power stations are being retired early, pushing these new industries to run on clean power.

The second reason for Indonesia's strong prospects is that it has found a way to combine democracy with economic reform. Reflecting the traumas of the 1990s, a flawed but pluralist political system has developed that emphasises compromise and social harmony. Joko Widodo, the deceptively laid-back president since 2014, rules through a sprawling coalition which has co-opted many of his opponents. You might think this would lead to lowest-common-denominator policies. But the public finances are tightly run. Incremental improvements include new infrastructure, the cleaning up of state firms and some modernisation of education and labour laws. Corruption is a problem, but the economy is more open than it was ten years ago.

The final reason for Indonesia's growing clout is geopolitics. Its location, size and resources make it a key theatre in the superpower contest. Reflecting a tradition of non-alignment that goes back to the 1950s, it wants to be neutral. It solicits capital from both sides of the divide, and is an arena in which Chinese and American digital firms and investors compete directly. In batteries CATL, the Chinese champion, is investing in a \$6bn project, but Jokowi, as the president is known, is also wooing

Tesla. In diplomacy he has sought to be a convener and peace-maker. Indonesia has criticised Western sanctions on Russia. Jokowi may be the only person to have met presidents Joe Biden, Xi Jinping, Vladimir Putin and Volodymyr Zelensky this year.

If Indonesia stays on this path for the next decade, the country could become one of the world's ten biggest economies. It would remain fairly resilient against shocks: its currency has outperformed several rich-world peers this year despite global financial turmoil. Living standards would rise: only 4% of people now live on \$2.15 a day or less, three-quarters less than in 2012. Although Indonesia is unlikely to become a Chinese-style manufacturing miracle, a big middle class would emerge.

Inevitably, there are dangers. One is succession. Jokowi's final term ends in 2024 and he has no obvious successor. Some supporters want him to fiddle the constitution to remain in power. The succession could become a competition to appeal to devout voters by espousing chauvinist Muslim policies. Alternatively, the business figures and political clans who form part of Jokowi's coalition could win power and lead a slide back to oligarchic rule. He has built plenty of roads and airports, but Jokowi has not strengthened the institutions that can guarantee continuity after he has left office.

Protectionism is another risk. The country has a long history of prickly resource nationalism. Downstreaming may work in nickel, in which Indonesia has market power, but backfire in other industries. Indonesia has yet to attract Apple's supply chain as it shifts from China to other parts of Asia, in part because its labour market is still too rigid. If Indonesia pushes too hard, EV firms will try to find substitutes for its green metals.

The biggest danger is that geopolitics causes Indonesia to stumble. Even on its current path, it could drift into China's orbit. For every dollar American firms have invested in Indonesia since 2020, Chinese firms have deployed nearly four. If tensions escalated, the costs would be high. A war over Taiwan could block the sea-lanes upon which Indonesia relies, while Western sanctions might strike Chinese firms that Indonesia depends on. Jokowi's diplomacy is humoured by Mr Biden and Mr Xi but so far the world's non-aligned countries, including most members of the ASEAN South-East Asian group, are too diffuse to have much influence on the superpowers.

Growing up in a zero-sum world

India and Indonesia are the bright stars of Asia. Both must satisfy electorates at home and find a way to grow, even as globalisation is in retreat. India is opting for tech- and manufacturing-led development, fuelled by subsidies, chauvinistic politics and decoupling from China. Indonesia is relying on resources, surgical protectionism, big-tent politics and neutrality. Both are giant bets. The superpowers will be watching closely—as will many other countries that want to get richer but would prefer not to pick sides. If it succeeds, Indonesia will improve the lives of a quarter of a billion people and spur on a growth-starved world. It could even alter the global balance of power. ■



After FTX

Crypto's downfall

The collapse of FTX has dealt a catastrophic blow to crypto's reputation and aspirations. Is this the end?

THE FALL from grace was hard and fast. Only a fortnight ago Sam Bankman-Fried was in the stratosphere. FTX, his cryptocurrency exchange, then the third-largest, was valued at \$32bn; his own wealth was estimated at \$16bn. To the gushing venture capitalists (VCs) of Silicon Valley he was the financial genius who could wow investors while playing video games, destined, perhaps, to become the world's first trillionaire. In Washington he was the acceptable face of crypto, communing with lawmakers and bankrolling efforts to influence its regulation.

Today there is nothing left but 1m furious creditors, dozens of shaky crypto firms and a proliferation of regulatory and criminal probes. The high-speed implosion of FTX has dealt a catastrophic blow to an industry with a history of failure and scandals. Never before has crypto looked so criminal, wasteful and useless.

The more that comes out about the demise of FTX, the more shocking the tale becomes. The exchange's own terms of service said it would not lend customers' assets to its trading arm. Yet of \$14bn of such assets, it had reportedly lent \$8bn-worth to Alameda Research, a trading firm also owned by Mr Bankman-Fried. In turn, it accepted as collateral its own digital tokens, which it had conjured out of thin air. A fatal run on the exchange exposed the gaping hole in its balance-sheet. To cap it all, after FTX declared bankruptcy in America, hundreds of millions of dollars mysteriously flowed out of its accounts.

Big personalities, incestuous loans, overnight collapses—these are the stuff of classic financial manias, from tulip fever in 17th-century Holland to the South Sea Bubble in 18th-century Britain to America's banking crises in the early 1900s. At its peak last year, the market value of all cryptocurrencies surged to the giddy height of almost \$3tn, up from nearly \$800bn at the start of 2021. Today it is back at \$830bn (see back Briefing).

As at the end of any mania, the question now is whether crypto can ever be useful for anything other than scams and speculation. The promise was of a technology that could make financial intermediation faster, cheaper and more efficient. Each new scandal that erupts makes it more likely that genuine innovators will be frightened off and the industry will dwindle. Yet a chance remains, diminishing though it is, that some lasting innovation will one day emerge. As crypto falls to Earth, that slim chance should be kept alive.

Amid the wreckage of the past week, it is worth remembering the technology's underlying potential. Conventional banking requires a vast infrastructure to maintain trust between strangers. This is expensive and is often captured by insiders who take a cut. Public blockchains, by contrast, are built on a network of computers, making their transactions transparent and, in theory, trustworthy. Interoperable, open-source functions can be built on top of them, including self-executing smart contracts that are guaranteed to function as written. A system of tokens, and rules governing them, can collectively offer a clever way to incentivise open-source contributors. And arrangements that would be expensive or impractical to enforce in the real world become possible—allowing artists to retain a stake in the profits

from the resale of their digital works, for instance.

The disappointment is that, 14 years after the Bitcoin blockchain was invented, little of this promise has been realised. Crypto's frenzy drew in talent from bright graduates to Wall Street professionals, and capital from VC firms, sovereign-wealth and pension funds. Vast quantities of money, time, talent and energy have been used to build what amount to virtual casinos. Efficient, decentralised versions of mainstream financial functions, such as currency exchanges and lending, exist. But many consumers, fearful of losing their money, do not trust them. Instead they are used to speculate on unstable tokens. Money-launderers, sanctions-dodgers and scammers abound.

Presented with all this, a sceptic might say that now is the time to regulate the industry out of existence. But a capitalist society should allow investors to take risks in the knowledge that they will make losses if their bets go sour. Even as crypto has imploded, the spillovers to the wider financial system have been manageable. FTX's backers included Sequoia, a Californian VC firm; Temasek, a Singaporean sovereign-wealth fund; and the Ontario Teachers' Pension Plan (see Business section). All have lost money, but none catastrophically.

Moreover, sceptics should acknowledge that nobody can predict which innovations will bear fruit and which will not.

People should be free to devote time and money to fusion power, airships, the metaverse and a host of other technologies that may never come good. Crypto is no different. As the virtual economy develops, useful decentralised applications may yet appear—who knows? The underlying technology continues to improve. An upgrade to Ethereum's blockchain in September radically reduced its energy consumption, paving the way for it to handle high transaction volumes efficiently.

Instead of over-regulating or stamping out crypto, regulators should be guided by two principles. One is to ensure that theft and fraud are minimised, as with any financial activity. The other is to keep the mainstream financial system insulated from further crypto-ructions. Although blockchains were explicitly designed to escape regulation, these principles justify regulating the institutions that act as gatekeepers for the cryptosphere. Requiring exchanges to back customer deposits with liquid assets is an obvious step. A second is disclosure rules that reveal if, say, a gargantuan and dubiously collateralised loan has been made to the exchange's own trading arm. Stablecoins, which are meant to hold their value in real-world currency, should be regulated as if they were payment instruments at banks.

Tulip bulb or light bulb?

Whether crypto survives, or becomes a financial curiosity like the tulip bulb, will not ultimately depend on regulation. The more scandals ensue, the more the whole enterprise and its aspirations become tainted. The lure of innovation means nothing if investors and users fear their money will disappear into thin air. For crypto to rise again, it must find a valid use that leaves the dodginess behind. ■



Financial markets

False dawn

Investors are becoming too optimistic about the world economy

A RARE SURGE of optimism is running through financial markets. For most of the year America's high inflation has proved troublingly persistent, Europe's energy crisis has threatened a deep recession and China's economy has been plagued by covid-19 lockdowns and a property bust. Investors are now cheering developments on all three fronts. America's annual inflation fell from 8.2% to 7.7% in October. Europe's natural-gas prices are down by two-thirds from their peak in August. China has loosened some restrictions associated with its "zero-covid" policy and on November 11th unveiled measures to ease the financial pressure on embattled property developers. This flurry of news has sent global stocks up by 13% since mid-October, as traders priced in fewer interest-rate rises by central banks and caused the dollar to fall.

Alas, investors are getting ahead of themselves. America's inflation is coming down because pandemic-related disruptions to supply chains are dissipating. A year ago dozens of ships were anchored outside Los Angeles waiting to be unloaded, and semiconductors and second-hand cars were in short supply. Today the anchorage is empty, there is a glut of chips and car prices are falling. These improvements are likely to continue. And from March 2023 comparisons of prices with a year ago will also no longer look back to before Russia's invasion of Ukraine, when oil was cheaper. That will cause headline inflation to fall further.

Yet as inflation subsides, it will get harder to fight. American wages are growing at an annual rate above 5%, because the labour market is still exceedingly tight; there are nearly two vacancies for every unemployed worker. The Federal Reserve's 2% inflation target is compatible with wage growth of only about 3-4% (reflecting inflation, productivity growth and perhaps a rebound in workers' share of economic output). Although job growth has

slowed, the Fed is therefore likely to keep raising interest rates until the labour market is much cooler. Some disinflation might come easily today, but a return to 2% will almost certainly require a recession (see Finance & economics section).

Europe's energy crisis is going through a similarly illusory respite. Natural-gas prices have plunged because storage levels are high and the weather has been mild. Yet Europe's economy is probably shrinking nonetheless—and it is only at the start of an energy crunch that will span at least two winters. Next year Europe could have to refill its storage without any piped Russian gas. The weather could be colder, and global liquefied-natural-gas prices could be higher. Worse, the inflation that has hitherto been caused by energy prices seems to be becoming entrenched. Britain's annual inflation reached 11.1% in October; excluding food and energy, it was 6.5%. Across Europe wage growth is rising and inflation expectations are creeping higher, making it harder to balance fighting inflation with supporting the economy.

China's economy has the biggest potential to spring a pleasant surprise in 2023, because it has been so damaged by zero-covid policy and a housing crash. The authorities have unveiled 20 tweaks to their covid rules and 16 measures to help property firms. Yet on both fronts the road ahead will be long and hard. Rising infections mean more lockdowns could be imminent. A managed end to zero covid would boost growth, but a chaotic "exit wave" of infections, in a population that has barely been exposed to the virus, could cause panic and further damage the economy. The property measures have helped developers and reduced the chance of a financial collapse, but demand for housing, and thus property's contribution to growth, is likely to remain subdued. The world economy's problems are still severe. It will not just shrug them off. ■



The war in Ukraine

Keep calm and carry on

Russia needs a respite. The West must help Ukraine fight on

THE ROCKET that landed in Poland on November 15th, killing two people, was mercifully not a missile from Russia. But the Ukrainian interceptor which fell to the ground would never have been launched were it not for Russia's brutal aerial assault on Ukraine that day—its biggest barrage of missiles against Ukrainian cities and infrastructure so far. Russia is escalating because it is losing. The West must keep its cool and intensify its support for Ukraine. This is a time for bold steps.

Poland and its allies deserve praise for their calm response. As Russia's state media gloated over the death of Poles and accused its enemies of a "provocation", NATO governments collected evidence and avoided raising the temperature. Volodymyr Zelensky, Ukraine's president, made a rare misstep in painting the

accident as a Russian missile attack. But Russia's behaviour courts disaster. In March it struck a base just 24km (15 miles) from the Polish border. The same month, a Soviet-era drone carrying explosives crashed in the Croatian capital, Zagreb. In September a Russian jet inadvertently fired an air-to-air missile close to a British spyplane in international airspace over the Black Sea. Russia does not want a war with NATO. But it hopes that such danger will induce NATO to back down.

That must not happen. Some American officials are showing signs of nerves. Mark Milley, America's top general, has likened the conflict to the stalemate of the first world war. He has cast doubt on Ukraine's ability to shift the front lines farther and suggested that it should consider negotiations with the Kremlin.►

► His diagnosis and prescription are both flawed.

Russia's army is in dire shape and on the retreat. Its withdrawal from Kherson earlier this month reflects a serious shortage of artillery ammunition (see Europe section). Precision munitions are running out, which is why Russian attacks on Ukraine's energy grid rely on Iranian drones. And even as the seasons bring mud and bitter cold, Ukraine, well stocked with Western winter gear, will keep fighting.

Russia needs a pause. It should not be given one. For Ukraine to press its advantage, it requires a steady supply of Western arms, ammunition and equipment.

Top of the list is air defence. As its Soviet-era systems run low on ammunition it needs additional Western launchers that can be replenished more easily—including longer-range Patriot batteries. Air defences can also spark a virtuous circle that would allow Ukraine to ramp up its own arms production without fear of having factories destroyed. Its army hopes to raise as many as a dozen new brigades for a future offensive. They will need a large fleet of armoured vehicles.

On November 15th the Biden administration asked Congress

for over \$37bn in emergency aid to Ukraine—more than the defence budgets of Australia, Canada or Italy. Europe must show the same sense of urgency. Russia's air attacks should serve as the trigger for the dispatch of tanks, such as German Leopards. European allies should create a fund to support the provision of Sweden's Gripen fighter jets, which are easy to maintain and well suited to Ukraine's flexible operations.

Jaw, jaw and war, war

This week's incident, and the danger that setbacks on the battlefield will lead Russia's president, Vladimir Putin, to escalate, including with nuclear weapons, show the importance of maintaining channels of communication with Russia. That is why Bill Burns, the director of the CIA, was right to meet his Russian counterpart in Turkey on November 14th. The door to a future diplomatic settlement, when both Ukraine and Russia are ready for one, should be left open. But a ceasefire now would be deeply disadvantageous to Ukraine, halting its momentum and giving Russia breathing space to restock its arsenal and prepare a fresh army. This is not the moment to let up. ■

The World Cup

In defence of Qatar

It is a worthier venue for a big sporting event than other recent hosts

MIGRANT WORKERS are often treated very badly. There is much less sexual freedom than in Western countries. It is not a democracy. These statements are true of Qatar, where the month-long finals of the football World Cup begin this weekend. They are also true of Russia, which hosted the previous World Cup, and China, which hosted the most recent Olympic games, last winter. In fact, Qatar is a much more suitable country to host a big sporting event than either of those two.

At best, Western criticism of the decision to award the games to Qatar fails to distinguish between truly repugnant regimes and merely flawed ones. At worst, it smacks of blind prejudice. A lot of the indignant pundits sound as if they simply do not like Muslims or rich people.

Qatar may not be a democracy, but it is not the despicable despotate of cartoonish editorials. The previous emir, under no popular pressure at all, introduced elections of a sort. He also set up a news channel, Al Jazeera, that is more outspoken than its Arab rivals, even if it goes easy on Qatar itself. That is a far cry from Vladimir Putin's Russia, where you get sent to prison for describing the war in Ukraine as a war, let alone denouncing it. And it is a world of difference from China, where no peep of political dissent is tolerated. The Argentine junta that hosted the World Cup in 1978 threw critics out of helicopters.

The world also looks at migrant workers in Qatar through a distorted lens. For one thing, the emirate is more open to foreign labour than America or any European country. Native Qatars make up only 12% of the population—a proportion supposedly more enlightened countries simply would not tolerate. Although these migrants are sometimes mistreated, the wages most earn are life-changing, which is why so many want to come in the first place. And whereas hosting the Olympics twice has

not made China more democratic, the chance to stage the World Cup has led to an improvement in Qatar's labour laws.

The claim that Qatar is a den of homophobia is also misleading. Gay sex is illegal, it is true, but so is all sex outside marriage. There are few prosecutions for violating these laws, however. And such conservative but seldom-enforced laws are common throughout much of the developing world, and in almost all Muslim countries. Qatar hardly stands out.

Then there are the claims that Qatar bribed its way to World Cup glory. That may be true, although no clear proof has ever been made public. But if it is, it says more about FIFA, the body governing international football, than it does about Qatar (see International section).

The world is always going to have rich countries; it needs sporting authorities able to guard against undue influence.

The strongest argument against Qatar as a host is environmental. With the world overheating, it seems mad to fly in legions of players, fans and hangers-on to run about in new, air-conditioned stadiums on grass sustained by desalinated water. The hosts' claim that the event will be carbon-neutral is dubious. But this is a vice of all big sporting events, to some degree. Thanks to clever engineering, cooling the stadiums is not as polluting as you might imagine. And the 3.6m tonnes of carbon dioxide that FIFA says the tournament will emit is just 0.01% of global emissions this year.

Unless FIFA wants the tournament to rotate among Finland, Norway and Sweden, it cannot always hold it in a blameless spot (see Graphic detail). The idea of bringing the World Cup to the world is only right. The Middle East is full of fans, but has never hosted the event before. Nor has any Muslim country. If the World Cup is ever to be held in such a place, Qatar is a perfectly good choice. ■



Disciplining police officers

I read with interest and, frankly, concern your article regarding the new commissioner of London's Metropolitan Police, Sir Mark Rowley ("Good cop", November 5th). You asserted that the commissioner is "hamstrung by a requirement, introduced in 2015...that most misconduct hearings be led by an independent chair" and that he is seeking support from government "to make changes allowing the Met to do its own firing".

Independent Legally Qualified Chairs (LQCs) were "introduced" into the police misconduct process following the Chapman report in 2014. Their introduction was not a knee-jerk reaction to that report, but followed extensive consultation on its recommendations. The report found that the existing system was too complex and often difficult for police forces to understand. More important, it found that, as the system was largely managed by the forces themselves, it lacked transparency and independence. It recommended that LQCs be brought in to ensure that decisions were objective and independent in order to deliver greater public confidence in the system. Putting it more succinctly, prior to this the public often considered proceedings to be a whitewash, and officers considered that their fate was already sealed before the proceedings began.

LQCs have serious concerns. Sir Mark was previously chief constable of Surrey Police and an assistant commissioner in the Met. Other chief officers, who are apparently calling for a return to the pre-LQC process, have also occupied senior positions for a number of years. The failure of police forces to properly tackle the issue of rogue officers has long preceded LQCs.

In the circumstances, how can the public have confidence that today's serious concerns, about getting to grips with issues such as violence against women and girls, misogyny and racism among police

officers, will be resolved? Certainly not by returning the ultimate decision on whether to sack rogue police to the senior officers who, for years, have had the authority to tackle these issues, but have failed to do so.

JOHN BASSETT
President
National Association of
Legally Qualified Chairs
London

Don't use food as a weapon

Subjecting civilian populations to extreme hunger and death is barbaric in a world with enough food to feed everyone on the planet many times over ("Bread-blocking bandits", November 5th). The UN Security Council resolution 2417 (2018) provides a framework to implement the prohibition on this tactic of war. It must be used to bring the armed men who perpetrate this crime to account and put an end to the weaponisation of food once and for all. The use of starvation as a method of war must be relegated to the history books.

BRIAN LANDER
Deputy director
Emergencies Division
UN World Food Programme
Rome

A history of inflation

You grouped together eight countries that were among the first to raise interest rates ("Trouble in Hikelandia", October 29th). You then proposed three explanations for the large increases to inflation that these countries nevertheless experienced, despite those rate rises. All three are plausible and your third proposal, that high inflation can generate self-perpetuating mechanisms, is particularly troubling.

However, there is a fourth possibility: that Hikelandia countries are unusually vulnerable to inflation spikes. Your list includes countries with a history of high inflation (Brazil, Hungary, Peru) and small open economies that are particularly at risk from

external shocks (New Zealand, South Korea). If this is also plausible, it is a somewhat more benign explanation for why, anticipating fast-rising inflation, those central banks moved quickly to increase interest rates.

PEDRO FRANCO DE
CAMPOS PINTO
Assistant professor
Musashi University
Tokyo

It has been so long since we faced the inflationary effects of the oil crisis in the 1970s that I wonder if Friedmanite monetarist assumptions are now so instinctive in thinking about inflation that the economics professionals are getting it wrong this time. Those assumptions may be preventing the current problems of supply-side disruption caused by the pandemic, China's lockdowns, the retrenchment of global trade and immigration and an oil market affected by the Ukraine war from receiving the primacy of attention they deserve.

It would seem reasonable to expect that it will take some years for the private sector to rebalance our economies with targeted government help and for central banks to play a secondary role this time. The "excess" pandemic spending of recent years may be the only thing keeping many afloat as the world adjusts.

RICHARD SMITH
Newton, Massachusetts

Anything goes in innovation

"In search of a bright light" (October 29th) described the contemporary well-intentioned, but flawed process of recognising and encouraging innovation. Innovation is concerned with change, but committees are more comfortable in funding confirmation, rather than something new and different (that is, investing in risky research).

Human nature may be constant, but serendipity is alive and well. A chance meeting between Katalin Kariko and Drew Weissman around a photocopying machine at the

University of Pennsylvania resulted in the birth and development of mRNA vaccines for covid-19. One may even say that the lack of funding for such vaccines facilitated this outcome. The natural history of this pandemic would have been catastrophic if vaccines were not available.

It may be time to move away from Karl Popper, and towards Paul Feyerabend's concept that a lack of rules allows science to progress: "anything goes." As long as the methodology is sound, proposals that are both different and aim high should be seriously considered. The current system is designed to filter out innovation, and it shows.

MICHAEL FERNANDES
Chapel Hill, North Carolina

Capital idea

"A tale of two pandemics" (October 22nd) abbreviated life expectancy as LE. This is an example of today's trend towards too much abbreviation (TMA). This makes it harder to read (HTR) than if you were to spell everything out (SEO). Please get off the TMA bandwagon and just SEO to make your writing ETR. TYVM.

RICHARD TAYLOR
The Woodlands, Texas

Either way

Your mention of "Trumpery" caused me some head scratching ("Now for the hard part", November 5th). I wondered whether you were using it as an eponym, a reference to a certain former American president. Or whether you were using the definition of "trumpery" from Dr Johnson's dictionary of 1755: "...something of less value than it seems; falsehood, empty talk; something of no value, trifles."

ATILLA ILKSON
Saugerties, New York



Thousand-island progressing

JAKARTA

South-East Asia's biggest country is poised for a boom—politics permitting

INDONESIANS ARE used to near-anonymity on the world stage. John Riady, a scion of Indonesian business, once joked that his country was the planet's biggest invisible object. But under the bonnets of new electric vehicles (EVs) and on apps used by hundreds of millions of customers, South-East Asia's largest economy is rapidly becoming more visible.

Indonesia holds more than a fifth of the world's nickel, a crucial component of the batteries used in electric vehicles. The only other country with similarly big reserves is Australia. Indonesia is also the world's third-largest source of cobalt, another vital

input. Analysis by *The Economist* suggests that by 2030, Indonesia will probably be the fourth-biggest producer of green commodities in the world, behind only Australia, Chile and Mongolia. The government hopes this abundance of resources essential to the global energy transition can spur an economic revival, boosting growth and halting 20 years of deindustrialisation.

"We want to be the main players in the EV battery industry," says Joko Widodo, Indonesia's president of eight years, who is known almost universally as Jokowi. As the host of the G20 summit this week in Bali, he is eagerly advertising his country's

openness to foreign investment.

But Indonesia's natural resources are not the only factor that might fuel faster growth. Jakarta, the capital, has become one of South-East Asia's most successful incubators of new technology companies. That in turn has raised hopes that Indonesia's difficult geography—it is a vast archipelago of thousands of islands—can be surmounted by digitisation.

Indonesia has much to recommend it to foreign investors. It is young: 26% of the population is under 15, in stark contrast to ageing East Asia. It has also maintained a careful diplomatic neutrality for decades, making it a plausible destination for both Chinese and Western investment—one area in which its otherwise frustrating international anonymity provides an advantage. It is the world's fourth-largest country by population, with 276m people, and so a gigantic market. And although it is only the world's seventh-largest economy after accounting for the cost of living, and 16th at market exchange rates, it is steadily climbing up the rankings.

A surge in foreign investment, especially in metals-processing, has provided the most obvious boost to growth in recent years (see chart 1 on next page). In 2014, just before Jokowi's first term in office, Indonesia banned the export of unrefined ore. "Industrial downstreaming is very important for Indonesia, to allow the raw material to be processed domestically," Jokowi told *The Economist* this week. (You can watch the interview at economist.com/jokowi-interview.) Although the policy runs counter to free-market orthodoxy and initially led to the closure of many mines, thanks to Indonesia's clout in the nickel market in particular, it is yielding results.

The island of Sulawesi illustrates the policy's success. Construction at the Morowali Industrial Park began in 2013, and the area now hosts at least 11 working smelters. The project was little known even in Indonesia when it began, spearheaded by China's Tsingshan Group, the largest producer of nickel in the world. It has since become a centrepiece of the country's industrial strategy, with a cumulative \$18bn invested by several companies.

Another mineral that is beginning to be processed domestically is bauxite, the ore that is refined into aluminium. A big refinery is under construction in the province of West Kalimantan, on the island of Borneo. In North Kalimantan, Adaro Energy Indonesia, a coal-mining firm, is building a hydropower plant, which should allow it to produce "green" aluminium, smelted using low-carbon energy.

The investment extends beyond metals-processing to manufacturing. On the island of Java, home to half the population, a South Korean battery firm, LG Energy Sol-►

ution, and Hyundai, a carmaker, began building Indonesia's first EV battery-cell plant late last year. The government wants Tesla to follow and has offered the company land for a big factory in Central Java.

There are local initiatives, too. Electrum, a joint venture between TBS Energi Utama, a conglomerate, and Gojek, a huge ride-hailing and delivery service, aims to begin building an electric-motorbike factory in the second half of 2023. The new venture has partnered with Gogoro, a Taiwanese firm that has pioneered battery-swapping stations for electric motorbikes and mopeds. "It's the future for us," says Pandu Patria Sjahrir of TBS, which began life as a coal-mining firm. "Business and government think alike on this, and you have a large domestic market which helps things move faster."

The second force improving Indonesia's economic outlook is a rapidly growing consumer-tech industry. This digital boom should help reduce the gargantuan logistical costs that Indonesia's geography imposes. The eastern and western tips of the country are almost as far apart as London and Kabul. The population is spread across some 6,000 islands, some densely forested and sparsely populated, others teeming with people, farms and factories, almost all of them mountainous. Jakarta's GDP per person has risen to around \$19,000. In central Java, a mere 230km away, it is below \$3,000, and some far-flung islands are even poorer (see map on next page).

Several startups are removing the mid-dlemen that proliferate in every physical industry. Kargo Technologies, which launched in 2019, operates as a lorry-hailing firm connecting shippers with Indonesia's army of haulers. Tiger Fang, one of the company's founders, was the general manager of Uber's operations in Indonesia. His former boss, Travis Kalanick, has invested. GudangAda, an online marketplace for consumer goods, connects wholesalers directly to millions of tiny retailers.

Even as interest rates have risen this year and investors have backed away from

emerging markets, Indonesian tech firms have continued to raise money. East Ventures, an Indonesian venture-capital firm, raised \$550m for a fund in May. AC Ventures, another firm, raised \$250m for its fifth fund in September. Indonesia has become a lasting, if small, element in the portfolio of many big private-equity investors, including KKR and the Carlyle Group.

GoTo, the product of the merger in 2021 of Gojek and Tokopedia, an e-commerce outfit, is the behemoth that bestrides Indonesian tech. Its turnover is equivalent to around 3% of Indonesian GDP. The hope is that other local tech firms will prosper on a similar scale by ironing out the economy's many inefficiencies.

Steady as she grows

The third factor propelling Indonesia's growth has been sound macroeconomic management. The finance minister, Sri Mulyani Indrawati, is a respected former managing director of the World Bank. The government restored its pre-pandemic deficit cap of 3% of GDP in its latest budget, winning praise from the IMF. Government debt is low and little of it is denominated in foreign currencies.

The currency, the rupiah, has dropped by 9% against the dollar since the beginning of 2022, far less than most of its counterparts in emerging markets. Whereas rising interest rates have sucked capital out of other developing countries, Indonesia's current account has swung from sustained deficit to surplus, as demand for its natural resources has risen.

But Jokowi has bigger ambitions. Indonesia's economic output has grown by a respectable 4.9% a year since the turn of the century, well above the global average of 3.6%. But its expansion has been overshadowed by faster-growing economies: China's GDP per person rose by an average of 8.7% a year over that period, and Vietnam's by 6.3% (see chart 2). The president first won election on a pledge to raise the growth rate to 7%.

Jokowi's early focus was infrastructure.

He likes to rattle through a list of concrete-heavy projects: 16 new airports, 18 ports and 2,100km of toll roads—more than two-and-a-half times the 821km built between 1978 and Jokowi's election in 2014, according to official statistics.

Next Jokowi plans an invigorating spurt of deregulation. The sprawling Omnibus Bill, in the works since 2019, will ease restrictions on foreign investors. The number of industries on the "negative list," which are fully or partially closed to foreign investment, will be reduced from 391 to 95. The process of licensing will be streamlined, with online applications replacing convoluted discretionary systems.

The law also liberalises Indonesia's fearsome labour laws. Hiring and firing will become much easier. Industry-wide minimum wages will be scrapped in favour of provincial rates tied to local conditions.

The Omnibus Bill was approved by parliament in 2020 despite big protests, only to be thrown out by the courts on procedural grounds. The government hopes to push a revised version through parliament again within months. If it succeeds, doing business in Indonesia will become much easier, especially for foreign investors.

There remain two big risks, however, which could divert Indonesia from this heartening trajectory. The first is that reforms do not last. Jokowi himself is an inconsistent policymaker. As governor of Jakarta in 2013, he spooked business with a whopping 44% rise to the minimum wage. In 2018 his government bullied Freeport McMoRan, an American mining firm, into selling it a controlling stake in Grasberg, a gigantic gold and copper mine in the Indonesian half of New Guinea.

Jokowi has relied mainly on state-owned enterprises to build all his new infrastructure, incurring big debts for which the state is liable but which do not appear on the government's books. Four publicly listed but state-controlled construction firms, for instance, had debts of 128trn rupiah (\$8.2bn) in the middle of 2022, up from around 7trn in 2013. The construction of a new capital, Nusantara, in the jungles of Borneo, a pet project of the president's, is likely to burden state-owned enterprises with yet more debt. Foreign investors are also being courted to finance the project, officially estimated to cost \$34bn. But many worry about whether Jokowi's successor will stick with such an expensive white elephant.

One figure in particular symbolises the ambiguous stance of Jokowi's government: Luhut Binsar Pandjaitan, the co-ordinating minister for maritime affairs and investment, and a former chief of staff to Jokowi. His vague title belies a broader role as a fixer for big business. He is the first name on the lips of optimistic investors, foreign and domestic, who view him as a canny al-

Clawing its way up



ly. In their telling, his network of bureaucrats and businessmen has been crucial to the recent leap in private investment.

But Mr Luhut's circle is undoubtedly clubbish. Mr Sjahrir, of TBS, is his nephew. Erick Thohir, the minister of state-owned enterprises and former chairman of Inter Milan football club, is the brother of Garibaldi Thohir, president-director of Adaro, the firm seeking to power green aluminium smelting in North Kalimantan. Unlike Jokowi, Mr Luhut is a long-standing member of the elite, having served as a general in the era of Suharto, Indonesia's dictator for 32 years. He owns a coal mine.

Earlier this year Mr Luhut aired the idea of ending the two-term limit on the presidency, which was introduced after Suharto's fall in 1998. The proposal would have paved the way for Jokowi to perpetuate himself in power, but was quickly shot down by Megawati Sukarnoputri, a former president who is still the leader of Jokowi's political party.

Third time will harm

The assumption in Jakarta is that Jokowi, despite having publicly disavowed the idea of extending his time in office beyond the end of his second term in 2024, is still looking for a way to do so. There is talk of constitutional fiddles such as a state of emergency to forestall elections, or of the president running for vice-president with a close ally at the top of the ticket (although Jokowi explicitly ruled this out when speaking to *The Economist*). A senior bureaucrat says that democracy will not survive if he finds a way to remain president.

And even if Jokowi does step down on schedule, his potential successors may not manage the economy as well as he has. Candidates need the support of at least 20% of MPS to stand, so the likely roster is quite small. Prabowo Subianto, the defence minister, who lost to Jokowi in the past two elections, appears likely to run again. The former general, who has been accused of human-rights abuses in East Timor during the 1980s, has softened his strongman image somewhat of late—but he still makes an unlikely reformer.

Anies Baswedan, the governor of Jakarta until October, is another likely candidate. He won office with the support of Islamic agitators and conservative voters, which worries non-Muslims, including the many Chinese-Indonesians who are prominent in business. Mr Anies himself is of a mild, bookish mien, however, and his supporters insist he would govern technocratically. Jokowi's candidate, if he does not run himself, is likely to be Ganjar Pranowo, the governor of Central Java and a member, like the president, of the Indonesian Democratic Party of Struggle (PDI-P). None of these candidates has expressed strong views on Jokowi's economic re-

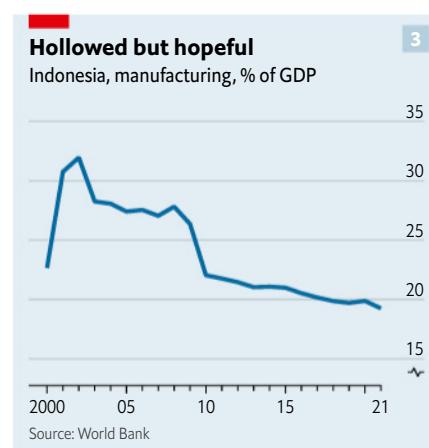


forms or clear plans of their own.

This vagueness makes the second big risk to Indonesia's promising new economic outlook all the more salient, and that is the country's weakness for economic nationalism. The decision to ban exports of raw ore worked to encourage more nickel-processing largely because Indonesia has such big reserves of the metal, demand for which is rising sharply. But attempts to apply a similar logic to other exports will probably end in failure. The bauxite industry, for instance, is only just beginning to recover from the export ban of 2014, which had to be temporarily reversed after producers responded to it by shutting mines and moving to other countries rather than build new refineries in Indonesia.

Comments like those of Bahlil Lahadalia, the investment minister, who suggested in October that the country might look to establish a cartel equivalent to OPEC for the battery-metals industry, only compound that concern. Muhamad Chatib Basri, a former finance minister during whose tenure taxes were raised on exports of raw minerals to encourage miners to invest in processing, says there are limits to how far mining companies can be prodded to move downstream. "You can't forget about competitiveness while doing industrial policy," he argues.

Indonesia used to be an archetypal Asian tiger in the 1980s and 1990s, with



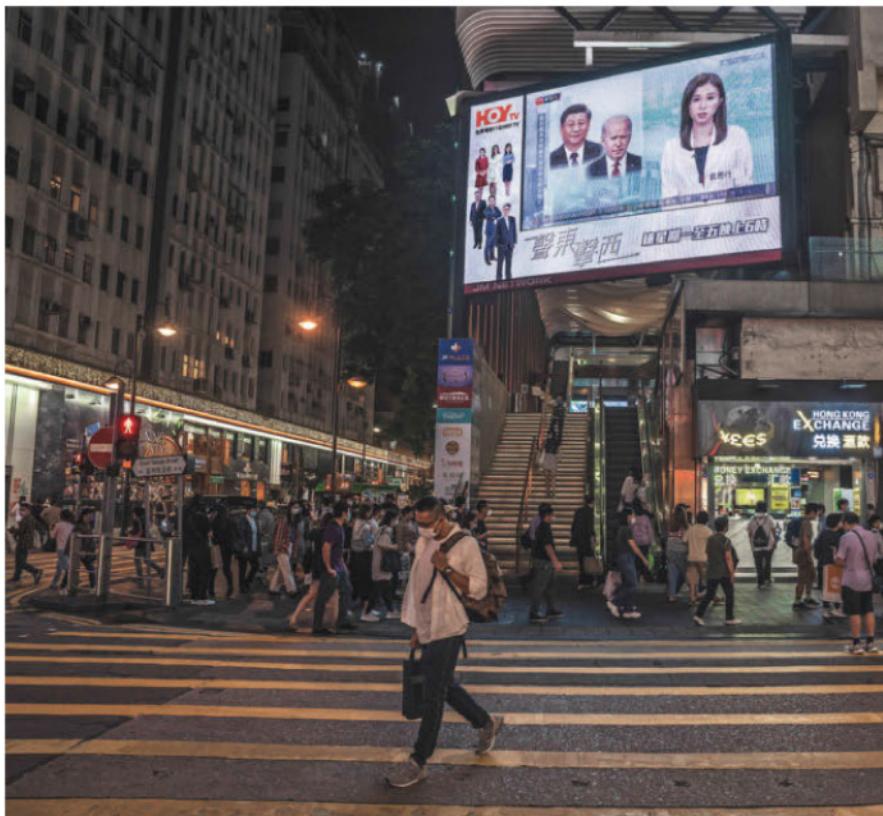
booming manufacturing and exports. But manufacturing's share of GDP has fallen steadily over the past 20 years (see chart 3), owing both to the political and economic turmoil that followed Suharto's fall and also to the rise of rival cheap manufacturing hubs in the region, such as Vietnam. Securing a share of the booming market for components of electric vehicles may slow the decline; it is unlikely to reverse it.

To do that, Indonesia will need to capture some of the investment in manufacturing that is migrating from China to other parts of the developing world. So far, little seems to be coming. Apple has 26 suppliers in Vietnam, 20 in Malaysia, 18 in Thailand, 16 in the Philippines and 11 in India. In Indonesia, it has only two.

Exporters gripe that the country still thinks of trade mostly in zero-sum terms. Its participation in global value chains is below the world average, whether measured by trade or production. It is the only big economy in South-East Asia for which that is true, according to research published by the Asian Development Bank. What's more, it is one of a very small number of countries where the level in 2019 was lower than in 2000 or 2010. Exports have slumped relative to GDP, from an average of around 30% in the 1990s to 22% last year.

The World Bank's final *Doing Business* report, published last year, suggested that exporters faced a combined 117 hours of checks and paperwork for each consignment of goods leaving the country, far higher than the figures for India, Malaysia, Thailand or Vietnam. And this is an area where the Omnibus Law will not transform the overall picture.

Indonesia may still attract scant attention internationally, but the outlines of a more visible economy are becoming clear. Its nickel deposits all but guarantee it a leading role in the electric-vehicle industry, which is still in the early stages of a decades-long expansion. In areas where the country has fewer natural advantages, the future remains blurry. Filling in the detail will require continued, diligent reform—and so an unusual degree of far-sightedness from Indonesia's politicians. ■



Superpower rivalry in Asia

Elephants in the long grass

SINGAPORE

South-East Asia's nearly 700m people have much to lose from confrontation between America and China

WHEN DONALD TRUMP began slapping tariffs on imports from China in early 2018, Indonesia's president, Joko Widodo (or Jokowi, as he is called) saw opportunity. He asked foreign visitors how Indonesia might take advantage of the growing spat. Could he, for instance, entice multinational companies to shift parts of their supply chains from China?

How times have changed. Under Mr Trump's successor as president, Joe Biden, the trade war with China has intensified, and been reinforced by geopolitical, ideological and even military competition that at times has seemed to risk conflict. On the Chinese side, an all-powerful President Xi Jinping speaks of a titanic struggle with an American-led West. On the American one, Mr Biden in October announced draconian controls to stop Chinese companies from benefiting from American technology—a clear bid to keep China down. He has also broken with a decades-long policy of rhetorical obfuscation in which America refused openly to commit itself to defending

Taiwan, the self-governing island whose eventual unification with the mainland is the Communist Party's most sacred tenet.

In the face of superpower rivalry, South-East Asians feel powerless. They are “the grass, not the elephants”, regional strategists say. Jokowi has shifted from seeing opportunity to sounding the alarm. This month he told *The Economist* he was “very worried” about the possibility of a conflict over Taiwan, not least because it could destroy the region's hopes for development and prosperity. He pushed hard for this week's meeting between Mr Biden and Mr Xi in Bali (see story in China section), on the eve of his hosting of world leaders there for the G20 summit. He called it the “most difficult” G20 ever. “We should not divide the world into parts,” he said, in his opening speech. “We must not allow the world to fall into another world war.”

Otherwise, President Vladimir Putin's war in Ukraine dominated deliberations at the G20, where the mood against Russia's invasion hardened. For South-East Asian

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leaders, it is not their fight: only a minority of the region's governments have openly condemned the invasion. Yet Asia is grappling with its consequences, including disrupted food supplies and rising prices.

The faraway conflict has also underlined the importance of peace at home. As the prime minister of Singapore, Lee Hsien Loong, put it at a national-day rally in August: “Look at how things have gone wrong in Europe. Can you be sure that things cannot go wrong in our region too? Better get real, and be psychologically prepared.”

Taiwan is the main security concern of South-East Asian policymakers. They have long worried about a superpower clash. But it was thought more likely to be in the South China Sea, where China's vague but expansive “nine-dash line” encompasses nearly the whole sea and where it has built military installations on offshore reefs. This has changed, says a regional diplomat. “The nine-dash line,” the diplomat says. “That's not a red line. [For China] Taiwan is the real red line.”

Island in a storm

In that context, regional strategists are alarmed by the American shift in rhetoric. They think the Biden administration has gone too far. They also deplore the visit to Taiwan in August by Nancy Pelosi, the Democratic speaker of the House of Representatives, as needlessly provocative. China responded with live-fire military exer-

cises all around the island. They are therefore nervous about the consequences if Ms Pelosi's likely Republican replacement, Kevin McCarthy, follows through on his promise to visit Taiwan, too.

They also worry that a dearth of trust acts as an obstacle to communication. In turn, mutual disdain grows. A South-East Asian diplomat who talks to both sides says Chinese officials look at America's political polarisation as proof of great-power decline. Both sides complain that conversations are superficial. Chinese and American officials, says the diplomat, are not pulling their counterparts aside for frank discussions over how to defuse tensions. The pandemic, in reducing face-to-face meetings, made a bad situation worse.

As for the weaponisation of technology against China, even America's closest friends in South-East Asia say the administration is taking the region down a dangerous road. It forces countries to take sides in painful ways. Singapore has already accepted that in a bifurcated world where technology is "friend-shored" the city-state will end up hewing to American-led supply chains. But what if America extends sanctions to tech-heavy Chinese firms operating outside China? This, says one Singaporean official, would create a huge dilemma for a city-state whose reputation is built on being a safe, predictable, open-for-business jurisdiction. For that matter, will Indonesia's budding industry powering electric vehicles one day be forced to choose between America and China?

Mr Biden and his team are aware of some of the region's concerns. Just before the G20, the American president was in Phnom Penh, where Cambodia hosted the annual summit of the ten-country Association of South-East Asian Nations (ASEAN). He assured ASEAN it was "the heart" of his policy in the Indo-Pacific region. He promised a "new era" of co-operation—a recognition that the region's interests had been somewhat ignored.

For all that their economies are bound to China's, South-East Asians do want American engagement as a counterweight to their huge northern neighbour. China's presence brings economic possibilities but also perils, such as military expansion in the South China Sea, indebtedness from Chinese-led infrastructure projects and China's subversion of ASEAN unity as it turns Cambodia and Laos into client states.

American involvement, then, is welcome. But, says one political leader, it has to be within a more "balanced" framework that provides long-term economic commitment. In Phnom Penh and Bali, Mr Biden promised this. America and Japan (which considers itself cannier at steering poorer Asian countries than its American ally, see *Banyan*) proposed new ways to help Indonesia decarbonise. Many South-

East Asians are sceptical that the promises will amount to much. Mr Biden's Indo-Pacific Economic Framework, a proposition for American involvement in the region, lacks heft. Only a few pockets of Mr Biden's administration, such as the commerce department, are pushing for more openness. Too much of his Asia policy, regional strategists say, is driven by anti-China ideology.

There was, then, relief at Mr Biden's meeting with Mr Xi. It did not represent a reset, but restored communication. At the least, says one South-East Asian official, the two elephants have trumpeted a desire to prevent a descent towards war. The grass gets a little reprieve, but for how long? ■

Kazakhstan

One steppe forward

ALMATY

A reformist president has arranged his re-election

NOWHERE HAS the international recoil against Vladimir Putin's invasion of Ukraine been more striking than in Kazakhstan. The vast, mineral-rich country shares over 7,600km (4,750 miles) of border with Russia and was long one of its closest allies. Yet Kazakhstan has banned displays of Russian military propaganda. It has given refuge to perhaps 100,000 Russian draft-dodgers. And its president, Kassym-Zhomart Tokayev, has shown an impressive lack of enthusiasm for the war.

His keenness to put Mr Putin at arm's length is all the more conspicuous because Mr Tokayev is casting off another former patron: Nursultan Nazarbayev, who ruled Kazakhstan for 30 years before handing it to Mr Tokayev in 2019. The 82-year-old for-

mer strongman had conferred huge powers on himself, as well as immunity from prosecution and the title "Leader of the Nation". But in January an insurrection allegedly backed by former members of his regime left 238 dead. The 69-year-old Mr Tokayev has since scrapped his predecessor's powers, pursued some of his cronies for their outlandish wealth and passed reforms intended, he says, to bring about "a radical reset of the entire political system".

A snap election due on November 20th is ostensibly part of that effort. Mr Tokayev called it after amending the constitution to extend presidential terms, from five years to seven, and impose a one-term limit on the office in future. Azamat Junisbai, a Kazakhstan-born social scientist at California's Pitzer College, considers the election—18 months ahead of schedule—a defensive move against the still-powerful Nazarbayev elite. Yet if Mr Tokayev appears sincere in his bid to make a "new Kazakhstan", the election recalls the old one.

No one doubts the president will win it with ease (if maybe not with the 97.7% vote-share his predecessor achieved in 2015). The only critic of Mr Tokayev who dared to try to run was disqualified on a technicality. The president's five permitted opponents are nonentities. One, a 68-year-old member of the obscure Auyl (Village) party, is best—or solely—known for a video on social media which shows him karate-chopping a meat bone. Mr Tokayev did not attend a televised debate on November 11th. He sent a proxy, whom some of his opponents politely quizzed on the president's plans for his next term. "There's no point voting," shrugged a man running a fairground stall in an Almaty park. Hardly anyone on the city's streets could name one of Mr Tokayev's opponents.

Still, the president, a former foreign minister and deputy UN secretary-general, does not seem unpopular. Despite its deep ties to Russia, Kazakhstan has suffered a fairly modest economic hit from the war; its economy has grown by 2.5% in the year to date. And if inflation is high, Kazakhs are somewhat used to that. Asked for their view of the president, several passers-by in Almaty praised his efforts to "de-oligopolarise" the economy.

The government has taken over several firms from relatives of Mr Nazarbayev; one of his nephews is in jail on graft charges. Though Mr Tokayev has issued an amnesty to most of the 1,600 people convicted or charged over the violence in January, it does not cover its alleged leaders.

They include Mr Nazarbayev's former security chief, Karim Masimov, who will soon be tried for treason. Mr Tokayev has shown courage against his erstwhile patrons. But will he bring the strong institutions and accountability he promises? The election, an early test, is discouraging. ■



Tokayev fancies his chances

Sri Lanka after the crisis

Oh Colombo

COLOMBO

The president pushes economic stability over political reform

ADRESSING PARLIAMENT on November 14th on the subject of next year's budget, Ranil Wickremesinghe strived to offer an uplifting vision for his crisis-ridden country. "Let us create a new economy tailored to the expectations of the youth," said Sri Lanka's president and finance minister. Attempting this, he pointedly added, need not involve the "traditional protests, struggles and strikes".

Mr Wickremesinghe has been treading a fine line since he became president in July. The protesters who hounded his predecessor, Gotabaya Rajapaksa, from office and from the country demanded deep reforms, including a clear-out of the political elite and a reduction in the powers of the presidency. Mr Wickremesinghe, a six-time former prime minister, has largely ignored them. Although he is working hard to restore economic stability, he has chosen to work with Mr Rajapaksa's supporters, paid little heed to the protesters' demand for political reform and, when some bitterly objected, persecuted them.

On the surface, his focus on economic stability is paying off. Colombo has returned to a sort of normal. The fuel queues that were a symbol of Sri Lanka's failing economy are now uncommon; power cuts are shorter. A suspension of foreign-debt repayments and a steep fall in imports over the past few months have freed up foreign exchange for fuel purchases. A new rationing system has reduced demand and the import of discounted Russian oil (which European countries and America shun) has improved supply. Last month Sri Lanka's parliament passed a law ending the government's control of fuel imports. That should allow private companies to bring in additional fuel supplies in short order.

But this is delicate progress. Inflation, at 66% in October, has left millions of people unable to afford enough food. A bailout from the International Monetary Fund that would allow Sri Lanka to resume servicing its debts and restore regular access to international credit markets appears to be months away. Still, the progress made on power cuts and fuel shortages has at least mollified middle-class city-dwellers—an important component of the street protests that did for Mr Rajapaksa. This has created space for Mr Wickremesinghe, whose cabinet is mostly composed of former Rajapaksa loyalists, to quietly shelve the reform agenda.

The political alliance led by the disgraced former president's party will probably have a parliamentary majority at least until February. At that point Mr Wickremesinghe could dissolve parliament and call fresh elections, another popular demand of pro-reform activists. But he has given no indication that he will do so. Instead, he has used anti-terror laws to arrest and intimidate the most persistent activist leaders. Human-rights groups complain of a shrinking space for dissent. A promised constitutional amendment to limit the overweening powers of the presidency passed parliament in such a watered-down form that one opposition lawmaker claimed it amounted to "fraud".

Mr Rajapaksa, whom the protesters want to be prosecuted for his contribution to ruining the economy, has returned to Sri Lanka and is living in a heavily guarded residence in Colombo at public expense. His almost equally reviled brother and former prime minister, Mahinda, and Mahinda's son Namal are meanwhile back on the trail in the country's south, rallying their Sinhala Buddhist supporters. Namal Rajapaksa has been put in charge of a parliamentary committee that is developing policy recommendations on everything from health care to fisheries.

Having seemingly gambled all on his economic management, Mr Wickremesinghe had better hope it comes good. And it may not. The IMF bail-out has been delayed by Sri Lanka's struggle to come to a debt-restructuring agreement with its bilateral creditors, including China and India. Liberalisation, particularly of vast state enterprises, is progressing slowly if at all. So long as inflation remains devastatingly high and Mr Wickremesinghe is unable to point to more convincing signs of a turnaround, he has reason to fear that the streets around his office will throng with angry citizens once again. ■



For a hungry people

India's Supreme Court

Modi and the judges

DELHI

The new chief justice faces a trial of strength against the government

NARENDRA MODI has never made a secret of his distaste for an independent judiciary. One of his first moves after becoming India's prime minister in 2014 was to push for a constitutional amendment that would have given the government significant influence over the selection of top judges. Having passed both houses of the legislature, Mr Modi's effort was thwarted in October 2015 by the Supreme Court, which ruled that the amendment was unconstitutional. New judges continue to be selected by a group of their colleagues.

Dhananjaya Chandrachud, who assumed office as India's 50th chief justice on November 9th, was appointed to the Supreme Court seven months after that ruling. He joined a court still deeply mindful of its failure to check Indira Gandhi's assumption of dictatorial powers during the Emergency in 1975 and, as a result, fiercely protective of its independence. Yet the court, under constant pressure from the government, has once again tended to bend to its demands, including in a ruling last week that confirmed a government line on expanding government-job quotas for upper-caste groups. Whether it continues on that path or stiffens its spine could depend largely on Mr Chandrachud.

On the face of it, the new chief will be no pushover. He comes from the traditional Delhi elite, which is despised by the prime minister's acolytes. His father was the longest-serving chief justice on the Supreme Court, his mother a classical musician who sang for All India Radio. Mr Chandrachud attended rarefied St Stephen's College and then Delhi University, before writing a doctoral thesis on affirmative action at Harvard.

He has long been an outspoken advocate of liberal values and minority rights. In a lecture in 2020 he condemned governments that disdain criticism. "The blanket labelling of dissent as antinational or anti-democratic" was harmful to democracy and the constitution, he argued, and use of "the state machinery" to curb such dissent violated the rule of law.

His record as a judge also reflects those concerns. His best-known judgments as a Supreme Court justice concerned citizens' rights to free speech and privacy. In 2018 Mr Chandrachud notably dissented from the court's ruling confirming that the government's Aadhaar programme, the world's largest biometric identity system, ►

► was constitutional. In his view the programme facilitated surveillance and violated citizens' privacy in ways that were disproportionate to its stated aims.

Mr Chandrachud says he wants to make the judiciary more representative, efficient and accountable to citizens. He will have his work cut out. The government is becoming increasingly inventive in its efforts to influence the courts. It has dragged its feet on clearing the appointments of new judges it dislikes. More insidiously, government agencies are deliberately stretching already overworked and under-

staffed courts by filing spurious cases against their opponents.

The Supreme Court has appeared not merely supine but troublingly pro-government at times. In June it cleared Mr Modi of complicity in deadly sectarian riots in Gujarat in 2002, when he was chief minister of the state. The ruling accused the petitioners of abusing the judicial process and suggested prosecuting them. One, an activist called Teesta Setalvad, was later arrested. She spent more than two months in jail before being granted interim bail.

Will Mr Chandrachud stand more firm-

ly against Mr Modi and his henchmen? His record also suggests he might not. In 2019 he went along with a ruling that awarded the land in Ayodhya where, in 1992, Hindu extremists had demolished a mosque, to a trust intending to build a Hindu temple on the site. And Mr Chandrachud's response last week to an attack by the justice minister on the "opaqueness" of judicial appointments sounded oddly conciliatory. Upholding the integrity of the court against such bullying requires more than espousing liberal values. It demands a willingness to defend them. ■

Banyan Speak softly, bring carrots

In developing Asia, can Japan compensate for America's tin-eared diplomacy?

IT IS A SOURCE of quiet pride to its people that Japan was the only Asian country present at the formation of the G7 in the 1970s. Japan's induction was a confirmation that the West should properly be defined not by North Atlantic geography but by a commitment to liberal democratic ideas and international norms.

This year the notion that there is such a thing as a "global West" has come sharply into relief, due to its antithesis, represented by Russia's invasion of Ukraine and by China's illiberalism at home and abroad, not least in its military threats to Taiwan. In this new global West, which denounces Russian aggression and deplores China's growing assertiveness, Asian representatives include not just Japan but also Australia, New Zealand, Singapore, South Korea and Taiwan.

Yet by population size they represent a small Asian minority. It is equally striking that illiberal Asian countries rarely criticise China or Russia and sometimes openly admire them. Cambodia, Laos, Thailand and Vietnam are among those countries. And it seems many of their citizens feel similarly. For all the talk by America and its friends of a "free and open Indo-Pacific", an arc of illiberalism shadows it.

There are many explanations for this. China's authoritarian modernisation has a powerful allure for poor Asian countries. The appeal of the Asian strongman claiming to engender development and national pride (even while fleecing the state) endures. America, the self-proclaimed leader of the free world, is loud and hectoring. It bangs on about democracy and human rights while starting wars. It offers few economic or trade enticements. President Joe Biden's measly-looking Indo-Pacific Economic

Framework faces scepticism for that reason. When it comes to outflanking its adversaries in Asia, concedes a senior American official, "America sucks".

This is where Japan comes in, to judge by Banyan's recent conversations with policymakers in Tokyo. Japan, they say, is able to reach parts of Asia that American diplomacy cannot. In building trust with the global south, they argue, it helps that Japan is no evangelist for democracy. The country has been untainted by war-making since 1945. And Japanese ties run deep into the establishments of South-East Asia and beyond.

Japan also has money to offer, if not as much as China. Among the ten-country Association of South-East Asian Nations, Japan is the biggest donor and a major source of FDI. Japan's approach to much-needed infrastructure is also fundamentally different to China's.

Chinese projects, which typically focus on countries rich in resources that China needs, are self-serving. They employ large numbers of Chinese workers rather than locals. Their accounting is opaque and

tends to overlook countries' ability to pay back debts. By contrast, the Japanese approach emphasises transparency. And, says an official, "We offer co-operation without an expectation of getting anything [direct] in return." China's lending has generated mounting resentment even in countries that are among its closest partners, such as Pakistan and Sri Lanka. Some of the Japanese arguments may also be self-serving. And yet criticism in Asia about the Japanese presence is almost never heard.

Meanwhile, his advisers suggest, Kishida Fumio, the prime minister, is convinced of the geopolitical as well as environmental benefits of using Japanese expertise to help poorer Asian countries shift, in parallel with Japan itself, to renewable energy. They expect Japan to contribute trillions of yen in private and public money to that effort. In this way, they say, Asia's coming energy transformation can be tied to Japan's—and thereby the West's.

Like America, Japan is hawkish, as it grasps the existential threat China poses. Over just a few years it has transformed its defence posture. However, unlike America but like all its neighbours, Japan is deeply reluctant to pick a fight with China. To lose would be the end of Japan as they know it, say officials; America, by contrast, could just go home. That reality, they add, helps Japan build trust with Asian countries fearful of being dragged into a great-power conflict.

But Japan also knows that, like itself, other Asian countries have no desire to be subordinated to China. Therefore, says a senior official, Japan's help for these countries' development is a mark of solidarity and a boost to their autonomy and independence. In Asia, the global West could yet spawn new members.





Energy in Indonesia

Dethroning King Coal

NEW YORK AND SINGAPORE

A major coal user signs a \$20bn deal to help it reach net-zero emissions

INDOONESIA IS COMMITTED to using our energy transition to achieve a green economy." Thus Joko Widodo, Indonesia's president, heralded on November 15th a new international accord designed to curb his country's addiction to coal. The Just Energy Transition Partnership (JETP), a deal brokered by America and Japan among seven other wealthy countries, promises Indonesia \$20bn in public and private financing from abroad to fuel its transition from dirty to clean energy. Negotiations with Vietnam, India and other countries in line for JETP deals have been bogged down, so a big success in Indonesia could be catalytic as well as momentous in itself.

The deal includes some eye-catching promises. Indonesia will aim to reach net-zero emissions of greenhouse gases from the power sector by 2050, bringing forward its target by a decade, and reach a peak in those emissions by 2030. It is increasing its target for the penetration of renewable energy to over a third of all power generation by 2030, which would mean doubling the pace of current deployment. Donors will put in \$10bn within five years using a mix of guarantees, concessional loans, grants and other financial tools. Banks that are part of the Glasgow Financial Alliance for Net Zero, a climate-focused group, aim to mobilise some \$10bn in private money.

There are several reasons to applaud this. Above all, unless the mountains of coal burned by Asia's giant economies are replaced by cleaner alternatives, the world will bake. Clever ways of paying to retire coal plants early using official money, while increasing the flow of private capital

to finance renewable energy—as the new deal envisions—are therefore essential.

The deal also builds on a smaller JETP pact agreed with South Africa a year ago. That \$8.5bn agreement has been slow to take off. Mandy Rambharos of the green group EDF, who helped launch it, says the sluggish pace is the fault of South Africa's bureaucracy and coal lobby. She reckons the Indonesia deal benefits from its focus on the power sector (South Africa's also covers electric vehicles and green hydrogen). Richard Folland of Carbon Tracker, a research firm, agrees that the new deal looks stronger, mainly because of the shorter-term commitments the Indonesians have made to reduce their emissions.

But there are snags. To begin with, it will take far more than \$20bn to tame this beast. TransitionZero, a research outfit, estimates that winding down power-pur-

chase agreements for coal early would alone cost \$37bn. The Institute for Essential Services Reform, a think-tank, reckons combining coal shutdowns with clean-energy investment would cost up to \$25bn a year through 2030. Indonesia spent just \$3bn on renewables from 2017 to 2021.

Moreover, its coal addiction is extreme. Indonesia is the biggest producer of the stuff after India and China. Its coal mines employ a quarter of a million people. In the past decade, coal's share of its power generation has gone from 49% to 61%. That has led to huge overcapacity, making it harder for renewables to compete. The country's newish fleet of 237 coal-fired plants could burn for decades if nothing is done.

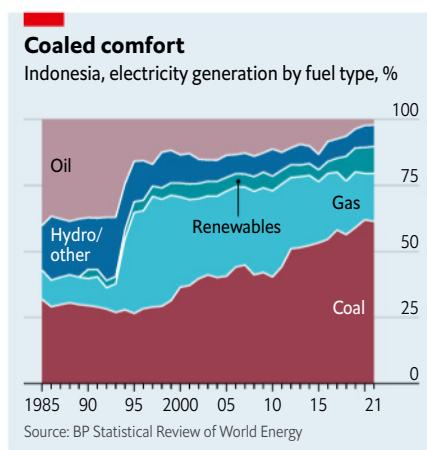
Regional concentration is another headache. The International Energy Agency, an official forecaster, reports that Indonesia's "multifaceted dependence" makes it the most vulnerable of all big coal-dependent economies. Coal makes up 35% of East Kalimantan's GDP and employs nearly 9% of its population. In China's sooty Shanxi province, the comparable figures are only 12% of GDP and 4% of the population. In Mpumalanga, the heart of South Africa's coal belt, the relevant figures are 19% of GDP and 5% of the population.

Worse yet, most Indonesian mines are controlled by a few family conglomerates with deep pockets and heavy political clout. The industry is a huge spender on political campaigns, especially in East Kalimantan. In the decade after the central government in 2001 transferred authority for approving new mines to regional governments, the number of mining permits rose 13-fold, peaking around election time.

Jokowi, as Indonesia's leader is known, won power by vowing to shake up an oligarchic system. But the coal industry seems to have found a place on his team. The manager of his re-election campaign in 2019 was Erick Thohir, whose brother is chief executive of Adaro Energy Indonesia, the country's second-largest coal miner. Several members of his cabinet have worked for or own shares in a coal giant.

Previous efforts to curb coal have flopped. The government planned to reduce coal production from 458m tonnes in 2014 to 400m tonnes by 2019. This year it will hit 663m tonnes. And Jokowi has left alone the billions in goodies coal firms enjoy each year, including exemption from sales tax and a steep discount on export tariffs, even as he cuts subsidies for petrol.

In September he at least banned new coal plants. And the JETP announcement marks a fresh start, using foreign cash to work with the coal industry not against it. Overseeing a green transition in Indonesia will be a punishing task requiring full presidential heft. But if it is forthcoming, this innovative deal could help leave much of the country's coal underground. ■





Chinese students abroad

Posters of protest

Some Chinese students abroad are taking on their government. But there are reasons such protests are rare

A FEW DAYS ago Ming, a student from mainland China, experienced what she calls a "wow moment". For an online workshop about protest art, Ming had submitted photographs of posters denouncing the Chinese Communist Party and the country's leader, Xi Jinping. The "wow" came when a fellow Chinese student posted a sympathetic comment about the submission. "You tend to assume that other Chinese students are pro-Communist Party and pro-Xi Jinping," says Ming, who is 20 and has been studying in Britain for three years (like the names of others who are quoted in this article, Ming's has been changed to conceal her identity). "It was surprising and encouraging to find people who support what you do."

During the past month other Chinese students on Western campuses have been making similar discoveries. They have been meeting in chat groups on Telegram, a messaging app, and organising protests

against their government. This has mainly involved putting up posters like the ones Ming uploaded for the workshop and posting pictures of them to Instagram, a video-and photo-sharing app. Related posters have appeared on 350 campuses in more than 30 countries, according to an administrator of Citizens Daily CN, an Instagram account to which people send sightings.

Such activism is rare among the hundreds of thousands of Chinese who study overseas. Still rarer are anti-party rallies by Chinese citizens abroad. Yet in several Western cities, mainland Chinese—mostly students—have staged small demonstra-

tions in recent weeks. More are planned, including in Toronto on November 19th and in London on December 10th.

The trigger for all this was a display of banners on a flyover spanning one of Beijing's ring roads on October 13th. Their red slogans challenged pandemic restrictions: "I don't want lockdown; I want freedom." But the hardest punch was thrown at Mr Xi: "Go on strike at school and work; remove the dictator and national traitor, Xi Jinping!" Not since the pro-democracy upheaval of 1989 had a leader been attacked so prominently on a busy road in the Chinese capital. Police swiftly removed the banners and detained a man deemed responsible. Censors deleted online references to the incident and disabled the social-media accounts of those who had posted them.

The banners' appearance must have been a shock to the police, who had tightened security in preparation for a five-yearly party congress. Right after the meeting Mr Xi was to be given new terms as party chief and military commander (these re-appointments were announced on October 23rd). Only adulation was permitted.

Among Chinese students abroad, control has proved far more difficult. Many of the posters that began to appear on Western campuses repeated the slogans that the protester in Beijing had used. They were put up by individuals, acting without di-►

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reaction from any organisation, according to several people involved. The students often wore disguises or operated at night. Even when they responded to online calls to join a demonstration, they usually did so with their faces covered.

One participant was Helen, a 33-year-old from the central province of Henan who now lives in Sydney, Australia. In May she finished a degree in accounting there. When she and a Chinese friend went out to put up posters around the city, she wore a black mask. They feared they might be attacked by Chinese nationalists, "but nothing happened—most Chinese witnesses were nice." Helen, too, is surprised by the way the poster movement has developed. "People like me who are pro-democracy were very rare," she says. "This movement helps people like me find each other."

The Telegram group that is the main forum in Britain for poster-movement activists has about 1,300 members. It is difficult to know how many are mainland Chinese. Even if most of them are, they would represent only about 1% of the Chinese students in Britain. A demonstration on October 29th in London drew about 100 people. It was a big number for a protest by mainland students abroad, but probably not enough to alarm China's leaders.

On campuses abroad, much still works in the party's favour. The only student organisations that have widespread reach among mainland Chinese at Western universities are the Chinese Students and Scholars Associations (CSSAs). These have close ties with Chinese diplomatic missions and help to propagate the party's views. Some Chinese are wary of the CSSAs, fearing they may report those with dissident tendencies to the Chinese authorities.

The party's views are also spread on WeChat, an omnipurpose app that Chinese students use for messaging and sharing news reports. Mainland students abroad usually keep the same accounts that they used in China. These are subject to more intense censorship than ones opened abroad. A Chinese student in her final year at Durham University in Britain says it is "quite normal" for first-year students from China "not to understand what's going on". All the information they receive, she says, is "from the Chinese propaganda system".

Racism is another impediment to the spread of liberal values. In a paper published in 2020, scholars at Stanford University in California and Sun Yat-sen University in China argued that Chinese stu-

dents in America are "more predisposed to favour liberal democracy than their peers in China." But anti-Chinese discrimination "significantly reduces" the belief among Chinese students in America that political reform is desirable, while increasing their support for authoritarian rule.

Chinese nationalism further complicates things. Those involved in the poster movement are as critical of the party as activists from Hong Kong, Xinjiang and Taiwan. But some of them worry about being accused of supporting those other campaigns, tainted as they are by separatism in the eyes of many mainland Chinese. Xiong, a student who attended the demonstration in London, says he felt uncomfortable about the presence of Hong Kongers there. He wondered whether they just wanted independence. Many Hong Kongers would say they just want democracy.

Chinese officials still worry. Last year a researcher at China's National Defence University lamented the involvement of

Chinese students abroad in (unspecified) "threats to state security". Such cases, he wrote in state media, had "exposed the shortcomings and weaknesses that still exist in the training of young students, especially overseas students." He urged diplomats and student groups to improve "ideological education" among them.

Such work may get easier now that China has begun to relax some of its draconian measures aimed at crushing covid-19. Chinese students abroad have chafed at the "zero-covid" policy, which has made it difficult for them to visit their families. But those involved in the poster movement insist their campaign is about far more than frustration with covid controls.

Still, several of them said they did not expect the campaign to grow. "As for other Chinese students, they will not look for information" about the protests, says a Chinese student in Utah. "They just want to stick to their comfort zone. They are too afraid to know about politics." ■

China and America

Shaky relations

Xi Jinping and Joe Biden try to improve ties between their countries

THE PROTOCOL of encounters between Chinese and American leaders is often a minefield. Advance teams have to thrash out every detail, down to which side leaders stand on when they shake hands for the media. The person pictured on the right, you see, can strike a stronger, more open pose than the one on the left, who must twist awkwardly to extend a right hand while still facing the cameras.

Past slights, perceived or deliberate, are long remembered. Chinese officials were incensed for years after Hu Jintao visited the White House as president in 2006 and the Americans announced China's national anthem as that of the "Republic of China"—Taiwan's official name—then let a protester heckle Mr Hu at a news conference. American officials were similarly upset when local authorities failed to provide a staircase for Barack Obama to leave his aeroplane on a visit to China in 2016.

Hats off, then, to the officials who choreographed what appears to have been a relatively constructive meeting between Joe Biden and his Chinese counterpart, Xi Jinping, on November 14th in Bali. From their deliberate smiles to their carefully chosen words in public, it was clear that both wanted to address widespread concerns over the dangerous downturn in their relationship. There were signs of real

progress, too, with both sides committing to resume high-level dialogue on issues including food security and economic affairs. To maintain the momentum, they agreed that Antony Blinken, America's secretary of state, would soon visit China.

But as both sides fleshed out their respective accounts of the three-hour meeting, a less harmonious picture emerged, one that reflected a hardening of attitudes on the most divisive issues between them, especially Taiwan, the self-governing island that China claims. There were also re-►



Taking sides

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vealing discrepancies, notably on Ukraine. And in meetings with other leaders at the G20 summit in Bali, Mr Xi and Mr Biden both sought support for initiatives that reflect their sharply conflicting worldviews. The meeting was a "baby step" in stabilising relations between leaders who both face strong domestic pressure not to yield ground, especially on Taiwan, said Yu Jie of the Royal Institute of International Affairs, a British think-tank. "At least the door of communication has not completely shut."

In American accounts of the meeting, Mr Biden told Mr Xi that he would continue to compete vigorously with China, but wanted to avoid conflict and to co-operate in areas such as climate change. There "need not be a new cold war," he told a news conference. America's readout also said that both leaders had expressed opposition to the "use or threat of use of nuclear weapons in Ukraine"—a clear reference to Russia. Yet Mr Biden showed no signs of yielding to Chinese demands that he moderate his restrictions on technology exports to China or provide new assurances on Taiwan. Instead, he reiterated that American policy on Taiwan was unchanged, raised objections to China's aggression towards the island and expressed concern over Chinese "non-market economic practices" and policies towards Hong Kong, Tibet and Xinjiang.

Chinese readouts likewise struck a conciliatory tone in parts, saying Mr Xi had pledged not to try to displace America or change the international order. He too called for co-operation in areas of global concern. But he spent considerable time expounding Taiwan's history, stressing that it was China's "first red line". He emphasised ideology, defending China's political system and rejecting Mr Biden's portrayal of a global contest between democracy and authoritarianism. On Ukraine, meanwhile, China's language was more nuanced, calling for peace talks while reiterating Mr Xi's appeal for the entire international community to oppose the threat or use of nuclear weapons.

Conflicting readouts are a common feature of such meetings, so not necessarily a problem. The concern is that the two sides' core differences are so great that they will struggle to make progress even in other areas once detailed discussions resume. Talks could also be disrupted if a new Republican speaker of America's House of Representatives visits Taiwan (China cut all high-level dialogue after Nancy Pelosi, the current speaker, went there in August).

As for protocol, Mr Biden took the power pose for the handshake. But he had to first walk several steps towards a stationary Mr Xi—a manoeuvre Chinese officials favour as a way to enhance their leader's stature on video. So call it a draw. For now, that's a good enough result. ■

Covid-19

Relax a little

BEIJING

Even as cases rise, the government eases covid restrictions

THE CHINESE government is loosening up. On November 11th it announced 20 tweaks to its "zero-covid" policy, which relies on mass testing and draconian restrictions to stem outbreaks. Many of those restrictions are now slightly less draconian. Travellers arriving from abroad, for example, will have to quarantine for eight days, down from ten. Airlines will no longer face a suspension of flights if they carry too many covid-infected passengers. Inside China people considered "close contacts of close contacts" of covid carriers will no longer need to quarantine. And the new guidelines forbid mass testing unless it is unclear how infections are spreading in an area. The markets welcomed the changes (see Finance & economics section).

They come at an odd time. New cases of covid-19 have risen to their highest level since the spring (see chart). After years of treating every infection as a threat, some cities now seem rather tolerant of cases. An outbreak in Beijing has not led to the city-wide closure of restaurants and gyms, as one did earlier this year. Under the old playbook, the city of Shijiazhuang would have used mass testing to curb its outbreak. But on November 14th city officials announced that restaurants, malls and public transport would no longer require proof of a recent negative covid test.

Under the new guidelines officials must not "arbitrarily" lock down cities. A big test will come in Guangzhou, a metropolis that is reporting thousands of new cases each day. Officials there have put in place harsh district-level controls, leading to riots in some areas. Migrant workers

have pulled down barriers and confronted health workers. Still, some analysts think a citywide lockdown is inevitable.

National officials insist that they are not scrapping the zero-covid policy, just trying to reduce its costs (see Chaguan). The situation is still "severe and complex", say state media. But the official tone is changing. Some cities are telling residents not to panic about the virus. Zhang Boli, a prominent practitioner of traditional Chinese medicine, said recently that covid was becoming less dangerous, as the public has acquired something like "herd immunity".

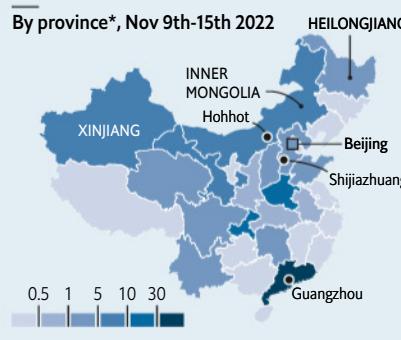
That is a dubious claim. China's success in suppressing the virus has, in effect, postponed a reckoning. Using infection estimates from Johns Hopkins University in America, fewer than one in a thousand of China's 1.4bn people have ever had covid. In addition, the Chinese public is under-vaccinated. Around a third have not received a third booster shot and many had their last jab months ago. If China were to lift all restrictions immediately, the Omicron variant would cause a wave of serious cases and deaths.

For years the public has been told to fear covid, so many people view the recent moves with trepidation, not excitement. "The virus may not be too terrible for me, but what about my grandad, my grandmother and my child?" asks Liu Jin, a resident of Shijiazhuang. She has kept her daughter out of nursery as a precaution. A popular herbal medicine used against covid (with doubtful effectiveness) has sold out in many drugstores in the city.

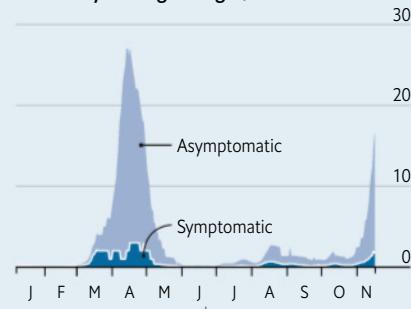
Not all of China is easing restrictions. Two days after the new guidelines were announced, a city in Heilongjiang province locked down in response to a single case. Much of Hohhot, the capital of Inner Mongolia, has been closed for weeks. For most of Xinjiang, it has been months. Local officials, told to prevent outbreaks, have long erred on the side of brutality. But the new rules encourage people to report excessive enforcement of the zero-covid policy. ■

Case study

Mainland China, new confirmed covid-19 cases, '000

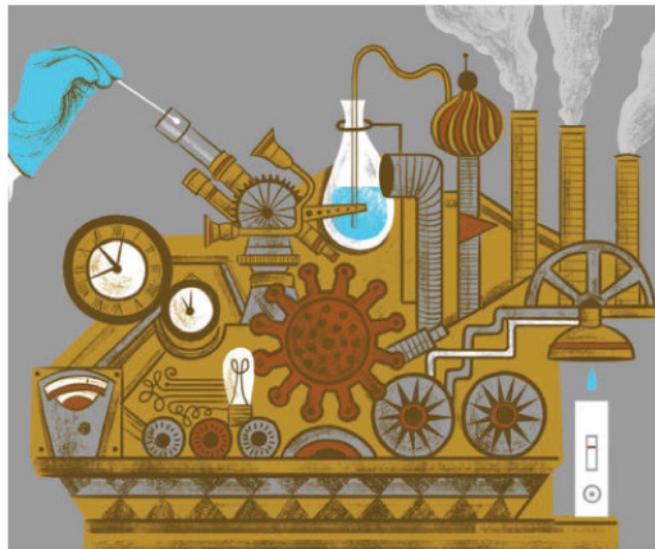


Seven-day moving average[†], 2022



Chaguan | China's steampunk covid response

How to read the country's confusing pandemic-policy changes



IN THE SCIENCE-FICTION genre known as steampunk, impressive feats of creativity are applied to an odd task: imagining a futuristic world that uses only Victorian technology. There are no silicon chips or lithium batteries in steampunk worlds. Instead, heroes in frock-coats pilot steam-powered flying machines made of canvas, wood and hissing copper pipes, or consult clockwork computers of exquisite complexity. To understand China's "zero-covid" policy, it is surprisingly helpful to think of it as a steampunk pandemic response.

The policy was born in a moment of chaos and danger for Communist Party leaders: the covid outbreak in Wuhan in early 2020. Despite the censors' best efforts, all of China saw online videos of gravely ill patients in hospital corridors and body bags in car parks. Horrified leaders knew that many places in their country had weaker hospitals than Wuhan, a city of 14m. Swiftly, officials locked China down and closed its borders. Pop-up isolation hospitals rose across the country. A growing array of smartphone apps were rolled out to trace the public's movements and covid status in real time. Restrictions were enforced by millions of pandemic guards. High and low technologies were combined to build something remarkable: a modern-day version of a 19th-century quarantine system, of the sort that Victorian doctors might have used to tackle a tuberculosis outbreak in an age before antibiotics.

From the start, China's zero-covid response followed a logic of its own. In places like America or Europe, governments struggled to "flatten the curve" of infections. Their aim was to slow the growth of each fresh covid wave to keep hospitals from being overwhelmed. China's ambition was to have no cases, and no curve.

In the first phase of the zero-covid policy, officials used travel curbs, mass testing and quarantines to keep the virus out. Given China's large population and poor health-care system, this was a rational if costly policy and prevented many deaths. It was popular, too, for life was relatively normal for many inside this China-size bubble. Propaganda chiefs highlighted the contrast with soaring casualty counts in America, Britain and other rich countries.

Early on Australia, New Zealand and Singapore also followed covid-elimination policies, but with a difference. Those countries used their zero-covid policies to buy time until they were ready to

live with the virus, with the help of effective vaccines and potent new antiviral drugs. China did not use its policy to buy time.

Instead, once the virus breached China's defences and many areas saw outbreaks, the country switched to a second phase, dubbed "dynamic zero-covid". China built nationwide systems to find each infected person and isolate them within hours, before tracing and isolating hundreds or even thousands of their close contacts. The "dynamic" bit nods to the impossibility of avoiding cases altogether. The ambition, rather, is to crush waves rapidly.

Alas, more contagious variants have tested this approach to breaking point. Facing the sack for outbreaks on their watch, officials have locked down some regions for months. Mass PCR tests have been imposed on cities with millions of residents, as often as every day. The economic and human costs are crippling. A broker, Soochow Securities, has estimated China's bill for covid testing alone at 1.7trn yuan (\$240bn) this year, or around 1.5% of GDP. That number, which one expert calls an underestimate, equates to nearly half of all China's public spending on education in 2020.

On November 11th the government announced 20 changes to make zero-covid policies more precise and less costly, and to ease international travel a bit. Local officials were warned not to impose excessive, indiscriminate policies. In the next days, several cities seemed to experiment with reduced mass testing and laxer controls on movement. Some propaganda messaging started to downplay covid's seriousness. That sparked speculation, at home and abroad, that China is about to ditch the zero-covid policy, despite denials in the *People's Daily* and other official news outlets.

Three main explanations for these changes suggest themselves. The first, call it Plan A, is that Chinese leaders are trying to make the zero-covid policy more sustainable. Plan B is that an organised exit from the policy is quietly underway, despite those official denials. Plan C is no plan at all; it posits that China has lost control and is crashing towards opening.

Plan B is least likely. An orderly exit requires long preparations. Instead China has squandered 2022. All-out vaccination campaigns should have started months ago, notably for older people. A course of three locally made shots offers reasonable protection against covid; only 68% of over-60s have had the full three. Giving everyone a fourth booster would allow for a much safer exit, but work on that has barely begun. Authorities should have stockpiled antiviral drugs and published protocols for handling an inevitable surge in infections, clarifying who should be admitted to hospital or receive antiviral treatments. As for giving China's people the most effective, foreign mRNA shots, Mr Xi showed little interest when this was suggested by Germany's chancellor, Olaf Scholz, recently. Instead, China's leader hinted at approving foreign shots for German expatriates. Finally, winter (when people huddle indoors and viruses multiply) would be a daft time to start opening.

Still clanking away

Current outbreaks are alarming, but China has managed higher case numbers before, suggesting that Plan C is not yet at hand. To spot a big shift in approach, watch what happens to mass testing, suggests Ben Cowling of the University of Hong Kong, for that is one of two pillars of the zero-covid policy, along with quarantining positive cases. That leaves Plan A. Party bosses appear to be tweaking their intricate zero-covid machine to keep it going, though new scientific tools render it obsolete and it may not survive coming virus waves. This would be an act of self-harm. Steampunk makes for pretty stories, but bad public policy. ■



The next election (already)

Series reboot

PALM BEACH, FLORIDA

Donald Trump declares that he will make America great again, again

YOU COULD tell something was afoot on the swampy, sweltering evening of November 15th in Palm Beach. The bridge to Mar-a-Lago, the opulent resort where Donald Trump resides, was thronged with fans who draped themselves, despite the humidity, in "Make America Great Again" flags—ambling, praying, tailgating. Inside the former president's palace something extraordinary was indeed happening, in front of a swankier crowd—an assemblage of suits with red baseball caps and evening dresses with pearls. Mr Trump was there to announce formally a decision that he had already hinted at over the past year: that he would be embarking on a revenge bid to take back the presidency in 2024.

Ever since he left the White House, shortly after the attempted insurrection at the Capitol on January 6th, Mr Trump has been plotting a comeback. He managed to keep a tight leash on the party throughout the midterm elections, meddling in primaries to pick candidates who most fervently endorsed the lie that Democrats had stolen the presidential election. Having restored

himself to the helm of the party, the former president was preparing to crow after November 8th when Republicans expected to sweep back to power.

That didn't happen, however. The Senate remained in Democratic control, while Republicans scraped together the barest majority in the House of Representatives. The sycophants who ran in key races in the swing states of Arizona and Pennsylvania came up with naught. The performance was so sub-par that his advisers reportedly tried counselling him to delay the announcement. But contrition and humility are not Mr Trump's thing. He simply took

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credit for the House flipping and blamed the bad results on other Republicans.

There was little new in the speech, which was largely a rehashing of the hour-long stemwinders he has been delivering at political rallies for the better part of the year. He took his usual delight in claiming that "now we are a nation in decline" and "a failing nation", recapitulating the theme of "American carnage" from his inaugural address by describing "blood-soaked streets" in cities that are "cesspools of violent crimes" and the invasion of fentanyl-toting illegal immigrants. His policy recommendations remained the same, with some updates for new culture-war battles over critical race theory and transgender children, though in addition to old proposals he now wants to execute drug-dealers. Once again, only he alone could fix it.

But the fighting words were delivered with less verve. Perhaps the weight of the midterms embarrassment pressed down, or the mountain of legal inquiries, or the prospect of a two-year-long campaign. The light behind the eyes had dimmed. "I'm a victim, I will tell you," he said in the most heartfelt portion of the speech.

Mr Trump's haste to re-enter the fray can be explained by two things. First, the Department of Justice is investigating whether or not he improperly took classified materials from the White House; the congressional January 6th committee has spent more than a year unravelling the effort to overturn the election result; prose-►

citors in Georgia are examining his exhortation to election officials to "find" enough votes for him to secure victory. Prosecuting a former president for this was already fraught and unprecedented, presenting difficult paths to trial and conviction. That he is also an active presidential candidate—with a good chance at winning his party's nomination again, and, Democrats must admit, the general election, too—makes prosecution even harder.

But, more important, his tight hold over the party is starting to be questioned, with elites searching for a way out that does not endanger their chance of maintaining power. Previous periods of questioning have usually been prompted by some whopping scandal—the revelation of the "Access Hollywood" tape in the closing days of the 2016 election, the praising of white supremacists who rallied in Charlottesville, Virginia, in 2017, or the campaign to delegitimise elections that ended in the sacking of the Capitol. In all cases, these doubts eventually subsided because Republicans reasoned that the man won them elections, and they could not work out a way to do so without him.

The midterms have called that into question. Mr Trump lost Republicans the House in his own midterm elections in 2018; he lost the presidential election in 2020; he almost single-handedly lost Republicans the Senate in the Georgia run-off elections held in 2021; and in 2022 he arguably kept the Senate in Democratic hands by boosting the campaigns of novice candidates. A morally compromised winner Republicans could live with; a morally compromised loser is less enticing.

By declaring early Mr Trump hopes to freeze out his potential rivals to lead the party, such as Ron DeSantis, the governor of Florida, and Glenn Youngkin, the governor of Virginia—both of whom the former



And 2024

president has already taken to sniping at. At his announcement speech at Mar-a-Lago, Mr Trump had the grace to refrain from reiterating his criticisms of them (he had branded one "Ron DeSanctimonious" and criticised the other for having a Chinese-sounding surname). Perhaps that is why the former president did not appear to be having much fun. He has always relished the personality-bashing aspects of politics, and much less to the dull business of making federal policy.

He also avoided repeating his claims that the presidential election was stolen, save one passing insinuation that the Chinese government had interfered to defeat him. If his advisers and speechwriters managed to keep him in check for one evening, they should not expect to do so over the two-year campaign for the presidency that now awaits them.

Away from the presidential struggle, the midterm fallout is being felt in other ways. Kevin McCarthy, the Republican congressman who expected to be easily made Speaker of the House, secured such a small majority of seats that the truculent Freedom Caucus will be able to exact big concessions by threatening his removal.

In the Senate Mitch McConnell, the party's minority leader, faced an unsuccessful challenge from Rick Scott, the senator from Florida. Although Mr Scott chaired the party committee in charge of ensuring a Senate majority, he blames Mr McConnell for the lacklustre result because he had expressed some displeasure at the Trumpian slate of candidates. Ronna McDaniel, the chairwoman of the party since 2017, is also facing down a possible insurrection of her own. Even if all are ultimately unsuccessful, they reflect the anxieties of a party that must once again decide if the pact with Mr Trump is worth it.

Time and time again, the elected Republicans have balked when presented with opportunities to distance themselves from Mr Trump. The next few months will offer another one. At the moment, other contenders, including Trump administration officials like the former vice-president Mike Pence, who just released a memoir somewhat critical of his boss, are jostling for position but are unlikely to immediately declare their candidacies. Mr DeSantis would probably wait until after the Florida legislative session ends in May. Being the only major declared candidate might give Mr Trump the opportunity to consolidate slipping support within the party. It might also leave him the one most exposed to attacks from within. "The journey ahead of us will not be easy," Mr Trump warned in his speech. "Anyone who truly seeks to take on this rigged and corrupt system will be faced with a storm of fire that only a few could understand." This sense of apocalyptic anxiety is widely shared. ■

Midterm maths

Triumph of the normies

WASHINGTON, DC

How Democrats held the Republicans to historically small midterm gains

MIDTERM
MATHS



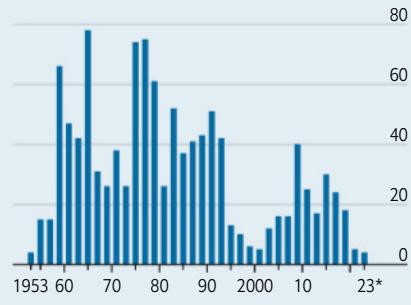
FACING OFF against an unpopular president, decades-high inflation and an ideological lurch to the left in public policy, America's Republicans have managed to score a most impressive triumph: the worst performance in midterm elections in recent history. Since 1934, the party in control of the White House has lost 28 seats on average in the House of Representatives; as *The Economist* went to press, the Republican Party looked likely to gain only eight. In the Senate, the opposition usually gains four seats; Republicans have lost one. When all the votes are tallied the party will win the House popular vote by only about 2 points, a swing of 4 since the 2020 election. That is half the swing in the popular vote for every midterm this century.

That Republicans lagged behind expectations will not have surprised this newspaper's most devoted readers. Our forecasting model for the midterms changed little between its launch date in early September and election day. And when we ran it post hoc for earlier dates, it foresaw the underperformance as early as July.

Various factors explain the party's disappointing showing. One is the Supreme Court's decision in June to overturn the right to an abortion, which had more impact than expected. Exit polls in Pennsylvania's Senate race, for instance, show a plurality of voters rated abortion as their top issue. Of those, 78% voted for John Fetterman, the Democratic candidate who ➤

The tight House

United States, House of Representatives
Size of majority (seats over 217)



Source: Clerk of the US House of Representatives

*Forecast

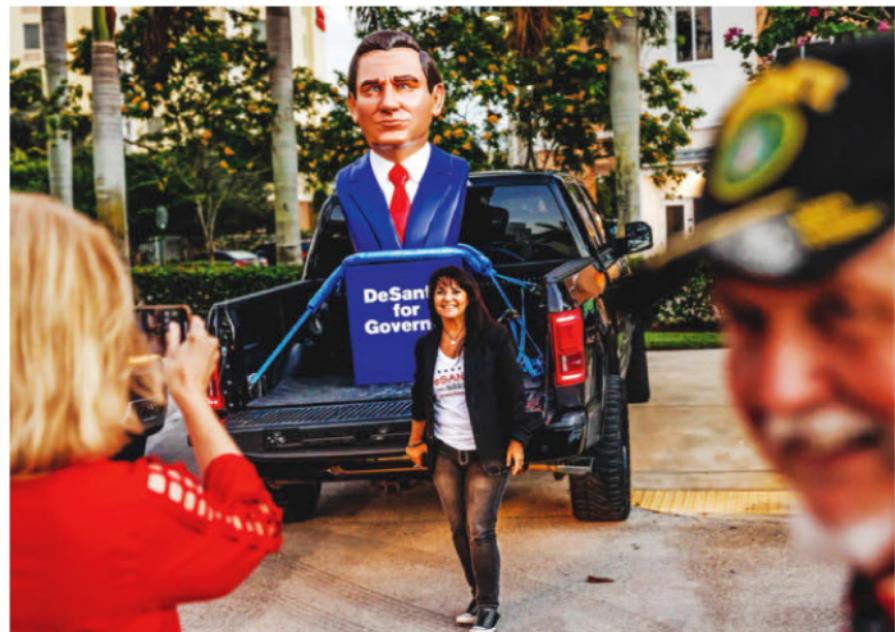
▶ carried the state by 4.5 points. The issue eclipsed inflation, crime, gun control and immigration (and those last three issues combined). That contrasts with the many polls ahead of the election which found the economy to be a much bigger deal.

Another factor is geography. According to an analysis by *The Economist* of election results in 2022 and the 2020 presidential race, Republicans' gains came disproportionately in right-leaning districts that they already held. The party faltered in would-be pickups. Compared with Donald Trump's vote-margin in the 2020 election, Republican candidates this year gained an average of 7.5 percentage points in competitive seats that went for Mr Trump last time, but only 4 points in competitive seats won by Mr Biden. That has produced a map where Republicans are hurt by geography, countering their usual structural advantage in the lower chamber. Whereas 213 House seats gave Mr Biden a greater vote-margin than his performance in the national popular vote in 2020—a statistic implying the party would lose the majority of seats if they won the popular vote—Democrats are on track to beat their margin in the popular vote in 220 seats this year. In other words, if the election had been tied, we would have expected them to win.

Finally, there are factors specific to the candidates themselves. Take the results in Colorado's 3rd district. There Lauren Boebert, who was both endorsed by Mr Trump and a devotee of his election conspiracies, has won re-election by a razor-thin margin of just 0.3 percentage points. That is despite the fact her seat went for Mr Trump by over eight points in 2020. But in the state's more heavily rural 4th district, the incumbent Republican Ken Buck, who was neither endorsed by Mr Trump nor embraced his election-denialism, won his seat with nearly a six-point swing.

A similar pattern emerged nationwide. This paper's modelling of results finds Republican candidates who were endorsed by Mr Trump in their primary did about 5 percentage points worse in their district than they would have if they had not received the endorsement. Election deniers suffered an additional one-point decrease in their margin, after controlling for factors such as the voting history of the seat and whether an incumbent was running. These findings suggest if every Republican candidate had refused Mr Trump's endorsement and affirmed the results of the election, the party would have won an additional five seats in the House this year.

Of course, elections take place in reality, not simulations of it (at least we think so). On November 15th, Mr Trump announced that he will run for president again in 2024. This year's midterm elections show how much better off the party would selecting a different nominee. ■



Republicans

Do do run Ron

NAPLES, FLORIDA

Ron DeSantis may be Republicans' best chance to prevent Donald Trump's return. What is he in favour of?

AND ON the eighth day, God created Ron DeSantis. At least according to his campaign, that is. A few days before being re-elected as Florida's governor on November 8th by a hefty 19-point margin, Mr DeSantis's wife, Casey, tweeted out a campaign advertisement, in which Mr DeSantis appears as the "fighter" whom God chose to protect his "planned paradise".

This was borderline blasphemous, but the timing was good. In light of his outperformance in Florida while Republicans elsewhere founded in the midterm elections, some donors now view Mr DeSantis as a potential saviour for the Republican Party, as it tries to move beyond Donald Trump. The 2024 election is still years away, and Mr DeSantis has yet to announce his candidacy, but support for him is growing. He managed to raise more than \$200m for his campaign for governor, a national record. According to a poll by YouGov for *The Economist*, 46% of Republicans and Republican-leaning independents prefer Mr DeSantis as the 2024 nominee, compared with 40% who prefer Mr Trump.

At just 44, Mr DeSantis represents a new generation of populist conservatism, mirroring Mr Trump but without all the broken glass. Some like to compare him to another Ronald (Reagan) for his conservative stances on social issues, but in his public appearances and recent victory speech, Mr

DeSantis is trying to portray himself as a Republican version of John F. Kennedy, with a glamorous wife and young family. The presidential comparisons are still premature. There are many questions about what Mr DeSantis stands for rather than against. But he is worth watching, because of the attention he is receiving and what he shows about how the Republican Party may eventually look after Mr Trump, whenever that day comes.

One way to think of Mr DeSantis is as a halfway house for Republicans who want to escape Trumpworld but see that the boundaries of the old territory have moved. Mr DeSantis has mimicked Mr Trump's mannerisms and presented himself as the enemy of the left's "woke" agenda. Like his fellow Florida resident, he attacks the media and revels in the subsequent media coverage, as happened when he chartered a plane to send migrants from San Antonio to Martha's Vineyard in Massachusetts. He has not publicly taken Mr Trump's position that the 2020 election was stolen, but he has alluded to improprieties. This year, one of his legislative priorities was to set up a special police force to investigate election fraud.

Despite their similarities, Mr DeSantis is a "more committed conservative than Trump", says Aubrey Jewett of the University of Central Florida. After graduating ▶

from Yale and Harvard Law School, Mr DeSantis served in the armed forces, deploying to Iraq as a legal adviser with the Navy. In 2011 he self-published a book called "Dreams from Our Founding Fathers", a play on Barack Obama's memoir. In it, he combines his reverence for the "Federalist Papers" and constitution with his disdain for big government and Mr Obama. ("Some have claimed Obama to have been a Muslim as a child, but until he joined Reverend Jeremiah Wright's Trinity United Church... Obama showed little regard for any religion," Mr DeSantis wrote sneeringly.)

His animosity towards Mr Obama's agenda, which he described as "the type of political programme that the constitution was designed to prevent", continued in Congress. Mr DeSantis spent five years there, under Mr Obama as an opponent of the Affordable Care Act and founding member of the government-shrinking Freedom Caucus and then, when Mr Trump was elected, opposing Robert Mueller's investigation into Russian collusion. On foreign policy Mr DeSantis largely defined his positions in opposition to Mr Obama's. He is fiercely pro-Israel and opposed military intervention in Syria, a nuclear deal with Iran and cultivating relations with Cuba (a winning position with Cuban-American voters in Florida).

He ran for governor in 2018 as more of a moderate. Other than being pro-environment and raising teachers' pay, he was light on state policy. At one point he cancelled a meeting with the *Tampa Bay Times* to give him more time to flesh out his governing platform. With the benefit of Mr Trump's endorsement he unexpectedly beat the favoured Republican candidate. Mr DeSantis won the general election by 0.4%, or about 32,000 votes.

Mr DeSantis's libertarian worldview helped him to surf two waves. First, he was early to lift lockdown restrictions during covid-19, correctly anticipating popular anger and frustration from people who wanted to see Florida reopen. Second, he anticipated scepticism of left-liberal overreach, including parents' unease about school curriculums and issues of gender identity and sexuality. (The latter led to a very public row with Disney over the so-called "Don't Say Gay" law that restricts discussions of sex and sexuality in public-school classrooms.) This year he endorsed dozens of candidates for local school boards, becoming the first sitting governor to get involved in such a way.

His record in Florida combines an attention to voters' concerns, such as the environment, and a desire to be seen as a strongman. "He's done more on climate resiliency and the Everglades than any governor in history," says Steve Schale, a Democratic strategist in Tallahassee. He has been happy to increase government spending,

taking advantage of federal largesse (which he opposed) and using it to increase the salaries of teachers and police officers. But unlike some other states with Republican governors, Florida has not expanded Medicaid, another policy subsidised by the federal government. He has also revealed himself to be a fierce partisan willing to break with convention. Earlier this year he became the first governor in Florida's history to propose his own maps during redistricting, which eliminated two black districts. The legislature pushed back at first but ultimately gave Mr DeSantis his way.

Bob McClure of the James Madison Institute, a conservative think-tank in Tallahassee, sees Mr DeSantis as deciding to promote "a robust federalism". But besides being in favour of "freedom" and Florida staying open for business, it is unclear what his economic policies would be during more normal times. "For people who want answers to big questions on DeSantis, there is still a lot we do not know," says Marc Sumerlin of Evenflow Macro, an economic consulting firm. Even Mr DeSantis's donors say they do not know what he is in favour of, though they understand well enough what he is against.

I met him on a Monday

While he is pro-business, Mr DeSantis is not as reliably cosy with big companies as Republicans of yore. His spat with Disney helped attract the attention of national donors and voters. (Some expect the legislature to find a way to smooth things over during the legislative session next year, so that Disney is not actually stripped of its "special privileges" in Florida.) According to one donor, one way to interpret the large cheques that Mr DeSantis has received from billionaire business folk and financiers is that they are trying to keep Mr DeSantis onside, because they are "panicked" about whether he will stay friendly to business or turn populist.

With a Republican supermajority in the state legislature, Mr DeSantis is likely to use the next legislative session, which begins in January, to score more victories on divisive social issues ahead of announcing his run for president. Such an announcement would probably come next May, after the legislative session concludes.

Right now, Mr DeSantis has momentum on his side. But his political career also has points of friction. He can be aloof and socially unaware. He "mansplains" to donors without asking questions. His success in small-talk primaries like Iowa and New Hampshire is far from guaranteed. And of course there is the problem of the man who made him. Mr DeSantis may be developing an expertise in belittling his political opponents, but it will be another thing when Mr Trump, who perfected that playbook, unleashes it on him. ■

Abortion laws

No but yes

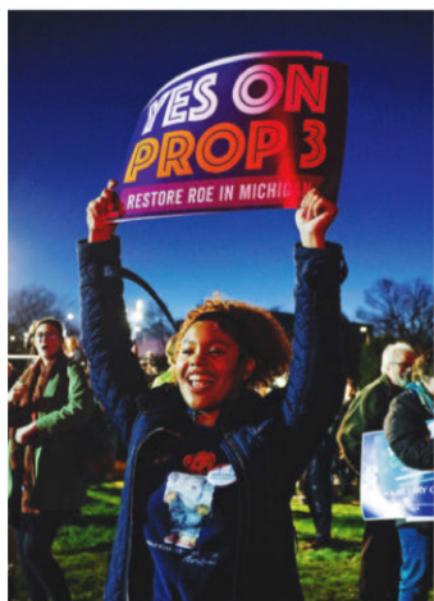
WASHINGTON, DC

What ballot initiatives reveal about American attitudes to abortion

S PARE A THOUGHT for the voters of Michigan, who on top of all the other choices on election day navigated three ballot initiatives in their booths. The most controversial sought to write a "new individual right to reproductive freedom" into the state's constitution. The long, woolly text left plenty of room for fearmongering. Vote yes and Michigan becomes the country's abortion capital and children could be sterilised without parental consent, claimed opponents. Vote no and judges will decide on abortion and providers could go to prison, claimed proponents.

In the end, 57% voted in favour of a constitutional right to abortion. This makes Michigan one of three states—along with California and Vermont, which voted similarly—to explicitly protect reproductive rights in its constitution. This is a first. Some state supreme courts have previously interpreted their laws as including such a protection, "but adding it explicitly is a big deal", says Elizabeth Nash of the Guttmacher Institute, a pro-choice think-tank.

The backdrop to this is the US Supreme Court's decision in June to overturn *Roe v Wade*. That removed the constitutional right to terminate a pregnancy and left states scrambling with their newfound freedom to either protect or restrict abortion access. In response, five states used these midterms to ask their citizens direct-►



Pros and constitutions

ly. All five voted either in favour of greater protections or against further restrictions.

Montanans rejected the most confusing bill of all, a “born-alive infant” law which would have required medics to try to save the life of any baby born alive, regardless of viability. Kentuckians were asked whether to amend their constitution by adding a clause that explicitly said abortion was not protected. Remarkably, in a state with some of the most conservative views on abortion, 52% rejected this. Only two years ago such an amendment was passed in Louisiana, where views on abortion are similar. The main difference seems to be that *Roe* was overturned in the meantime. Six weeks after that ruling voters in Kansas rejected a similar clause, in what now no longer looks like a fluke.

The outcomes of the latest votes point to three bigger trends. First, Republican voters are more likely than their representatives to support some access to abortion. Second, that this support is not enough to drive them away from their party. And third, that in the post-*Roe* world, ballot initiatives may well be a tool that primarily benefits those pushing for abortion rights.

Most Americans favour some access to abortion and few want absolute bans. Six in ten believe abortion should be legal in most cases; only 8% believe it should always be illegal, according to PRRI’s American Values Survey. Over the past two years, the share of Republicans who believe abortion should be illegal in all circumstances has fallen by more than half, from 23% in 2020 to just 11% in 2022. The sharpest drop came just after *Roe* was overturned.

This is not to say America has suddenly become pro-choice. Four in ten Americans believe abortion is morally wrong, according to Gallup, a pollster. But the votes suggested that, for many, the outright bans that in some states followed the overturning of *Roe* were a bridge too far. Kentucky, where due to a “trigger law” abortion became illegal overnight in almost all cases, including rape and incest, is a case in point. “The old *Roe*-world was likely more permissive than what the typical Kentuckian would like,” says Stephen Voss of the University of Kentucky. “But today the circumstances where abortions are allowed are likely stricter than what the typical Kentuckian would like.”

States—or citizens—wishing instead to protect access may feel emboldened by Michigan’s outcome. The vast majority of the 48 abortion ballot initiatives since 1970 have been put forward by the “pro-life” side. This could now change; “pro-choice” campaigners are actively plotting where to focus their attention next. Missouri, Ohio and Oklahoma are all potential candidates.

The immediate effects of these five referendums are limited, particularly in California and Vermont, where they are mostly

an insurance policy. In Michigan, though, the new protection will make it much easier to throw out a contentious 1931 trigger law currently held up in court (the one that campaigners warned could land providers in prison). And in Kentucky, the result leaves the door open for legal challenges to regain some access to abortion.

Anti-abortion activists will be scratching their heads. Most people do not think the decision about an abortion is between a woman, her doctor and a local politician, says Laura Lindberg of Rutgers University.

“That framing failed.” States that wish to further curtail access may conclude it is better not to ask people at all, and just implement bans. Those with existing bans may try to tighten them further, potentially even going after people who travel out of state for an abortion or order abortion pills online. Most state legislatures with ambitions to roll out more extensive bans have not even been in session since the *Dobbs* decision, notes Mary Ziegler of the University of California, Davis: “We are just at the beginning of this thing.” ■

Gay rodeo

Bucking the trend

EL RENO, OKLAHOMA

A celebration of rugged camp in the south-west

DUBBED “THE PUPPY” by the eldest of his three “husbands” Ryan Knop looks anything but timid wrestling a 200 kilo steer to the dirt at the World Gay Rodeo Finals in El Reno, Oklahoma. After leaving his Mormon hometown, Mr Knop met the trio—who six months later invited him to join their relationship—at a Santa Fe contest. Gay rodeo became a haven for the foursome. “You may be burly or you may be pretty but here we wear cowboy on our hearts,” he says.

Off a dusty two-lane road and nestled between fields of winter wheat, the arena fills up with men in flannel shirts and fishnet stockings. A woman with a tight drawl plates up pulled-pork baked potatoes and jalapeño brisket nachos doused in cheese the colour of apricots. A Budweiser banner advertises cold beer with the tagline “Thanks for coming out”. The rodeo kicks off with a prayer and the national anthem. Most events are classic—riders cling to bucking bulls and ropers on horseback snare calves. But some are spicier. A team of two dash towards a tethered goat. One grabs its legs while the other tries to yank a pair of tighty whities onto its hind quarters.

Since the competition’s inception in 1976 (this counter-culture is well into middle age) gay rodeo contestants have gathered from rural regions across America and Canada. A young trans man, whose New Mexico youth rodeo days were stunted when his horse’s ankle was shattered by angry teenagers, revels in the glitz and glamour of it all. Others are more reserved. One of the few contestants good enough to compete in professional rodeo—a rugged man as big as a linebacker—goes by a pseudonym for fear of being blackballed. “Being gay is the furthest thing from my DNA,” he asserts. “It is a piece of who I am, but the western lifestyle is my identity.”

Some take a hit for participating. Pickup man Rick McKay, whose job it is to grab contestants off bucking beasts before they get hurt, is ridiculed when people at straight contests find out that he works gay rodeo. “It is a struggle every time,” he mutters. “But I’d like to know how the steer knows if he’s got a gay man or a straight man on his back.”

Spectators cheer as the many-husbanded Mr Knop gets his steer to the ground in the chute-dogging finals. Cowgirls in scuffed-up jeans reminisce about competing bareback as youngsters. Some unconventional family reunions occur. Wesley Givens, a theatrically mustachioed contestant from Little Rock (and a plaintiff in Arkansas’ marriage-equality case), donates sperm to cowgirl couples to start families. Three of his biological children are at this year’s rodeo. To them he is “Uncle Wes”.



Pink carnations and a pickup truck

Lexington | Anger management

Glenn Youngkin, Virginia's governor, has a different idea of how Republicans should compete



IN THE ANXIOUS RACE to develop a Trumpism without Trump, the Republican governor of Virginia, Glenn Youngkin, is at work on a formula that is peculiar, even radical. He wants not just to substitute for the man but to replace the key binding ingredient—anger—with affability. Ron DeSantis, the governor of Florida, has mastered the Trumpian scowl, which the likes of Ted Cruz, a senator from Texas, are doubtless still practising in the bathroom mirror. But the gangly, even goofy Mr Youngkin seems incapable of being less than ebullient, even at eight o'clock on a recent morning as he bundled his six-foot-seven-inch frame into the back seat of a Chevrolet Suburban, and, discovering Lexington, began joyfully recounting tales of the six years he lived in London.

Just a year has passed since Mr Youngkin, a former private-equity executive, upended conventional wisdom by winning the governorship of a state that went for Joe Biden in 2020 by ten points. He won by keeping enough distance from Donald Trump to avoid alienating suburbanites, while criticising lockdowns and lefty school curriculums that worried both them and more conservative rural voters. “We brought together Forever Trumpers and Never Trumpers,” he says proudly, and accurately. “Brought together the Tea Party folks and libertarians, tons and tons of independent voters...and we had Democrats walk across the aisle.”

Ever yearning for the next Ronald Reagan, some Republicans thought they caught glimpses of his sunniness and uplifting politics in Mr Youngkin’s campaign. A college basketball star who was not good enough to turn pro but too tall to fulfil his dream of being an astronaut, Mr Youngkin went to Harvard Business School and spent 25 years at the Carlyle Group, eventually becoming its co-ceo and making a fortune. Now 55, he was much in demand from Republican candidates this autumn, and appeared at rallies from Maine to Nevada. Mr Trump has taken note of Mr Youngkin’s rise and, with typically blunt force, tried to squash him. (“Young Kin”, the former president mused recently on his social-media site, Truth Social. “Sounds Chinese, doesn’t it?”)

Party elites long for a hero to free them from Mr Trump. On matters of policy, Mr DeSantis and Mr Youngkin reach similar conclusions: that progressive ideology is tainting public education; that, in Mr Youngkin’s words, Democrats pursued “the systematic

dismantling of the culture of law enforcement”; that covid jabs ought not to be mandated and that “every state is a border state now” because of fentanyl trafficking.

But Mr DeSantis is a fiery culture warrior and thus the more obviously Trumpy option. A pessimist—or realist—might argue that his pugilism better suits a conservative movement whose intellectual centre has shifted from journals of ideas to Fox News. Indeed, rough calculations show that over the past year Mr DeSantis has been mentioned on Fox at triple the rate of Mr Youngkin.

But though Mr DeSantis easily won re-election in Florida, the midterm elections suggested Americans nationally are weary not just of Mr Trump but of political belligerence. The unavoidable subtext of Mr DeSantis’s declarations is that his opponents must be wicked, stupid or sick. For Mr Youngkin, the length of an enemies list is not a point of pride. Whereas Mr DeSantis is mirthless and even misanthropic, Mr Youngkin relishes working a diner.

The son of a nurse and a father who was often out of work, Mr Youngkin as a teenager washed dishes at a Virginia Beach restaurant to help pay bills. On the day Lexington spent with him, just before the midterms, he stopped at the Dixie Restaurant, a diner in Petersburg. He moved easily from shaking hands with patrons in the front to joking with the staff in the dishpit and kitchen, as his unsmiling security detail eyed the long knives and open flames.

Mr Trump’s divisiveness made him a minoritarian president. More successful presidents have managed to mean more things to more voters, without appearing to be frauds. You see signs of that gift in Mr Youngkin. Conservatives were overjoyed with his email tipline for reporting violations of his ban on teaching concepts such as critical race theory. Moderates may take heart from the 10% pay increase he gave to teachers, from his efforts to revive blighted areas and even from Virginia’s new history curriculums, which do not present a whitewashed version of America. Mr Youngkin says teachers should tell the tale in full. “We have to,” he says, with an arm-touch for emphasis, as his car speeds between events. “There have been some just horrifically awful periods in the nation’s history and, by the way, Virginia’s history.”

His dark material

Yet among the candidates Mr Youngkin stumped for this autumn were extremists such as Kari Lake, who ran for governor of Arizona pledging to avenge Mr Trump’s “stolen” election. Asked how he could countenance such a stance, Mr Youngkin hems and haws. “There’s a lot of people across the country who feel a real lack of faith in the election process,” he says. “And by the way it’s not just Republicans. We saw it in 2016, some Democrats said that the election had been stolen.” They did, but it is also true, and surely more significant, that they did not storm the Capitol and try to make denying reality central to their agenda.

Mr Youngkin ended his day with an evening rally for Yesli Vega, a doctrinaire conservative fighting (unsuccessfully, it proved) to unseat a Democratic congresswoman in northern Virginia. He traded his suit jacket for a red sleeveless vest, a signature look aped by his staff. His message changed a bit, too, the affability giving way to something harder. “The spirit of Virginia is alive and well,” he told the crowd, assembled on a dark field. “And, of course, what we’ve seen is the left-liberal Democrats are trying to squeeze it out. That’s what they’re trying to do across the whole country.” It will be a stretch for any candidate who hopes to be a broadly unifying figure to also appeal to Mr Trump’s splenetic loyalists. But at least, as he recounted “left-liberal” sins, he was smiling. ■



Argentina

Another pot of white gold

BUENOS AIRES

Can lithium exports help sort out Argentina's economic woes?

PICTURE A COUNTRY in South America that is pro-business, is attractive to foreign capital and offers political stability for long-term investment. Most people would think of Chile. But when it comes to mining lithium, a light, salt-like metal used for batteries in electric vehicles and mobile phones, the country in question is its dysfunctional neighbour, Argentina. Better known for triple-digit inflation and railing against the IMF, Argentine officials have gone on a charm offensive from Washington to London with a boosterish message: the mining sector is open for business.

The transition to green energy has made lithium one of the world's most sought-after metals. The price of lithium

carbonate (LCE), the raw material used in lithium-ion batteries, soared this year from a five-year average of around \$14,000 per tonne to over \$80,000. According to Benchmark Mineral Intelligence, a consultancy, as sales of electric vehicles grow, demand for LCE is set to increase to 2.4m tonnes in 2030, compared with around 600,000 tonnes this year. Although lithium is plentiful, supply is struggling to keep up. Worldwide ten working mines

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can produce battery-grade lithium, says Daisy Jennings-Gray of Benchmark. A global scramble to find cheap deposits and to build mines to meet the increase in demand has started. Argentina could benefit.

Almost two-thirds of the world's lithium can be found in the Andean plains that straddle Argentina, Chile and Bolivia—collectively known as the "lithium triangle". Bolivia has the world's greatest resources, but it has failed to get production going. The state owns all lithium deposits and companies can exploit it only if they strike a deal with the public firm, Yacimientos de Litio Bolivianos. Political volatility and a lack of technical know-how have not helped. In 2016 the deputy interior minister was bludgeoned to death by miners.

Chile used to be the world's lithium powerhouse. In 2017 it was overtaken by Australia, which became the top supplier globally. Chile now accounts for 26% of total supply. There, too, lithium deposits are owned by the state, which doles out contracts to private companies. Two firms, Albemarle and SQM, dominate the industry. In 2016 and 2018 the government renegotiated their contracts and introduced new rules that force companies to sell up to 25% of the metal at below-market prices at home in order to encourage local industry. In addition, royalties were linked to global prices, which can be volatile. Mining companies also agreed to give a portion of their earnings to development projects in the communities where they operate, in order to dampen protests by local activists and potentially create jobs. Although this is reasonable, it may have caused some investors to look across the Andes.

By contrast lithium is not considered a strategic resource in Argentina. The state plays a small role. Instead, the constitution grants the country's 23 provinces the right to administer minerals on their land and grant concessions to firms. A law from 1993 gives tax breaks for mining firms and establishes that their ventures cannot face new taxes for a period of 30 years from the date they present a feasibility study to the federal government. Royalties are capped at 3%, compared with 7-40% in Chile.

All this has attracted capital. Some 40 lithium projects are currently in different stages of exploration, more than in any other country. JPMorgan Chase, a bank, expects Argentina to overtake Chile as the world's second-largest producer by 2027. By 2030 Argentina could supply 16% of the world's lithium, up from 6% in 2021 (see chart on next page). Rio Tinto, an Anglo-Australian mining giant, acquired a lithium mine in March for \$825m. POSCO, a South Korean firm, is investing \$4bn in a lithium project.

Chinese firms are especially keen. In July Ganfeng Lithium, a Chinese mega-pro-

ducer, announced plans to buy a plant for almost \$1bn. Argentina's macroeconomic mismanagement—the country has around a dozen different exchange rates and inflation is nearing 100%—puts many Western companies off. For Chinese companies, however, "the point is less financial and more strategic," says Carlos Freytes of Fundar, an Argentine think-tank. "It's about a geopolitical ambition. They want to guarantee supply." Of the nine projects closest to production in Argentina, six involve Chinese companies, according to data compiled by Fundar.

Argentina's mining laws were passed during a brief window of free-market reforms. They are difficult to change because the constitution devolves power to the provinces, which control the Senate. The governors of the three north-western provinces that host Argentina's lithium—Salta, Catamarca, and Jujuy—are not afraid to push back against the government. When the foreign ministry said in October that it was in talks with Bolivia and Chile to create a "lithium OPEC" to set regional prices for the metal, the governors complained and the proposal stalled. They hope that foreign investment can help their provinces grow. The World Bank estimates that, in a best-case scenario, lithium production

and processing could increase the GDP and fiscal revenue of those provinces by 10%.

Yet problems remain. Conflicts with indigenous communities who live on the land where lithium is extracted could grow. These have set back projects in Bolivia and Chile, and have shut down other mines in Argentina. A study from 2019 in Chile found that lithium mining worsened droughts in surrounding areas, which in turn angered locals. Argentina's low royalty rates could mean that most of the profits end up in foreign pockets rather than state coffers, which might provoke a political backlash. "This is plunder, plain and simple," says Enrique Viale, an environmental lawyer in Buenos Aires. On November 10th a law was discussed in the lower house of

Congress that, if passed, could impose stricter environmental checks on wetlands, including the land on which lithium mines are built. The law was proposed a decade ago but founded because of opposition by provinces and mining lobbies.

And Argentina's politicians could dampen investors' enthusiasm. The state oil company has recently branched out into lithium; the federal government could try to give it privileged access over private companies. Stricter export controls could halt production. "There is no single sector that can rescue Argentina from its morass," points out Benjamin Gedan of the Wilson Centre, a think-tank. But in an economically dysfunctional country lithium remains, for now, a rare point of hope. ■

El Salvador

Deep down in the crypto-dip

The value of the country's bitcoin has fallen by two-thirds

WILL THE fall in the price of bitcoin following the collapse of FTX, a cryptocurrency exchange, cause El Salvador's bitcoin-backing president, Nayib Bukele, to reconsider his gamble with the country's finances? So far Mr Bukele, who made bitcoin legal tender in September 2021, appears defiant. On November 17th he tweeted that his government will buy one bitcoin a day, after not having bought any in almost six months (see chart). He has also brushed off any criticism of his decision to buy it using public money. "Stop drinking the elites' Kool-Aid and take a look at the facts," he wrote two months ago.

Sadly the facts are dire, at least for El Salvador's 6.5m people. The country has lost \$65m, or two-thirds, of the \$105m the social-media obsessed leader has shelled out on the cryptocurrency. (This assumes Mr Bukele can be taken at his word; purchases are tracked using his tweets.) Mr Bukele has claimed these are not really losses, since he has not sold any of the coins—apeing the bitcoin bros who cry that one bitcoin is worth one bitcoin whenever it slumps in price. He also claims that the fall is no big deal as it represents 0.2% of GDP. He reckons that bitcoin boosts tourism.

Even so, the government is cash-strapped. And the losses from Mr Bukele's bitcoin binge have cost the country in other ways. Analysts and creditors fret that El Salvador will be unable to service its debt, including around \$667m due in January. In order to reassure markets that it would avoid a default, the government bought back \$565m of its sovereign bonds in September. But that month

Fitch, a ratings agency, downgraded the country. El Salvador may turn to China to buy its foreign debt, if a potential free-trade deal is struck.

Salvadoreans have not caught the bitcoin bug. Less than a quarter of those surveyed in September had paid for something using it. Some of those may have done so only to use up the \$30 of bitcoin the government gave to people who downloaded a digital wallet. Fully 77% thought the government should stop buying it. This makes crypto Mr Bukele's weakness. The self-proclaimed "world's coolest dictator" has an approval rating of 86%, mostly because of a crackdown on crime. Since March over 50,000 suspected gang members have been locked up. But having one unpopular policy may be a cost he is willing to absorb, like the bitcoin losses. For now, at least.

Intermittently buying the dip

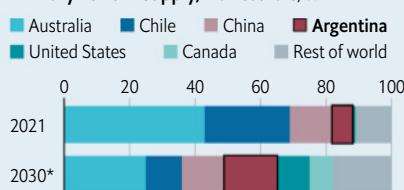
El Salvador, bitcoin



Sources: Refinitiv Datastream; Nayib Bukele, Twitter

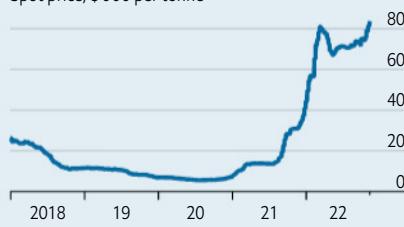
Powering up

Primary lithium supply, market share, %

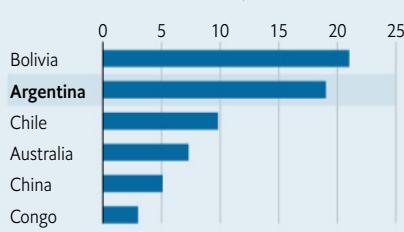


Lithium carbonate, battery grade

Spot price, \$'000 per tonne



Identified lithium resources, Jan 2022, tonnes, m





Algeria

A rotten regime saved, for now, by gas

ALGIERS AND TIZI-OUZOU

When energy prices fall again, the government is sure to wobble

TWO WORDS in the local lexicon encapsulate Algeria's malaise: *hogra* and *hagara*. The first encompasses a range of gloomy feelings that affect Algerians: a sense of humiliation and oppression, a denial of dignity. This leads to the second increasingly common word, literally meaning "those who burn". It is applied to the growing number of Algerians wanting to emigrate illegally to get a better life abroad, involving the burning of identity papers. So far this year some 13,000 have reached Spain in rickety boats.

A recent article in *Le Monde*, a French newspaper, headed "Suitcase or prison", explained why leading human-rights campaigners feel impelled to emigrate. "I had to flee to stay alive," said Aïssa Rahmoune, a lawyer. Algerians with enough money or connections to leave legally often head for Europe, America or the Gulf. Of those who get visas to study abroad, "90% don't come back home," says a seasoned Western business visitor. (Like all foreigners and resident Algerians interviewed for this article, he requested anonymity, a telling reflection on the regime.)

For the moment, three factors stifle the

disgruntlement. One is the high price of gas and oil, which account for 90% of foreign-currency earnings. Europe is thirsting especially for Algeria's abundant gas. The second is the social contract whereby the basics of life—staple foods, electricity, cooking oil, petrol and housing—are massively subsidised. This puts Algeria a shade ahead of its north African peers in the UN's human-development index. "No one goes hungry," concedes a critic of the regime.

The third is the lurking memory of dreadful bouts of nationwide violence, including the so-called dark decade. This began in 1992, when the military regime cancelled the second round of an election that Islamists were poised to win, prompting a civil war in which Algerians killed perhaps 150,000-200,000 of their compatriots.

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Though many people loathe the stagnation under the current set-up, and resent and fear the military-cum-security apparatus behind it, many prefer it to the chaos and bloodshed they think might ensue if the lid of repression were lifted.

Aside from gas and oil, the economy is dismal. The biggest company is Sonatrach, a badly run behemoth that dominates the energy sector. Economic growth has often lagged behind the soaring population, now around 45m. And the rising domestic consumption of gas limits the scope for exporting more of it. Unemployment is around 15%, and far higher for the young.

A law passed in 2019 was supposed to open investment to foreigners, dropping a previous requirement that Algerian firms, generally state-run, must own more than half of any company. But Western banks and the IMF, regarded with suspicion in official Algerian circles, remain wary of entanglement. Bureaucratic obstacles, gross incompetence and a hostile attitude to foreign capital, especially French and American, still deter foreigners, though Occidental, an American oil giant, France's Total-Energies and Italy's Eni signed a production-sharing deal with Sonatrach in July.

Most foreign business people remain flummoxed by the new laws and their small print. It is still unclear how or whether profits may be repatriated. Other constant complaints are the seemingly random imposition of tariffs on imports ("They slap them on whenever they like," says a Western investor); the reluctance to let in imports of any item that is also made ➤

► in Algeria, however poor the local product's quality; the non-convertibility of the Algerian dinar, which is discounted by a third on the widely used black market; and the routine need to bribe state officials to clinch a deal. Businessmen who fall foul of the authorities or of well-connected rivals often get accused of corruption or tax avoidance—and end up in jail.

The requirement for ministers or senior officials to sign off on virtually any deal, plus the lethargy and incompetence of officialdom, make business extraordinarily tricky. One foreign resident reckons that 40% of requests to state bodies are never answered. Middle-ranking people "are petrified of stepping out of line", says another Westerner. "You have to take it all the way to the top, otherwise things just languish for ever. Laws can change, but again and again things just never happen."

This stultifying business environment reflects the nature of Algeria's politics. In early 2019 peaceful street protests erupted after the ailing Abdelaziz Bouteflika, who had been president for 20 years, said he would run for a fifth term. Known as the *Hirak*, or Movement, the protests, which sometimes drew crowds of a million onto the streets, forced Bouteflika to step down, along with his inner circle of crooks and security men. Scores of bigwigs, including Bouteflika's brother, past heads of the security service, two former prime ministers and a string of ministers and generals, were put in jail. Most are still there.

But it soon became clear that the new regime of Abdelmadjid Tebboune, a dreary former long-serving minister under Bouteflika, was much the same as its predecessor. It has been saved only by the onset of covid-19 in 2020, which caused the *Hirak* to fizzle out, and by the rocketing price of gas and oil after Russia invaded Ukraine.

Could a genuinely reforming, liberalising figure à la Gorbachev emerge from within "Le Pouvoir" ("The Power"), as the murky circle of figures still pulling the strings is known? Emmanuel Macron, France's president, offended Mr Tebboune a year ago by aptly describing him as "trapped" in a military-political system. Many insiders think he is little more than a figurehead. Afflicted by covid, in 2020 he disappeared from view for more than a month in Germany. Diplomats and businessmen often sigh that "nobody really knows who's in charge."

Repression has again increased. Human Rights Watch counts more than 280 political prisoners; a local group puts the figure at 320. A leading rights body, the Youth Action Rally, was dissolved a year ago. Foreign NGOs are virtually banned. Independent political figures and journalists are harassed and jailed, often falsely accused of conniving with one of two groups, Rachad and the Movement for the Autono-

my of Kabylia (the main Berber region). The first is associated with Islamist extremism, the second with separatism; both of these frighten many Algerians.

The official media are pathetically sycophantic. The Western press, especially the French, is regarded as hostile. No major French newspaper has a resident French correspondent; Agence France Presse's bureau had to close down. A history professor claims with a straight face that the opposition media and the *Hirak* were infiltrated by Mossad, the Israeli intelligence service, and were often bribed by Morocco.

Official pronouncements tend to be infused with a mixture of boastfulness and paranoia. Candid assessments, particularly in the French press, are furiously dismissed as racist or driven by a hate-filled desire to destabilise the country—Africa's largest in area. Official media are also obsessively virulent towards neighbouring Morocco, especially as the diplomatic tide may be turning against Algeria in its campaign to win independence for Western Sahara from Morocco's occupation.

The truth is that Algeria's economy and politics are both sclerotic, its leadership repressive yet feeble, its role in Africa and the Arab world self-regarding but unappreciated; it still poses as a champion of the global non-aligned movement. Many of its people, especially the young, are unhappy, frustrated and fearful of authority. *Hogra* prevails; the *haraga* look for a way out. The masses who backed the *Hirak* have not disappeared. If the price of gas and oil were to fall precipitously, it is hard to see how this opaque yet rotten regime could survive. ■

Iran's protests

Artful dodgers

Anti-regime graffiti are changing the look of the streets

AT FIRST THEY tried performance art. Across Iran, young women and men crouched down, heads hanging in submission, arms cuffed to trees or lampposts. When the police began rounding them up, protesters padlocked mannequins bent double to street signs. In sports matches players adopted similar poses when they scored, re-enacting the fate of Khoda Nour, a protester the mullahs' men tied to a flagpole without food or drink, a glass of water placed before him, just out of reach.

Then they switched from theatre to visual art. Two months after the death of a Kurdish woman, Mahsa Amini, arrested for showing her hair beneath her mandatory veil, protest art is changing cityscapes.



Not quite blood, toil, tears and sweat

Stencils of Amini and other women killed in the uprising plaster walls, rivalling the state's ubiquitous murals glorifying martyrdom. Public fountains spew red dye, prompting the authorities to drain them. Stickers cover old street signs with new names. Ekbatan, a western suburb of Tehran, the capital, has been dubbed Arman after a young man shot dead in the protests. Demonstrators brandish the black flag of Islam mockingly cut into slivers like wavy hair. Girls in middle-class north Tehran sport a new style of handbag, with red splashes mimicking bullet wounds.

Graffiti artists have to work fast; some have been shot dead. "It's hard to create when the workspace is so hostile," explains one of them. It takes seconds to spray-paint stencils and tie paper leaves with fallen protesters' names to trees.

Iconoclasm is often quickest. Red paint spilt from rooftops streaks through the portraits of the supreme leader, Ayatollah Ali Khamenei, that routinely cover the sides of housing blocks. Fading images of the regime's founder, Ruhollah Khomeini, bleed from the eyes (see above). Traffic noise is changing too. Drivers honk horns to the rhythm of "Death to the Dictator", as women wave veils out of car windows.

Many artists retreat online for safety. Some fashion medieval images of armies with spears surrounding a woman waving her headscarf. Others go for pop art, showing scissors cutting the Mona Lisa's hair.

Still, they are struggling to coin a logo for their revolt that spans Iran's ethnic, religious, economic and gender divisions. Some recycle the visuals of the revolution of 1979, with Soviet-style clenched fists and broken chains. Some female artists worry about men trying to intrude on their realm. "They say we're all part of the patriarchy," complains a male artist, struggling to circulate one of his posters. ■

Qatar and the Gulf

The cup runneth over

DUBAI

Qatar's neighbours hope the football tournament will bring a tourism boom

DRIVE AROUND this glittering Gulf metropolis, and excitement for the World Cup is palpable. Hotels, pubs and tourist spots are putting the last touches to fan zones that will accommodate up to 10,000 people. One of the national airlines has increased its schedule tenfold to handle the influx of visitors. A transport authority is laying on 700 taxis, dozens of buses and two ferries to move fans around town. But this is not in Qatar, the tournament's host. It is in Dubai, the commercial capital of the United Arab Emirates (UAE), some 450km (280 miles) away.

An estimated 1.2m fans are expected to visit Qatar for the show, which begins on November 20th. Not all of them will stay in Qatar, though. Some could not find affordable places to sleep (or any places at all). Others were put off by crowds or restrictions on alcohol. So several neighbouring countries stand to benefit from the cup—neighbours that still had Qatar under a blockade just two years ago.

The biggest winner will be Dubai, the Gulf's most popular destination. Even at the last minute it still has plenty of rooms available. Alcohol flows in its hotels and restaurants. Tourists may also buy their own tipples at off-licences, whereas Qatar's sole liquor store is open only to residents who have an official permit.

In normal times Flydubai, the emirate's budget carrier, operates three daily flights to Doha, Qatar's capital. That will jump to around 30 on match days during the group stage, with Qatar Airways offering another 15 flights. Airlines in Abu Dhabi, the UAE's capital, and Sharjah, an emirate nearby, are also planning hundreds of extra services.

The UAE is not the only country expecting a tourism boom. Saudi Arabia, which began welcoming tourists only in 2019, plans to receive tens of thousands of foreign fans. Ticket-holders will get free two-month visas to the kingdom. Ahmed al-Khatib, the tourism minister, says there will be 240 weekly flights between Saudi Arabia and Qatar during the tournament, versus the usual six. Even sleepy Oman, which shuns mass-market tourism, expects its hotels to be busy.

Saudi Arabia's team has qualified to play in the cup, and its citizens have bought more tickets than any other nationality bar Qataris and Americans. Many plan to stay in the kingdom's eastern province, near the border with Qatar, and drive

across for matches. Qatari officials say they have expanded the crossing at Abu Samra to process 4,000 travellers an hour.

This would have been impossible a few years ago. In 2017 Bahrain, Saudi Arabia and the UAE (along with Egypt) imposed an embargo on Qatar, severing travel and trade links. They demanded that Qatar cut its ties with Islamist groups, downgrade relations with Iran and generally trim the independence of its foreign policy. Qatar refused to bow. The embargo was abruptly ended last year, in part because the blocking states realised it was futile.

Though Qatar is the host, many fans will experience the cup as a pan-Gulf

event. Some Qataris wonder, quietly, if it would have been better to bid for a shared tournament, akin to the one in 2026, when America, Canada and Mexico will be joint hosts. By some estimates, Qatar has spent more than \$200bn in preparation. Its neighbours will spend only a tiny fraction of that, yet enjoy an immediate boom.

Not all of them, though. Bahrain is the nearest to Qatar, just a flight of 140km away. Yet its rulers have organised no shuttle flights or fan zones. Deep family ties link many Qataris and Bahrainis, but their governments are quarrelling over politics and territorial disputes, which sometimes trump sport—and self-interest. ■

Shrinkflation

The parable of the African doughnut

KISUMU

What shrinking products say about consumer spending on the continent

AT THIS STALL in Kisumu, western Kenya, Walter Otieno plops balls of dough into a fizzing pan. After a minute or two the encrusted orbs, known as mandazi, are ready for sale. But his customers may not feel as full as they once did. Mr Otieno has halved the size of his "African doughnuts", as the snack is also called, which he sells for ten Kenyan shillings (about eight US cents) each.

"I'm forced to do it to break even," he explains. The cost of his ingredients has soared. A ten-litre jug of cooking oil goes for 3,000 shillings, up from 2,000 in January; flour is two-thirds dearer than a few months ago. In October Kenya's food-price inflation reached an annual rate of 16%, the highest rate on record. The knock-on effects of Russia's invasion of Ukraine have compounded the impact

of regional droughts.

Elsewhere in the market there are other examples. A milk-seller holds up two plastic bottles. Two years ago 40 shillings bought a litre. Today he fills a half-litre bottle for the same price. All sorts of fruit are sold in smaller bunches, say traders.

The cost of staple foods across sub-Saharan Africa has risen by almost a quarter since 2020, reckons the IMF. The prices of food that is grown locally have also shot up. In Ghana, for instance, the cost of cassava has gone up by almost 80%. Shrinkflation is on the rise, too. In South Africa sticks of biltong (dried meat) are not as thick. In Uganda street sellers have shrunk the "Rolex" ("rolled eggs"), which is more or less a vegetable omelette rolled inside a chapati.

Shrinkflation is often seen through the eyes of Western consumers irked by suspiciously capacious crisp packets. But African consumers, many of whom lack the cash, credit or space to buy in bulk, have long bought goods in small quantities. In Nigeria companies have learned to flog small sachets of shampoo and washing powder to cash-strapped customers. As the economy has stagnated, manufacturers have shrunk ever more products. Today Nigerians can buy "smallie" Domino's pizzas and wash them down with sachets of Baileys, a creamy tipple.

Poor consumers mean that retailers often see shrinking products as a better option than raising prices. Add to that the fierce competition in many marketplaces, where dozens of vendors sell the same goods. "Raise prices?" exclaims Mr Otieno. "I cannot dare do that because customers will run away."



How big are your doughnuts?

Idi Amin's legacy

Back in business

KAMPALA

Fifty years after expulsion, Asians are thriving again in Uganda—but insecurities linger

THE FAIRWAY HOTEL in Kampala, the capital, is a good place to ponder the changing fortunes of Uganda's south Asians. It began life as the home of Bandali Jaffer, an Indian cotton trader. His son, a member of the first Ugandan parliament, turned it into a hotel to host a visiting pope. Then, in 1972, the dictator Idi Amin expelled the country's 55,000 people of Indian descent and confiscated their property. The Fairway became an army base.

The expulsion, which took place over three months and culminated 50 years ago this month, was a traumatic chapter, but not the final one. Today the hotel is back in the family, managed by Mr Jaffer's Canadian-born great-grandson Azhar. "I never thought I would end up here," he says, but now "this is home."

On one recent evening the Fairway thronged with Indian businessmen: spaghetti-dealers and biscuit-bakers, pipe-traders and detergent-makers. Most were newcomers with no memory of the old days. The Amin era was like "a bad dream", says Mohan Reddy from Andhra Pradesh in south India, who is busy organising an Afro-Indian investment summit: "When you wake up, you have to forget about it."

But the "insecurities of expulsion" linger, to borrow the title of a forthcoming book by Anneeth Kaur Hundle, an anthropologist at the University of California, Irvine. Amin's decree was popular with many Ugandans, who saw it as a move to "Africanise" the economy. For the small traders who had organised boycotts of Asian shops, it was a Pyrrhic victory: the businesses of expelled Asians were dished out to soldiers and officials, who ran the country into the ground. Still, memories of the expulsion are much more ambivalent within Uganda than abroad.

The outsiders inside

When south Asians returned in the 1980s and 1990s, it was at the invitation of a new government, which was trying to rebuild the country through free markets and foreign capital. Their place in Uganda is tied to their economic identity as "investor-citizens", argues Ms Hundle. "The government has really perfected ways to reincorporate Ugandan Asians and welcome new south Asians...but still maintain them as racial outsiders," she says.

The most prominent of the south Asians expelled in 1972 had been rich in-

dustrialists, who returned as soon as they could to reclaim their estates. But most were middling traders and shopkeepers—the *dukawallas*—who went on to find greener pastures in Britain and Canada. Only a few thousand returned. Their niche has been filled by newcomers from all corners of India, not just the old heartlands of Gujarat, who make up most of the 35,000 south Asians in Uganda today. Some put down roots in Uganda; others see it as a stepping stone to the West.

Asians run hotels, refine sugar, shape steel, fillet fish, import foodstuffs, and much else besides. They claim to contribute 60–65% of tax revenues. Most attribute their success to hard work and thrift: an Indian will always carry a packed lunch rather than eat out, explains Singh Katongole, a prominent Asian leader. They also benefit from transnational ties, which link them to foreign credit. Some big-shots profited from political connections. Others cashed in during the return of expropriated properties in the 1990s, gathering up the assets of those who stayed abroad.

The typecasting of Asians as "investors" eased their return, but it is an unstable basis for belonging. Most new migrants are professional workers or small traders, not captains of industry. In August the authorities deported more than a hundred foreigners, including Indians, Pakistanis and Chinese. Officials said the deportees had

promised to build and run factories, but were instead running electronics shops.

Meanwhile, big Asian business is the most visible face of local capitalism—and of its inequities. Small farmers accuse south Asian-owned firms of grabbing land for sugar and palm-oil plantations. Workers complain about domineering bosses.

A new history of Ugandan Asians by Samwiri Lwanga Lunyiigo, a Ugandan historian, paints south Asians as junior partners in British colonialism who today remain "the real masters in Uganda". That is reckless hyperbole, but a milder sense of resentment is widely felt by Ugandans. The government needs to create "a fair ring for all the players" or "people will demand for a second Amin to come," reckons Tony Galiliwango, who trades car parts in Kampala. In 2007 an Indian trader was killed by a mob, though incidents of overt racial hostility are thankfully rare.

Minding their own business

There are no Ugandan Indians in parliament. "We're essentially apolitical," argues a member of one notable family. "Our interests are as businessmen." Like most investors, south Asian magnates tend to think those interests are best served by backing Yoweri Museveni, the authoritarian president since 1986.

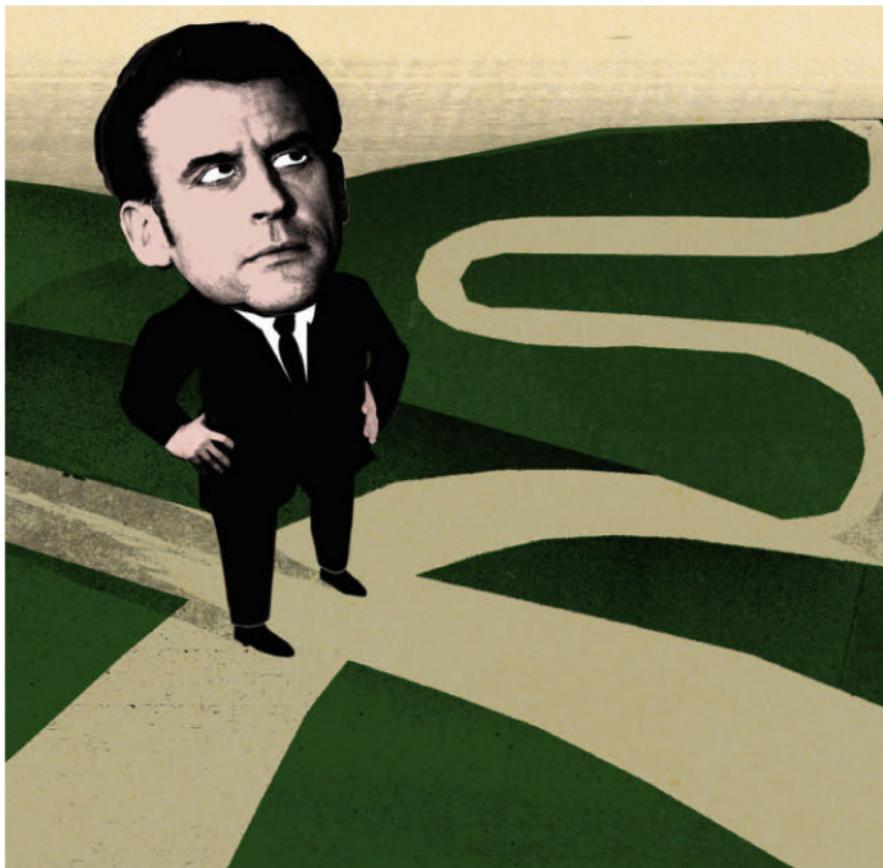
"For government they are a resource because they have no political base in the country," says Mahmood Mamdani, a Ugandan Asian intellectual at Columbia University. "All governments since independence have used this business community as a counter to local business communities, to play one off against the other."

The outsider status of Uganda's Asians is preserved by the constitution, which views citizenship through an ethnic lens. It lists 65 "indigenous communities" whose children are considered citizens by birth. Some Asian leaders are pushing for the Bahindi ("Indians") to be added. Legal nuances matter less than a feeling in the bones. "Because of the expulsion there's always a little bit of anxiety," says Mr Jaffer of the Fairway Hotel.

Yet there is also a sense of communities rubbing along, despite the troubles of the past. Younger generations are building bridges: one Asian man has 3.3m likes for his TikTok videos of himself speaking Ugandan languages. And valued traditions remain. During the festival of Navratri a group of old-timers chat at the Patidar Samaj, one of many Indian community associations. They reminisce about their bachelor days in the 1990s, when they came to seek their fortunes, sometimes sleeping in the office behind the temple. Outside hundreds of people dance in a joyous circle, arms twirling beneath a canopy of lights. "It is like you are in India," says one, as the band steps up the beat. ■



In wetter pastures



French politics

Second time unlucky

PARIS

Emmanuel Macron is struggling to impose a clear direction on his government

HAD EMMANUEL MACRON faced six parliamentary attempts to topple his government in a fortnight during his first presidential term, it would have felt like a political insurrection. Yet this autumn, six months after the French president was re-elected and then lost his parliamentary majority, this is what has just happened. Of the six no-confidence motions, instigated by opposition parties between October 19th and November 2nd, none secured the 289 votes needed for the government to fall. But they point to the trouble Mr Macron is facing without control of parliament, as he tries to gain traction with policymaking in his second term.

The no-confidence votes were prompted by the government's use of an emergency provision known as 49-3 (the number of the relevant article in the constitution). Since late October Elisabeth Borne, Mr Macron's prime minister, has used this four times. Designed to avoid legislative

deadlock, it enables the government to pass a law without the need for a parliamentary vote—so long as it wins any subsequent no-confidence motion. Only one of the six votes held so far has come close. On October 24th Marine Le Pen's hard-right National Rally (RN) decided at the last minute to side with its arch-opponents, Jean-Luc Mélenchon's hard-left alliance, NUPES. The combined effort was just 50 votes short of bringing down the government.

The opposition has cried foul, calling the use of 49-3 a "denial of democracy". In

fact its use is both legal, and constrained. When Michel Rocard, a Socialist prime minister, ran a minority government in 1988-91, he used it 28 times. In 2008 the rules were tightened to cover only the budget, and one other bill per parliamentary session. So far Ms Borne has used this provision to put two budget bills through two readings each. She could yet use it for a future piece of legislation, such as raising the retirement age from 62 to 64 or 65.

As one of Mr Macron's legislators puts it, however, the use of 49-3 is "perfectly legal, but it is not normal". It reflects not only the fragility of minority government, but also France's lack of a parliamentary culture of compromise. The opposition is divided, broadly, into three squabbling blocs: the RN, the centre-right Republicans, and NUPES, made up of Socialists, Greens, Communists and Mr Mélenchon's party, Unsubmissive France (LFI). Together, they could topple the government. In-

The scale of the problem

France, National Assembly, November 15th 2022

Seats per parliamentary group (out of 577)



Source: French National Assembly

*Renaissance, Horizons and MoDem †LFI, Socialists, Greens and Communists

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Indeed Ms Le Pen's decision to back a no-confidence motion tabled by NUPES was a first hint that they might join forces to do so. So far, each effort has failed because the opposition is split, and the Republicans have consistently abstained.

Mr Macron has threatened to dissolve the National Assembly and call fresh legislative elections if he loses a no-confidence vote. This would be a big risk for his own party, now called Renaissance, which might lose seats. But it may be a bluff: a way to put pressure on the Republicans, in order to keep them from forcing the government out. The centre-right party, whose candidate, Valérie Pécresse, came fifth in the presidential election, is as ill placed as Mr Macron to fight a campaign.

The party best placed to gain seats is Ms Le Pen's. Nobody balks at her presence in parliament these days. Up to a point, her strategy of "normalisation", or preparing to govern, is working. She still rails against immigration, most recently at Mr Macron's decision to let a migrant-rescue ship turned back by Italy dock in France. But she also makes dull policy speeches, laying into the high level of government debt or pleading for a tax on oil firms' "superprofits". On a recent weekday, fellow diners scarcely blinked as she lunched with her staff at a well-known nearby restaurant.

On November 5th the RN elected Jordan Bardella, a 27-year-old Le Pen protégé, as the new party president, leaving her to focus on her job as parliamentary party leader. The limits of her clean-up, though, were exposed on November 4th, when the National Assembly suspended Grégoire de Fournas, an RN member, for 15 days after what appeared to have been a racist remark in parliament.

Within Mr Macron's centrist party, frustration at the obstructive parliamentary theatrics is acute. "We were elected to transform France, not to manage crises," grumbles a deputy. It would be a mistake, however, to conclude that France has become ungovernable. Ms Borne, an engineer, has quietly emerged as a no-nonsense leader, securing legislative support for various policies. On November 4th cross-party backing was found in the Senate for a bill to enforce greater use of solar panels and other renewables, as part of Mr Macron's green push. In October the lower house passed a bill to tighten the rules governing unemployment benefits, thanks to the Republicans. In August a cost-of-living bill passed—with Ms Le Pen's support.

Moreover, the French economy is not faring too badly compared with its neighbours. French GDP is expected to grow in 2023, albeit by only 0.7%, while Germany's economy is forecast to contract. Thanks to government limits on the rise in household energy bills, the French inflation rate in October, at 7.1%, was the lowest in the

euro zone. The employment rate across all age groups has actually increased in France since before the pandemic.

The French seem in no mood to thank their president for any of this, though. Mr Macron's poll rating in October, at 35%, had dropped to its lowest for nearly three years, according to Ifop, a polling group. The country remains on edge. Trade unionists recently blockaded oil refineries to press for wage increases. Although only 18% of the French supported this action, 49% said they were "outraged" by the economic situation, up from 40% a year ago.

As he jets about to global and European summits, brimming with ideas—a "green wall" in Africa, a new "political community" in Europe—Mr Macron has lost neither his energy nor inventiveness. He seems to be mulling over his legacy, too. "I am obsessed with one thing," the president told a handful of reporters recently. "I believe that our duty towards our children is to leave them with the same freedom of choice as us. That means governing well. If your choices are limited tomorrow by those you make today, you have failed." Yet at home the once-disruptive president seems unsure how to reform the country without dividing it. Six months into his second term, Mr Macron is still in search of that sense of direction and purpose that so distinctly marked the start of his first. ■

The war in Ukraine

After Kherson

Ukraine has momentum. What it needs now are munitions

THE LIBERATION of Kherson on November 11th was not the end of the war. Russia still occupies the 70% of Kherson province that is east of the Dnieper river, not to mention swathes of next-door Zaporizhia, and Donetsk and Luhansk in the east. But it was the "beginning of the end", declared President Volodymyr Zelensky, delivering his Churchillian flourish as he walked the streets of Kherson on November 14th.

The front lines in the province are still in flux. Ukraine's armed forces are fanning out across the west bank of the Dnieper, looking for any Russians trapped on the wrong side. There are tales that Ukraine has mounted raids across the river against Oleshky, opposite Kherson city, and towards Nova Kakhovka, the site of a key dam, as well as on the Kinburn Spit, a slender finger of land that stretches into the Black Sea. But there is no evidence that these swashbuckling operations are real.

The question is whether Kherson repre-



sents the last gasp of Ukraine's spectacular offensives or, as Mr Zelensky suggests, just another milestone in the steady collapse of Russian lines. Broadly speaking, Ukraine now has three options.

One is to pursue Russia east over the Dnieper. That is relatively unlikely. Russia blew up the key bridges as it retreated. It still has some of its best troops and plenty of artillery in the area. The same geographical constraint that made life difficult for Russian commanders—an almost 2km-wide river—will bedevil Ukrainian ones.

Another is to reinforce a promising attack under way in the east. In Luhansk province, Ukraine has been pressing Russia's ragged lines around the town of Svatove, which sits atop vital supply lines to the south. Russian morale appears to be particularly low in this sector, with evidence of newly mobilised recruits facing extreme hardship and heavy casualties in the face of Ukrainian shelling.

More ambitious still is the third option: a major attack south from Zaporizhia towards Melitopol and beyond to sever Russia's so-called land bridge to Crimea, and possibly thence along the Sea of Azov coastline to Mariupol. Mr Zelensky had pressed for such an offensive in the summer, but was talked out of it by his own generals, after American and British war-gaming showed how difficult and costly such a thrust would be.

Russia evidently sees this as a possibility. It is churning out miniature concrete pyramids, known as dragon's teeth, and probably laying them around Mariupol to block oncoming armour. Satellite images show excavators digging zig-zag trenches at the entrance to Crimea. These entrenchments and fortifications are "old-fashioned and static", says a Western official, "but also fit for purpose".

► There is no doubt that Russia's army is in poor shape. Ukrainian intelligence says that Russia has only around 120 Iskander ballistic missiles remaining in its arsenal. The situation with artillery ammunition is even worse. Western officials have told *The Economist* that Russia has around a month's worth of it left—one reason why it decided to abandon the Kherson front.

But Ukraine faces some of the same limitations. It is running short of many different types of ammunition, including the air-defence interceptors needed to parity Iranian-supplied drones and Russian missiles. It has been on the offensive since August. It has also taken heavy casualties. Mark Milley, the chairman of America's joint chiefs of staff, said on November 9th that Ukraine, like Russia, had suffered approximately 100,000 casualties, either killed or wounded.

Sceptics, including General Milley, argue that Ukraine's main offensives are probably over for the winter. They argue that Ukraine's ground offensives in Kherson were not much different from Russia's in Donbas—slow, crude and relatively ineffective—and that the earlier breakthrough in Kharkiv occurred only because Russian lines were woefully undermanned, a condition that is unlikely to obtain elsewhere as mobilised recruits arrive in greater numbers and Russia redeploy more than 30,000 soldiers freed up from Kherson.

Optimists point to Ukraine's advantages. It has 200,000 to 300,000 combat-capable troops, against fewer than 100,000 Russians in the field. Morale among Ukrainian forces is sky-high, a key factor in winter warfare, in which soldiers must bear acute hardship. It also has the edge in precision firepower, thanks to GPS-guided shells and rockets, such as Excalibur artillery rounds.

Ukraine's success in Kherson ultimately offers reasons for both optimism and caution, says Michael Kofman of CNA, a think-tank. It shows that Ukraine, if adequately supplied, can take back territory over time, but also that future offensives are more likely to be slow, attritional battles than Kharkiv-like Blitzkrieg. Ammunition, for artillery and air defence, is "the most decisive factor", argues Mr Kofman. Ukrainian units on the attack will eat through more of it than Russian ones on the defence. They are already consuming a majority of America's monthly production of GMLRS, the GPS-guided rockets fired by HIMARS, according to one source.

The good news is that America and its European allies are beginning to expand ammunition production. The bad news is that Ukraine may not feel the benefit until next summer. Mr Zelensky might note that after Churchill more modestly pronounced the end of the beginning after the second battle of El Alamein in 1942, the war still had three long years to run. ■

Civil defence

Shelter from the storm

DNIPRO

Ingenious ways of protecting civilians from Russian bombs

IN THE CENTRAL Ukrainian city of Dnipro they are installing mobile bomb shelters. In the past week they have erected nine; they plan a total of 28. Dnipro is following the example of cities like Kharkiv, Odessa and Mykolaiv that have also suffered regular Russian bombardment since the start of the invasion. "We understand nowhere is safe in Ukraine," says Dmitro Volyk, the city's chief architect.

The shelters are made of modular sections of thick concrete, and were developed in 2014 to reinforce trenches on the

Donbas front. Originally designed to be half-buried and covered over with earth and branches, they are now being deployed on Ukrainian city streets so that people can take shelter during the frequent air-raid alerts. The sandy soil along Dnipro's river banks makes excavating bunkers a tricky proposition; these shelters can be lifted into position in hours. The thick concrete walls won't withstand a direct hit, says Mr Volyk, but they will protect against blast waves, shrapnel and flying glass. "They are tested in battle conditions."

There are already about 300 municipal shelters in Dnipro, many of them refurbished from the second world war. Others were built in the 1950s to withstand a nuclear blast and have sophisticated ventilation, filtration and water systems. The city council organises concerts in the metro, which is also used for shelter. "We used to laugh about the metro," says Mr Volyk. Built in the 1980s and considered a bit of a

Archaeology

Basque in the spotlight

MADRID

The written Basque language may be 1,000 years older than anyone thought

SHARDS OF POTTERY often tell historians useful things, but even the geekiest archaeologist would admit they are not very exciting to look at. Not so a discovery in Irulegui, in Spain's Navarre region, last year: a life-size bronze cut-out of a hand, green with age, with a small hole indicating that it was meant to hang, perhaps over a door. It was found in a village destroyed in a war of the 1st century BC. Such striking hand-shaped designs are unknown in Spanish or neighbouring cultures.

Still more important is the short inscription, five words in an intriguing script. Experts recognised it as a version of the writing systems used for the now-extinct Iberian and Celtiberian languages, present on the peninsula before the Roman conquest. But this language was neither of those. The researchers were stunned to find that they could make out the first word—in Basque. "Sorioneku", meaning "good fortune", was staring the researchers in the face. A descendant of that word, *zorionak*, is used in the Basque "Happy Birthday" song today.

The findings are so significant because the Vascones, the predecessors of today's Basques, who spoke an old form of their language, were not known to write. The previous oldest known writing in the language was in the *Glosas Emilianenses*, in which a monk translated snippets of Latin into early medieval Spanish and a couple of words of Basque.

These jottings date from the 10th century; Basque writing proper does not really begin until the 16th century.

Basque has long fascinated linguists and historians, as it is completely unrelated to its neighbours, speakers of the vast group of Indo-European languages that includes almost every other tongue in Europe. But Basque history has also been wrangled over, in the context of a long-running independence movement. Being able to set back the date of the written language by an entire millennium will delight fans of one of Europe's most distinctive cultures.



Talk to the hand



Better than nothing

► Soviet folly, "it was never considered a very good way of getting around the city. But now it's the safest place, we have found a more practical use for it."

In July Ukraine's parliament passed a law making access to a bomb shelter mandatory for every new residential building. As the threat of aerial bombardment continues (around 100 missiles were launched at several cities in Ukraine on November 15th, the day after President Volodymyr Zelensky appeared in newly liberated Kherson this week), schools and businesses all over Ukraine are building new and larger shelters. Hospitals have been busily renovating their basements.

Construction companies are advertising dual-purpose cellars, lined in reinforced concrete or 4mm-thick steel plates, that can be used for saunas, storing wine or sheltering from bombs. Several companies are manufacturing prefab shelters. One metallurgical company, which had been making highway barriers before the invasion, joined a construction company to invent the "Hobbit House", a burrow made of 10cm-thick concrete walls with a 15cm reinforced-concrete dome designed—hence the name—to be partially buried and covered with grassy sod. Several dozen have been sold since April, mostly to schools, which are not allowed to open unless they have bomb-shelter provision.

Most people in Dnipro, says Mr Volyk, were reassured to see the new mobile shelters in place, although for some, he admitted, their appearance was a depressing indication that the war was going to continue for a long time. These days air-raid alerts are so common that most people ignore them. After the siren sounded on a recent Saturday afternoon, the new mobile bunker next to a bus stop beside a busy park remained empty. ■

Germany

Not so nervous now

BERLIN

Europe's notorious worriers are chirpier than you might expect

ARE YOU also afraid of winter? Tell us your own personal story!" Thus did *Bild*, a tabloid, invite readers last month to spook each other over spiralling heating bills. Other outlets warn that the famed *Mittelstand*, the cluster of strong, medium-sized firms that have long been the backbone of Europe's biggest economy, will be driven to extinction by surging energy costs. The German press is not alone in dispensing gloom. Economists at Deutsche Bank, the country's biggest, warn in a recent report not just of a coming recession but of "accelerated deindustrialisation", as manufacturers flee to places blessed with lower-cost energy.

From greying autumn skies to the highest inflation recorded since 1951 and the biggest war in Europe since 1945, there are ample reasons to justify such a dark mood. But the reality is rather more nuanced. Not only does Germany's economy appear to have been more resilient than might have been expected in the face of a tenfold surge in the price of electricity. A closer inspection of public opinion also suggests that the Germans are not as anxious as doomsayers might have you think.

Just-released numbers for industrial production in September, for instance, show an unexpectedly robust 2.6% rise over last year. More impressively, the jump was achieved despite a 14% drop in consumption of natural gas, a feedstock for heavy industries that used to be largely supplied from Russia. A recent study suggests that the making of just 300 products, many of which could be cheaply imported, accounts for some 90% of industrial use of natural gas. In any case the price of natural

gas, which spiked in August, has now fallen back to merely double normal levels (see chart). Germany's stores of the fuel are chock-full. Fears of imminent hardship are certainly not reflected in the DAX40 index of German blue chips. It has rallied by 16% since September, into pre-covid territory.

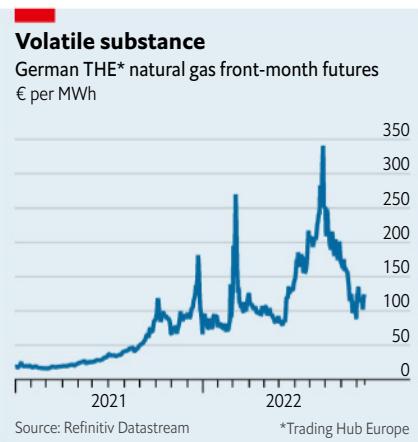
With the government promise to "leave no man standing alone" backed, in early October, by a pledge of €200bn (\$208bn) to shield consumers from energy prices, the German public is also finding the prospect of winter less daunting. Since 1992 R+V, a big insurance firm, has run detailed annual surveys to measure what Germans fear. Released in October, this year's results do show a 17% jump from last year in worries over the cost of living. They also reveal a predictable surge in anxiety over Germany being drawn into a war. But other indicators show little change, and the survey's overall anxiety index suggests that Germans are, in fact, less fretful than they have been in 22 of the past 30 years.

"There never really was a bad mood, to be honest," says Nico Lange, a defence analyst who has lately met hundreds of ordinary citizens in a series of meetings intended to explain the *Zeitenwende*, or overhaul of German security policy, planned in response to Russia's invasion of Ukraine. "What we find is not that people are negative about Ukraine policy, but that they have a lot of questions that they don't feel the government is bothering to answer."

Mr Lange says the impression of gloom may come from a media focus on certain disgruntled groups, particularly in former East Germany. A poll in November by ARD, a broadcaster, supports this view. Across a range of issues Germans in the east worry more: some 71% fear that the high cost of energy could lead to strife, compared with 58% in the west. More in the east also vote for fringe parties such as the anti-immigrant Alternative for Germany (AfD). In the poor former East German state of Thuringia, for example, the AfD is the leading party in voting intentions, at 25%, compared with 14% nationally (though this is also up, from just 9% in June).

Farther east in Schwedt, a town on the Polish border where the main employer, an oil refinery normally fed by Russian crude, is currently mothballed, a local bystander shrugs when asked what a straggling protest march is about. They are afraid of everything, she says: losing jobs, being unable to pay bills, facing another covid wave.

Although R+V's long-term polling shows that the east-west grumpiness gap persists, even this is diminishing. Germany's angst-mongers delight in pointing to the grim approval ratings of the current government, which took power last year. But polls show that Germans, both east and west, have nearly always taken a dim view of whoever is in power. ■



Charlemagne | Can we manage?

A new migration crisis is brewing in Europe. Prepare for populism



LOVELY PLACE, Belgrade. The Serbian capital attracts many tourists from far and wide, there to enjoy its diverse architecture and meat-heavy cuisine. One recent batch of arrivals has raised eyebrows, however. Few would have expected citizens of Burundi, the poorest country in the world, to plump for a Balkan holiday. And yet thousands have flown there since Serbia announced in 2018 that Burundians could visit without a visa—a rare privilege for Africans travelling to Europe. To nobody's surprise the unexpected tourists were not there to admire Belgrade's fine opera house. The European Union's border force has reported a surge of Burundians arriving illegally in the bloc, bits of which border Serbia (as people-smugglers charging \$3,000 a head to cross that border well know). Authorities in Belgrade, which had nixed visa requirements for Burundi as thanks for it withdrawing diplomatic recognition of neighbouring Kosovo, are in the process of closing the loophole after the EU threatened to make it harder for Serbians themselves to enter.

Burundian fake tourists are not the only ones trying for a better life in Europe. Illegal entries into the EU have surged of late. Some 281,000 have been logged since the start of the year, up by 77% since 2021. The latest available figures show that in August alone some 84,500 asylum applications were lodged in the EU and its neighbours (this excludes Ukrainians, who need not apply for asylum to live in the EU for up to three years). That is the most in any month since a wave of arrivals in 2015–16 caused a migration crisis that roiled the continent. Back then, the picture of a drowned Syrian toddler whose body had drifted onto a beach was seared into the public mind and prompted a generous—if belated and uneven—response which included Germany taking in more than 1m refugees. So far this year 1,811 deaths have occurred in the Mediterranean, a grim tally. Amid war in Ukraine and an energy crisis across Europe, few seem to have much noticed.

A political spat may change that. On November 11th French authorities reluctantly provided a berth for the *Ocean Viking*, a rescue boat carrying 230 migrants picked up trying to cross the Mediterranean. Italy had for weeks refused to let the boat near its shores; France stepped in to avoid loss of life and denounced its neighbour as behaving “irresponsibly” and in breach of legal norms.

Giorgia Meloni, Italy's new prime minister, had spent her first weeks in office trying to reassure EU partners worried about her hard-right platform and past praise of Mussolini. Unexpectedly, it had once looked as if she might form an opposites-attract duo with Emmanuel Macron, France's president, or at least manage a civil relationship. That seems unlikely now.

More migrants will undoubtedly land on Europe's shores, and with them more such tensions. Afghans and Syrians are still fleeing desperate situations in their countries. Joining them are Asians and Africans who have fallen into poverty because of soaring food and fuel prices, both linked to the war in Ukraine. Covid-19 seems to have caused migrants to delay their attempts at reaching Europe, not abated them. Climate change will no doubt prompt more to try their luck. For now it is causing unseasonably warm weather, helping keep sea- and land-crossing routes open for longer, points out Hugo Brady of the International Centre for Migration Policy Development in Vienna.

Europe is in little mood to take them in. What generosity of spirit might exist has been soaked up by the arrival of nearly 5m Ukrainians recorded as having received asylum-like protection in the EU since the start of the war. In contrast to 2015, the economy is heading for recession, crimping both potential job opportunities for migrants and the tax receipts to support them. Some places are already struggling. In Austria asylum-seekers have been put up in tents, to the dismay of NGOs. In the Netherlands, a baby died in a migrant-reception centre in August. An increase in small boats crossing the Channel prompted Britain to agree to pay France to patrol its beaches to detect and prevent migrants setting off.

Wir schaffen das nicht

The revival of the migrant crisis, even if on a smaller scale than the previous one, poses two problems for Europe. The first is at national level. Helping Ukrainian women and children flee Russia's bombs is popular enough with voters. Taking in what are often male economic migrants from farther afield is not. Angela Merkel, then German chancellor, in 2015 said that “*Wir schaffen das*”—we can manage. Few share that sentiment today. Populist politicians have gained ground across the bloc. Take Sweden, once relatively welcoming to asylum-seekers: it is now run by a government that relies on support from an anti-migrant party.

The second problem is one of co-ordination. Europe's approach to dealing with migration is a mess of national and EU policies. Southern Europeans resent rules that force potential refugees to apply for asylum in the first country they arrive at, often a coastal one like Greece and Italy. They would like their fellow EU members to share the burden by agreeing to resettle migrants (most of whom would rather end up in places like Germany anyway). Northerners will agree only to a voluntary scheme, which has not worked well. That has eroded trust. Southerners for their part are accused of flouting the rules, by mistreating asylum-seekers and nudging them to travel to other EU countries to seek refuge. As a result border controls that were once abolished within the bloc have made an unwelcome return in many countries.

Improvements since 2015 have largely focused on keeping migrants out. Frontex, the EU's border agency, has been bolstered. Countries such as Libya and Turkey, through which many migrants come to Europe, have been paid to help stem the flow—even at the cost of supporting dodgy regimes. But having failed to block migrant arrivals, Europe will now have to deal with them. That is where it failed in 2015, and it still does not have a plan. ■



Britain's armed forces

Straps around the barrel

NORTHWOOD

STRATCOM wants to be the glue that binds Britain's armed forces

GENERAL SIR Jim Hockenhull could not have anticipated a public profile when he entered the Intelligence Corps, one of the darker corners of the British armed forces, at the tail end of the cold war in 1986, nor when he was appointed chief of defence intelligence in 2018. But Russia's war on Ukraine thrust him into the limelight. On February 16th, as Russian tanks massed on Ukraine's border, he made a rare public statement warning that Russia was not pulling back as it claimed. The next day Defence Intelligence (DI) took the unprecedented step of publishing a map depicting Russia's possible axes of invasion. Eight days later it was vindicated. Its updates on the war are now tweeted daily.

General Hockenhull's role in the intelligence war won him admiration in military and political circles. He was already the first career intelligence officer ever to have acquired three stars on his shoulder (making him a lieutenant-general). In April he was handed a fourth (full general) and promoted to run Strategic Command, or STRATCOM, a youthful branch of the armed

forces that began life in 2012 as the Joint Forces Command. It is hardly known outside the defence world. But it embodies an intellectual and practical shift taking place across Western armed forces as they grapple with the changing character of war.

"We own what I would describe as the jewels in the crown of defence," says General Hockenhull, in an interview with *The Economist* at his headquarters in the Northwood suburb of London. The purpose of STRATCOM is to house, run and modernise "joint" capabilities—those that sit above the three services, or fall between them.

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That means some of the sexiest units in the armed forces, such as offensive cyber and special forces. It also includes lower-profile ones, like medical services, overseas bases and IR, not to mention DI itself.

Modern armed forces put a premium on their armies, air forces and navies working seamlessly together, including in new domains of war like cyber and space. This was once called "jointness"; the voguish term used is now "multi-domain integration". It is jargon—but it matters. Russia's war in Ukraine offers a cautionary tale: Russia's air force proved unable to work with ground forces, and its troops have struggled with dull but vital things like logistics and communications.

General Hockenhull's job is to provide the connective tissue—a common vision for how the three services need to view and wage future war, and the practical means to integrate them: "It's the metal straps around the barrel that hold the thing together." Sometimes this is straightforward. In the build-up to war, British intelligence officers, special forces, defence attachés and other personnel in Ukraine each gathered separate insights into what Russia was up to. So STRATCOM built a secure communications system to bring those discussions under a single command.

In other cases it involves bigger reforms. A decade ago DI had only 500 analysts of its own, with the bulk of intelligence capabilities dispersed within the services. The air force controlled geospa-►

tial intelligence, such as spy satellites; the army ran human intelligence operations, such as the recruitment of agents, and so on. "Everything was done on a sort of gentleman's agreement," says General Hockenhull. But when priorities clashed—if one service wanted intelligence on the Middle East, but the other on Europe—the result was "incoherence" and duplication. Now those capabilities have largely been centralised, with defence intelligence swelling to nearly 6,000 personnel.

This process of integration is not always popular with the services. General Hockenhull says that STRATCOM has had to intervene at a number of moments where one service has purchased equipment, such as radios, that would be incompatible with that of another. The army might want to buy the cheapest drone or armoured vehicle; STRATCOM presses them to buy the one which can plug into wider military networks. Aircraft-carriers might belong to the navy, but they have to be able to serve as platforms for special forces and hubs for command and control. The goal is to "wring absolute maximum value out of all of those assets", he says, even if it adds cost. "Integration isn't free."

An institution like STRATCOM is unusual among Western militaries. In many ways, its star has risen in recent years. Five out of seven four-star officers in the British armed forces have a background in STRATCOM. General Hockenhull's predecessor, Patrick Sanders, is now head of the army. Many of its constituent elements are becoming more prominent. Defence medical services played a crucial role in the covid-19 pandemic. Overseas bases—like Cyprus, Gibraltar and Diego Garcia—are increasingly viewed as "lily pads" to project power in peacetime. D1 has never been better known.

The Chief of Joint Operations, who sits within STRATCOM at Northwood and oversees key military deployments, has also been unusually busy. Britain now has a pair of ships permanently deployed to Asia as part of its "tilt" to the Indo-Pacific. Brit-

ain's Typhoon fighter jets have seen increasing activity; a squadron is currently in Qatar for the World Cup. Ukraine remains a priority: a new task is to repair British-supplied weapons, some of which have never been used in war before and are wearing out quickly.

Underlying all this is a dramatic shift in risk-tolerance, says General Hockenhull. "Things which were previously deemed to be aggressive or potentially provocative, which would be either self-censored or ruled out in the Ministry of Defence or government" are increasingly on the table. He gives the example of Britain's decision to send rocket artillery to Ukraine. Others activities, like the use of special forces and offensive cyber capabilities, are not publicly acknowledged. "A big calculation all the time was: this might provoke. The Ukraine experience has shifted the dial on that....people now see the value of action."

Not everyone agrees that the STRATCOM experiment has been a success. Edward Stringer, a retired air marshal who worked there as head of "joint force development" until last year, argues that the decision to exile its functions to the edge of London destroyed its clout in the Ministry of Defence head office—a salutary lesson that, in bureaucracies, geography is power. He notes that, unsurprisingly, a new and influential institution, the Secretary of State's Office for Net Assessment and Challenge, which answers directly to Ben Wallace, the defence secretary, now does some of the tasks—such as analysing threats, conducting war games and thinking about the future of war—that STRATCOM was supposed to do.

While General Hockenhull is in charge of working out how British forces should fight in the future, his authority over the services remains limited: he cannot force them to radically change their equipment, exercises and plans to fit with that doctrine. In a recent paper for Policy Exchange, a think-tank, Mr Stringer argues that Britain's armed forces consequently remain less than the sum of their parts: "the accidents of several, independent sub-forces developed by the three services...with scant ammunition in the magazine".

Money is also getting tight. A pledge made in October by Liz Truss, the former prime minister, to spend 3% of GDP on defence has been quietly jettisoned by her successor. Mr Wallace says his priority is to prevent inflation and the falling pound from ravaging his budget. Military leaders, buoyant a month ago, are downbeat again. But a fiscal crunch makes integration all the more important. "In times of budget tightening, there's a tendency to want to squeeze those things that some might see at the periphery," warns General Hockenhull. "But those specialist capabilities give us the edge in modern operations." ■



The Labour Party

Green wedge

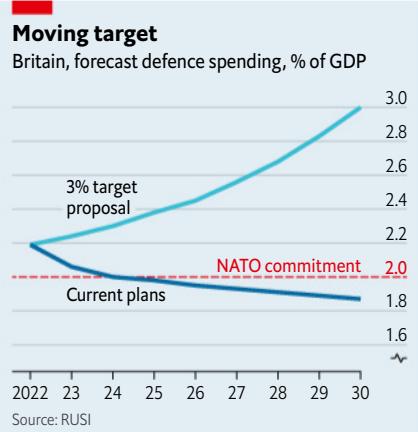
NEWTON AYCLIFFE

An interview with the woman who hopes to run Britain's finances

WHEN RACHEL REEVES, Britain's shadow chancellor, describes the Labour Party's industrial policy as the "sounds and the sights of the future arriving", she may be imagining something like the train factory run by Hitachi, a Japanese manufacturer, in Newton Aycliffe, in north-east England. Ms Reeves visited its gleaming production line on November 11th. Next year, trials will begin on battery propulsion, using systems built for family cars to power trains through the stations and tunnels of Britain's creaking railway network.

Whether Ms Reeves ever sees her party's industrial policy implemented will depend in part on the fallout from the government's autumn statement. As *The Economist* went to press, Jeremy Hunt, the chancellor, was expected to announce tax rises and spending cuts of around £55bn (\$65bn), or approximately 2% of GDP. The Conservative Party's return to austerity offers a remarkable opportunity for Labour. Since Liz Truss, the former prime minister, inflicted grave damage on the British economy with unfunded tax cuts, which were then swiftly reversed, Labour has recouped its lead on economic management for the first time in 15 years, according to Ipsos, a pollster. Only one in three voters thinks the government has a mandate for spending reductions.

Opportunity carries risks, too. Repairing the public finances is the chief goal of Rishi Sunak, the new prime minister. But while Ms Reeves has promised "ironclad" ►



► fiscal discipline, a general election fought over how to control public spending is not advantageous terrain for Labour. "The most important thing, and the agenda that I want to fight the next election on and lead on as chancellor, is growing the economy," Ms Reeves told *The Economist*.

At the centre of her plans is a vast package of state investment in decarbonisation, which includes insulating 19m draughty homes and creating a new state-owned energy company. It is pitched at the industrial towns that have drifted away from Labour over the past two decades. "We are not going to be doing green hydrogen electrolysis in Surrey. We are not going to be doing carbon capture and storage in Buckinghamshire," says Ms Reeves. Instead she cites "big opportunities for Grimsby and Hull, Teesside and Merseyside, Grangemouth and South Wales, Scunthorpe and Rotherham". The Hitachi plant is in Sedgefield, an old mining constituency represented for 24 years by Sir Tony Blair before it fell to the Conservatives in 2019. Labour have high hopes of winning it back.

How much of Ms Reeves's plan, expected to cost a total of £28bn a year, could be delivered depends on the public finances, which have deteriorated sharply since the programme was announced in 2021. Ms Reeves stresses that the package is subject to her fiscal rules, which require debt to fall as a share of GDP.

The green industrial agenda has become a sweet spot for Labour, as it has for centre-left parties globally. It provides a modernising mission for a party that believes in state activism but has struggled to articulate an agenda for office since its proposals for wholesale nationalisation of industries were rejected by voters in 2019.

A dash for renewable energy binds a fractious coalition of socialists, greens and security hawks. It was also once the agenda of Boris Johnson, who saw it as a recipe for holding on to seats like Sedgefield. Mr Sunak's heart "was never really in net zero", says Ms Reeves.

She paints a picture of Britain slipping behind its peers. The woes of Britishvolt, a battery maker that had wanted to build a factory in north-east England before it was rescued from bankruptcy, are "incredibly depressing". She ruefully notes that President Joe Biden's Inflation Reduction Act, which will shower \$369bn in subsidies and tax credits over a decade on renewable energy and electric vehicles, hydrogen hubs and carbon capture and storage, has helped make America much more attractive to investors. Britain's rotating cast of prime ministers, by contrast, means chief executives "just don't know from one minute to the next what this government's strategy is". Labour's supporters fret that their leadership is too cautious to win. But consistency is a popular virtue these days. ■

Britain and France

Le bromance?

PARIS

Or le wishful thinking?

BILLED AS "HISTORIC", the deal signed in Paris by the British home secretary, Suella Braverman, and her French counterpart, Gérald Darmanin, had the main virtue of taking place. Meeting on November 14th, the pair agreed to work together to curb "small boat" crossings from the beaches of northern France to the British coast. So far this year 40,000 migrants have taken this perilous route, preferred by traffickers after security was tightened on ferry and tunnel crossings. Britain will pay France £63m (€72m) a year, or 15% more than currently, to have more French police patrolling the coast. France will allow British police to monitor such operations.

In reality, the agreement is in line with previous deals and will not stop traffickers plying their trade, although it may help to limit crossings. It does, though, seem to embody something bigger: a tentative reset of the troubled relationship between Britain and France. This tie has in recent years been marked by cross-channel finger-pointing and an utter collapse in trust. Boris Johnson urged the French to "donnez-moi un break"; Emmanuel Macron, the French president, privately called him a "clown". Liz Truss could not even decide if Mr Macron was a friend or a foe.

Rishi Sunak, by contrast, brings a welcome note of seriousness. "Friends, partners, allies," he tweeted breathlessly after his first meeting with the French president on November 7th, when the pair seemed to



Equal in stature

rush into each other's arms. "A new bromance?" mused the *Washington Post*.

Certainly, Mr Sunak and Mr Macron have plenty in common. Of the same generation (Mr Sunak is 42 years old; Mr Macron, 44), both are the sons of medics. Both are former investment bankers and dealmakers, who were educated at top schools and arrived late in politics. Both went into government via the finance ministry, and seem more at ease handling spreadsheets than bar-room banter. With their well-cut suits, the pair even appear to share a tailor—although *Le Monde* could not resist querying whether Mr Sunak, with his short trouser leg, wears the wrong size.

In fact Paris began to reach out to London before Mr Sunak got the job—and after Mr Johnson lost it. Mr Macron sent generous messages to the "British people" upon the queen's death. Mindful of Tory sensitivities about the European Union and France in particular, he was careful to take his fingerprints off an invitation to Ms Truss to the first meeting of the European Political Community, his brainchild, in Prague, which she accepted. James Cleverly, the foreign secretary, was invited to the Armistice Day commemoration in Paris.

Indeed both governments have direct cross-Channel links. An arch Brexiteer, Ms Braverman studied law at the Sorbonne, and is a fan of Jacques Brel, a Belgian crooner loved by the French. Catherine Colonna, Mr Macron's foreign minister, was formerly ambassador in London. Roland Lescure, the French industry minister, studied at the LSE; Laurence Boone, the Europe minister, went to the London Business School. Plans to do more together are in the works. Mr Macron wants to host a Franco-British summit next year, the first for five years. Unveiling a national strategic review on November 9th he vowed to raise defence co-operation with Britain "to another level". There is muttering in Paris about a visit by King Charles next year.

A decision by Europe's only two nuclear powers, and NATO allies, to behave like grown-ups can only be a good thing. Mr Sunak and Mr Macron are indeed likely to find a way to do business with each other. Yet it is early days and there is still wariness in Paris. One French minister calls the relationship "better" than before, no more. "It's a step towards a reset," says Alexandre Holroyd, French deputy for an overseas constituency that includes Britain.

Mr Macron's centrist pro-European politics remain far from Mr Sunak's Brexit-driven right-wingery. He will resist any bid by Mr Sunak to use bilateral talks to bypass Brussels. And the Northern Ireland Protocol bill still looms as a big potential obstacle. "Both capitals have tried hard to make the mood music better," says Lord Peter Ricketts, former ambassador in Paris; "But the idea of a bromance is ridiculous." ■

Bagehot | The new masculinity

Who speaks for the Great British Lad?



BAGEHOT WOKE up fully-clothed, face-down in a Novotel in Leicester on Saturday morning. The curtains were open and the lights were on. An evening in search of the Great British Lad had ended abruptly when two Peronis, four pints of Madri (a trendy lager aimed at middle-class football fans), a daiquiri, a woo-woo, a vodka Red Bull, two vodka lemonades and two rounds of tequila left your correspondent without time to put on his pyjamas.

The hunt for the Lad is worthy of such in-depth reporting. In the 1990s, the Lad ruled all. There was a TV show called "Men Behaving Badly". Effigies of England footballers were hanged after they made errors. People now regard that era as if it were as alien as the "Black and White Minstrel Show", yet it was not long ago. Britain's largest newspaper, the *Sun*, had topless women on page three until the mists of 2015.

Today, a different Lad is on top. Phrases such as "toxic masculinity" have gone from niche academic terms to overused. Prince Harry evolved from a party-animal squaddie into a mental-health advocate. England footballers, once dismissed as thick louts, are now hailed as thoughtful, even rather sweet boys. Advertisements have shifted from lager-soaked legends to real men talking about being depressed. ("It takes BIG BALLS to say you're not ok" is the slogan of Big Balls gin.) As Gramsci did not put it: the old lad is dying and the new lad cannot be born; in this interregnum a great variety of morbid symptoms appear.

Observing those symptoms is a man known online as Pu55yman_Dan, who has developed a cult following among football fans and was Bagehot's guide for the evening. While the typical Lad professes progressive values loudly, he argues, "scratch beneath the surface, they're not". And so Pu55yman_Dan adopted the online persona of a football fan who tries, but fails, to fit in with the new strain of Lad.

Lads of the old regime have leapt on the new one with dizzying speed. Dapper Laughs, a notorious comedian, now posts videos imploring men to examine their mental health and check in on their mates. "You're a geezer," he says in one. "If you needed to hear that, I'm glad I said it." This is some change from his previous content: among other highlights, he once posted a picture of a pair of testicles in a box of eggs.

The new masculinity creates a peculiar moral licence. Young men realise that some abusive patter is no longer allowed, although they are not always sure which. In his hit "Doja", which reached number two this summer thanks to TikTok virility, Central Cee, a rapper from London, attacked homophobia with lashings of misogyny instead: "How I can be homophobic/My bitch is gay". (The 24-year-old clarified: "It's literally what I say. I'm not homophobic. My girlfriend is bisexual.")

Cynicism about the corporate purveyors of the new masculinity is understandable. Companies have fallen over themselves to raise awareness of men's mental health. As a result, it risks becoming the next health and safety: a well-meaning and potentially hugely successful policy intervention that ends up mocked. Both are about stopping men dying. It is almost entirely men who die at work; the vast majority of people who kill themselves are male. But it is odd for capital to put its arm around labour and ask "You alright, mate?" Sometimes the messenger is the problem, rather than the message. Or as Pu55yman_Dan put it to the tune of Abba: "Gimme gimme gimme a Madri at midnight/Won't somebody help me with my men's mental health."

Young men are a strange group, in that both left and right see their flaws, whether joblessness or toxic behaviour, as individual failings rather than structural ones. This is unhelpful and unfair, argues Richard Reeves, the author of "Of Boys and Men", a new book on the state of males. If men are committing suicide in large numbers and are well behind women educationally in almost every country, there may be structural factors at play, which require structural solutions such as letting boys start school a year later.

Lads do not make themselves easy to understand. Politically, the Lad is odd. Age is the main game when it comes to voting, with older voters supporting the Conservatives and younger ones backing Labour, regardless of sex, points out Chris Curtis, a pollster. But not when it comes to the Lad. Nearly 30% of 18- to 24-year-old men voted Conservative at the last election, compared with only 15% of women, says YouGov, a polling organisation. Polling of young men is not gospel. They are difficult to recruit and often give joke answers. A margin of error becomes a margin of banter.

Tomb of the Unknown Lad

Young people do tend to be more progressive than their parents. When it comes to the Lad, he is less progressive than some might think. In 2016, 39% of 18- to 24-year-old men voted Leave, compared with 20% of women that age; lockdown scepticism was most common among young men. The prevailing portrayal of a young man in the media as a soppy left-wing undergraduate at a protest is misleading. It could just as well be the Lad who, in the words of the *Sun*, "put flare up bum, drank 20 ciders, snorted coke and then stormed Wembley for England vs Italy Euro 2020 final". Incidentally, Pu55yman_Dan has a master's degree, bridging the Lad gap. The Lad is large. He contains multitudes.

And so in Fan Club, an exceptionally sticky-floored venue in Leicester, a steady stream of young men say hello to Pu55yman_Dan, who is a minor celebrity among men aged between 18 and 35 who like football and live in the East Midlands. A perplexed friend looked on, wondering why strangers demanded photos with his mate and why a journalist had been buying him drinks all night. A little later, Pu55yman_Dan threw up in his vodka lemonade, leaving a streak of yellow in his glass. Nevertheless, he persevered and stayed out until 3am. Bagehot, however, was defeated and went to bed. ■



The future of football

Changing the game

A tide of new money will drive big changes for the world's favourite sport

IT WAS NOT the sort of pre-tournament publicity that the organisers would have hoped for. On November 20th Qatar's footballers will take on Ecuador in the first match of the 2022 World Cup, the biggest event in the global sporting calendar. Yet just 13 days before, Sepp Blatter, a former president of FIFA, world football's governing body, told a Swiss newspaper that, in his opinion, awarding the World Cup to Qatar had been a "mistake".

In 2010, when Mr Blatter pulled the card from the envelope and publicly announced Qatar's victory—to general astonishment—he was forced, for the sake of diplomacy, to take a rather different line. Football, he announced, was going to "new lands"; the idea was to broaden the game's appeal. Few other observers were willing to defend the deal. Accusations of corruption and bribery flew; though a report commissioned by FIFA and eventually published in

2014 gave Qatar's bid its seal of approval, with a few reservations.

Elite sport is a notoriously murky business, and exactly what happened may never be fully known. Qatar's rulers, and the 1.3m fans expected at the World Cup, will be hoping that, as the matches get under way, talk will turn to matters on the pitch rather than off it. Qatar has spent lavishly to ensure the tournament is a success, building seven stadiums, an expanded airport and dozens of hotels. But if so, it will be only a temporary reprieve. The decision to hold football's biggest party in a tiny, autocratic petrostate with plenty of money but no particular footballing heritage is only the starker example of how money and new ideas are shaking up the top levels of the world's favourite sport.

In the past few years corruption scandals have shaken football. Mr Blatter himself stepped down in 2015, during an Amer-

ican investigation into FIFA, and was later banned from football administration by its ethics committee. The covid-19 pandemic has worsened the already fragile finances of many top-flight clubs, which are struggling to pay the enormous wages that star players can command.

Last year saw the rise and temporary fall of a plan for a breakaway "European Super League" (ESL) of elite clubs, built on the closed, cartel-like model of American professional sports. Hedge funds and investors from America and the Middle East have invested in financially precarious European clubs: they are keen to squeeze yet more games into an already packed calendar. There is even talk among investors, and the sport's administrators, of a rash of new super-tournaments, some of which are explicitly designed to compete with the World Cup itself.

Money was one of Qatar's chief attractions. Its team are Asian champions, but few consider them contenders. In fact, the national side has never qualified for a World Cup before (it is playing this time because the host country qualifies automatically). But it is a financial force, and keen to promote itself as a modern, developed country. Solid numbers are scarce, but the current World Cup is almost certainly the most expensive ever staged. The ➤

► stadiums alone are said to have cost \$6.5bn. Much of a broader \$300bn economic development plan called Qatar 2030 has been written with the needs of the World Cup in mind (a gleaming new metro system, for instance, serves several of the new stadiums).

Paying the price

That frenzy of construction has made many uncomfortable. Qatar's large force of migrant labourers are often harshly treated under its *kafala* ("sponsorship") system, unable to change jobs or leave the country without their employer's consent. They were worked to the bone to get things ready; many have died on the job. The Danish team will play in a monochrome red shirt which hides the team crest and kitmaker's logo. Hummel, the manufacturer in question, said it did not "wish to be visible" at the tournament. One of its other kits is black, "the colour of mourning". In October the Australian team released a video criticising Qatar for alleged human-rights abuses. None of this seems likely to reverse a growing trend for big sporting events to be held in autocracies (see Graphic detail).

Several players, including Bruno Fernandes of Manchester United and Nico Schlotterbeck of Borussia Dortmund, have complained about the timing of the tournament. The World Cup usually takes place in June or July. Rescheduling it to November was necessary to avoid the scorching Qatari summer. But it leaves the tournament sitting awkwardly in the middle of the lucrative European club season. Jürgen Klopp, Liverpool's manager, summed up the mood for many: "I will watch the games anyway, but it's different."

Money—both the lack of it now and the desire for more in future—was also behind the plans for the ESL. It was envisaged as an annual contest that would pit top European clubs against each other, much like the Champions League. A dozen elite clubs from across the continent, including Arsenal, Juventus and Real Madrid, announced the plan in April 2021. Amid a furious backlash from fans and politicians, they abandoned it a few days later—though their retreat was only temporary. In October Barcelona, Juventus and Real Madrid resurrected the idea, with a new management team and a public-relations offensive. The ESL's backers also have a case before the European Court of Justice challenging UEFA's monopoly on organising competitive continental football in Europe. A verdict is due early next year.

The ESL would have operated along the closed-shop lines familiar to fans of American sports. The 12 founder members of the ESL would have been guaranteed permanent places in the competition, no matter how badly they performed. That idea was anathema for many fans used to the cut-

throat meritocracy of existing European football, where any club can, at least in theory, aspire to qualify for the Champions League, and where teams stuck in a rut can take years to get out of it.

But it is less attractive for investors and the clubs themselves: they prefer rules that guarantee a return on their ever-increasing outlays. So many clubs in Spain's top two domestic leagues were struggling after the pandemic that, in December 2021, they agreed to sell 8.2% of profits for the next 50 years to cvc, a Luxembourg-based private-equity firm. Over the summer FC Barcelona sold 25% of the media rights to its Spanish games to Sixth Street, another private-equity firm, until 2047. The club hopes to plug holes left by years of financial mismanagement. And in January several Spanish clubs will be back in the Middle East: Saudi Arabia has paid €240m (\$254m) to host six editions of the Supercopa, an annual Spanish mini tournament.

The backlash against the ESL has not put off football's governing bodies, which are keen to launch new formats of their own. FIFA and UEFA are enmeshed in bitter wrangling over the future of summer tournaments. Although FIFA governs the World Cup, which makes up 90% of its revenue, its bosses lament that UEFA makes far more money: \$14bn during the last World Cup cycle between 2015 and 2018, compared with just \$5.7bn for FIFA over the same period. That is mainly because of the Champions League. FIFA is desperate to diversify, including by creating other competitions. UEFA jealously guards its position.

Cramming in more contests would raise more money, but would require administrators to find more space in a crowded calendar. International "friendlies," or exhibition matches, have been all but scrapped, and qualifying paths for big tournaments shortened. From 2024 the

"international breaks", during which club players are diverted to international duties, are set to be fewer but longer, packing games in while reducing the time players spend travelling. The tournaments which determine continental champions, like the Euros and the African Cup of Nations, could all be scheduled for the same summer, instead of being spread across a four-year cycle. That would free up a month's space for a new and lucrative tournament every second summer. "There is going to be a fight," says Simon Kuper, one of the authors of "Soccernomics", a book on the business side of the game.

Football, wall-to-wall

Three ideas are kicking about. The first is to stage the World Cup every two years rather than every four. The second, which FIFA's governing council approved shortly before the pandemic, is to beef up an existing mid-season tournament named the Club World Cup, a worldwide equivalent to the Champions League. Eye-popping prize money was to be provided—in exchange for a 49% share—by a consortium led by SoftBank, a Japanese firm with a penchant for big, risky bets, and Saudi Arabia, which hoped to host the resulting tournament.

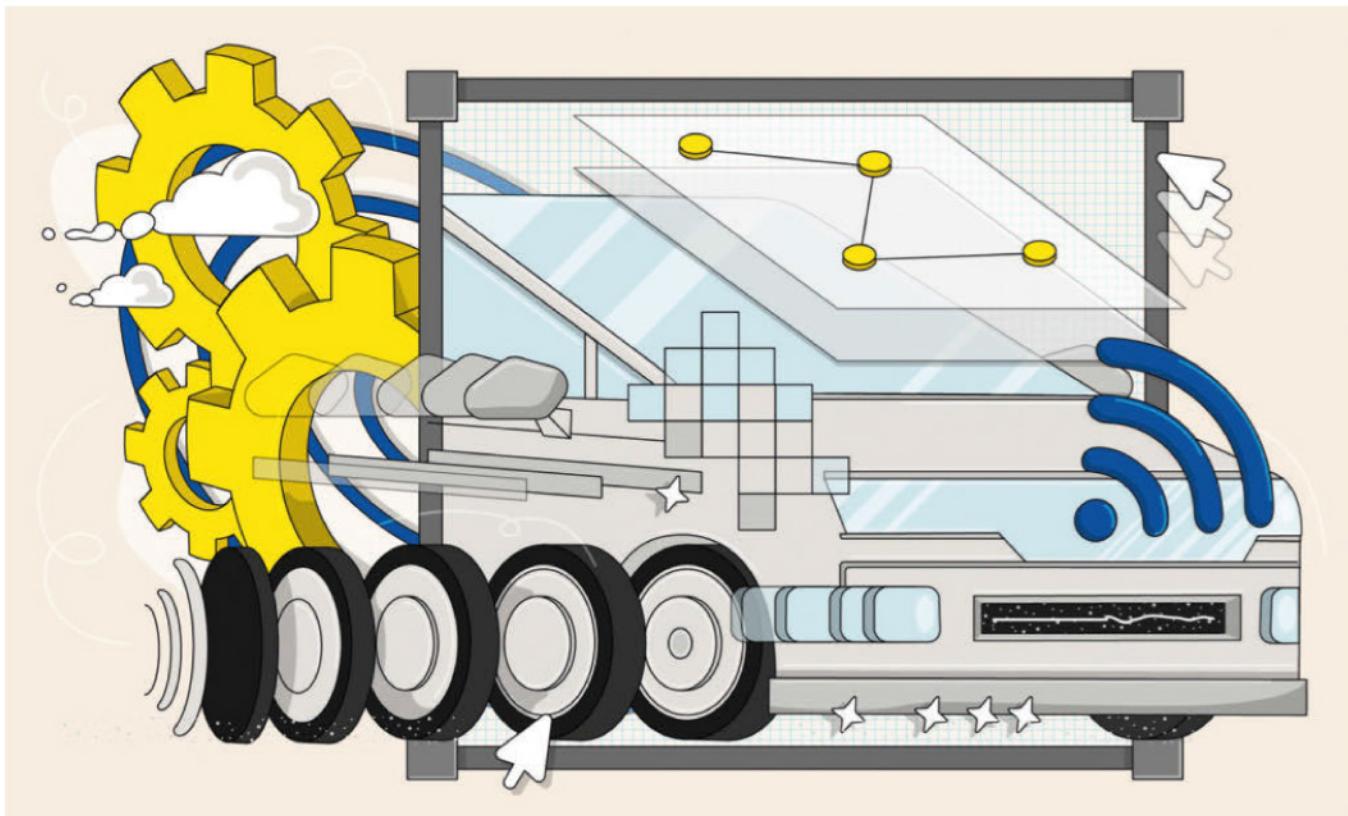
The third, and the most likely to happen, is an expansion of the Nations League, a tournament introduced in 2018 by UEFA in place of friendlies. FIFA wants other continents to adopt the format, and for the best teams to stage a "Global Nations League" every four years under its purview. UEFA has responded by inviting South American countries to join the European Nations League from 2024, cutting FIFA out. Either plan would boost the Nations League as a direct rival to the World Cup.

The World Cup itself is destined to carry on growing. The Qatar tournament features 32 teams, twice as many as played during the 1970s. The 2026 event, hosted by America, Canada and Mexico, will feature 48. That will mean more matches between no-hoppers—but will also direct a larger share of the revenue to the world's 211 national footballing federations.

Meanwhile, bids for the 2030 World Cup are already being prepared. Saudi Arabia, a bitter geopolitical rival of Qatar's, is keen to host a World Cup of its own. In theory, eligibility criteria should preclude another Middle Eastern country acting as host for the next two tournaments. But Saudi Arabia has hitched its bid to those of Greece and Egypt, in the hope that it will therefore count as European or African. The kingdom says it will pay to build stadiums in both countries. The decision is not due until March 2024. But one lesson of Qatar is that it would be bold to bet against another winter World Cup in an autocratic desert state in the not-too-distant future. In football, as in so much else, money talks. ■



Those who built it all



The future of carmaking

Reinventing the wheels

BERLIN AND PARIS

Cars are becoming increasingly defined by software. That is a big problem for many of their makers

AFTER A DAY'S work, you are not quite ready to go home. Perhaps you fancy catching a film. You could head to the cinema. Instead, you retreat into your car. A few taps on the touchscreen dashboard and the vehicle turns into a multimedia cocoon. Light trickles down the interior surfaces like a waterfall. Speakers ooze surround-sound. Augmented-reality glasses make a screen appear in front of your eyes.

This immersive experience is at the core of what Nio, a Chinese electric-vehicle (EV) company, laid out as the future of the car at a launch party last month in Berlin. The firm wants its high-end EVs to be a "second living room". Forget horsepower, acceleration and design—Nio emphasises the two dozen high-resolution cameras and transistors (of which there are 68bn, about four times as many as in the latest iPhone) in their vehicles. "We have a supercomputer in our cars," boasts Nio's boss, William Li.

Nio is at the forefront of a revolution in the car industry: the archetypal hardware

business is becoming ever more about software. Immutable objects that do not change after they leave the factory are turning into dynamic platforms for applications and features which can be updated "over the air". Rather than deteriorate with age, such "software-defined vehicles" can improve over the years. Brands will become defined less by handling or mechanical excellence, and more by the services they offer, from safety features and infotainment to artificially intelligent driving aids. Nio's cars come equipped with an AI assistant called Nomi, whose circular in-

terface sits on top of the dashboard and smiles when you ask it questions.

Like all revolutions, this one promises to usher in a new world. It will certainly benefit motorists and digitally native carmakers such as Nio or Tesla, America's EV champion. It will also claim victims, mostly among incumbent carmakers steeped in the culture of mechanical engineering. The boss of Volkswagen, Herbert Diess, recently lost his job after botching the German giant's software plans. For many of VW's rivals, too, the shift is proving thornier than managing the other big transition, from the internal-combustion engine to electric power. It may also prove more consequential. Luca de Meo, boss of Renault, a French carmaker, likens the situation to the upheaval wrought on telecommunications by the smartphone. The shift will define the fate of a global industry with revenues of nearly \$3trn.

Cars have been accumulating software for decades. For the most part, however, code was deeply embedded in a car's parts, powering the "electronic control units" of such things as the ignition, brakes and steering. Most of these programs were developed by the carmakers' suppliers and came in completed units that were then assembled into a vehicle. Car firms "were mostly integrators", explains Klaus Schmitz of Arthur D. Little, a consultancy.

In recent years this setup has started to collapse under its own complexity. As ➤

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► more software was added, it became harder to make all the pieces work together, explains Andreas Boes of ISF Munich, a think-tank. In June 2020 vw postponed for months the launch of the ID.3, a new EV, because of software troubles. Software engineers like to untangle such messes by creating a "platform"—to equip cars with a central computer powered by an operating system (os) that comes with standardised digital plugs for additional components (application programming interfaces, or APIs, in the jargon) and a connection to the computing clouds.

This technical transformation, in turn, has triggered a knotty cultural one. In the old hardware world, car companies were hierarchical, process-oriented organisations often run by big egos. Launching a new model took around four years and the focus fell on meeting the deadline for the all-important start of production. A new model was much the same as the old one, with precious little innovation, says Henrik Fisker, who once designed Aston Martin and BMW sports cars and now runs an EV startup bearing his name. In the new software world, by contrast, decentralised teams of developers focus more on problem-solving than on execution. Cars are updated in rhythms counted not in years but in days and sometimes hours. Products are never really finished.

This is second nature to newcomers such as Tesla—which was conceived as a software company that happened to make cars and is now the world's most valuable carmaker—as well as Nio and others, whose valuations belie their current limited output (see chart). For the incumbents, it requires radical reinvention. Established carmakers are furiously recruiting chief software officers (csos), developing their own os and holding "software days" to present digital strategy to investors. But most have yet to create an organisation ca-

pable of straddling hardware and software; to decide which pieces of software to keep firmly under their control and develop in-house and which to outsource; and to come up with a profitable business model for services made possible by all the code.

Take the organisational challenge first. The trick is to strike a balance between keeping development of software and hardware for different parts of a car in separate vertical groups and getting a "horizontal" software unit to write the programs, says Ondrej Burkacky of McKinsey, another consultancy. Cling too closely to the vertical approach and your software "will look like your org-chart", he says—something plainly displayed on many incumbents' car dashboards. Turn too horizontal and your software unit will get overwhelmed. That is what happened at vw, critics say, which installed its Cariad division in Ingolstadt, a six-hour drive from the group's headquarters in Wolfsburg.

Gear shift

Other carmakers are learning from vw's mistakes and adopting more mixed models. BMW and Stellantis (whose biggest shareholder, Exor, also part-owns *The Economist's* parent company) will spread their software teams around the world, closer to where the related hardware is made. Stellantis recently launched a "Data and Software Academy" intended to retrain more than 1,000 of the firm's existing employees per year, as well as hiring talent worldwide, with the aim of having 4,500 engineers by 2024. Mercedes-Benz has just invested €200m (\$206m) in an ultramodern "Electric Software Hub", which will one day house 1,000 programmers in the middle of its research-and-development campus in Sindelfingen, close to its headquarters in Stuttgart. "Here they can easily work with any department," explains Magnus Östberg, the firm's cso.

Although most carmakers now say they employ several thousand coders, this can be misleading. Many of the programmers are still steeped in the old world of embedded software, not the new one of platforms and cloud computing. And quality is more important than quantity, says Doug Field, who used to work at Apple and Tesla and now oversees software at Ford. The best programmers are not just 20% better than the average, they are ten times better, he points out. Makers of luxury cars, such as Mercedes-Benz and BMW, will always be attractive employers for such brainboxes. For lowlier brands, it can be a struggle to afford the high salaries and cushy work environments. "You have to accept if they want to come to work at 10am wearing bunny slippers," says Mr Field.

Moreover, making the mechanical engineers who still dominate the industry work with software engineers, who will increasingly take a lead, will not be easy. One side is trained to achieve the perfect *Spaltmaß*, a German word for the gap between a car's body panels. The other has no problem putting out half-baked "beta" products and collecting feedback from users. Making these cultures dovetail takes time, says Anja Hendel of Diconium, a firm that helps manufacturers build software divisions. One of the purposes of initiatives like Stellantis's academy and Mercedes-Benz's hub is to speed up the process.

Even with thousands of top-notch programmers, the car firms will not be developing all their software by themselves. Even doing just 60% in-house, vw's goal with Cariad, looks ambitious. Other carmakers are aiming at closer to 20-30%. That in turn means getting outside help.

vw tacitly acknowledged as much on October 13th, when it announced that Cariad would invest €2.4bn in a joint venture with Horizon Robotics, a Chinese firm, in part to develop software for the Chinese market. Stellantis has teamed up with Amazon to build a "SmartCockpit" which it can then customise for its brands. BMW is working with Qualcomm, a chip firm, to co-develop parts of a car os—which Qualcomm will then offer to other carmakers. Mercedes-Benz will reportedly fork out over 40% of the revenues from software and updates to Nvidia in exchange for access to the chipmaker's processors and programs.

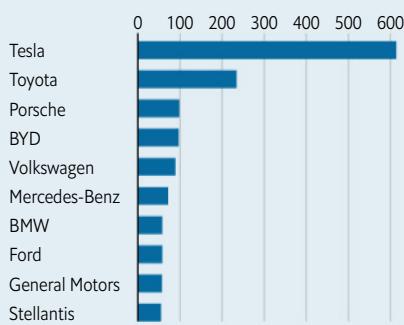
Mass-market firms may opt for Android Automotive, a software package developed by Google. Indeed on November 8th Renault announced a deepening of its relationship with the tech firm to speed its digital transformation by developing a centralised platform. Big technology firms "give us the initial speed", says Yves Bonnefont, Stellantis's cso.

Collaboration presents a dilemma, however: whether to develop a differentiated product over which the car firms

Stacks for tech

Car companies

Biggest by market capitalisation
November 15th 2022, \$bn



Sources: Refinitiv Datastream; company reports; *The Economist*

Market capitalisation* per vehicle sold†, 2021, \$m
Selected companies



*November 15th 2022 †Deliveries for Lucid, Rivian, Nio and Porsche
†Q3 2022 sales or deliveries, annualised

▶ have control, or whether to “forgo control and adopt a platform that consumers appear to readily accept”, as Bernstein, a broker, notes. They want to avoid the fate of PC-makers, which the tech giants turned into profitless commoditised businesses by inserting themselves between their products and customers. Most want to keep things such as the “user interface” (what used to be called the dashboard) and safety systems in-house. These are increasingly considered the soul of a brand—as is the overall architecture of a car’s software and the data it generates.

“Any co-operation has to be structured in such a way that we keep control of all the car’s data,” insists Frank Weber, who heads development at BMW. To temper the power of big tech, Mr Weber has long been calling for German carmakers to share costs by jointly developing software that does not differentiate them. So far the industry’s competitive instincts have prevailed. But an open-source project for software-defined vehicles within the Eclipse Foundation, an umbrella organisation for carmakers as well as tech firms for such initiatives, has recently gained momentum.

Launched by ETAS, the software arm of Bosch, a supplier of car parts, and Microsoft, a software giant, the project makes a stab at becoming to the automotive industry what Android is to smartphones: a platform shared by many manufacturers. It could help create a European “car os”, which might be able to compete better in a world where you can expect a couple of American oss, maybe one from Japan, and another from China. Old brands and new (Gucci-mobile anyone?) could then be built on one of these digital platforms.

Even if the carmakers succeed in creating their software-defined vehicles, they must also work out how to make money from them. Many eye a pot of gold at the end of the digital transition, in the form of margin-boosting revenues from services. These range from streaming entertainment and self-driving add-ons to tailored insurance policies and even temporary hardware features. BMW recently announced a subscription service for heated seats, at a cost of \$18 a month. Last year VW said it believed industry revenues from software could hit €1.2trn in 2030, around a quarter of the total market for moving people and things on wheels (or “mobility”, as the industry insists on calling it). Stellantis expects its software and service revenues to reach €4bn a year by 2026 and €20bn by 2030—with tech-like net margins of 20% to boot, twice what even a premium carmaker ekes out at the best of times.

Many analysts are sceptical; they reckon that many of these services will eventually be included free as competitors try to win customers. “There is always that one firm that does it without charging for it,”

says Patrick Hummel of UBS, an investment bank. And though features such as “full self-driving”, which Tesla offers for \$15,000, may be tempting, it is far from certain that car-owners will part with money for things that once came at no cost, such as keeping their bums warm.

Each of these changes—to digital technology, organisation and business models—is a big shock on its own. Together they amount to a handbrake turn for an industry characterised by inertia. Many established firms still do not seem to accept the scale of the challenge. Digitisation has yet to creep into boardrooms: more than a third of board members at the four big German carmakers are mechanical engineers, and none comes from the tech industry.

For now, though, the digital race is still to be won. Even as the car industry struggles with software, the upstarts have much to learn about getting *Spaltmaß* right at scale, maintaining complex supply chains and building trust in their brands. “Incumbents are not doomed like Nokia,” says Christoph Bornschein of TLGG, another consultancy, referring to a once-dominant firm caught out by the smartphone revolution. “But they have only a narrow window of opportunity to get their act together.” ■

The World Cup

Chasing the ball

KOCHI

India’s hospitality workers are heading to Qatar

AS IS THE fate of anyone running a hotel in Kerala these days, Bijoy George is a man with too much to do. Before pandemic-induced lockdowns began in 2020, he managed 40 employees at the Eighth Bastion Hotel near the old Dutch cemetery in the charming historic quarter of Kochi, a bustling coastal city. Now that business is back to pre-covid levels he needs the same number of staff again. But he has only 20 workers. His plight is shared with every other hotel, café and bar. It is a result of the state’s hospitality employees moving en masse to Qatar, not to watch football but to take up employment tied to the World Cup.

As the start of the competition approaches on November 20th, workers are quitting at a rate Mr George says he has never seen in his 22 years in the business. Qatar, a country with a population of under 3m, will have welcomed more than 1.5m visitors before the matches conclude on December 18th. That means finding staff to run all the new hotels that have been built along with other venues that have been pressed into service to profit from the rev-



Getting clean away

elry of raucous sports fans.

Kerala has long been a significant source of hospitality workers for Qatar and other Middle Eastern countries. Its communist state government provides good schools with English-language instruction but few jobs. More than 2m people, 17% of its working population, already work overseas, largely in the Gulf. The \$18bn or so they send back each year, is equivalent to around 14% of the state’s output.

The appeal of Qatar is straightforward. Starting salaries approach \$1,000 a month, more than six times the level for similar jobs in Kerala. To replace those who have left, Kerala’s employers have been casting their nets wider. Recruiters have been voracious, extending their searches to many other Indian cities, most notably Mumbai. But that means the most common word on name-tags pinned to the breast pockets of workers is “trainee”.

Among the many skills that need to be taught, says Mr George, is smiling at customers—the failure to do so a result of shyness among those new to the workforce. The danger is that after a week or so when confidence grows, even these employees may slip away to the Gulf. Large hotel chains operating in India have added to the flight by sending senior employees to Qatar to get new operations up and running.

Most contracts run for three months, concluding at the end of December, not long after the World Cup final. Returning workers will be welcomed back with open arms. Filling the gaps is even more important as Indian tourism and weddings have resumed. In a bad year for other businesses, the share prices of the country’s local hotel companies have soared. The reunions, though, may be short-lived. The game these workers will have learned from the World Cup is how to be paid better. That means leaving India. ■

Twitter's competitors

Fleeing the nest

NEW YORK

The substitutes are all found wanting

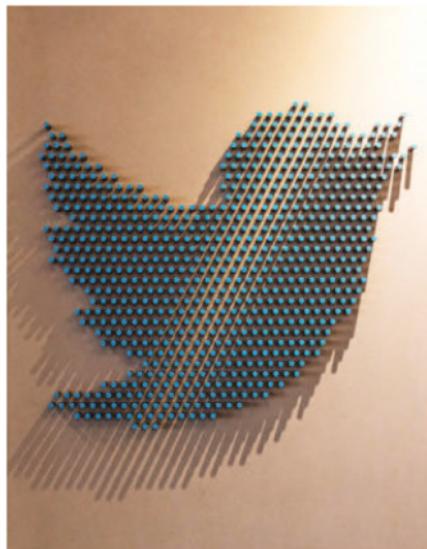
TWITTER IS THE WORST! But also the best," Elon Musk tweeted recently. Not everyone agrees with the second sentiment. Soon after he purchased the social network for \$44bn on October 27th, the hashtag #TwitterMigration started trending. Concerned with what Mr Musk has planned for the social-media platform, some are searching for alternative spaces to swap news, views and pictures of pets. Along with renewed interest in established platforms such as Tumblr, Discord and Reddit, newcomers are under consideration. What chance do they have of pecking away at Twitter's 240m users?

Many are flocking to Mastodon, a decentralised social network founded in 2016 by Eugen Rochko, a German developer and its only employee. The platform feels like Twitter, but positions itself as its antithesis: no ads and no algorithms and "not for sale", it claims. On November 12th Mastodon said it had added over 1m new members since the Twitter deal closed. But meeting this sudden surge in interest has strained its small, crowdfunded model. Mastodon apparently receives only around \$20,000 a month from just over 4,000 donors and some small government grants. It suspended sign-ups to the two servers it maintains after demand rocketed.

Cohost is also gaining ground. The platform comes across as a cuddlier version of Twitter with its pastel colours, a smiling bug for a mascot and similar values to Mastodon. It is similarly swamped. Its three developers are working flat out to upgrade the site and approve a waiting list of over 17,000 new users. This makes it unlikely to compete with Mastodon, let alone Twitter, and even more unlikely to get its subscription model off the ground.

Less cosy is Truth Social, Donald Trump's attempt to compete with the platform that banned him in 2021. It does not look like a serious competitor. Investors seem reluctant to put more money into its loss-making parent company and ad revenues are tiny. Many Twitter users will avoid a platform built for conservatives. Concerns about hate speech also make it an unlikely rival: it was only recently approved to appear on Google's app store.

The urgency to find an alternative also depends on what version of Twitter survives Mr Musk's takeover. Many executives spared the sack in his cull of employees are leaving anyway, robbing it of skilled work-



Taking flight from Twitter

ers. Advertisers are becoming more cautious, despite the pausing of a service introduced by Mr Musk that allowed anyone to buy a verified account, which led to problems with impersonation. The share price of Eli Lilly, an American drugmaker, tumbled after a fake account in its name tweeted that "insulin is free now". The head of a rival social network admits to targeting large Twitter advertisers in recent days to tempt them to defect.

Mr Musk meanwhile appears unfazed: "Twitter usage is at an all-time high LOL," he claimed in a tweet on November 7th. "I just hope the servers don't melt!" Yet three days later he reportedly warned his remaining employees of the possibility of bankruptcy. If Twitter melts away, a decent substitute remains elusive. ■

Venture capital

After the party

SAN FRANCISCO

FTX's failure and SoftBank's struggles point to a tech-investing hangover

THE MEETING is a dream come true for the screenwriters who are already said to be at work on the film version of events. In 2021 Sequoia Capital, a large venture-capital (vc) firm, made its first investment in FTX, a now-bankrupt cryptocurrency exchange. To publicise the deal Sequoia published part of the transcript from the virtual pitch meeting on its website. Sam Bankman-Fried, the founder of FTX, explained how he wanted the firm to be a "superapp" where "you can do anything you want with your money from inside FTX". Sequoia's investors swooned. "I love this founder," said

one in a chat function; "Yes!!!!" declared another. An FTX executive who sat close to Mr Bankman-Fried during the pitch noticed another detail: "It turns out that that fucker was playing 'League of Legends' throughout the entire meeting."

It also turns out that FTX was doing more with customers' money than it had promised (see back Briefing). Its demise has forced Sequoia to write down its \$210m investment. It will also hurt another embattled backer. On November 11th SoftBank, a Japanese conglomerate turned tech investor, reported that its Vision Funds, which focus on vc investments, had lost about \$10bn in the three months to September. The firm is expected to write down around \$100m from its investment in FTX.

This adds to a string of bad news for tech investors. Since the tech downturn began last December plenty of Silicon Valley darlings have gone bust, including Fast, an online-checkout firm, and LendUp, a purveyor of payday loans. There has been a flurry of other blow-ups in cryptoland too, such as the failure of Three Arrows Capital, a hedge fund, and Voyager Digital, a lender.

vc investing is all about taking risks. An investor may expect only two firms to succeed out of a portfolio of ten, hoping that the supersize returns from the stars make up for the duds. Usually the risk is greatest when firms are young and cheap. But FTX's valuation in January was \$32bn. Many think the industry's failure to notice that something was wrong is symptomatic of bigger problems. "Venture capital is in la-la land", says one industry veteran. There are three areas of risk: governance, due diligence and a focus on growth at all costs.

The problems are a hangover from years of explosive growth. Today the market is sluggish because of high inflation, rising interest rates and the war in Ukraine. But in 2021 vc investment reached a record \$630bn, twice the previous record set the year before. Part of the reason for the growth was new entrants. SoftBank raised its first vc fund, worth a whopping \$100bn, in 2017. After that crossover investors (which back both public and private firms), such as Tiger Global and Coatue, began to chase more deals with startups, too.

The newcomers created fierce competition and injected far more capital into the market. That meant some investors "began to rationalise a bunch of governance structures that would have previously been unthinkable", says Eric Vishria of Benchmark, a vc firm. In the past, vc investors were expected to take seats on the boards of firms in which they made sizeable investments. That is no longer the case. FTX had no investors on its board. Tiger, for instance, invested in about 300 firms in 2021 with few board seats in return.

Due diligence is another issue. Before the boom years, investors had weeks to ↗

scrutinise founders and grill a firm's customers. As competition intensified, deadlines grew shorter. Some red-hot startups gave investors just 24 hours to make an offer. For many the risk of missing out on the next Google was too great. As a result, much due diligence went out of the window. Instead some investors used the involvement of big firms, such as Sequoia or Andreessen Horowitz, as a short-cut test. If a renowned vc outfit was investing in a startup, the theory went, it must be a safe bet. That logic is under review. (Sequoia says that it performs "rigorous" due dilig-

ence on all its portfolio companies.)

The industry's obsessive focus on growth presents the final problem. Many investors push startups to expand at all costs, especially after large funding rounds. But not all companies can actually support this supercharged growth model, argues Mark Goldberg of Index Ventures, another vc firm. Startups that get swept up are at risk of falling flat. That includes firms such as WeWork, a flexible office-rental company that aborted its initial public offering in 2019, and Opendoor, a property firm which got stung by falling

house prices this year. "It's like giving jet fuel to cars," adds Mr Goldberg. "If you do that, bad things will happen."

The market downturn has, for now, relieved some of the pressure on the industry. In most cases, investors say they now have more time for due diligence. Governance may improve too, thanks to FTX's woes and the fact the slump has given investors more bargaining power. But, as the downturn drags on, more Silicon Valley startups will struggle to raise the capital they need. The hangover from 2021 is only just beginning. ■

Bartleby Management balls

What you can/cannot learn from the success of football's next World Cup winners

ON DECEMBER 18TH the winners of the football World Cup in Qatar will lift the famous golden trophy. Several rituals will then unfold. The final entry will be made on fans' wall charts. Pundits will share their lists of players of the tournament. In the victors' home country, cars will clog the streets and drivers will lean on their horns. And in the days that follow, leadership coaches will post drivel about the secrets to be learned from the successful manager.

But why wait till the end of the World Cup to find out how Hansi Flick of Germany, Didier Deschamps of France or whoever actually wins did it? Why even hang around for the start of the tournament on November 20th? Before a whistle has been blown and a ball has been kicked, here is your cut-out-and-keep guide to what bosses everywhere can learn from the winning manager (wm). All you have to do is delete anything that doesn't quite fit the narrative.

Team spirit. The wm instilled a tight bond among the team by showing them unwavering support/creating an atmosphere of fear. He was known for putting his arms around the shoulders/hands around the necks of underperforming players. His oxytocin-releasing bear-hugs/scarlet-faced rages ensured that a group of elite performers relaxed/did not relax. "He showed us love/utter contempt and we all responded to that," said a man in shorts from the winning team. The power of empathy/barely suppressed terror will surely not be lost on managers in the workplace.

Data. The wm obsessively immerses himself in data/does not know how to turn on a computer. In the build-up to each game he took each player through a detailed analysis of his opposite number/encouraged everyone to play table

tennis. After the matches were over he watched videos of each game/Netflix. "He planned everything in minute detail/told us to just go out there and have fun," said another happy man in shorts. In the office, as on the pitch, rigorous analysis/gut instinct is often the difference between success and failure.

Purpose. The choice of Qatar as a venue for the World Cup was mired in controversy from the start; questions have swirled about corruption, human rights and worker safety. The wm turned these concerns to his advantage/seemed totally unaware of them. He made it clear that the team were ambassadors for the sport/only there to win. His decision to always wear a rainbow-coloured wristband/refuse to answer any questions about the host country was incredibly astute. "He gave us a much-needed sense of purpose," recalled one of his players. "Only an absolute cretin would have wondered what we were in Qatar to do," said another.

Stars. The wm built his whole team around/eschewed the very idea of a star player. "A superstar like Neymar/Harry

Maguire/someone else has to be given freedom to express himself/realise that the team comes first," he said afterwards. Every organisation will have its own outstanding performers. The clear message from this World Cup is that they should sometimes/never be given special treatment.

There is an alternative way of thinking about the lessons for corporate managers from an event like the World Cup: there are none. First, the jobs are wholly different. Football managers don't need to change strategy because the market is shifting ("we will use our excellence in the field of spherical objects to diversify into basketball"). Corporate bosses do not tend to get customer feedback from people making hand gestures in a crowd. Nor do their career prospects usually rely on the split-second decision-making of a bunch of talented 20-somethings.

Second, all leadership writing depends on the dubious premise that an entity was successful because a person was in charge, rather than while they were in charge. The "halo effect" is the name given to the tendency for a positive impression in one area to lead to a positive impression in another. But just as a high-flying firm does not necessarily signal a world-beating ceo, so a World Cup winners' medal does not mean the manager was a genius.

Just one, Vittorio Pozzo of Italy, has ever successfully defended the World Cup title; only eight countries have ever lifted the trophy in the history of the tournament. Whoever ends up celebrating on December 18th, the pool of people available for selection, the role of luck and the quality of the competition will have mattered at least as much as the person at the top. That is one management lesson worth learning.



Schumpeter | League of ex-legends

From GE to FTX, American capitalism is dangerously exposed to the Icarus complex



IT IS HARD to think of two more different firms than GE, a once-exalted symbol of American inventiveness, and FTX, a Bahamas-based fly-by-night crypto exchange. Besides high-pitched voices, it is hard to think of two people with less in common than the late Jack Welch, GE's legendary former CEO, and Sam Bankman-Fried, FTX's disgraced founder. The former, son of working-class parents, was fiendishly competitive about profits, had a frat-boy approach to life, and was as much at home on a golf course as he was on the factory floor. The latter, son of Stanford law professors, is scruffy, nerdy, a player of "League of Legends", and claims to be motivated to make money only so that he can give it away.

Yet there is one big thing they share, and it's not just a love of expletives: "I fucked up, I fucked up," admits Welch, with tears in his eyes, at the start of a monumental new book by William Cohan on the rise and fall of GE, published on November 15th. "I fucked up, and should have done better," tweeted Mr Bankman-Fried a few days earlier, as his crypto empire, once worth \$32bn, crashed around his ears, leaving some 1m creditors out of pocket.

Both men share the experience of having been considered the corporate messiahs of their generations. Welch was hailed as the greatest CEO of the 20th century. The 30-year-old Mr Bankman-Fried wore a halo of sorts on his mop-haired head not just for trying to bring a semblance of respectability to the chaos of crypto, but for appearing to do it to promote the greater good of humanity (see back Briefing). Yet both saw their reputations crushed as the businesses that they nurtured imploded—agonisingly slowly in the case of GE, which is splitting into three, and at warp speed in the case of FTX. You could call it the Icarus complex. They both flew too close to the sun. But where was Daedalus? Why do the self-interested stewards of American capitalism—Wall Street, venture capitalists, investors, the business press—so often fall victim to too-good-to-be-true corporate narratives?

Read "Power Failure", Mr Cohan's 800-page extravaganza on the firm founded in 1892 as the General Electric Company, and it is instantly clear how important brilliant people are to business success—and how their brilliance can become a dangerous vulnerability. GE had not only the inventor, Thomas Edison, to thank for its start in life; Charles Coffin, a visionary businessman, set it on

the path to lasting greatness. Welch, who took over as CEO in 1981, stood on a similar pedestal. The author describes in beautifully reported detail Welch's mastery of the chemistry behind GE's products, such as plastics, as well as his abilities as a leader to cajole, charm, party with and, yes, annihilate staff. From the point of view of profits, it worked. Under him GE achieved quarter after quarter of earnings growth and a market value that grew from \$12bn in 1981 to \$400bn when he stepped down in 2001.

But such success inevitably over-seduces investors. No one, apart from short-sellers, has an interest in peering through the hype. Under Welch, GE's mythology—and no doubt M&A fees—meant that Wall Street mostly turned a blind eye to the growing role GE Capital, an unregulated bank, played in enabling the firm to meet its "stretch" profit targets. Under Jeff Immelt, his successor (whose appointment caused Welch such bitter regret), its size became an Achilles heel.

Likewise Mr Bankman-Fried, whose net worth reached \$26bn at its peak, played the iconoclastic whizz kid and raised almost \$2bn from investors. All appear to have been blindsided by the disastrous relationship between FTX and Alameda Research, his trading firm. The exchange's balance-sheet, reported in the *Financial Times* on November 12th, looks as sophisticated as a household's spreadsheet. Even now its founder continues to act casually. The *New York Times* reports that since FTX's collapse, he is unwinding by playing video games. Perhaps this is multitasking 3.0: blowing enemies to bits while blowing fortunes to smithereens.

Such spectacular failures are more likely in finance because shuffling money around is a confidence game. But in the case of GE, as Mr Immelt sought to wind down the firm's dependence on GE Capital, he is also accused of bungling the acquisition of the power business of Alstom, a French rival, which brought his firm closer to the brink. It is a reminder that industrial businesses can also hide danger—and that it's worth peering under the bonnet even of makers of adored products, such as Teslas and iPhones.

Hagiographies in the financial press add to the risks. Like a modern-day Welch, Mr Bankman-Fried graced the covers of both *Forbes* ("Only Zuck has been as rich...this young"), and *Fortune* ("the next Warren Buffett") in less than a year. No one asked where the money came from when he used FTX and Alameda to bail out struggling crypto firms. Instead, he was compared to John Pierpont Morgan, lender of last resort in the Panic of 1907. Mr Cohan relates how Welch crafted his own media image, too. Not only did he develop close relationships with the journalists who covered GE. He had a "catch-and-kill" approach to problematic stories. One former *Wall Street Journal* reporter, who wrote a book on the underside of Welch's tenure at GE, was so bruised by the experience that he turned to God.

The baggy shorts

And yet the truth is, for all their hubris, some business titans are in a league of their own, which is why it is so hard for investors to be dispassionate. Welch's reputation may have cratered, but a thoughtful book like Mr Cohan's suggests that in the long run he will be vindicated. As one executive puts it, most of his decisions were the right ones. Most of Mr Immelt's were wrong. For now, Mr Bankman-Fried's name is in the dirt. Perhaps a forthcoming tome being pitched by Michael Lewis, author of "The Big Short", will reveal what caused the house of cards to fall. It will no doubt be riveting. But why weren't investors, whose money was on the line, the keenest of all to get the inside story? ■



Hold on for dear life

BOGOTÁ AND WASHINGTON, DC

The failure of FTX and Sam Bankman-Fried is reverberating through the industry

Nobody in crypto has slept in days. That, at least, is what it feels like in the never-ending Twitter "spaces" which have been running since FTX, a Bahamas-based crypto exchange and crown jewel in the empire of Sam Bankman-Fried, its once-feted founder, filed for bankruptcy on November 11th. The scattered crypto-community often comes together in these online forums—they are where people shill tokens, organise pump and dumps, and occasionally even discuss exciting innovations. In the days after the fall of FTX and Mr Bankman-Fried's other firms, including FTX.US, an America-based exchange, and Alameda Research, a trading firm, they

became places for traders to mourn, former employees to spill the beans and other exchange operators, including Changpeng Zhao of Binance and Jesse Powell of Kraken, to try to reassure customers.

In other words, they are places that now reek of despair—not just about the billions of dollars that are trapped on a defunct exchange, but about the architect of the mess. Mr Bankman-Fried was crypto's golden boy. He studied physics at the Mas-

sachusetts Institute of Technology and was supposed to have learned the craft of marketmaking and trading at Jane Street, an elite financial firm. It was this, along with the fact that FTX gobbled up market share after it was founded in 2019, that attracted investors like Sequoia, considered one of Silicon Valley's sharpest venture-capital firms, and Temasek, Singapore's sovereign-wealth fund. Mr Bankman-Fried used his credentials and newfound wealth—FTX was worth \$32bn at its peak in January—to donate to politicians, push his views on regulation and buy up competitors. He was supposed to be crypto's future. Instead, he may have robbed the industry of one.

It was possible to get very rich, very fast in crypto. A certain type of winner got lucky, bought Lamborghinis and justified their riches by belligerently asserting that blockchain technology or bitcoin was the future. Those who disagreed got the now-familiar rejoinder: "Have fun staying poor." It is tempting to see comeuppance in every scam, failure or hack that befalls the industry. The failure of FTX is certainly the closest thing to a death blow it has faced.

Everyone in FTX's orbit has suffered a financial hit, but the real wound cuts deeper. Mr Bankman-Fried has let down supporters, embarrassed investors and made fools of politicians. He has also damaged and exposed flaws in effective altruism, a movement that aims to safeguard humanity's future, and to which he donated time and money (see next story). The result of the mess will be less sympathetic regulators. Institutions and punters who embraced crypto will shun the Wild West.

The details of precisely what went wrong at FTX will spill out in bankruptcy proceedings and possibly criminal ones over the coming months and years. But the early evidence, in particular a balance-sheet obtained by the *Financial Times*, does not make for pretty reading. In the spreadsheet, which metadata suggest Mr Bankman-Fried created, FTX appears to hold about \$1bn of real money or money-like assets, including currencies and stablecoins (crypto-tokens pegged to the dollar), against some \$9bn of liabilities owed to customers. Mr Bankman-Fried claims to hold an additional \$3.5bn in equity or venture investments. Almost everything else on the balance-sheet—assets claimed to be worth around \$5bn—are either tokens FTX minted itself, had a hand in creating or those known in the vernacular as "shitcoins", which are not worth the energy needed to render the pixels on a screen. To add insult to injury, FTX has since lost most of its liquid assets, worth around \$500m, in a hack that seems to have been orchestrated by an insider.

Astute readers may notice this is not how an exchange should work. Normal ➤

→ Also in this section

65 What next for effective altruism?

ones hold customer deposits, not a mix of venture investments and tokens. Then there is an apparent hole in the accounts. In a grovelling note left in them seemingly by Mr Bankman-Fried, the writer claims not to have realised \$8bn was missing, an amount worth more than half that deposited in the firm's care. This is put down to a "poorly labelled" internal account.

In messages published by Vox, an online publication, Mr Bankman-Fried said FTX had directed customers to send money directly to Alameda but never checked it got passed along (Mr Bankman-Fried has since tweeted he thought the messages were private). This does not tally with what Caroline Ellison, chief executive of Alameda and reputedly a former girlfriend of Mr Bankman-Fried, is reported to have mentioned on a call with colleagues on November 9th. According to the *Wall Street Journal*, Ms Ellison said that she and Mr Bankman-Fried knew of a decision to move FTX customer funds to Alameda. Since Mr Bankman-Fried resigned from FTX on November 11th, the firm has declined to comment, but on November 16th the new boss issued a statement pointing out Mr Bankman-Fried has no role at FTX or Alameda and does not speak on the firms' behalf.

To the moon...and beyond

The balance-sheet of Alameda—information about which has been reported by CoinDesk, a news website—appears similarly full of holes. It shows the trading firm owed \$8bn in loans and that its assets again consisted largely of tokens created by FTX. Combining the two balance-sheets in a rough calculation, it appears that before things went south, Mr Bankman-Fried's firms had taken in around \$14bn of deposits, borrowed \$8bn and raised almost \$2bn of equity capital from investors. His firms gave back \$5bn to those savvy enough to run away fast, and probably hold around \$5.7bn in equity and venture in-

vestments plus \$1bn in cash. This means a hole of perhaps somewhere between \$4bn and \$12bn, depending on how much of Alameda's debt is owed to FTX. Mr Bankman-Fried insisted on November 15th that the trading firm's problem was liquidity, not solvency, because it held lots of illiquid but valuable assets. But the balance-sheets appear to have exposed what Mr Bankman-Fried counts as a valuable asset.

How did Alameda lose so much money? It was clearly using leverage. In April last year a former employee tweeted the firm was taking long positions on crypto assets based on "narrative market-drivers", such as Elon Musk's tweets. Presumably such leveraged positions worked well until November last year, when crypto prices peaked, at which point things went downhill. Transactions that occur on a blockchain are public, meaning it is possible to look for evidence of when Alameda appears to have needed to tap FTX's customer funds. Nansen.ai, a blockchain-explorer company, has identified wallets belonging to the firms. Analysis of them cannot provide a complete picture. Both firms could create new wallets on a whim; many transactions were directed through other trading firms, muddying the trail. Still, the wallets suggest Alameda blew up over the summer at the same time as other crypto firms, such as Three Arrows Capital, a hedge fund, and Voyager, a lending platform—and that Mr Bankman-Fried bailed out Alameda by lending it customer funds.

The idea Alameda blew up in May or June may help explain why Mr Bankman-Fried swooped to rescue firms like Voyager. He may not, as was thought at the time, have considered himself the next John Pierpont Morgan, a banker who saved the American financial system in 1907. Instead, he may have been backed into a corner. Alameda is reported to have borrowed money from Voyager. If the lending platform had been liquidated it would have ex-

acerbated problems at his fund.

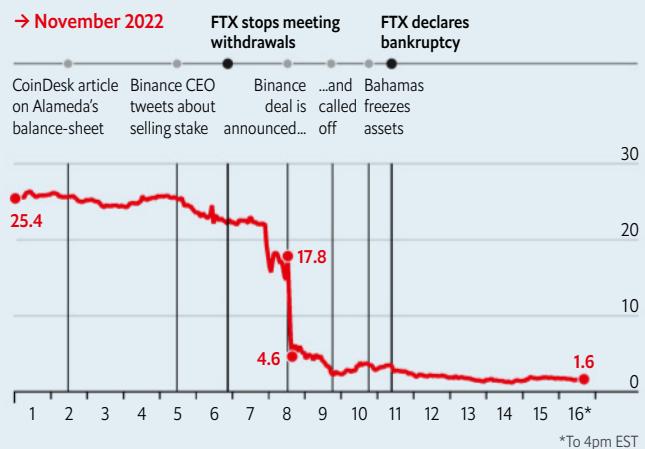
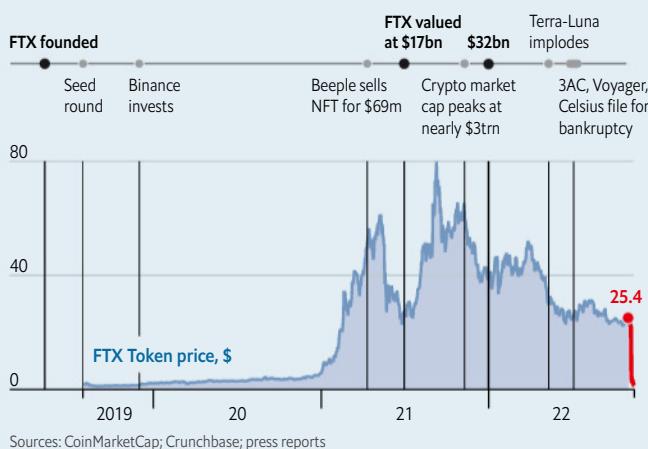
The only way out would have been to bet big or raise money. According to reports, Mr Bankman-Fried has been trying to raise capital since the summer. He flew to Abu Dhabi two weeks ago in an apparent attempt to drum up interest. When his problems became acute, he called Sequoia and other early investors. He even tried Binance, owned by his great rival, Mr Zhao.

There is also more cynical speculation about what happened. One suggestion is that Mr Bankman-Fried may have used customer funds not just as a solution to a problem. Perhaps Alameda had been relying on FTX as its piggy-bank all along: depositing the exchange's own tokens as collateral in order to move more reliably valuable crypto, like bitcoin or ether or stablecoins, to Alameda for trading purposes.

It is a view which Mr Bankman-Fried's words appear to support, if not insurmountably prove. In an interview with Bloomberg, a news website, he described how to build a token in order to borrow against it. He suggested making the number of tokens traded low relative to the number issued, thus making it easier to pump up the market capitalisation. For a token in theory worth \$20m, "Maybe there hasn't been \$20m that has flowed into it yet". But "You can ... finance this, right? You put X token in a borrow-lending protocol and borrow dollars with it." Mr Bankman-Fried then described how, once these tokens have been deposited as collateral for a loan in exchange for dollars, "If you think it's worth less than two-thirds of that, you could even just put some in there, take the dollars out. Never...give the dollars back." He gave this description of borrowing real dollars he would never give back against a low-float, imaginary token on April 25th—two months before Three Arrows Capital was liquidated, and Alameda's problems seem to have started.

It is this kind of public theorising that

Not gonna make it

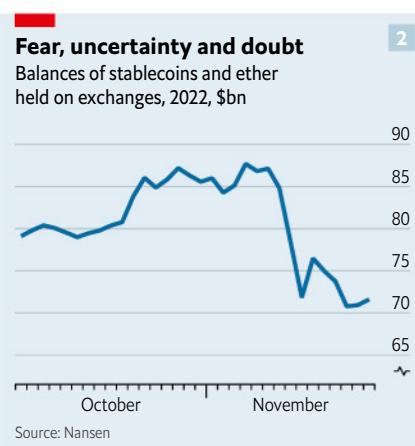


has made some even more suspicious. Regulators and law-enforcement agencies, including the Department of Justice and the Securities and Exchange Commission are investigating, along with authorities in the Bahamas. Mr Bankman-Fried may be flown to America for questioning; Congress plans to force him to testify in December about what went wrong. In crypto-forums, thousands of conspiracy theories are being traded.

Still, the theory for which there is most evidence is the one Ms Ellison seemed to outline to Alameda's staff on November 9th: that the trading firm had taken on leverage and was struggling to meet its liabilities in the summer, at which point the decision was taken to move over customer funds from FTX. The tale is one that makes plain why regulators tend to split up these kinds of firms in the world of traditional finance. Retail brokers, which take in customers' deposits and hold their assets, are segregated from exchanges, the venue in which customers trade assets, which are in turn segregated from marketmaking firms, such as banks and hedge funds.

FTX was an offshore exchange which, like Binance and others, had studiously avoided locating itself in a strict regulatory regime. (Its American counterpart, FTX.US, has also filed for bankruptcy, but seemed to face fewer problems redeeming customer assets.) Thus its blow-up is not straightforwardly the fault of poor American regulation. Nevertheless, Alesia Haas of Coinbase, another crypto exchange, argues a lack of regulatory clarity in America "pushed volumes offshore", meaning more American customers will end up hurt by FTX's implosion. She argues that rules making it clear how and where digital-asset exchanges ought to be registered would help. There are several bills floating around Congress that would do just that. They will surely have fresh impetus now.

The events also reveal just how interconnected crypto is, and the vulnerability this brings. When one large project (the Terra-Luna stablecoin system) blew up in the summer, it was enough to bring down a hedge fund and two lending platforms, which was in turn enough to bankrupt one of crypto's biggest exchanges. This dynamic has been supercharged by the failure of FTX, which already seems to have taken out three smaller exchanges, AAX, BlockFi and Liquid, as well as a lending platform, Genesis. Other exchanges faced enormous withdrawals (see chart 2). Given that it took around six months for the fallout of the summer's blow-up to hit FTX, the stage is



now set for more blow-ups.

The bigger question the events raise is whether crypto is a cause for which it is worth fighting. FTX is just the latest and biggest in a long line of multi-billion dollar projects, businesses and funds that have gone spectacularly bust. Hacks and scams are commonplace. "Why bother with any of this?" is a reasonable question. It is an indictment that, almost 14 years after bitcoin was created, there are only a handful of use cases for crypto, such as firms paying workers in countries suffering from hyperinflation, like Argentina, or efficient decentralised exchanges and lending tools. Even these seem at present to offer only moderate improvements over more old-fashioned forms of finance.

Diamond hands

Among the developers who work on the software powering the Ethereum blockchain, or those building applications on top of it, the promise of crypto has never seemed greater. In October, at a crypto conference in Colombia, Danny Ryan, an Ethereum developer, pleaded with the audience to work on functions and applications other than those related to finance. And that is the direction many are taking, especially now that efficient, scalable blockchains are beginning to emerge. Stani Kulechov, the creator of Aave, a decentralised-lending protocol, is building a social-media platform that would allow people to port their followers from application to application, thus allowing them to quit a platform without losing clout. The Gitcoin platform allows people to vote on grants to be distributed to so-called public-goods projects, like open-source software.

Much of crypto is just a casino—and thus high-octane, shiny and tempting. Mr Bankman-Fried positioned himself as the champion for the less dubious end of the industry. But it is now clear he actually ran one of the most dubious casinos of all. With his empire in ruins, crypto advocates must hope it is the underlying technology's turn to shine. ■

Consequences of a collapse

EA games

What Sam Bankman-Fried's downfall means for his social movement

SAM BANKMAN-FRIED explained a curious belief in an interview earlier this year. The boss of FTX, a now-bankrupt crypto exchange, was asked by Tyler Cowen, an economist, what it means to him to be "risk neutral". The concept is one used by investors who wish to be just as open to good surprises as bad ones. But Mr Bankman-Fried applies it more widely.

What would he do, Mr Cowen continued, if given the choice between two options. One (with a 51% probability) doubles the number of worlds in existence; the other (with a 49% probability) wipes out our world and any others. Mr Bankman-Fried ummed and ahhed. Mr Cowen noted he could repeatedly offer the same options, surely wiping out the world by the end of the game. Would this not make taking the risk an example of a "St Petersburg paradox", in which maximising gains leads to a nonsensical conclusion? Mr Bankman-Fried countered that it might also lead to "an enormously valuable existence".

Mr Bankman-Fried's sudden fall from grace has cast a spotlight on effective altruism, a burgeoning movement to which he belongs. As an effective altruist, he seeks to maximise expected utility, even if doing so presents uncomfortable trade-offs. He has promised to give away his lifetime earnings, which he was making good on by pouring money into effective-altruist causes at the time of his downfall. The blow-up has raised hard questions. Was he motivated by the movement's goals? Why did its leading lights not see this coming? ■



Money Talks

For more on this story, listen to our podcast at: www.economist.com/cryptopod

► And what now for effective altruism?

Effective altruism is both a social movement and research agenda aimed at maximising the good done with one's time and money. It counted 6,500 active members in 2019. But the number of adherents seems to have shot up since then, and its ideas have been popularised in bestselling books by William MacAskill, an Oxford philosopher. Followers are drawn from elite universities, with nearly one in ten having attended Oxford or Cambridge. Many have a penchant for estimating expected values and writing long, introspective blog posts. The movement's careers-advice arm guides youngsters on how to find the most "high-impact" careers. It is not hard to see why critics see it as something of a cult.

Until recently, even the most ardent critic would have said effective altruism was a pretty harmless one. The downfall of Mr Bankman-Fried, who has been apparently dedicated to the cause since his time at university, has led to a reckoning. Not only has effective altruism lost its wealthiest backer; its reputation has been tarnished by association. Many inside and outside the community are questioning its values, as well as the movement's failure to scrutinise its biggest funder—something particularly painful for a group that prides itself on logically assessing risk.

The greatest happiness

Mr Bankman-Fried's life story is intertwined with the history of effective altruism. The movement, which took inspiration from the utilitarian ethics of Peter Singer, a philosopher, was formally established in Oxford in 2011 by Mr MacAskill, a mentor to Mr Bankman-Fried, along with colleagues. Effective altruism was initially focused on helping poor people around the world, albeit in unusual ways. Effective altruists often advised graduates to "earn to give"—ie, to make lots of money and then donate it. More effective to be the banker who buys millions of bed nets than the guy who hands them out, or so the logic went.

According to a profile of Mr Bankman-Fried published by Sequoia, a venture-capital firm that invested in his crypto exchange, Mr MacAskill nudged Mr Bankman-Fried to take a trading internship so he could earn to give. After a few years in finance and a stint at the Centre for Effective Altruism, Mr Bankman-Fried corralled some fellow effective altruists to start a crypto firm. "This thing couldn't have taken off without EA," said a colleague. "All the employees, all the funding—everything was EA to start with." Nine of Mr Bankman-Fried's inner circle, mostly effective altruists who worked with him, lived with him in the same Bahamian penthouse.

The crypto boom of 2020 and 2021 propelled Mr Bankman-Fried's wealth and status. At his peak, he was worth \$26bn, mak-

ing him effective altruism's richest big donor, at least on paper (the other big one is Dustin Moskovitz, a co-founder of Facebook). His rise preceded Mr MacAskill's latest book, "What We Owe The Future", which was published in August. This made the case for "long-termism," a view that emphasises the fact most human lives will be in the future. As Mr MacAskill writes, "distance in time is like distance in space." If people matter 1,000km away, they matter 1,000 years away. Long-termists seek to cut the risk posed by things like rogue, powerful artificial-intelligence.

Mr Bankman-Fried claimed to be a long-termist, and spent a lot of money advancing the cause. In 2015 nearly all effective-altruist spending went to global development. This year nearly 40% went to minimising existential risk (see chart). Mr Bankman-Fried's "FTX Future Fund," which was launched in February, disbursed \$130m in its first four months, mostly to long-termist causes. So fast was the spending, some altruists believed the movement was no longer "funding-constrained"—it had so much money, the only problem was finding talented people who could make good use of it.

He also became a big donor to Democrats—along with his firm giving \$110m in the run-up to the midterm elections—and donated smaller sums to Republicans he thought would help prepare for pandemics. He backed an advocacy group run by his brother, Guarding Against Pandemics, which became well-known in Washington. Money, politics, media campaigns, best-selling books: little wonder Mr Bankman-Fried, Mr MacAskill and effective altruism were everywhere from adverts on the London Underground to the covers of *Time* and *Forbes*. Effective altruism had peaked.

That may be why Mr Bankman-Fried's fall has caused such shock waves. On an online forum, Mr MacAskill wrote he was "outraged" at the harm Mr Bankman-Fried had caused and felt "sadness and self-hatred". In private, many effective altruists say they are "betrayed" or "humbled".

"Maybe risk neutrality makes sense in some abstract way," says an employee at an effective-altruism-backed charity. "Not when other people are depending on you."

Democratic strategists are mourning the loss of their big donor. The Future Fund's collapse will leave nascent organisations in the dust. Kevin Esvelt of the Massachusetts Institute of Technology, and a co-founder of SecureBio, a bio-risk outfit that received a grant from Mr Bankman-Fried's fund, says the collapse will set back work on pandemic preparedness.

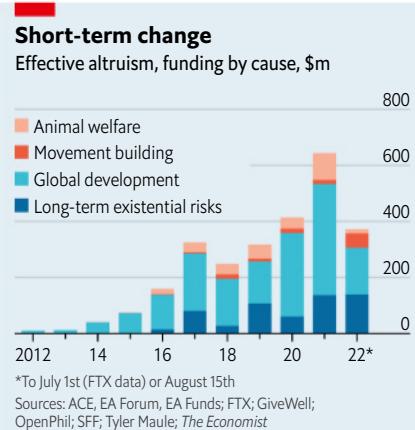
A hiring opportunity

EA is now funding-constrained. As one poster on an online forum puts it: "Back to earning [to] give I guess, I'll see you guys at the McKinsey office." The loss of trust may be more damaging for effective altruism's long-term prospects than the loss of money, however. The problem is simple. As Mr Moskovitz wrote: "Either EA encouraged Sam's unethical behaviour, or provided a convenient rationalisation for such actions." Josh Morrison of 1Day Sooner, a public-health charity part-funded by Mr Bankman-Fried's fund, worries that, "Fewer people may call themselves EA, and we may see fewer college students sign up."

In messages with Vox, an online publication, published on November 15th, Mr Bankman-Fried claimed his ethical positions were "dumb shit"; a move to gain a better reputation and impose his version of "good" on the world. To do this, he sought to win "by this dumb game we woke Westerners play". The question now is exactly what he meant by "good" and which ethical positions he was disavowing.

The decline of Mr Bankman-Fried taps into existing criticisms of the movement, namely that it is too centralised and insular—and that this stifles dissent. Many spoken to for this article, including some who did not call themselves effective altruists, asked not to be named for fear of blowback. Two say there was talk in their social groups about unethical behaviour by Mr Bankman-Fried, including a lack of transparency in the relationship between his crypto firms, well before the FTX blow-up.

Perhaps Mr Bankman-Fried's money provided an incentive not to look too closely. The hope is this may be the fiasco to get effective altruism to finally change, says one adherent: "If EA is willing to suffer public criticism over this, I think that is a totally viable pathway to reform." Effective altruists do not just need new funding. They also need new ideas. ■



More from 1843

For additional reporting on the long-termist shift in effective altruism, visit: www.economist.com/EA1843



Persistent prices

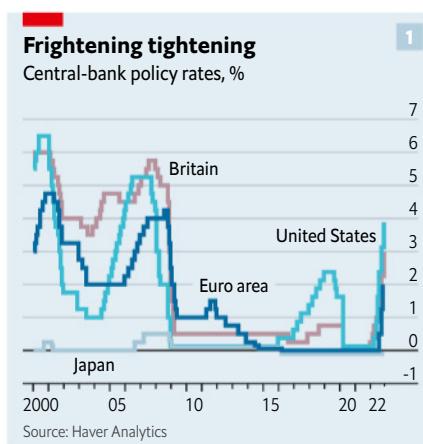
Worst of both worlds

Even a global recession may not bring down inflation

INVESTORS HAVE swooned at the good news. Since early October European shares have risen, with optimists declaring an end to the continent's energy crisis in sight. Chinese stocks have jumped at recent talk that Xi Jinping will abandon his "zero-covid" policy, and as regulators have loosened their curbs on the property sector. On November 10th, on the news that America's consumer-price inflation had come in slightly below economists' expectations, the tech-heavy NASDAQ index rose by 7%, one of the biggest ever daily moves, as investors priced in lower interest rates.

But take a step back, and the outlook has in fact darkened in recent weeks. The global economy is slowing, perhaps into a recession, as central banks ramp up interest rates to battle a once-in-a-generation surge in prices (see chart 1). Even with one month of better-than-expected data for America, there is scant evidence that inflation is anywhere near defeated (see chart 2 on next page). Indeed, in much of the world it is broadening out.

For most of this year people have worried about a downturn. In June Google searches for "recession" neared a record high. For a long time, however, the gloomy rhetoric ran ahead of reality. Output in the median rich country increased by about 1.3% from the end of 2021 to the third quar-

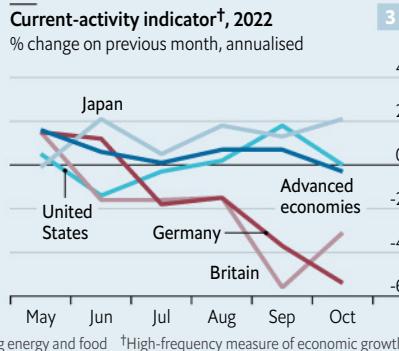


ter of this year—not spectacular, but not bad. In the year to September the average unemployment rate in the OECD, a club of mostly rich countries that accounts for about 60% of global GDP, fell by close to one percentage point. Joblessness in the euro area hit an all-time low. Consumer spending was strong, with hotels, planes and restaurants packed the world over.

Now reality has caught up with the rhetoric. Higher borrowing costs are starting to bite. In many countries, including Canada and New Zealand, house prices are falling as homebuyers face expensive mortgages. Housebuilders are cancelling projects, and homeowners are feeling less wealthy. Other companies are also reining in spending. In their latest monetary-policy report the Bank of England's researchers note that costlier finance is "weighing on investment intentions". The minutes of a recent Federal Reserve meeting observe that fixed investment by businesses has "already started to respond to the tightening of financial conditions".

Deteriorating economic conditions are beginning to show up in "real-time" data. Goldman Sachs, a bank, publishes a "current-activity indicator", a month-by-month measure of economic strength. Last month, for the first time since the initial covid-19 lockdowns in 2020, rich-world economies appeared to shrink (see chart 3). Likewise, a global survey of purchasing managers indicates a contraction for the ➤

Paying the price



► first time since June 2020. Since July a "nowcast" of global annualised GDP growth produced by JPMorgan Chase, another bank, has fallen by half.

Optimists point to strong labour markets. America's formidable jobs machine has slowed, but is still whirring, adding more than 250,000 positions in October. Elsewhere, though, signs of weakness are emerging. Claudia Sahm, an economist, has suggested that a recession is nigh when the average of the unemployment rate over the past three months rises by at least 0.5 percentage points relative to its low during the previous year. We find that eight out of 31 rich countries currently meet this criterion, including Denmark and the Netherlands. This is not a high proportion compared with, say, the beginning of the global financial crisis of 2007-09. But it does signal that a serious slowdown is now under way.

The "Sahm rule" reveals another important truth: that different countries are moving at very different speeds. Aside from America, a number of places, including Australia and Spain, are still growing at a decent rate. Yet others are in trouble. Sweden, where high interest rates are hurting a particularly frothy housing market, is losing steam fast. Britain is now almost certainly in recession. In Germany sky-

high energy prices are forcing industrial shutdowns. It may be faring the worst of all rich countries.

How severe will the downturn be? Households in rich countries are still sitting on trillions of dollars of "excess savings", which they accumulated in 2020-21 from stimulus cheques and other fiscal support. This money will allow them to continue spending, even in the face of falling real incomes. New research by Goldman Sachs finds that large private-sector saving surpluses are associated with less severe recessions. And healthy savings pots mean economic pain is less likely to translate into financial distress. Mortgage-delinquency rates are actually declining in America, and are extremely low in New Zealand and Canada.

Marching orders

Labour markets are weakening, but a rise in unemployment like that seen after the financial crisis is unlikely. This is because demand for labour has a long way to fall before it matches supply. Early this year the two were seriously out of whack, with the number of unfilled vacancies across the OECD peaking at 30m, according to our calculations. Now as demand falls, vacancies rather than jobs seem once again to be taking the strain. We estimate that the num-

ber of unfilled positions has fallen by a tenth since the high, but the number of filled posts is static.

Much depends on the path of inflation. Central banks are willing to induce a recession in order to lower it. Higher rates may bring "some softening of labour-market conditions", as Jerome Powell, the chairman of the Fed, noted earlier this month. "We do think that [raising rates] is going to dampen demand, we're not going to pretend this is pain-free," warns Philip Lane, chief economist of the European Central Bank. Both economic theory and data over the past seven decades suggest that falling GDP is associated with a large decline in the speed of price rises. But the lags between tighter monetary policy and lower inflation are not well understood. Central banks may have to cause more pain than they anticipate.

In some countries lower energy and food prices are helping to drag down the headline rate of inflation. America's recent figures for October were better than economists expected. In general, though, prices are not heading in the direction that central bankers would like. Inflation "surprises" across the rich world, when reported data come in higher than forecast, are still common (see chart 4). According to figures released on November 16th, inflation in Britain was 11.1% in October, well above economists' expectations. On the same day, Canadian data showed no sign of waning inflation. Almost everywhere "core" inflation, which reflects underlying price pressure better, is rising. In three dimensions—breadth, wages and expectations—rich-world inflation is getting more, not less, entrenched.

Begin with breadth. When the inflationary surge started last year, it was confined in most countries to a small number of goods and services. In America it was second-hand cars. In Japan it was food. In Europe it was energy. This provided false comfort to pundits, many of whom assumed that once the prices of these few components stopped rising, overall inflation would fizzle out.

In fact, the inflation virus has spread. We analysed the consumer baskets of 36 mostly rich countries. In June 60% of prices in the median basket were rising by more than 4% year on year. Now 67% are. Even in Japan, the land of low inflation, the prices of a third of the basket are rising by more than 4%. This broadening out is in part due to an exceptionally strong dollar, which raises inflation by making imports more expensive. But it is more to do with what is happening in domestic economies.

This is where the second dimension—wages—comes in. Pay is a guide to the future path of inflation: when companies' labour costs rise, they tend to pass them on to customers in the form of higher prices.►

October surprise



Inflation optimists point to data from America, where there is some evidence of a pay slowdown, albeit from increases of 6% or more year on year. Growth in Britain also seems to have peaked at a high-but-no-longer-rising rate.

Elsewhere, though, there is not much evidence of restraint. New research from Pawel Adrjan of Indeed, a jobs website, and Reamonn Lydon of the Central Bank of Ireland suggests that nominal pay in euro-zone job postings is rising by more than 5% year on year, and is still accelerating. French wage inflation "has further to go", reckons JPMorgan. In Germany IG Metall, a big union for metals and engineering workers, is seeking a pay rise of up to 8%. In New Zealand, Norway and Sweden pay growth is still rising. This is not what you would expect at a time when the economic outlook is dire.

The third dimension is expectations. Alternative Macro Signals, a consultancy, runs millions of news articles in several languages through a model to construct a "news inflation pressure index". The index, which has proved to be a good predictor of official numbers, is still elevated. Similar evidence comes from Google-search data, which suggests that global interest in inflation has never been so high.

Survey-based measures of expectations similarly provide no evidence of weakening inflation. Figures put together by the Cleveland Fed, Morning Consult, a data company, and Raphael Schoenle of Brandeis University gauge the public's inflation expectations in various rich countries. According to the survey for October, in the median country the public reckons prices will rise by 5% over the next year, as it has in previous months (see chart 5). The inflation expectations of companies—the economic actors that actually set prices—are just as concerning. A survey by the Cleveland Fed, based on research by Bernardo Candia, Olivier Coibion and Yuriy Gorodnichenko, three economists, finds that American firms currently expect inflation of 7% over the next year, the highest level since the survey began in 2018.

Painful ignorance

Everyone can agree on one thing about the past year. It has demonstrated just how poorly economists understand inflation, including both what causes it and what causes it to persist. It is likely, therefore, that economists will also struggle to predict when inflation will cool. Optimists hope that prices will once again take people by surprise, with their rise slowing sooner than expected. But it seems more likely that inflation will prove stubborn even as the economy slows. That will leave policymakers with a grim choice: to squeeze the economy tighter and tighter, or to let prices spiral. ■



Dollar debt

Crash watch

Are risky emerging-market firms the next to go?

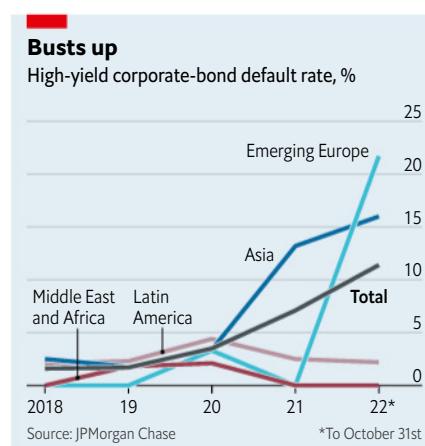
SINCE SEPTEMBER, when a botched budget in Britain roiled markets enough to threaten giant pension funds, investors have been looking for other vulnerabilities that might cause markets to break. Emerging economies are a prime candidate. Historically, high American interest rates and a soaring dollar have triggered financial instability across the developing world. A few unlucky places, including Argentina and Sri Lanka, have stumbled into crisis this time round, but many emerging-market governments have deeper foreign-exchange reserves and less dollar-denominated debt than before, and thus look much sturdier than even a decade ago.

Big firms in these countries are a different story. Debt issued by large companies has risen relentlessly since the turn of the

millennium—from just over 60% of emerging-market GDP in 2000 to more than 90% on the eve of the covid-19 pandemic—as firms took advantage of low interest rates. Borrowing then jumped a further ten percentage points in 2020 alone. Much of this money is owed to foreigners. Although governments in emerging economies began to borrow in their own currencies after blow-ups in the 1990s, corporate debt is still mostly denominated in foreign currencies, meaning local-currency depreciation leads to a deterioration in companies' balance-sheets.

According to JPMorgan Chase, a bank, the default rate for emerging-market issuers of high-yield corporate debt has jumped to 11.4% this year, well above the 1.7% notched in 2019 and the long-term average of 3.7%. Higher rates and an expensive dollar are only partly to blame. Troubles have been concentrated in China, where property-market woes have kept default rates in the sector at double-digit levels for two consecutive years, as well as in Russia and Ukraine. Russian firms are expected to default on debt worth \$28bn in 2023, equivalent to two-thirds of the remaining stock of debt. Nevertheless, markets have for the most part already priced in losses, reckons JPMorgan, so defaults are unlikely to spark a wider crisis.

It is problems elsewhere that look more troubling. Rising rates and slowing growth have taken a toll on property markets around the world, and this is now creating difficulties for firms outside China as well. ■



► as within. A default, in late September, on short-term debt issued by the developer of Legoland Korea has thrown debt markets in South Korea into turmoil. Yields on short-term debt have shot up to the highest levels since the global financial crisis of 2007-09. In late October the government said it would buy around \$35bn in corporate bonds in order to stabilise markets.

In recent weeks, property troubles have also popped up in other emerging Asian economies. Liquidity has evaporated from Vietnamese corporate-bond markets, following an effort by officials to rein in cor-

ruption in the country's property market. As prices for developers' shares and bonds tumble, the central bank is weighing intervention to keep the market functioning. Indonesian developers face similar difficulties. Prices for the bonds of several large firms have fallen to distressed levels, amid credit-rating downgrades and fears that default risks are growing.

This spreading financial unease may seem reminiscent of past panics, including the devastating crisis that ripped across Asian economies in 1997 and 1998. There are, though, good reasons to hope

trouble will be contained. Rising rates have hurt property markets, but most big firms pay fixed coupons on their bonds and have not issued much new debt over the past year. Governments across Asia have fiscal room to support their economies and hefty piles of foreign-exchange reserves.

Yet both Britain's budget fiasco and the sudden collapse of FTX, a cryptocurrency-trading platform, demonstrate how quickly financial vulnerabilities can crystallise into problems. A few wobbles among emerging-market bonds could prove a few too many for comfort. ■

Buttonwood The tenacity of ESG

A green-investing boom has not been followed by bust

THE STANDARD story of 2021's green-finance boom goes something like this: in a phenomenon that reached fever pitch a year ago at the COP26 convention in Glasgow, a lot of investors lost their heads. A potent cocktail of cheap money and sanctimony fuelled a boom in environmental, social and governance (ESG) investing, during which asset managers and bankers pitched themselves as environmental saviours.

Nemesis followed hubris. Russia's invasion of Ukraine, and subsequent elevated gas and oil prices, reminded the world just how much it needed fossil fuels, and how profitable investing in them could be. The cynicism of the asset managers and bankers was exposed as regulators cracked down on "greenwashing". DWS, Germany's largest asset manager, was raided by the authorities following a whistleblower complaint; Britain's advertising watchdog banned HSBC, a bank, from making "misleading" environmental claims. Far from saving the world, ESG thus became mired in green-wash and scandal.

There is just one problem with this fable of financial greenery's fall to earth: hard facts. True, appetite for ESG investing has fallen. Net inflows are well below those of last year. But for all the talk of a backlash, sustainable-investment funds have been much more resilient than other funds during this year's downturn. According to Morningstar, a data firm, \$139bn had flowed into sustainable funds by the end of September, compared with \$643bn of net outflows from the broader market. European funds have attracted the bulk of the money, receiving 89% of total inflows into sustainable funds, but even in America such funds have drawn more money than other investment vehicles.

Why have green funds remained attractive? It is certainly not because of juicy returns. These funds tend to invest heavily in technology stocks, which often achieve high ESG ratings owing to some combination of progressive Californian values, asset-light business operations and sophisticated human-resources departments which do things like diversity monitoring as a matter of course. Such stocks have performed poorly this year. And while ESG funds are overexposed to this year's losers, they are underexposed to the big winners: fossil-fuel firms. The iShares ESG Aware MSCI USA index, one of the biggest passive ESG funds, is down by 18% this year, compared with a 16% fall in the SPDR S&P 500 ETF, which tracks the S&P 500 index of American stocks.

Sustainable-fund managers point out that their investors are not overly bothered by short-term returns. People putting money into ESG believe the energy transition is not something that will happen over a couple of years, but a long-term trend that will mean their investments inevitably pay off. Oil majors may have

been a good investment this year, they admit, but that will cease as deadlines for hitting net-zero emissions near. Sustainably minded investors tend to be young and have decades-long investment horizons. They do not fret about a few years of poor performance.

Social values give investors a non-pecuniary reason for allocating money and sticking with their choice, a rare advantage for funds in an industry where a competitive edge normally means lower fees. Indeed, Morningstar's data show that the greener the fund, the more likely it is to have enticed investors to stick around. The EU's Sustainable Finance Disclosure Regulation, a rule on climate-investment standards, splits funds into three categories. Those in the greener bucket, known as Article 9 funds, enjoyed the biggest net inflows in the third quarter of the year. Article 8 funds, sometimes called "light green" in the industry, have seen net outflows—but not as big as those from Article 6 funds, which have no sustainability focus at all.

There are notably fewer bankers and asset managers at this year's COP27 convention in Sharm el-Sheikh than there were in Glasgow. Perhaps that is because they have one eye on American politics, where Republicans are rallying against "woke capitalism", none more volubly than Ron DeSantis, Florida's governor and a potential presidential candidate. Allies of Mr DeSantis may have to grit their teeth, however. This year's green-washing scandals, and investors' relaxed attitude towards them, have demonstrated an important truth: that there is money to be made from environmental investing. So long as that is true, businesses claiming to provide investors with the genuine, truly green article will not be going anywhere.



Free exchange | After the bust

Only a revived economy can save China's property industry



MANY ELDERLY Chinese suffer from what they call the “three highs”: those of blood pressure, blood sugar and cholesterol. According to some economists, such as Zhang Bin of the Chinese Academy of Social Sciences, the property market suffers from “three highs” of its own. Prices are lofty, especially in the peripheries of big cities. The debt of property developers is too high, because they must hold expensive illiquid assets like land. And households sink too much wealth into property, because they see it as a lucrative investment rather than a place to live.

In an aggressive attempt to cure these maladies, China’s policy-makers have created several others. The flow of finance to property developers has slowed abruptly since the government imposed limits on their borrowing in 2020, forcing dozens into default. This has reduced the pace of construction for flats, many of which were sold in advance. And these delays have in turn contributed to a sharp slowdown in property sales, especially among people who now doubt that they will receive any flat they might purchase.

On November 11th China’s central bank and banking regulator issued a plan to tackle some of these problems. They will encourage commercial banks to help finance stalled homebuilding projects, alongside state-directed “policy banks”. They will temporarily suspend limits on banks’ exposure to real estate and urge them to extend the maturities of loans which are due in the next six months. And regulators will guarantee new bonds issued by developers they consider viable, including private-sector firms.

It is not clear this will be enough to solve developers’ woes. The measures will do more to increase the flow of finance and pace of construction than to revive sales. In the first ten months of this year, China’s property firms sold 9.41m square metres of residential floor space, a quarter less than in the same period last year. Boosting this figure would do wonders for these firms’ balance-sheets and their creditors’ chances of repayment. But any attempt to revive sales raises hard questions for policymakers. If sales now are too slow, what pace would be too fast? To solve this year’s crisis, must people be tempted to buy more housing than they need?

China’s president, Xi Jinping, insists that housing is for living in, not speculation. To stick to this instruction, home-building in China’s cities ought not to exceed “fundamental” demand, which

depends on the growth of China’s urban population and its desire for living space. But China’s property market is sometimes called upon to serve other purposes, too. During the global financial crisis in 2008, China stimulated construction to employ laid-off manufacturing workers and save the economy. Demand for housing then acquired a speculative momentum of its own. Between 2011 and 2015, China built roughly 18% more flats than it required to meet fundamental demand, according to a paper published last year by Wu Jing and Xu Mandi of Tsinghua University. And it did that even after demolishing over 7m old or decrepit homes a year.

Demand for living space in China’s cities will grow more slowly in the years ahead. Having torn down so many old buildings in recent years, China’s bulldozers are running out of targets. The proportion of urban homes without an independent toilet fell from 32% in 2000 to 15% in 2015, point out Mr Wu and Ms Xu.

The property market must also contend with an unwelcome bend in the so-called urbanisation curve. Ray Northam, a geographer, noted in 1975 that urban centres are “a complex, baffling, and not easily understood creation of man”. Nonetheless, he argued that they grow in a somewhat predictable fashion. The fraction of a country’s population living in cities follows an attenuated S shape, rising slowly during an initial stage of growth, more quickly during an acceleration stage, then slowing and flattening off during a terminal stage. Mr Wu and Ms Xu show that the acceleration stage in China ended some time around 2007. Since then the country has been in the upper half of the S. Its urbanisation rate reached 65% in 2021 and can be expected to rise by only a little over one percentage point a year for the rest of this decade.

What does this mean for property sales? The paper by Mr Wu and Ms Xu relies on China’s census and mini-census, which appear at five-year intervals. This makes it hard to adjust the numbers to take account of recent events. But an alternative model based on annual data was published in 2020 by China Index Academy, the country’s biggest property-research institute. It calculated that developers’ sales volumes would need to shrink by about 3.7% a year in 2021-25 to remain in line with demand, a worrying conclusion for firms which desperately need sales to rise.

From S to V?

Yet the true picture is not quite as gloomy. This year’s collapse has been so profound that developers are now far behind the schedule laid out by China Index Academy. From the start of 2020 to October this year, they sold only about 80% of the floor space the model projected for that period. That gives the property market some scope to rebound from this crisis before resuming a stately long-term decline. The level of sales envisaged by the model for 2023 is well below last year’s peak, but it is also 16% higher than the pace of sales this year.

In theory, therefore, China’s property market has room for a cyclical upturn even in the midst of a longer-term decline, meaning policymakers can try to revive sales without stoking speculative demand. Yet even such a limited rebound is far from guaranteed. Developers may succeed in rolling over debts and completing ongoing projects. They may struggle to attract new custom. Consumer confidence remains near record lows. No one knows how or when China will exit its damaging “zero-covid” policy. For as long as economic growth remains precarious, households will be wary of the outlays that are required to buy a home. In the past, a property revival has saved China’s economy. Now only a revived economy can save Chinese property. ■



Aviation

Welcome to the vertiport

PONTOISE-CORMEILLES

A new type of air terminal opens for flying taxis

AS THE MORNING mist slowly clears over Pontoise-Cormeilles, a regional airport 40km north-west of central Paris, it is time to check in at the vertiport. This is the name the aviation industry has adopted to describe a new type of air terminal. Vertiports will be used by eVTOLs, or flying taxis as they are sometimes called. As the name indicates, these aircraft take off and land vertically, like helicopters. But instead of being powered by jet turbines they rely on sets of electrically driven rotors, much like hovering drones.

Pontoise-Cormeilles' vertiport, which opened on November 10th, so far serves only as a prototype—for, being the first of its kind in Europe, it has no matching facility to act as a destination. But Groupe ADP, which manages Paris's airports, including Pontoise-Cormeilles, hopes that will soon change. The Paris Olympics open in July 2024. By then the firm plans for at least two routes to be operating in the region, with a

total of ten air taxis, each flying two or three trips an hour. These would link the Olympic Village with conventional airports and also with the Paris heliport at Issy-les-Moulineaux, on the southern side of the city near an emergency medical centre.

Quick exit

The terminal building itself is compact—about as big as a medium-sized apartment. The idea is that, having bought a ticket using a mobile-phone app, a passenger can check in rapidly and paperlessly. A facial-recognition scan confirms identity and a floor sensor measures weight. This lets the

craft, sitting on a pad just outside, calculate its load so that it knows how much power will be needed for the journey, and thus when its batteries will require topping up. There should be barely enough time to grab a cup of coffee before the less-than-20-minute hop downtown, avoiding the snarling rush-hour traffic below.

If a passenger spends more than ten or 15 minutes in the terminal then something has gone wrong, says Duncan Walker, boss of Skyports, the British firm that built the facility. The eVTOL flying around outside it is made by Volocopter, a German company. Skyports has opened a similar vertiport in Marina, California, which is being used by Joby Aviation, an American outfit that is also developing a flying taxi, and is planning others in places that include London and Singapore.

In a dense urban environment, a vertiport needs to take up as little space as possible, which is why people will not be encouraged to linger. And there is another difference from either a conventional airport or a heliport: silence. As the eVTOL flies overhead it is strikingly quieter than a helicopter that landed near the main airport building a little earlier. "That's your licence to operate in city centres," says Mr Walker. Not only are flying taxis less noisy than helicopters, but if recharged from a renewable source of electricity they are ➤

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► greener and, being mechanically simpler, a lot cheaper to run.

Operating costs should fall even further, for eVTOLs are readily adaptable to autonomous flight. That frees up the pilot's seat for an extra passenger. At first, however, regulators are expected to grant airworthiness certificates only to flying taxis with pilots on board. This will allow experience to be gained and the reliability of the craft to be tested before they are permitted to do without the pilot.

To get airborne quickly, most putative operators are therefore starting with piloted versions of their offerings. Volocopter appears to be in the lead. Its craft, VoloCity, has room for just a single passenger. Hot on its heels are Joby, which is flight-testing a five-seater, and AutoFlight, a company based in Shanghai, which is flying a four-seater. Airbus, Europe's biggest aircraft-maker, is also developing a four-seat flying taxi that will, initially, be piloted.

Two exceptions to the general rule are Boeing, America's biggest aircraft-maker, which has teamed up with Wisk Aero, a Californian firm, to produce a four-seater, and a two-seater being tested by Ehang, another Chinese firm. Both of these projects aim for autonomy from the beginning.

Getting an airworthiness certificate is, however, only part of the process needed to begin commercial services. An airline-style operator's licence is also needed. The idea is that the first vertiports will help with this by demonstrating that flights are reliable, safe and can be integrated into existing air-traffic-control systems.

Prêt à transporter

In theory, eVTOLs should show a good level of safety, for they have high levels of what engineers call redundancy—that is, duplication of critical systems. This comes about principally from their multiple rotors, which allow a craft to continue flying if one or more of its motors fails. A rotor failure in a helicopter means the pilot has to make an emergency landing by gliding to the ground using a technique called autorotation. If one of the 18 rotors on a VoloCity failed it would, by contrast, hardly be noticed, says Paul Stone, Volocopter's test pilot.

Mr Stone, who has flown more than 200 types of aircraft, including vertical-take-off jets, also observes that the computerised flight controls on a VoloCity make it "much simpler to fly, and therefore easier to learn". At first, the pilots will be people with backgrounds flying either fixed-wing aircraft or helicopters, who will be trained to handle eVTOLs, too. Eventually, though, he expects a separate eVTOL licence will be created, letting people learn to fly them from scratch. And even when autonomy arrives, piloting jobs will still be available. The plan is that qualified individuals sit-

The Space Launch System

A white elephant flies

At last, the world's most pointless rocket has been launched

THE WORLD'S largest rocket got there in the end. NASA, America's space agency, has been trying to fly the Space Launch System (SLS) since August 29th, but technical problems (and later a hurricane) have meant repeated delays. However, on November 16th, at a little before two o'clock in the morning, Florida time, it actually managed to blast off. This nocturnal launch, dictated by the vagaries of celestial mechanics, gave rocket-watchers a rare treat, as the vehicle's white-hot exhaust lit up the countryside for miles around.

The SLS's destination (or, rather, the destination of Orion, the capsule it carries) is the Moon—almost, for it will not land. This version of Orion is uncrewed. But others will, if all goes to plan, return astronauts to the lunar surface half a century after the end of the Apollo programme. That project, called Artemis, after Apollo's twin sister (who was the Ancient Greek goddess of the Moon, and thus, in any case, a more appropriate moniker than Apollo, the god of the Sun), will use the SLS as its launch vehicle. But

Artemis 1, as the mission which has just begun is formally dubbed, will restrict itself to dropping off a few hitchhikers in the form of so-called cubesats that will carry out scientific studies of variable worth, and then making some complicated loops around the Moon before returning home on December 11th.

If all goes to plan, it will be followed by a crewed flypast of the Moon in 2024 and a landing in 2025. But few think that schedule will be met. Delay is the SLS's middle name. Its first launch was once supposed to happen in 2016. If America does return to the Moon, the end of the decade looks more realistic.

Delay is not the only source of grumbling. Much of the SLS, including the boosters strapped to its side and the orange fuel tank that makes up its body, consists of tweaked, recycled parts from the Space Shuttle, which made its final flight in 2011. The official reason for using technology from the 1980s is that it is tried-and-tested. But politicians are also keen to preserve existing, well-paid manufacturing jobs. This may help account for why, despite being built from well-understood technology, the SLS has cost \$23bn to develop so far, and each launch is projected to cost \$2bn.

Cheaper alternatives exist. NASA already relies on SpaceX's reusable Falcon-9 rocket to ferry astronauts to the International Space Station. And SpaceX is working on its own giant rocket, Starship. If this goes to plan it might cost as little as \$10m per launch. Starship's first orbital flight will happen soon. If that works, Starship will swiftly make the SLS look pretty pointless.

That is unlikely to stop more launches. When Jim Bridenstine, then NASA's boss, suggested in 2019 that SpaceX's existing Falcon Heavy rocket might offer a cheaper, quicker route back to the Moon, he was slapped down by pro-SLS politicians. America will return to the Moon. But it will not be cheap.



To a budget of infinity and beyond!

ting in control centres on the ground will monitor several flights each, as already happens with military drones, and will thus be available to take manual command in an emergency.

As technologies improve, eVTOLs' capabilities will grow. Much of that progress will come from developments in battery technology for electric cars, says Dirk Hoke, who recently took over as Volocop-

ter's chief executive, having previously run Airbus's defence and space division. A bigger, faster version of VoloCity, using a new type of battery, is already on the way, he adds. But he would not go into details. By the end of the decade, though, it is not only Paris's notorious traffic that could be bypassed from above with the convenience of using a ride-hailing app, but the jammed roads of several other cities, too. ■

Astronomy

A meteorite in the Cotswolds

A find from an English country garden speaks of the solar system's first days

WINCHCOMBE, A RURAL English town, is not a place where much happens. But, on February 28th 2021, something did. At six minutes to ten that evening, Winchcombe was hit by a meteorite.

The first piece of this bolide was found the following day by the Wilcocks, a local family, shattered on their driveway (see picture). Once they realised what it was, they donned rubber gloves, scooped the remains into freezer bags, and alerted the UK Meteor Observation Network, a group of amateurs who study incoming space debris. Other bits turned up elsewhere, later.

Aficionados were excited by the fall for two reasons. One was that the fragments' rapid recovery had left little time for them to be contaminated by terrestrial chemistry. The other, that the bolide's descent was captured in numerous photographs, both official (in the form of 16 dedicated meteor-tracking cameras) and unofficial (in the form of numerous vehicle-dashboard and doorbell cameras). These allowed its orbit before its encounter with Earth to be calculated with precision. A group of those aficionados (124 of them, to be exact, including the three Wilcocks) have just published a paper on the matter in *Science Advances*.

The stone was of a type called a carbonaceous chondrite. These, as the mess on the Wilcocks' drive showed, are loose agglomerations of stuff—and that stuff is not much altered from the primordial cosmic dust that turned into the solar system.

Tracing the Winchcombe meteorite's

path from the pictures taken of its arrival showed its orbital aphelion (the point in that orbit farthest from the Sun) to be just inside the orbit of Jupiter. It came, in other words, from the outer part of the main asteroid belt. Its chemistry, pristine because of the Wilcocks' swift action, showed that the water in it nevertheless had the same isotopic composition as water on Earth. This supports the idea that Earth's ocean was a cosmic afterthought "plastered" onto the planet, subsequent to its formation, by hydrated material from space.

Analysis of the meteorite's exposure to cosmic rays (revealed by the presence of particular isotopes of neon and aluminium), suggested, meanwhile, that it had until recently (perhaps as little as 300,000 years ago), been below the surface of something bigger. Presumably, it was liberated by a cosmic collision and thereby set on the course that eventually brought it to the Wilcocks' front garden. ■

Fisheries

Lobster brisk

Protected areas affect lobster evolution in a way that helps fisherfolk

CREATE A PLACE OF safety in which marine life can multiply, and the overspill into nearby unprotected areas will provide more quarry for fisherfolk than if no such zone existed. That is the theory, anyway. And practice suggests it works. However, the advantage may be more than a mere increase in numbers. A study of lobsters suggests that, for these creatures at least, marine protected areas (MPAS), as they are known formally, also reverse an evolutionary trend towards smaller individuals which fishing imposes, thus benefiting the men and women in the boats twice over.

The research in question was conducted by Tonje Sordalen of the University of Agder, in Norway, and is published this week in the *Proceedings of the Royal Society*. Dr Sordalen started from the fact that for several species, lobsters included, growth rates and boldness of behaviour seem to go hand in hand, suggesting they are promoted by the same genes. Why, is not clear. One hypothesis is that faster-growing individuals need to spend more time and effort searching for food.

Unfortunately from a lobster's point of view, such boldness may include a tendency to explore lobsterpots. Certainly, that is true for their freshwater cousins, crayfish, where big, adventurous individuals are more likely to end up in traps. And that, in turn, creates a selective pressure for timid-

ity, to avoid getting trapped—with small body size coming along for the ride.

Moreover, in Norway at least, the law may exacerbate this trend. Lobsters less than 250mm long cannot be harvested. If caught, they must be returned to the sea. Females carrying eggs must be released too, regardless of size. The first rule clearly generates selection pressure against growing big—and Dr Sordalen suspected that the second has a similar effect, since females do not moult when carrying eggs, and a lobster which is not moulting cannot grow beyond the size that its carapace will permit. So, since carrying eggs stops females being harvested, she guessed that there would be a pressure for them to carry eggs more frequently, thus moulting less often and growing more slowly.

Putting all this together, she theorised that decades of trapping off Norway's coast would have caused the lobsters there to be both meek and slow growing. And the catch of lobsters large enough to be retained has indeed dropped in recent years. But, following her theory's logic, the lobsters in MPAS should be different.

To find out if that is correct, she worked with the Norwegian Institute of Marine Research to monitor the growth of lobsters in three such areas off the country's southern coast and in three unprotected areas in the same region. During four consecutive days each year between 2006 (when the reserves were established) and 2020, she and her colleagues collected a total of 2,303 lobsters from these sites. They measured them, sexed them and tagged them, and also studied them for evidence of moulting, before releasing them.

The effect of MPAS on lobsters' growth rates was, they found, significant—but only for females. In protected areas, an average female skipped moulting to produce eggs about once in four years. Those in unprotected areas did so once in three. Also, when females in protected areas did moult, they grew by 9% more afterwards than did those in unprotected areas. In essence, then, females grew faster and larger in the protected areas than they did in places where they were being caught in traps.

Intriguingly, Dr Sordalen saw no increase in post-moult growth in males. Even if only one sex is responding, though, that is still consistent with her hypothesis, and confirms another benefit of MPAS besides population growth.

Her theory may apply, too, beyond crustaceans. Several fish also exhibit a link between growth rate and boldness, and some studies show that faster-growing individuals are caught more often. It is true, as well, that the size of some commercial species has shrunk over the decades. Dr Sordalen may thus have hit on something applicable to fisheries management way beyond her chosen species. ■



A case of cosmic fly-tipping



Classical music

Airs and graces

BALTIMORE, BERLIN AND LONDON

Making classical music more accessible need not come at the cost of artistic standards

LIVE AND love with open mind/Let our cultures intertwine." In April, at a performance by the Baltimore Symphony Orchestra (BSO), the bass sang that ode to mutual understanding by Wordsmith, a rapper, in the final movement of Beethoven's ninth symphony. The original text, by Friedrich Schiller, begins: "Joy, bright spark of divinity/Daughter of Elysium."

Classical music is often thought to be intimidating. Performed by white men in white bow ties, the art form is perceived to exemplify snobbery, stuffiness and racial privilege. Ensembles such as the BSO want to change that. Some groups are taking classical music from hushed concert halls to car parks and trendy nightclubs; many orchestras are performing film scores as well as symphonies (the Lyon National Orchestra, pictured, among them). The Pierre Boulez Saal, a hall in Berlin, invites parents to morning chamber-music concerts—*baby, not jacket, required*.

To many in the classical-music world, increasing accessibility is a way of staying off irrelevance. Just 1% of music sales and streams in America are of classical pieces,

according to MRC Data, a research company. Before the pandemic 58% of concert-goers in Britain were aged 65 or older, reports a study commissioned by the BBC. The BSO's main hall was more than 60% full on average before the pandemic; recently it has been 40% full.

Many people have not felt that they belong in a concert hall. Black Britons were less than 1% of the pre-pandemic audience. Reginald Mobley, a black American countertenor, says that when he was growing up in Florida his family thought of classical music as the music of cross-burners. Some scholars view the Western canon—roughly the masterworks of composers from Jos-

quin des Prez in the 15th century to Igor Stravinsky in the 20th—as a product of privilege. Beethoven, an "above-average composer", has been "propelled up by whiteness and maleness", contends Philip Ewell, an American musicologist.

Such notions did not deter Mr Mobley. A professor who heard him singing in a barbershop quartet identified him as a countertenor. Now Mr Mobley sings baroque and other music with major ensembles in Europe and America. "People of colour coming into the arts should not be a fluke like it was for me," he says.

Cultural gatekeepers increasingly agree with him. In July the BSO appointed Jonathan Heyward as its first black music director. Mr Mobley is the first programming consultant of the Handel and Haydn Society in Boston, with a mission to diversify its repertoire. Works by neglected black composers, such as Florence Price, are heard ever more often.

In some ways the pandemic helped pry classical music open. It prompted Wigmore Hall, a chamber-music venue in London, to stream free concerts. This "democratised" its audience, says its director, John Gilhooley. When the hall reopened in September 2020, younger folk filled more seats. On streaming platforms, classical music is "finding a way to people who don't think of themselves as classical-music lovers", says Tom Lewis, co-president of Decca Records. A third of classical-music streaming is by 18- to 25-year-olds; some are mixing it with other genres. ➤

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Such enthusiasm is to be celebrated, but eagerness to expand the audience can come at a cost. The issue of accessibility is "an absolute minefield", says Paul McCreesh, artistic director of the Gabrieli Consort & Players, a choir and orchestra. That is because the clamour for classical music to be more approachable and relevant risks drowning out the music itself. There is also now an added expectation that it will promote social justice. Classical music must respond. Its artistic health depends on how it does so.

One concern is that classical music's civic mission will overshadow its cultural one. In a recent radio interview Michael Tilson Thomas, music director laureate of the San Francisco Symphony, worried that many young musicians' commitment to social causes was not matched by their dedication to music. Anthony Tommasini, formerly the *New York Times*'s chief classical-music critic, has proposed that orchestras stop "blind auditions". He hopes that making visible the race of musicians applying for jobs will increase the number of non-white performers, but this would mean, as he acknowledged, ending a practice that from the 1970s helped raise the number of women in orchestras.

"Powerbrokers" such as funders and broadcasters are a big source of "extra-musical concepts", thinks Mr McCreesh. The consequences of that came to seem more alarming this month when the Arts Council England, which distributes money from the government and the lottery, ended grants to some top-flight groups in London, such as the English National Opera, as part of a policy to boost the arts outside the capital. Jennifer Johnston, an opera singer, spoke for many classical musicians when she lamented on Twitter the "permanent watering down of our industry so [that] the government can say it's not 'elitist'".

The quest for accessibility can add to other forces that push classical music, perhaps the form that most rewards concentrated listening, to the periphery of people's attention. They are not new. Popularisers have long recognised that getting people to sit still and silently is at odds with getting them to show up. When the "promenade concerts" that became the BBC Proms, Britain's big summer classical-music festival, began in London in 1895, Beethoven was played "to an accompaniment of popping corks". In his day, Mozart expected audiences to be boisterous.

Eager as musicians are to broaden their audience, there's no getting around the fact that many classical works demand patience, especially in live performance. "In a classical concert, you just sit in a rather uncomfortable seat and you try not to make too much noise for two hours," says Sir Stephen Hough, a British pianist, composer and author, "but you should leave feeling a

different person." Even Mozart lamented playing to a salon of aristocrats who were making sketches of one another: "I had to play to the chairs, tables and walls."

To present classical music as hard work risks keeping audiences away, but suggesting that it is easier listening than it is risks disappointing them. It is best, both for audiences and the art itself, when accessibility is paired with ambition. Robert Newman, the impresario who helped launch the Proms, wanted to guide listeners up to Olympus, not to bring the music down. His grandiose aim was to "train the public by easy stages. Popular at first, gradually raising the standard until I have created a public for classical and modern music." The Pierre Boulez Saal calls its fare "music for the thinking ear".

There are ways to make classical music more accessible without compromising it. Sir Stephen suggests shorter concerts without intervals. #SingTheScore, a series of videos by I Fagiolini, a British choral group, mixes silliness and sophistication. Good music education is crucial to diversifying both audiences and ensembles. The skills required to sing in the Gabrieli Consort are nurtured mainly in fee-charging schools, says Mr McCreesh. That mostly leaves out white working-class children as well as those from ethnic minorities. Gabrieli Roar, which works with state-school and other youth choirs in Britain, tries to correct that.

If every school offered such teaching, more children would cherish the hush that comes when a conductor raises the baton, knowing that the music that follows will transmute life in ways that hold in suspense their own lives. When it falls, after a moment, the ovation can begin. ■

Friedrich Hayek

This is what we believe

Hayek. By Bruce Caldwell and Hansjoerg Klausinger. University of Chicago Press; 824 pages; \$50 and £35

ROBERT SKIDELSKY'S three-volume biography of John Maynard Keynes achieved something few histories of economic thought can do: it was well written, packed with interesting detail and offered enough—but not too much—theory. Now Keynes's great rival, Friedrich Hayek, is the subject of a biography comparable to Lord Skidelsky's. It is certainly on a similar scale. The first volume is more than 800 pages, and a second is on the way. Bruce



Free thinker

Caldwell's and Hansjoerg Klausinger's work also has the makings of something just as good.

Keynes and Hayek had radically different outlooks on economics. "Maynard", as he was known, argued that when a recession loomed, people and the government ought to be encouraged to spend, giving the economy some oomph. "Fritz", in books, newspaper articles and his teaching, was the most dogmatic representative of the opposite view. He thought that Keynesian ideas represented "an extremely dangerous popular delusion" and argued that his counterpart's solutions would not only fail to solve economic problems, but would make them worse.

The rivalry was often heated. Keynes described one of Hayek's efforts as "one of the most frightful muddles I have ever read". Hayek, for his part, suggested Keynes "knew very little economics". (In 2010 their mutual antipathy was immortalised in "Fear the Boom and Bust", a comedy rap battle on YouTube.)

Messrs Caldwell and Klausinger are not interested in adjudicating which of Keynes and Hayek was ultimately right. They are more interested in Hayek the man. It turns out that, despite their professional differences, he and Keynes shared many traits. Both were born into respectable families. Both were too clever for school and so got bored. Both liked holidaying in Cornwall. Both, in their economic theorising, used little mathematics. And, in their personal interactions, there was tremendous mutual respect, even if not always warmth. Keynes arranged for Hayek to spend time with him at King's College, Cambridge, during the second world war.

The book offers wonderful descriptions of the intellectual circles in which Hayek moved. After fighting in the first world war—though he saw little action—he fell

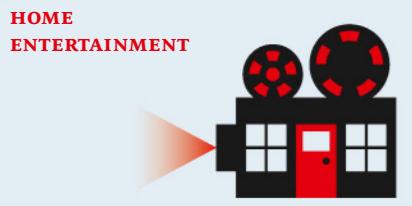
under the spell of Ludwig von Mises, a fellow Austrian economist. Over time he became more and more convinced of the futility of state intervention. Hayek moved to Britain in 1931, and events there reinforced his belief that governments were clueless. Stopping in Paris en route to London, he learned that Britain had gone off the gold standard "and 30% was off the magnificent annual salary of £1,000 to which I had been looking forward".

Governments, he believed, could not know better than millions of individuals when it came to distributing resources. Published in 1944, "The Road to Serfdom" argued that state intervention often produced the need for further state intervention and, with it, raised the chances of fascism. The book was a sensation in America, having been condensed in *Reader's Digest*. Yet the German translation was banned in early post-war East Germany, on the insistence of the Russians, one of the four occupying powers, who did not like its anti-state message. Incidents such as these solidified in Hayek's mind the idea that his work mattered.

The book punctures some long-standing myths about Hayek. He did not, as many of his acolytes believe, predict the Depression. The Austrian Institute for Business Cycle Research, of which Hayek was director between 1927 and 1931, did not produce its own forecasts of the American economy; and indeed Hayek was sceptical of forecasting in general. The story that Keynes and Hayek once did air-raid duty together at King's also, unfortunately, appears to be untrue.

Yet the book does in large part confirm the popular notion that Hayek was a rather strange, and not always very nice, man. For someone who believed so passionately in free markets, he seemed obsessed with class and despised America for its vulgarity when he visited in the early 1920s. He joked that he had never seen the inside of his own kitchen, leaving such tasks to his wife, Hella. He concocted an elaborate scheme, involving moving to America, to divorce Hella and be with someone else.

The second volume will cover the period after which Hayek moved to America, his association with the "Chicago school" of economics, his growing influence on the political right and the hardening of his pro-market views as he aged. That there is still so much to learn about Hayek hints at the biggest problem with this biography: its size. The prose is jargon-free and elegant, making it easy enough for the non-specialist to understand. But it would still require a commitment on a Hayekian scale to try to read it all. Perhaps, then, following what Lord Skidelsky did in 2003, the authors might consider condensing their work into a single, smaller book. Their biography deserves a wide audience. ■



The insight of "Peanuts"

Wise children

In his long-running cartoon, Charles Schulz probed the human condition

IN ALL OF mankind's history, there has never been more damage done than by people who 'thought they were doing the right thing.' So says Lucy after her friend, Charlie Brown, reveals that he has replaced her little brother Linus's much-nuzzled security blanket. It's a remark that captures the spirit of "Peanuts", Charles Schulz's long-running cartoon strip, in which children, free from adult intervention, confront uncomfortable truths.

"Peanuts" celebrates the pleasures of friendship, but also registers the pain of unrequited love and the gulf between fantasy and reality. Each instalment, drawn with crisp simplicity, provides a brief lesson in the elusive nature of happiness. With their large heads and tiny torsos, the characters look vulnerable, and though the setting may be wholesomely suburban, the tone is mostly downbeat.

Schulz, born 100 years ago this month, could trace the bleakness of his worldview to a dour childhood in St Paul, Minnesota. His family considered his endless doodling dim-witted at best and degenerate at worst. His first steps as a commercial artist were halted by the second world war. When he returned from serving in Germa-

ny he began a strip called "Li'l Folks", a perceptive portrait of antagonism between girls and boys.

It was the embryo of "Peanuts", the first instalment of which appeared in October 1950. He would draw another 17,897, the last appearing the day after his death in February 2000, by which time the strip had graced 2,000 newspapers in 72 countries. The name was never to Schulz's taste: foisted on him by his publisher, it apparently derived from "peanut gallery", slang for the cheapest seats in a vaudeville theatre. But the world of the cartoon was entirely his own, with each character embodying a different aspect of his personality and revealing some larger paradox of humanity.

Charlie Brown, who suffers one setback after another, pickles in self-doubt yet remains determined to succeed. Linus, a sensitive boy, seeks to answer loss and loneliness with philosophy. Schroeder is a piano prodigy and a perfectionist, isolated by his obsession with Beethoven. Lucy runs a pop-up psychiatric clinic where her standard remedy is a brisk "Snap out of it!" For Umberto Eco, an Italian novelist and philosopher, these li'l folks were nothing less than "monstrous infantile reductions of all the neuroses of a modern citizen of industrial civilisation".

Schulz's most famous creation, however, is not a child. Snoopy, Charlie's pet beagle, is sunny yet meditative, selfish but loyal; he dreams of success as a novelist and of being a British flying ace. Trivia fans may be glad to know that he is the only "Peanuts" character permitted to kiss and that the reader never sees inside his kennel. He has inspired many to own a dog, though his influence has extended far beyond this—as a mascot for aerospace safety and a pioneer of the rewards of cartoon merchandise. Most of all, he is a lasting example to other artists of the possibilities of imbuing animals with psychological depth. ■



Sporting rivalries

Clash of the titans

Messi vs Ronaldo. By Joshua Robinson and Jonathan Clegg. Mariner Books; 320 pages; \$29.99 and £25

WINNING THE Ballon d'Or, an award given to the best male footballer in the world, is considered one of the crowning glories of a player's career. Only a handful of athletes have won the prize twice; Marco van Basten, Johan Cruyff and Michel Platini each prevailed three times. For a decade, Lionel Messi and Cristiano Ronaldo turned the Ballon d'Or into a duopoly. Between 2008—when Mr Ronaldo first won the award—and 2017, the pair claimed every Ballon d'Or between them.

Never have the highest reaches of football been dominated by the same two men for so long. In "Messi vs Ronaldo", Joshua Robinson and Jonathan Clegg, two journalists at the *Wall Street Journal*, attempt to understand how they have done it. Talent is part of the story. Both players combine relentless scoring—they are the all-time top goalscorers in La Liga, Spain's top division, and the Champions League, the leading European club competition—with brilliant passing. At their best, they function both as their side's main creator of goals and the main scorer of them.

The pair's influence also reflects globalisation, modern technology and football's growing clout. When Mr Messi played for Barcelona, he had a say in transfers and even managerial appointments. His sway was such that, when a club employee argued that Mr Messi "would not be as good" without the help of his team-mates, the staff member was quickly dismissed "for having publicly expressed a personal opinion that does not match that of the club". Mr Messi's salary—€555m (\$577m) over his last four years—almost bankrupted Barcelona. When Mr Ronaldo moved from Real Madrid to Juventus in 2018, his new club gained a vast number of social-media followers while his old one lost hundreds of thousands. Traditionally, fandom means following a particular team regardless of its squad; for many in the age of Mr Messi and Mr Ronaldo, it has become about following players instead.

From 2009 to 2018, when both men played for Spanish teams, every clash doubled up as a referendum on which man was the superior star. If Mr Messi—for his grace in playing the game and sense of play—was football's Roger Federer, then Mr Ronaldo was its Rafael Nadal: less artistic, more



Turf war

physical, his career a triumph of sheer bloody-mindedness. Mr Messi has eschewed publicity and Mr Ronaldo has embraced it. (See the recent interview in which he criticised his current club, Manchester United.) But the authors argue that such contrasts overlook the players' "mutual understanding": "that their most important business partner is the other". If there is no friendship between the two, neither is there real animosity.

There has been a dark side to their sporting excellence. Both players allowed themselves to be courted by intolerant regimes—the United Arab Emirates in Mr Ronaldo's case and Saudi Arabia in Mr Messi's. They have largely kept politics and sport separate, in the manner of the quip uttered by Michael Jordan, a basketball player: "Republicans buy sneakers, too." Both had to repay millions to the Spanish tax authorities. Mr Ronaldo has been accused of sexual assault. (He denies the allegations and has never been charged.)

Coverage of such matters ensures that this rigorously researched book avoids becoming hagiography. The result is an ambitious and valuable study for all those who want to understand the modern world of football that Mr Messi and Mr Ronaldo have helped forge. Yet the authors might have examined the endurance of these star athletes in greater depth.

Aged 35 and 37, Mr Messi and Mr Ronaldo, albeit a little diminished, continue to play on, apparently motivated less by what they can achieve at their clubs than on the international stage, for Argentina and Portugal. Both have won one major international tournament. The weeks ahead offer the tantalising possibility that one of the pair might win the prize both covet most: the World Cup. ■

Cormac McCarthy's new novels

End of the road

The Passenger. By Cormac McCarthy. Knopf; 400 pages; \$30. Picador; £20

Stella Maris. By Cormac McCarthy. Knopf; 208 pages; \$26. Picador; £20

IN 1992 CORMAC McCARTHY published his sixth novel, "All the Pretty Horses". The first volume of what came to be known as "The Border Trilogy", "All the Pretty Horses" told the story of a boy from Texas who rides to Mexico with a friend shortly after the death of his grandfather. Mr McCarthy's earlier works had drawn on history, physics and philosophy, and depicted almost biblical cruelty in an arid Western landscape. His language was as grand as it was dry; rarely did he write about women or domesticity. Mr McCarthy's fans were devoted, but limited in number.

"All the Pretty Horses" changed that. It established him as the heir to William Faulkner, Truman Capote and other masters of the American Southern Gothic tradition. Mr McCarthy became a bestselling author and a household name. Thereafter he earned a whole new generation of readers. In 2006 he published "The Road", a post-apocalyptic novel which followed a dying man and his young son; it won a Pulitzer prize and was adapted into a film. In 2007 Javier Bardem starred in a screen version of "No Country for Old Men", Mr McCarthy's ninth novel. It won four Oscars, including Best Picture, and sealed the author's critical and commercial success.

He was recently divorced at the time; for the next 15 years, he published no more fiction. Instead he focused on working with the Santa Fe Institute, an arcane research centre in New Mexico, where he concentrated on his interests in science and human consciousness. The announcement earlier this year that Mr McCarthy was about to bring out not one but two novels in quick succession raised cheers. The author is now 89, and few thought he had another book in him.

The problem is that the new work is a mess. "The Passenger" begins well. A small jet has crashed and sunk into the Gulf of Mexico. The passengers are "sitting in their seats, their hair floating. Their mouths open, their eyes devoid of speculation." The pilot's flight bag is missing, as is a panel from the instrumentation. One of the passengers cannot be accounted for.

A salvage diver considers the job at hand. He is the son of a man who worked with Robert Oppenheimer to develop the ►

Johnson Mum's the word



Why some terms sound similar in completely unrelated languages

A MAP BOUNCING around social media shows "languages where the word for 'mother/mom' takes an m-sound". It puts old maps of defunct empires to shame; scores of countries are shaded red.

There are two ways this near-universality might have come about. One is by spread. It is possible that language was invented only once, before the human exodus from Africa. This hypothesis—that there was once a "Proto-World" language—has led some researchers to scour distant languages in search of commonalities, which can then be used to try to reconstruct the parent words. But such work is rejected by most mainstream linguists. Human language is maybe 100,000 years old, possibly much older. Languages change vastly even in mere millennia. "Proto-World" proposals remain controversial at best.

There is another reason so many languages might have an m-sound in "mother". Linguists generally argue for "the arbitrariness of the sign": no connection exists between the word *dog* and the furry quadruped. A rare exception is onomatopoeia, where words representing the bark of a dog (*bow-wow* or Spanish's *guau-guau*) vaguely resemble the sound. Yet most things are not subject to naming this way.

What about *mama*? It does not sound like a mother, but it does piggyback on another feature of language: the fact that some sounds are more widespread than others around the world. There are many dozens of observed consonants, from the clicks of some African languages to the "ejectives" (which make use of air pressure built up in the mouth) of Caucasian ones. These sounds are rare and hard for non-natives to learn.

In contrast, a few—such as b, m, p, t, d and k—show up far more frequently, in

nearly every spoken language in the world. That is almost certainly because they are easy to make. A baby vocalising will, at first, make a vowel-like sound, usually something like "ah", which requires little in the way of control over the mouth. If they briefly close their mouth and continue vocalising, air will come out of their nose, thus making the m-sound that is used in "mother" around the world.

Though the "mamas" bear the most obvious similarity, the "pas" have striking commonalities, too. Babies can easily stop their breath when they close their lips (rather than going on breathing through the nose). This produces a b- or a p-sound. It is surely for this reason that so many names for "father" use these consonants: *papa* in English, *abb* in Arabic and *baba* in Mandarin. T- and d-sounds are similarly basic, involving a simple tap of the tongue against the teeth: hence *daddy*, *tatay* (Tagalog) or *tayta* (Quechua).

Father and *mother* are, therefore, an oddity. F- is not especially easy to articulate; th-sounds are even harder. English, Greek and Spanish are unusual in having



them, and French-, German- and Italian-speakers struggle mightily with them, often substituting related consonants. Even surrounded by English from birth, Anglophone babies master consonants in an order that roughly mirrors their frequency around the world. Children may struggle with th-sounds when they are five, or older still in many cases.

This helps solve the mystery of why, despite parents being formally known as "mother" and "father", so few children call them that. (The same thing can be seen elsewhere, too: Russian for "father" is formally *otyets*, but children call their dads *papa*.) Few parents will insist on children using the proper term to refer to them, especially if it means waiting until a child is seven and can pronounce it.

Languages can violate these rules, though they do so within reason. Marathi has *aai* for "mother", no doubt because vowels are especially easy for infants. And Georgian, like a few other languages, switches the expected labels: "mother" is *deda* and "father" is *mama*. No one uses a tongue-twister like, say, *throlth*.

Roman Jakobson, a Russian linguist, explained the final piece of the puzzle in the 1950s. Are babies consciously naming their parents the same way the world over? Probably not. They are cooing and babbling to practise the use of their vocal apparatus. It is the parents, desperate to communicate, who identify those early sounds as the baby's "names" for them. (This may be why the names often feature two repeated syllables, to distinguish them from random sounds.)

It is hard to find linguistic universals amid the world's dazzling variety. It is heartwarming to find a commonality embedded in another universal: the love that babies inspire in their mamas and their papas.

► nuclear bomb. He is afraid of the deep and in love with his sister, who has been dead for ten years. Not surprisingly, his musings are both random and complicated.

The story of the watery grave is soon abandoned as the salvage diver heads landward to make a long road trip to visit his grandmother. Along the way, the book meanders through string theory, the founding of quantum mechanics, Arthur Schopenhauer's philosophy and whether God exists. There is the odd distraction about a hoard of gold coins and the theft of a rare 16th-century Italian violin.

Mr McCarthy's thirst for language is unquenched, and the literary vista of his sentences stretches out towards the horizon. Yet the story barely hangs together. "Stella Maris", a 200-page coda, inexplicably published as a separate book six weeks after the first, is the transcript of a conversation between two people: the diver's sister (and obsessive love interest), a former mathematician who is now a paranoid schizophrenic in a hospital in Wisconsin, and her doctor. It adds little clarity to the whole enterprise, and much confusion. Most of the time Mr McCarthy forgoes quotation

marks; indeed he avoids punctuation in general. Many readers will be bewildered.

Mr McCarthy's publishers have packaged the two volumes into a handsome set in time for the festive season. In America Knopf has elegantly bedecked the books in sunset gold and underwater blue; Picador, its British equivalent, is releasing a "beautiful, limited-edition slipcase". These efforts could be seen as a fetching tribute to the elderly author. More likely, given the hefty price tag of \$56, or £50, they will be perceived as an experiment in shameless commercial cynicism. ■

Economic data

	Gross domestic product			Consumer prices		Unemployment rate	Current-account balance	Budget balance	Interest rates	Currency units		
	% change on year ago latest	quarter*	2022†	% change on year ago latest	2022†	%	% of GDP, 2022†	% of GDP, 2022†	10-yr gov't bonds latest,%	change on year ago, bp	per \$ Nov 16th	% change on year ago
United States	1.8	Q3	2.6	1.5	7.7	Oct	8.0	3.7	Oct	-3.7	204	-
China	3.9	Q3	16.5	3.3	2.1	Oct	2.0	5.5	Oct‡	2.5	-7.1	7.08
Japan	1.8	Q3	-1.2	1.8	3.0	Sep	2.2	2.6	Sep	1.9	-6.1	139
Britain	2.4	Q3	-0.7	4.4	11.1	Oct	8.0	3.6	Aug††	-6.4	-6.3	0.84
Canada	4.6	Q2	3.3	3.1	6.9	Oct	6.8	5.2	Oct	1.3	-3.3	1.33
Euro area	2.1	Q3	0.8	3.0	10.7	Oct	8.3	6.6	Sep	1.3	-4.3	0.96
Austria	6.0	Q2	11.5	4.7	11.0	Oct	8.8	5.1	Sep	0.5	-4.1	0.96
Belgium	4.1	Q2	2.2	2.2	12.3	Oct	9.6	5.7	Sep	-1.3	-5.1	0.96
France	1.0	Q3	0.6	2.4	6.2	Oct	6.0	7.1	Sep	-1.8	-5.4	0.96
Germany	1.1	Q3	1.1	1.4	10.4	Oct	8.4	3.0	Sep	3.9	-4.4	0.96
Greece	7.8	Q2	5.0	5.5	9.1	Oct	9.9	11.8	Sep	-6.3	-4.5	0.96
Italy	2.6	Q3	2.0	3.3	11.8	Oct	7.8	7.9	Sep	-0.8	-5.9	0.96
Netherlands	3.1	Q3	-0.9	4.6	14.3	Oct	12.4	3.8	Sep	6.0	-0.9	0.96
Spain	3.8	Q3	1.0	4.4	7.3	Oct	9.2	12.7	Sep	0.2	-5.4	0.96
Czech Republic	3.6	Q2	-1.6	2.0	15.1	Oct	15.7	2.2	Sep‡	-3.7	-5.1	23.4
Denmark	3.5	Q2	2.0	2.8	10.1	Oct	7.9	2.5	Sep	9.0	0.9	7.15
Norway	3.9	Q2	2.9	2.2	7.5	Oct	6.2	3.2	Aug‡‡	17.3	11.3	10.0
Poland	5.3	Q2	9.3	3.5	17.9	Oct	14.4	5.1	Sep§	-3.7	-3.7	4.52
Russia	-4.0	Q3	na	-4.4	12.6	Oct	14.0	3.9	Sep§	12.9	-3.1	21.6
Sweden	3.1	Q3	2.8	2.2	10.9	Oct	7.9	6.5	Sep§	3.0	-0.5	10.5
Switzerland	2.4	Q2	1.1	2.0	3.0	Oct	3.1	2.1	Oct	5.6	-1.1	0.94
Turkey	7.6	Q2	8.5	5.0	85.5	Oct	72.8	9.9	Sep§	-5.7	-3.8	18.6
Australia	3.6	Q2	3.6	3.5	7.3	Q3	6.0	3.4	Oct	2.3	-1.7	1.48
Hong Kong	-4.5	Q3	-10.0	-2.5	4.3	Sep	2.0	3.9	Sep‡‡	4.3	-6.4	-0.4
India	13.5	Q2	9.5	7.0	6.8	Oct	6.9	7.8	Oct	-2.5	-6.4	81.3
Indonesia	5.7	Q3	na	5.0	5.7	Oct	4.5	5.9	Q3§	2.1	-3.9	83.0
Malaysia	14.2	Q3	na	6.0	4.5	Sep	3.4	3.6	Sep§	1.6	-6.1	4.55
Pakistan	6.2	2022**	na	6.2	26.6	Oct	19.8	6.3	2021	-4.4	-7.6	12.9
Philippines	7.6	Q3	12.1	7.6	7.7	Oct	5.4	5.2	Q3§	-3.8	-7.8	57.4
Singapore	4.4	Q3	6.3	3.5	7.5	Sep	6.1	2.0	Q3	18.8	-1.0	1.37
South Korea	3.0	Q3	1.1	2.6	5.7	Oct	5.2	2.4	Oct§	1.1	-3.2	155
Taiwan	4.1	Q3	6.6	2.9	2.7	Oct	3.0	3.6	Sep	14.1	-2.0	111
Thailand	2.5	Q2	2.7	2.8	6.0	Oct	6.0	1.2	Aug§	-1.2	-5.0	35.7
Argentina	6.9	Q2	4.2	5.0	88.0	Oct	73.8	6.9	Q3§	-0.6	-4.4	na
Brazil	3.2	Q2	5.0	2.7	6.5	Oct	9.3	8.7	Sep§‡‡	-1.8	-6.2	5.34
Chile	5.4	Q2	nil	2.2	12.8	Oct	11.7	8.0	Sep§‡‡	-7.8	-0.3	-10.5
Colombia	7.1	Q3	6.4	7.6	12.2	Oct	10.1	10.7	Sep§	-5.6	-4.7	4,933
Mexico	4.2	Q3	4.1	2.6	8.4	Oct	8.0	3.1	Sep§	-1.0	-2.4	8.0
Peru	3.3	Q2	2.3	2.6	8.3	Oct	7.8	6.0	Oct§	-4.0	-1.5	207
Egypt	3.3	Q2	na	6.6	16.2	Oct	13.3	7.4	Q3§	-4.6	-7.4	24.5
Israel	7.6	Q3	2.1	5.6	5.1	Oct	4.5	3.7	Sep	2.9	0.5	3.43
Saudi Arabia	3.2	2021	na	8.9	3.0	Oct	2.5	5.8	Q2	13.5	3.5	3.76
South Africa	0.2	Q2	-2.9	1.9	7.8	Sep	6.9	33.9	Q2§	-1.3	-6.2	85.0

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 Nov 16th	% change on:			index Nov 16th	one week	Dec 31st 2021	% change on:			
		one week	Dec 31st 2021	index Nov 16th				month	year		
United States S&P 500	3,958.8	5.6	-16.9		Pakistan KSE	42,983.8	1.7	-3.6			
United States NAScomp	11,183.7	8.0	-28.5		Singapore STI	3,266.2	3.2	4.6			
China Shanghai Comp	3,120.0	2.4	-14.3		South Korea KOSPI	2,477.5	2.2	-16.8			
China Shenzhen Comp	2,038.0	1.3	-19.5		Taiwan TWI	14,537.4	6.6	-20.2			
Japan Nikkei 225	28,028.3	1.1	-2.7		Thailand SET	1,620.0	-0.2	-2.3			
Japan Topix	1,963.3	0.7	-1.5		Argentina MERV	154,108.8	7.7	84.6			
Britain FTSE 100	7,351.2	0.8	-0.5		Brazil BVSP	110,243.3	-2.9	5.2			
Canada S&P TSX	19,958.0	3.2	-6.0		Mexico IPC	51,544.9	2.0	-3.2			
Euro area EURO STOXX 50	3,888.2	4.2	-9.7		Egypt EGX 30	12,341.2	4.7	3.6			
France CAC 40	6,607.2	2.7	-7.6		Israel TA-125	1,952.8	0.9	-5.8			
Germany DAX*	14,234.0	4.2	-10.4		Saudi Arabia Tadawul	11,151.2	-2.2	-1.6			
Italy FTSE/MIB	24,531.3	3.2	-10.3		South Africa JSE AS	72,607.4	4.3	-1.5			
Netherlands AEX	709.1	4.7	-11.1		World, dev'd MSCI	2,657.6	5.9	-17.8			
Spain IBEX 35	8,101.4	0.8	-7.0		Emerging markets MSCI	954.3	6.0	-22.5			
Poland WIG	55,612.1	4.3	-19.7		US corporate bonds, spread over Treasuries						
Russia RTS, \$ terms	1,163.6	4.5	-27.1								
Switzerland SMI	10,936.6	0.3	-15.1								
Turkey BIST	4,668.5	7.1	151.3								
Australia All Ord.	7,327.4	1.9	-5.8								
Hong Kong Hang Seng	18,256.5	11.6	-22.0								
India BSE	61,980.7	1.6	6.4								
Indonesia IDX	7,014.4	-0.8	6.6								
Malaysia KLSE	1,448.4	0.2	-7.6								

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

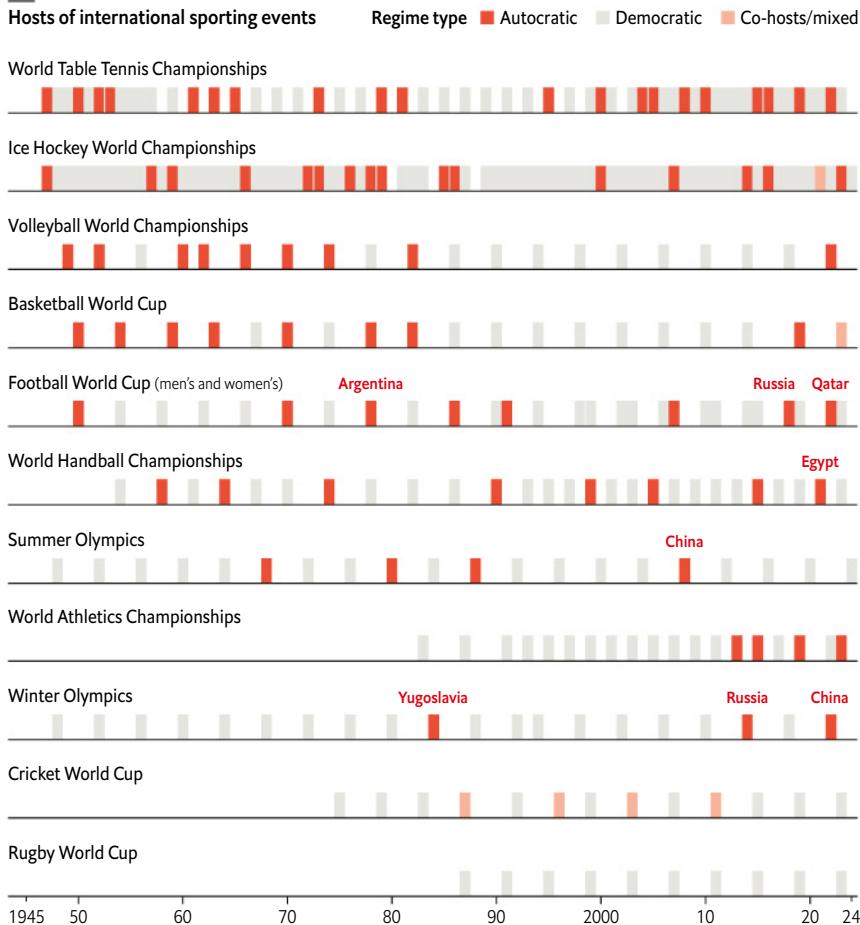
Commodities

The Economist commodity-price index	2015=100	Nov 8th	Nov 15th*	month	year
Dollar Index	All items	143.9	147.2	2.0	-1.0
	Food	139.4	137.4	-0.8	1.2
Industrials	All	148.1	156.4	4.4	-2.7
	Non-food agriculturals	140.4	140.8	0.3	-4.9
	Metals	150.3	161.1	5.6	-2.1
Sterling Index	All items	189.9	188.9	-3.0	11.7
Euro Index	All items	158.5	157.5	-3.1	8.4
Gold	\$ per oz	1,698.8	1,770.2	7.2	-4.9
Brent	\$ per barrel	95.4	94.0	4.2	13.8

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

For more countries and additional data, visit economist.com/economic-and-financial-indicators

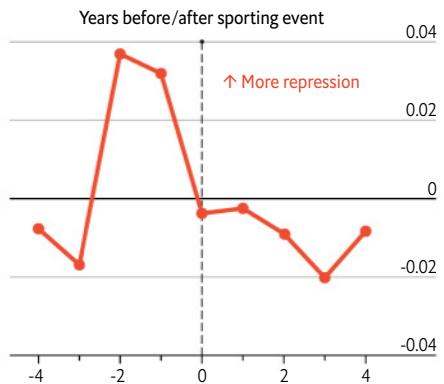
→ Democracies have become more reluctant to host sporting showcases



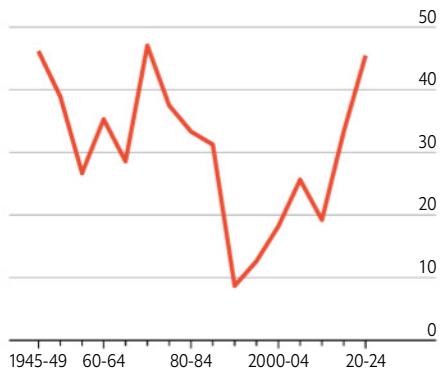
*Summer and Winter Olympics, FIFA World Cup, Africa Cup and Copa América

Source: "International sports events and repression in autocracies: Evidence from the 1978 FIFA World Cup", by A. Scharpf, C. Glaesel and P. Edwards, *American Political Science Review*, Oct 2022

Repression around international sporting events*
1945-2020, score above country average in time period



Autocratic hosts of international sporting events
% of total



Poisoned chalices

International sporting competitions are increasingly held in autocracies

THERE ARE no democratic litmus tests for hosts of global sporting events. From the Nazi Olympics to Argentina's football World Cup in 1978, unsavoury regimes have long used such competitions to burnish their prestige and supercharge nationalism. But 30 years ago, the vast majority of tournaments took place in democracies. Only during the past decade have cases like the 2022 men's football World Cup, which kicks off in Qatar on November 20th, begun to look like the norm again.

According to data compiled by Adam Scharpf, of the University of Copenhagen, and two colleagues, the share of international sporting events hosted by autocracies fell from 36% in 1945-88 to 15% in 1989-2012. Since then, it has rebounded to 37%. Although the total number of democracies

in the world has also declined from the post-cold-war high, only a few recent autocratic hosts are lapsed democracies.

The pattern is reflected both in high-profile competitions—since 2008, China has hosted two Olympics, and Russia an Olympics and a World Cup—and in smaller ones. The World Athletics Championships, for example, were held only in democracies from 1983 to 2011. Since then, four of the six hosts chosen have been autocratic.

Ironically, this trend stems largely from democratic decision-making. Studies have shown that big sporting events tend to be bad deals for host countries. Cities have to build costly stadiums that are rarely used afterwards, and that fail to spark economic development in surrounding areas. As a result, governments accountable to their taxpayers have become less enthusiastic about being the host. This year's Winter Olympics wound up in Beijing almost by default, after all four cities in democratic countries that had bid backed out. The only alternative was Almaty, Kazakhstan.

Autocrats, in contrast, are free to squander public funds. The main threat they face as hosts is that protesters or the press will

highlight human-rights violations. But rather than encouraging reform, the international spotlight seems to lead such regimes to become even more repressive in the run-up to sporting events.

Using "repression scores" calculated by other scholars that measure how much violence states inflict on their citizens, Mr Scharpf has shown that hosts of the Olympics and football tournaments tend to crack down two years before opening ceremonies. Once the world starts watching, they ease off. For example, according to Human Rights Watch, ahead of the Olympics of 2008 China pre-emptively arrested people who were likely to express discontent. As a result, official "protest zones" were empty during the event.

Qatar is following this pattern. In recent weeks it has moved thousands of foreign workers, whose treatment in the country has drawn widespread criticism, out of its capital, where their plight would be most likely to draw attention. If the governing bodies of big sporting events do not want to encourage such policies, they will need to work out how to make hosting them more attractive for democracies. ■



From friendship to haunting

Hannah Pick-Goslar, close friend and champion of Anne Frank, died on October 28th, aged 93

LATE IN THE summer of 1942, Hannah Goslar's mother began to think of making strawberry jam. Hannah, then 13, was sent round to the Franks' house, two doors away in Amsterdam, to borrow the scales and perhaps to get some cast-off packets of pectin. Otto Frank was in the pectin-and-spices business, and Hannah and his daughter Anne were firm best friends.

Hannah rang the bell, but nobody answered. She rang it again, and Mr Goudsmit the lodger came to the door, irritable and jumpy, obviously thinking it might be the occupying Germans hunting for Jews. Why was she here? he snapped. Didn't she know that the Franks, to avoid the same fate, had gone to stay with Otto's mother in Switzerland?

No, she hadn't known. But she was not alarmed. Anne was always doing extraordinary things: showing all her friends how she could dislocate her shoulders, k-nock, k-nock, making everyone go "Wow!"; getting the idea, when she and Hannah were playing together in Otto's office on Sundays, of throwing water down on people in the street; writing crazy essays, tossing her black hair, the centre of everyone's attention. She might well disappear off the face of the Earth, and say nothing.

Hannah was eight months older, and taller; but she often felt younger, and was far shyer. Her family was also sterner and more religious than the liberal Franks, whose food she could not eat because it wasn't kosher. With Anne, life was seldom dull. And so it continued, even after Anne's death in 1945, when the discovery of her diary made her the most famous child victim of the second world war. Hannah then found herself sought out too, simply for being her friend. From 1947 she had embarked on a new life in Palestine, then in Israel, becoming a paediatric nurse, marrying an army colonel, having three children and, eventually, 31 great-grandchildren—her answer to Hitler, she often said. But she also became Anne's ambassador, taking her presence with her into

classrooms and lecture halls the world over, making sure she was as famous as she had always wanted to be.

The attraction had been instant. On their first day in kindergarten, two tiny refugees from Germany, they flew into each other's arms. They played together constantly: hopscotch, ping-pong, skipping. When Jewish pupils were expelled from Christian schools they stormed the Jewish Lyceum together, although they both found it a struggle to pass in mathematics.

Yet Anne also had a disconcerting, unknowable, secret side. During school breaks she would sit scribbling in notebooks, re-buffering anyone who pried. When the celebrated diary, with its red-and-white-check cover, was given to her on her 13th birthday, Hannah was at the party. She little knew how shocked she would be when, a few years later, she read the published version.

In the very first pages, Anne claimed she had never had a real friend. Going round the girls in her class, Hannah was only the eighth she noticed: "a bit on the strange side", "always blabbing to her mother", therefore not a friend to confide in. The Goslar household was chaos, with a younger sister screaming while Hannah tried to help a bit, though she was "all thumbs". The diary showed Hannah an Anne who was deep-thinking, keenly perceptive, even more boy-crazy; in fact, someone she hadn't known.

When she went on her jam-making errand, they were already no longer first-best friends. And now Anne and her family had gone into hiding, though still in Amsterdam; Switzerland was a cover story. Yet the girls went on haunting each other. Hannah supposed that Anne was cosily in the Alps, sipping hot chocolate with a handsome boy. In November 1943 Anne dreamed in a frighteningly different vein: that Hanneli had come to her, thin, in rags, with huge eyes, pleading to be rescued from "this hell". For at least a year, Anne hadn't thought about her; now she felt sure Hannah was in a death camp. The entry went on with desperate prayers that God would save her friend, and the cry: "Why have I been chosen to live, when she's probably going to die?"

In reality, the reverse occurred. In June 1943, some months after Hannah's mother had died in childbirth, the Goslars were rounded up and sent first to a transit camp at Westerbork, then to Bergen-Belsen. They were spared the worst indignities because they had papers allowing them to be sent to Palestine in exchange for German prisoners-of-war: they were not shaved or tattooed, and could keep the things they had brought with them. In both camps Hannah worked and looked after her younger sister, already dreaming of life as a nurse from the book on Florence Nightingale she had managed to pack.

In the last winter of the war, Bergen-Belsen suddenly took in hundreds of prisoners from Auschwitz. Existing prisoners were made to sleep two to a bed, and the camp was divided into two sections by a barbed-wire fence stuffed with rushes and reeds. The two sides could not see each other, and were forbidden to talk; Hannah registered the new arrivals mostly by noticing the lice that moved in with them, carrying typhoid.

But up close to the fence, at night, people pressed and whispered across the divide; and she learned then that, astonishingly, Anne was among the newcomers. The Franks' hiding place had been discovered, and they had been taken to the worst camp of all. At the fence, the two girls whispered and cried. Anne's lovely black hair had been shaved off; she was starving and she was cold. Over the next days Hannah did what she could, scraping together *knackebrot*, prunes and socks from a Red Cross package and throwing them across. The first packet was snatched by someone else; Anne caught the second. They could not make contact again.

In later years, the shelves in Hannah's sun-filled flat in Jerusalem were weighed down with books on Anne in many languages. At the fence, all she had seen was a shadow through the rushes and the dark. There, however, they had confided in each other—perhaps known each other—more closely than at any other point. In those snatched minutes, they were true best friends. ■