

# The Economist

The world that won't criticise Russia

Pakistan's meddlesome generals

Partygate, the final episode?

A new geography of innovation

APRIL 16TH–22ND 2022

## What China is getting wrong

It's not just covid





## THE DATEJUST

Introduced in 1945, the Datejust remains the archetype of the classic watch, with its timeless style and exceptional elegance. The first watch to display the date in a window, and the first to feature the patented Cyclops lens, its appeal has spanned eras. Over the years, it has continued to evolve with Rolex's latest technology, while remaining one of the purest expressions of the Oyster Perpetual collection.

#Perpetual



SAPPHIRE CRYSTAL

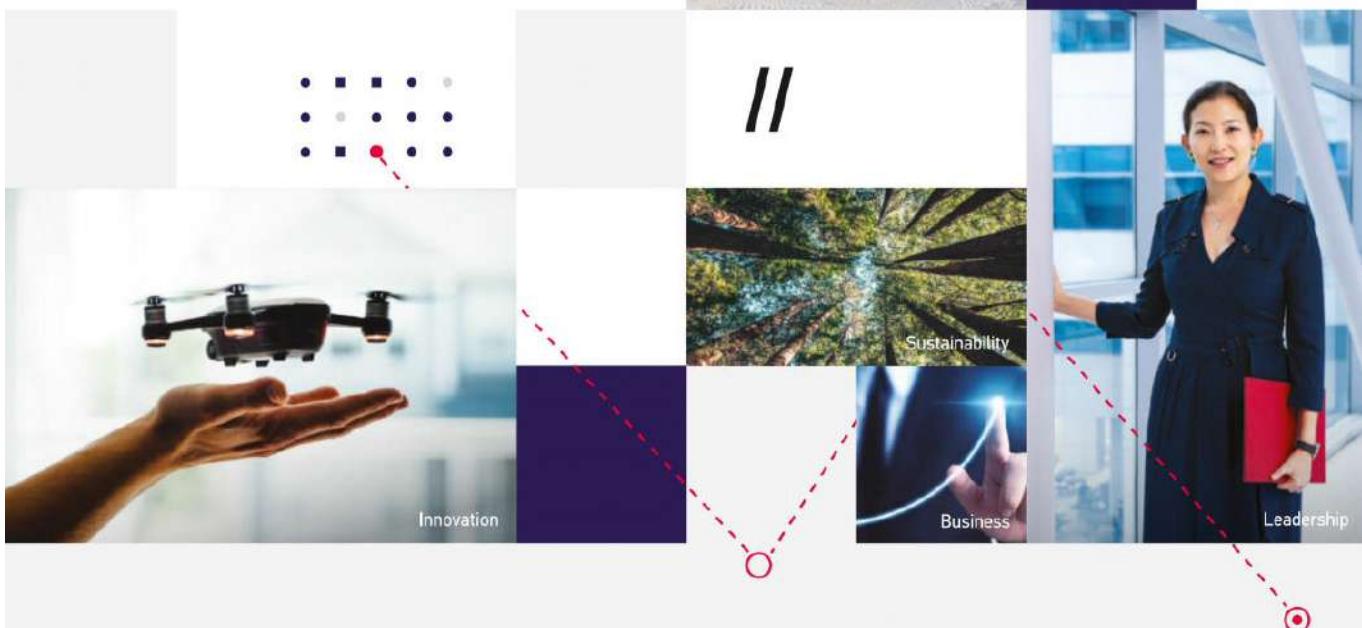


OYSTER PERPETUAL DATEJUST 41



**ROLEX**

# DEVELOPING LEADERS FOR A SUSTAINABLE FUTURE



- **Nanyang MBA**
- **Nanyang Professional MBA**
- **Nanyang Fellows MBA**
- **Nanyang Executive MBA**

Young and research-intensive, Nanyang Technological University (NTU Singapore) is ranked 12th globally. It is also placed 1st among the world's best young universities.

Nanyang Business School draws on NTU's strengths in technology, innovation and research to provide holistic, interdisciplinary business education with a push towards sustainability. Our MBA programmes empower you with the essential knowledge and skills to **innovate for the future**, **lead with impact** for the benefit of business, community and environment, and **transform with cultural dexterity** to succeed in dynamic Asia and beyond.

Learn more



To discover our programmes,  
scan the QR code or contact  
us at +65 6790 4185 /  
[nbsgradstudies@ntu.edu.sg](mailto:nbsgradstudies@ntu.edu.sg).



**NANYANG  
TECHNOLOGICAL  
UNIVERSITY  
SINGAPORE**

Nanyang Business School



## On the cover

In three big areas Xi Jinping is exhibiting poor judgment in an all-important year: leader, page 11. Locked down and fed up, page 28. The incubator state: China's plans for tech, page 60

**The world that won't criticise Russia** It is time to get off the fence: leader, page 12. Why so many countries won't stand up to Vladimir Putin, page 50. How Ukraine is based on bottom-up self-reliance, page 17. The bill for reconstruction, page 20

**Pakistan's meddlesome generals** They should try letting politicians run the country for once: leader, page 13. Shehzad Sharif takes over from Imran Khan as prime minister. He faces a daunting to-do list, page 23

**Partygate, the final episode?** Boris Johnson broke his own lockdown rules, but he won't be forced from office: leader, page 14, and analysis, page 47

**A new geography of innovation** Startup hubs are mushrooming around the world, page 53

→ The digital element of your subscription means that you can search our archive, read all of our daily journalism and listen to audio versions of our stories. Visit [economist.com](http://economist.com)

## The world this week

8 A summary of political and business news

### Leaders

11 **What China gets wrong**  
It's not just covid-19

12 **Backing Ukraine**  
Get off the fence

13 **Pakistan**  
Mismanaged democracy

13 **France's election**  
Don't panic

14 **Partygate**  
The final episode

### Letters

16 On Ukraine, logistics in Africa, food banks, tacos, initials, energy

### Briefing

17 **The war in Ukraine**  
A people coming together

20 **The cost of rebuilding**  
And the need for reform

## Asia

23 Pakistan's new leader

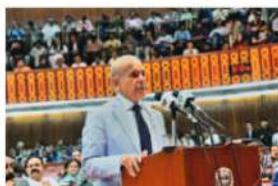
24 Sri Lanka's debt

25 Mt Everest and Ukraine

25 Burmese refugees

26 Architecture in Tokyo

27 **Banyan** Australian defence and security



## China

28 Locked down and fed up

29 Downgrading English

30 **Chaguan** Xi Jinping lectures China's critics



## United States

31 In praise of the IRS

32 Student loans

33 Local-news startups

33 Brooklyn subway shooting

34 Abortion after Roe

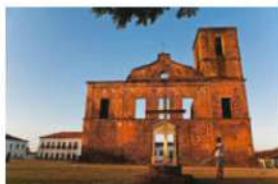
36 **Lexington** Ken Paxton and the heart of Texas



## The Americas

37 Religion in Latin America

38 Canada's budget



## Middle East & Africa

39 Yemen's search for peace

40 A wave of terror in Israel

41 Financing terror in Africa

42 War crimes in Tigray

42 A Marmite shortage



**Free exchange** What a wave of bigger military budgets will mean for the economy, page 66



► Contents continues overleaf

**Europe**

- 43** France's election  
**44** Finland and NATO  
**45** Russians in Germany  
**45** Spain's hard-right Vox  
**46** **Charlemagne** The power of older voters

**Britain**

- 47** Boris Johnson is fined  
**48** Prisons and planning  
**49** **Bagehot** The mighty Martin Lewis

**International**

- 50** Russia's friends in need

**Business**

- 53** The geography of innovation  
**56** Sanctioning Russia  
**56** Boycotting brazen brands  
**57** **Bartleby** Email sign-offs  
**58** Hybrid dealmaking  
**59** **Schumpeter** Opaque Shein

**Finance & economics**

- 60** Innovation in China  
**63** The drivers of inflation  
**63** Sri Lanka defaults  
**64** Talent wars on Wall St  
**65** **Buttonwood** The politics of crypto  
**66** **Free exchange** Guns v butter

**Science & technology**

- 67** Tracking ships at sea  
**68** Cracks in the Standard Model?  
**69** Soldering wounds  
**70** Drugs and genetic screening

**Culture**

- 71** Hong Kong  
**72** America's civil war  
**73** An Omani artist  
**74** The joy of gardening  
**74** Speculative fiction  
**75** **Back Story** The genius of "Atlanta"

**Economic & financial indicators**

- 76** Statistics on 42 economies

**Graphic detail**

- 77** When hot weather strengthens environmentalism

**Obituary**

- 78** Vladimir Zhirinovsky, a political jester in Moscow

The Economist

**Volume 443 Number 9292**

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

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

**Subscription service**

For our full range of subscription offers, including digital only or print and digital bundled, visit: [Economist.com/offers](http://Economist.com/offers)

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

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

Asia: 001800 771 2711  
 Singapore: +61 2915 75069

**PEFC certified**

This copy of *The Economist* is printed on paper sourced from sustainably managed forests, recycled and controlled sources certified by PEFC  
[www.pefc.org](http://www.pefc.org)



"BEAUTY LIES IN THE DETAILS OF  
THE GRANDEST STRUCTURES,  
AND THE FINEST."

ORAÎTO.  
CREATOR OF SHAPES, WEARS THE  
VACHERON CONSTANTIN TRADITIONNELLE.

  
**VACHERON CONSTANTIN** | ONE OF  
GENÈVE NOT MANY.



Following Russia's withdrawal from northern **Ukraine**, the inhabitants of Kyiv, the capital, as well as other northern cities such as Sumy and Chernihiv, enjoyed a week with no shelling or rocket attacks for the first time since the war started on February 24th. Ukraine's second city, Kharkiv, farther to the east, was largely quiet, too. But there are fears that Russia is preparing a massive new assault in the Donbas region in the south-east. Vladimir Putin said peace talks were at a dead end and that Russia would prevail. Joe Biden, America's president, described Russia's actions in Ukraine as genocide.

Karl Nehammer, the chancellor of **Austria**, became the first Western leader to visit Mr Putin since the war began. He emerged gloomy about the prospects for peace.

#### Nice to see you

Ursula von der Leyen, the president of the European Commission, travelled to **Kyiv** to meet Volodymyr Zelensky, Ukraine's president. Boris Johnson, Britain's prime minister, also called on Mr Zelensky. Britain, Slovakia and other European governments also gave Ukraine more weapons, including tanks and anti-aircraft missile systems.

The **UN** said that two-thirds of **children** in Ukraine have been displaced because of the conflict, mostly within the country, although 2m have been taken abroad. Ukraine's ambassador to the UN claimed that Russia has forcibly removed 121,000 children. More reports emerged of rapes by Russian soldiers and human-trafficking.

Russia withdrew from the **UN Human Rights Council** after a vote in the General Assembly to suspend it. China joined 23 other countries in voting against Russia's suspension; 58 countries abstained.

**France** went to the polls in the first round of its presidential election. Just as in 2017, the top two candidates, who will proceed to a run-off on April 24th, are Emmanuel Macron, the incumbent, and Marine Le Pen, the right-wing leader of the National Rally. The opinion polls predict a much tighter race than last time.

Imran Khan was ousted as **Pakistan's** prime minister when he lost a vote of confidence in parliament. He had tried to ward off the vote by dissolving the legislature, but the Supreme Court ruled the manoeuvre illegal. Legislators selected as the new prime minister Shehbaz Sharif, the younger brother of Nawaz Sharif, a former prime minister. Mr Khan called for protests.

**Sri Lanka** suspended payments on all foreign debt until it can reach agreement with creditors on restructuring the loans, paving the way for the country's first default. The move will allow the government to use its dwindling foreign reserves to import food and fuel while it negotiates a restructuring and a bail-out from the IMF.

**Australia's** prime minister, Scott Morrison, called a general election for May 21st. His conservative coalition trails the opposition Labor Party in the polls.

A gunman opened fire at a station on a **New York** subway train, wounding ten people. He also let off a smoke canister. Another 13 were injured in the mêlée. The attacker's motive was not immediately clear.

A murder charge against a woman in Texas who induced an **abortion** was dropped. The woman reportedly told hospital

staff that she had tried to abort her fetus herself, which led to her arrest. Last year Texas passed a law that in effect bans abortion after six weeks. The local district-attorney said the woman would not be prosecuted.

After an all-night manhunt **Israeli** forces killed a Palestinian man who murdered three people on a busy street in Tel Aviv. It was the latest in a number of fatal attacks carried out in Israel by Palestinians and Israeli Arabs. Naftali Bennett, the prime minister, vowed that anyone who helped the terrorists "would pay a heavy price".

Abd Rabbo Mansour Hadi, the president of **Yemen**, who was long ago forced into exile in Saudi Arabia, was replaced at the behest of his hosts by an eight-man council. The new body supposedly represents a cross-section of Yemenis.

The **EU** said it would wind down a mission training **Mali's** army because of a row over the country's award of a security contract to the Wagner Group, a mercenary outfit with close links to Russia's government. The decision also casts doubt over the future of other EU forces who are part of a UN peacekeeping mission in Mali.

**Nigeria's** vice-president, Yemi Osinbajo, decided to run for president in elections next year. Mr Osinbajo is seen as a more competent figure than his boss, Muhammadu Buhari, who is completing his second and final term.

Andrés Manuel López Obrador, the president of **Mexico**, easily won a referendum on whether he should continue in office. Turnout, at 18%, was low. Mr López Obrador's fortunes were also boosted after the Supreme Court upheld his proposed electricity-market reform, which will favour state-owned utility companies over private producers.

Luiz Inácio Lula da Silva, a former president of **Brazil** and the front-runner in October's



Sources: Johns Hopkins University CSSE; Our World in Data; UN; World Bank; The Economist's excess-deaths model

→ For our latest coverage please visit [economist.com/coronavirus](https://economist.com/coronavirus)

presidential election, chose Geraldo Alckmin, a former governor of São Paulo, as his running-mate, despite a history of political disagreements. Lula is polling first at around 40%, but Jair Bolsonaro, the incumbent, is gaining ground.

A British-born supporter of Islamic State was found guilty of murdering **Sir David Amess**, a British MP, last October. He had considered several MPs as targets before deciding to stab Sir David, who was holding meetings with his constituents.

#### The party hangover

Officials confirmed that **Boris Johnson**, Britain's prime minister; his wife, Carrie, and Rishi Sunak, the chancellor, had been fined by the police for breaking lockdown restrictions by attending social events. Mr Johnson is the first sitting British prime minister to be penalised for breaking a law. He is also accused of misleading Parliament.



America's annual rate of **inflation** as measured by the official consumer-price index jumped again in March to 8.5%, from 7.9% in February. Inflation is being fuelled by surging energy and commodity prices. There may be some respite for consumers this month as **oil prices** have fallen back recently, in part because of weaker demand in China. Brent crude is trading around \$100 to \$105 a barrel having hurtled towards \$140 in early March. Petrol prices rose by 18% in America last month, but have been in retreat in April. Britain's annual inflation rate rose to 7%.

Responding to "rising inflation expectations", **New Zealand's** central bank lifted its main interest rate by half a percentage point, to 1.5%. The Federal Reserve may raise rates by the same amount next month.

**Global food prices** hit a new high, according to an index from the UN Food and Agriculture Organisation. The war in Ukraine has amplified existing supply strains, such as crop conditions in America. Russia and Ukraine account for 30% of the world's wheat exports and 20% of maize (corn). The price of both staples soared by close to 20% in March. Higher prices for sunflower seed oil, of which Ukraine is the biggest exporter, have pushed up the prices of palm, soya and rapeseed oil.

The World Bank forecast that **Ukraine's economy** will shrink by 45% this year because of Russia's invasion. Half of the country's businesses are closed and others are struggling. Russian GDP is set to contract by 11%.

**Russia's central bank** unexpectedly cut its main interest rate to 17%, having doubled it to 20% at the start of the war. It now thinks the rouble has sufficiently recovered from its rout in the markets to lessen the threat of a spike in inflation. It also lifted one of its temporary capital controls by allowing people to buy cash foreign currencies again.

**Société Générale** decided to sell **Rosbank**, a big Russian firm it owns, joining a long list of companies to leave Russia. The French bank is one of several Western companies with a serious presence in Russia's financial industry. It is selling the assets to Vladimir Potanin, Russia's richest man, who is not subject to sanctions by America, Britain or the EU, though Canada recently added him to its list.

### Titter ye not

**Elon Musk** flashed his merciful side by declining a seat on **Twitter's** board, days after he was offered one. He also deleted a number of sarcastic tweets that he had posted about the company, including one that suggested it dropped the "w" from Twitter. Parag Agrawal, the chief executive, didn't give a reason for Mr

Musk's change of mind, but said, "I believe this is for the best." Tesla's boss has amassed a 9.2% stake in the social-media platform.

Disruptions to **supply chains** caused by covid-19 lockdowns in China were a factor behind this week's jitters in the country's stockmarkets. Nio, an electric-car maker with ambitions to take on Tesla, halted production at a factory because of problems obtaining components, which drove its share price down by 10%.

**GoTo** had a successful IPO on the Jakarta stock exchange. Formed last year by the merger of Gojek, a ride-hailing platform, and Tokopedia, an e-commerce firm, GoTo's backers include SoftBank and Alibaba. It wants to use proceeds from the \$1.1bn it raised during its stockmarket flotation to expand its business outside Indonesia to other countries in South-East Asia, increasing its rivalry with Grab, which is based in Singapore.

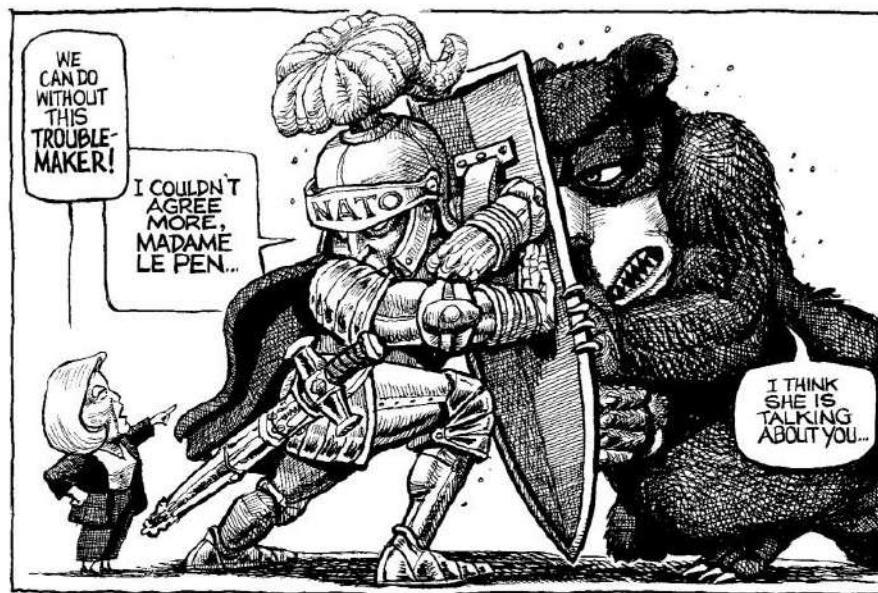
An estimated 4.5bn **passengers** flew last year, according to Airports Council International. That was up by 25% from 2020 but down by half from 2019. Atlanta regained ACI's crown of world's busiest

airport. Heathrow was the only airport in the top ten for international passengers to register a decline in 2021, although March this year was its busiest month since the outbreak of covid-19. Its hopes for a busy summer depend in part on how airlines cope with fewer staff following huge lay-offs during the pandemic.

### Bowing to the inevitable

With its plan to split in two in tatters, **Toshiba** formed a "special committee" to "engage with potential investors" and "review strategic alternatives". Shareholders have been pressing the Japanese conglomerate to consider buy-out offers from private-equity groups. Bain Capital is expected to submit its offer soon.

**Amazon** reportedly filed a legal complaint about the vote at its warehouse in Staten Island which unionised workers there, the first time the retailer's staff have formed a union. One of Amazon's grievances is that organisers allegedly distributed cannabis, which is legal in New York, to entice votes. Nonsense, said the union's lawyer: distributing cannabis "is no different than distributing free t-shirts" and did not affect the outcome.



# Mission Critical?

Darktrace protects critical infrastructure – from IT systems to industrial networks – against advanced cyber-attacks. Our AI can neutralize threats in seconds, without disrupting operations.

When it comes to security, leave nothing to chance.

Learn more at [darktrace.com](http://darktrace.com)



 **DARKTRACE**  
World-Leading Cyber AI

# What China gets wrong

**Xi Jinping is exhibiting poor judgment in an all-important year**

IT IS OFTEN said that China's government plans decades ahead, carefully playing the long game as democracies flip-flop and dither. But in Shanghai right now there is not much sign of strategic genius. Even as the rest of the world has reopened, 25m people are in a citywide lockdown, trapped in their apartments and facing food and medical shortages that not even China's censors can cover up. The zero-covid policy has become a dead end from which the Communist Party has no quick exit.

It is one of a trio of problems faced by China this year, alongside a misfiring economy and the war in Ukraine. You may think they are unconnected, but China's response to each has a common root: swagger and hubris in public, an obsession with control in private, and dubious results. Rather than being the product of statecraft with the Yellow Emperor's time horizon, China's actions reflect an authoritarian system under Xi Jinping that struggles to calibrate policy or admit when it is wrong.

This is the year for China's president when everything has to follow the script. In the autumn he is expected to use a five-yearly party congress to launch a third term as its chief, in defiance of norms that he step aside after two and opening a pathway to lifelong rule. For this coronation to go smoothly, China must be stable and successful.

In some ways Mr Xi has triumphed. The propagandists can boast of a covid-19 mortality rate that is the lowest of any big country, and an economy that has grown by more than any other in the G20 since 2018. As Europe descends into war, China stands apart and secure, with a growing nuclear arsenal and the muscle and money to project power from the Pacific to the Caribbean.

Yet look closer and Mr Xi's final year as a political mortal betrays China's weaknesses under his rule as well as its strengths. Start with the pandemic. Since the virus was detected in Wuhan, China has pursued a zero-covid strategy. Its borders have been closed for two years and outbreaks are met with quarantines, coercive mass testing and harsh lockdowns. Early on, China's rulers decided on a giant utilitarian experiment, leading to a largely covid-free life for the majority, at the cost of forfeited individual liberties, pain for those in lockdown and national isolation.

But the outbreaks are becoming harder to control (see China section). In addition to Shanghai, five provinces have partial lockdowns and Guangzhou has closed its schools. At least 150m people are affected. Having granted autonomy to Shanghai to manage its lockdown, Mr Xi has seized back control. And there is no exit strategy. The party has not prepared the public for living with covid and has failed to jab enough vulnerable old folk or use more effective Western vaccines. The choice now is between a redoubled vaccination campaign alongside an exit wave that could, according to some models, kill 2m people, or indefinite isolation and repeated curfews.

Those lockdowns are hurting growth, amplifying a botched attempt to recast the economy. Mr Xi has called on Chinese capitalists to become less predatory and more self-reliant. But in an attempt to implement vague slogans such as "common prosper-

ity", zealous officials have reasserted state control and intimidated the most successful entrepreneurs. A once-glittering tech industry is in intensive care, with the largest ten firms having lost \$1.7trn of market value after a barrage of regulations. The bosses of Alibaba and Tencent are reduced to displays of cringing obedience and barred from expanding in some new areas. In recent weeks the party has tried to reverse course. But global investors are wary. Those ten largest tech firms are valued at a 50% discount to their American peers.

In their place China hopes to create a loyal new generation of startups that follow the party's austere goals (see Finance & economics section). Registration documents point to tens of thousands of these firms being created in inland cities, which purport to be at the cutting edge of the cloud, robotics and artificial intelligence. For now, patriotic investors are cheering them on but many are duds or frauds tolerated by officials keen to meet local development targets. A tech industry where the incentives are subsidies and fear, and which is separated from an increasingly globalised system of venture capital (see Business section), is likely to fall behind the frontier of innovation.

The last problem involves Ukraine and foreign policy. Mr Xi has sided with Russia, in keeping with his belief that the West is in decline. Yet this stance has costs. It will further hurt relations

with America and Europe, upon whose markets China relies. China hopes Europe can be prised apart from America, but the war has revived NATO and transatlantic co-operation in energy. It is true that many countries do not want to pick sides between the West and China and Russia (see next leader). But China's "wolf warrior" diplomacy is backfiring, as foreigners balk at the insults and threats issuing from Beijing.

Across rich countries, public perceptions of China are at their worst for two decades. The same is true in some developing ones, such as India, that fear Chinese aggression.

Underestimating China is foolish. Its centralised governance allows vast resources to be concentrated on strategic tasks, from building a navy to dominating the battery business. Public opinion can be mobilised. The sheer size of the domestic market lets firms achieve economies of scale without leaving home—and the potential pool of profits will always tempt global firms to be present, and mercantilist governments to support them.

## The three regrets

These strengths remain. Yet China's system of government is developing new flaws as power grows more concentrated. Authoritarian states can get things right but hate to admit when they are wrong. The more Mr Xi's status is officially exalted ahead of the party congress, the more sycophancy there will be. When bureaucrats compete to demonstrate zeal, the administration becomes less effective; if officials fear to speak up, the feedback mechanism fails. A test of China's long-term prospects is whether it can change course. For now, if you think China's ascent is inevitable, look at the deserted streets of its biggest city, and ask yourself if Mr Xi has a monopoly on wisdom. ■



## The war in Ukraine

# Get off the fence

Russia wants to impose its brutal vision on its neighbour. That is everyone's business

**T**HE WAR is first of all about the fate of 44m Ukrainians. But in the shattered ruins of Mariupol and Kharkiv a worldview is also at stake. Vladimir Putin invaded Ukraine to force it to renounce the West and to submit to the Kremlin. He believes that big countries should be free to dominate smaller ones. Ukraine counters that it will choose its own allies. With Western backing, it is affirming the universal principle that all countries are sovereign. Whoever prevails on the battlefield will win a fundamental argument about how the world should work.

It matters, therefore, that off the battlefield this is an argument the West is losing. Most of the emerging world either backs Russia over its invasion or is neutral. Some countries depend on Russian arms, others feel a misplaced nostalgia for Soviet largesse, but many see the West as decadent, self-serving and hypocritical. And many more, even if they do not welcome the invasion, see it as somebody else's problem. As America and the rest of NATO rally support for action against Russia, that is a stunning rebuke. It is also taking the world down a dangerous path.

On March 2nd, 141 countries voted in the UN to deplore Russia's invasion. Just five voted against and 35 abstained. But the real pattern is more complex. Our sister organisation, the Economist Intelligence Unit, has noted that only a third of the world's people live in countries that have not only condemned Russia but also imposed sanctions on it. Most of them are Western. Another third are in neutral countries. This group includes giants like India and tricky American allies, such as Saudi Arabia and the United Arab Emirates. The final third are in countries that are echoing Russia's rationale for the invasion. The biggest, China, has repeated propaganda claiming that Ukraine has hosted American-backed bioweapons laboratories.

In Mr Putin's world, where might makes right, today's lack of support is proof of Western decline. After the Soviet collapse in 1991, when America became the sole superpower, countries aligned themselves with it not so much out of ideological conviction but to win its backing. On this reading, America's sway over smaller countries has diminished as China has risen.

There is something to this, even if declinism is exaggerated. The West has also hastened its own loss of influence (see International section). Until Mr Putin jolted it by invading Ukraine, the West had seemed to have lost faith in the universal principles it espoused. Following the Russian attack on Georgia in 2008, America's president, Barack Obama, rushed to "reset" relations and focus on nation-building at home. When Bashar al-Assad used chemical weapons in 2013, Mr Obama backed off. After annexing Crimea in 2014, Russia got a slap on the wrist.

China and Russia argue that this lack of self-belief is a sign of Western decadence. If so, it spread under Donald Trump, who held America's allies in contempt and was wholly transactional. Democracy in America sank further into outrage and conspiracy. The European Union often seemed hopelessly self-absorbed. Brexit, whether you were for or against it, was a fiasco.

Poorer countries also see America and its allies as self-serving, because they demand solidarity when it suits them and turn

their backs when it does not. While Russia and China released covid-19 vaccines abroad, the West hoarded huge stocks. Countries that grew rich by burning oil and coal have urged a global effort to limit climate change, but failed to keep their (limited) promises to help finance poorer countries' plans to abandon fossil fuels and adapt to a warmer world.

And poorer countries see the West as hypocritical. Europe talks about universal rights, but its laudable welcome for millions of refugees from the war in Ukraine has been undercut by its rejection of refugees from the war in Syria. America and its closest allies invaded Iraq in 2003 without UN backing. In Western eyes, and *The Economist's*, Saddam Hussein was a murderous dictator who had used nerve gas on his own people and attacked his neighbours. He could not be more different from Volodymyr Zelensky, Ukraine's elected president. Yet the rulers of other countries worry that if the West is free to act as judge, jury and executioner, they will get summary justice.

This is a poisonous cocktail of legitimate grievances and exaggeration, all laced with a lingering resentment of colonialism. The pity is that emerging countries are making a grave error. As sovereign powers, they too have a stake in the war. All the West's faults do not outweigh the fact that, in the system Mr Putin is offering, their people would suffer terribly.



The reason is that the world Mr Putin desires would be far more decadent, self-serving and amoral than the one that exists today. Ukraine shows how. His extravagant lies about Nazis in Kyiv and his denial that Russia is even fighting a war are decadent. His brazen claim that NATO provoked the war, posing an intolerable threat to Russia by expanding into central and eastern Europe is self-serving. Those countries were not swallowed up; they chose to join NATO for their own protection after decades of Soviet tyranny. And witness the drowning of all morality in his armies' unconscionable use of torture, rape and mass murder as the routine tools of war.

What is more, Mr Putin's belief in the dominance of great powers will not be limited to the battlefield. For he is right that, ultimately, the successful use of force underpins the structure of geopolitics. If Russia is allowed to prevail in Ukraine, bullying, lying and manipulation will further permeate trade, treaties and international law—the whole panoply of arrangements that are so easily taken for granted, but which keep the world turning.

That vision may suit China, which is impatient to shape the world in its own interests and which feels strong enough to dominate its sphere of influence. It would certainly suit tyrants, who want free rein to abuse their countries and terrorise their neighbours. But it cannot be welcome to leaders who want the best for their people.

Contrast Mr Putin's brutish vision with Ukraine's (see Briefing). Partly in answer to Russian aggression, the country has emerged as a beacon of democracy. Like the West, it is imperfect. But it stands for freedom and hope. Developing countries should not abandon today's flawed system. They should defend it from Mr Putin and use their growing influence to help it flourish. ■

Pakistan

## Mismanaged democracy

The meddling generals should try letting politicians run the country for once

**W**HEN PAKISTAN's top brass helped install Imran Khan as prime minister in 2018, the former cricket champion seemed like the perfect front man. He was a sporting hero, dashing and cosmopolitan. Even so, he had cultivated a folksy, pious air, along with a streak of indignant nationalism that could fire up a rally. His party looked different from the tiresome old lot, which are run as fiefs by political dynasties. His attack on the entire political class as irretrievably corrupt dovetailed helpfully with the work of the aptly named NAB, or National Accountability Bureau, which was trying to put an end to one of those dynasties by prosecuting Nawaz Sharif, the outgoing prime minister.

Most important, Mr Khan cheerfully did what the armed forces wanted, be it cosying up to China and rich Arab states or playing the West as the army quietly helped the Taliban return to power in Afghanistan. The "miltablishtment", as Pakistani wags call it, seemed to have landed on exactly what it was looking for: a plausible yet pliable manager, who would give the army the final say on anything it cared about, but could still take the blame for whatever went wrong.

Yet Mr Khan, predictably, turned out not to be infinitely malleable; he soon developed illusions about his own importance. Last autumn he tried to block Qamar Javed Bajwa, the country's most senior general, from putting a new man in charge of the intelligence service. Mr Khan's electoral success had depended on the scheming of the previous chap, and soaring inflation and a faltering economy were doubtless making him twitchy with new elections due next year.

Magically, the same political barons whose defection to Mr Khan's camp had brought him to office suddenly recanted, and switched allegiance back to the Sharif family. Mr Khan was thrown out in a no-confidence motion in the early hours of April

10th. Shehbaz Sharif (pictured), the younger brother of Nawaz, was sworn in as prime minister on April 11th (see Asia section).

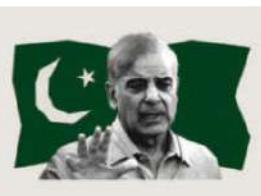
The generals will be glad to be rid of Mr Khan. They seem to have changed their minds on several fronts. They appear keen to shift Pakistan away from Mr Khan's anti-Western posture and undo the perception that the country is China's poodle. They also seem wary of Pakistan's tilt towards extremism, not helped by Mr Khan's strident Islamist rhetoric.

But what the generals may consider a success is really a defeat, in that it shows that the system they have created is inherently unstable. For one thing, it is hard to be prime minister, and to be called "boss" by the army chief, and not begin to think that you should have some say in how the country is run. The older Mr Sharif, too, started out in politics as a protégé of the generals before getting ideas above his station.

What is more, it is not clear how much leeway the new prime minister has, or whom the generals will turn to next if he, too, rubs them up the wrong way. The popular support the army ginned up for Mr Khan has not disappeared.

Plenty of angry voters attended a rally he held to protest his loss of power. The economy remains a mess and elections must still take place in 2023. Further upheaval is inevitable.

Pakistan is not easy to run, as the army well knows. Its many stints in direct control have all ended badly—hence its recent practice of stepping back and trying to manage politics from behind the scenes. But this set-up, too, is also doomed to fail. The army's overbearing influence means that politics is reduced to a game. Governments do not have the authority to enact their own policies. Political speech is understood as empty talk. The generals may believe they are simply applying a guiding hand to the messy business of politics. In fact, they are saboteurs. ■



France's presidential election

## Don't panic

Emmanuel Macron still has the edge in the second round

**F**OR THE third time in the past 20 years a candidate of the hard right has made it through to the run-off round of France's presidential election, causing much anxiety in liberal circles across Europe and beyond. The panic is overdone. The French do not much like their presidents, often relishing elections as an opportunity to give an incumbent a good kick in the teeth. Only two have been re-elected since 1965. Bearing that in mind, Emmanuel Macron's share of the vote on April 10th was close to a triumph (see Europe section). At 27.9%, it was the highest first-round score attained by any incumbent since 1988, and almost four points more than he got in 2017. That is testament to the competence with which he has governed, boosting employment and productivity and improving training and education while

avoiding major mishaps, despite the disruption of covid-19.

Just as in 2017, Mr Macron will face Marine Le Pen in the run-off. Ms Le Pen has done a good job of rebranding herself and her party. She focused her campaign on bread-and-butter issues like energy prices rather than only on toxic ones like immigration. After her previous defeat she changed the name of her party from the National Front, which she had inherited from her overtly racist father, to the more mainstream-sounding National Rally. Even so, her share of the vote in the first round rose by less than two points, to 23.2%.

From here it is much easier to see a path to a second term for Mr Macron than an upset by Ms Le Pen. The president should pick up most of the votes of the eliminated mainstream candi-

dates; Ms Le Pen will grab those of the far-right Eric Zemmour. So the election will be determined by a scrabble for the votes of the perennial firebrand, Jean-Luc Mélenchon, who got an astonishing 22%, thanks partly to tactical voting on the left. Mr Mélenchon has told his supporters that "not a single one" of his votes should go to Ms Le Pen. Many will defy him out of their hatred of the former banker in the Elysée and their anger at the deprivation of France's left-behind rural backwaters, post-industrial towns and urban slums. But Ms Le Pen needs to secure the great bulk of Mr Mélenchon's votes to win, and that will be hard.

*The Economist's* poll-of-polls has the race at a tight 53-47%. Nevertheless our electoral model, which is based on that, gives Ms Le Pen a one-in-five chance of victory, about the same as Donald Trump faced on some estimates at the 2016 election in America. Mr Macron needs to campaign his socks off to minimise the likelihood of something as shocking happening in France on April 24th.

French voters should be in no doubt: a Le Pen presidency would be a disaster for France and for Europe. Ms Le Pen has in the past expressed open admiration for Mr Trump and Vladimir

Putin and still supports Hungary's autocratic Viktor Orban. She wants to pull France out of NATO's integrated command structure, and to ban the Muslim headscarf (though not other scarves). She has dropped her call for France to leave the euro, but would pick fights with the EU in her quest to give priority to French citizens in government handouts and jobs, to give French law primacy and to slash French payments to the EU's budget. A Le Pen victory would also give heart to the hard right elsewhere in Europe, notably Italy, which is due an election next year. The EU would face a grave crisis. Huge, perhaps violent, protests could well roil France's streets.

Whatever transpires in the second round, the fact that on April 10th a record 58% voted for the extremes of right and left is a sign that France is divided and unhappy. In presidential politics the two mainstream parties of left and right that supplied almost all its governments since 1958 have been vaporised—their candidates got less than 7% between them. If the four-in-five chance does indeed give Mr Macron his second term, he must use it to tackle the root causes of this division and discontent. Russian roulette is not a game to be played repeatedly. ■

#### Standards in British politics

## Partygate, the final episode

Boris Johnson broke his own lockdown rules, but he won't be forced from office

WHEN SOMEBODY has a lucky escape do they learn from their mistake, or are they emboldened to make the next one? That was the question facing Britain on April 12th after the prime minister, along with his wife and chancellor, received a "fixed penalty notice"—a small fine—for a get-together during the covid-19 lockdowns. The answer, alas, is that Boris Johnson has form. However repentant he now is in public, in private he will be revelling in his knack for wriggling out of the tightest spots like a greased piglet. For Britain, that is not a good outcome.

For several weeks, starting towards the end of last year, "Partygate" looked as if it might end Mr Johnson's political career. Revelations emerged that the prime minister and his staff had been boozing at one knees-up after another, in breach of the government's own covid rules. Mr Johnson first told Parliament there had been no parties. When that proved false, he said he had not known about them. When he was shown to have been at several, he denied that they were really parties. When it was said he had been warned, he seemed to suggest that he had misunderstood his own government's rules.

Some Conservatives have argued that this week's fine is no more serious than a speeding ticket (see Britain section). In fact, it proves that the police have in effect concluded that Mr Johnson either lied to Parliament or was wildly ignorant of his government's policy on the biggest and most urgent issue of the day. He has, in other words, been a knave or a fool—and few would call the biographer of Churchill and Shakespeare a fool.

Breaking the law and lying to Parliament were sacking offences before Partygate and they still should be. But Mr Johnson's fate is in the hands of Tory MPs and, at the moment, they believe that they need him if they are to keep their seats at the next election. It helps that Partygate no longer seems quite so

heinous now that Russia is committing war crimes in Ukraine. Given that Mr Johnson has helped lead the international coalition against Vladimir Putin, Tory MPs now say he is too important to lose—though since Britain has changed prime ministers during its own wars, in 1916 and 1940, it is hard to see why it should shrink from doing so during someone else's.

Even though Mr Johnson may receive more fines over Partygate, it will therefore not spell his end. But it will leave its Merlot-tinged mark on British politics. Mr Johnson has lost the trust of voters. Snap polls taken this week suggest that about 60% think he should resign and over 70% think he lied to Parliament. Britain faces an energy crisis (see *Baghot*), a huge backlog in the



health service and a surge in the cost of living. It is a time for the hard choices that would stretch the nerves of even the most esteemed prime minister. Mr Johnson, who courts popularity, is more likely than ever to duck them.

This scandal also casts a pall over the Conservatives. The party of law and order has, with open eyes, chosen to associate itself with Mr Johnson's law-breaking and lies. It has been tainted by them. However much it pretends that there were extenuating circumstances, MPs will learn the lessons—that rules are for suckers, that the crime is getting caught and that, even if you are nabbed, braggadocio will see you through. And Mr Johnson and his party have eroded standards in public life. Because elections are blunt instruments, these are in effect self-policed. The prime minister is the chief enforcer of the ministerial code. Because he is assumed to be beyond reproach, there is no provision for when he himself is the problem.

Partygate is winding down. Sadly for Britain, the man with more gates to his name than Heathrow airport has got away with it again. You can count on the next one coming along soon. ■



A New Challenge?

Unique Access to Confidential Opportunities

InterExec is the global leader in enabling Top Executives to access £200k/\$300k to £2m/\$3m+ unadvertised vacancies worldwide. We act discreetly through a 15,000 strong international network.

[london@interexec.net](mailto:london@interexec.net) [www.interexec.net](http://www.interexec.net) +44 (0)20 7256 5085

**InterExec**  
UNIQUE NETWORK • OUTSTANDING TALENT



Jane Leighton  
BEFORE CREATIVE INDUSTRIES  
NOW MATHS TEACHER

ARE YOU READY FOR A CHANGE?

Come back to school [nowteach.org.uk](http://nowteach.org.uk)

NOWTEACH

**Chief Executive Officer**

The International Science Council (ISC) is a leading non-governmental organization with a unique global membership striving to advance science as a global public good. It is the largest global science organization of its type and the only such bringing together the natural and social sciences.

The ISC is now seeking to appoint an innovative and dynamic Chief Executive Officer (CEO) to lead the organization from its headquarters in Paris through its next stage of development. Reporting to the President and Governing Board, the CEO will develop and deliver a compelling shared vision for the future of the ISC, enhancing its profile and maximizing its impact. This is a unique opportunity for an experienced leader to play an important and highly visible role in the continued development of science and its contribution to society.

For more information on the ISC, the role, and how to apply please visit: [www.perrettlavener.com/campaigns/ISC-CEO](http://www.perrettlavener.com/campaigns/ISC-CEO)

 International Science Council

 Perrett Laver  
AMERICAN ASIA-EUROPEAN JAPAN

**A lesson from history**

One historical case that has been overlooked as a parallel for the situation in Ukraine is the Spanish civil war ("Why Ukraine must win", April 2nd). From 1936 until 1939 European democracies gave moral support to the republicans in that conflict, but failed to provide them with sufficient military support to defeat Franco, the dictator. They hesitated because of internal domestic divisions and for fear that they would be stepping across a line that would make them belligerents in the war. As a result, a few months after the fall of Barcelona and Madrid, these same European democracies found themselves in a much nastier war. They had Franco on their consciences until he died, in bed, in 1975.

We are at risk of repeating that error today in Ukraine. As you argue, no solution short of a decisive military victory by the Ukrainians will preserve Western credibility and the rule of law. Consequently, three measures need to be taken immediately: the establishment of clearly defined "red lines" concerning the use of chemical and nuclear weapons; blocking SWIFT transfers to all Russian banks and the termination of Russian oil and gas purchases that this would imply; and providing the Ukrainians with immediate access to the entire Western arsenal of defensive weapons. But, like the Spanish civil war, fear Western democracies lack the courage to implement these measures.

MATTHEW LEITNER  
Former director of the executive masters in international negotiation and policymaking Graduate Institute of International and Development Studies (IHEID)  
Geneva

If victory in Ukraine is so important to the West, then why the hypocrisy of sending weapons and other support and letting the Ukrainians do all the dying? If victory is so important, why are we not putting NATO boots on the

ground and giving Ukraine back to the Ukrainians? To quote Primo Levi regarding another period of horrific atrocities, "If not now, when?"

MICHAEL SLATER  
*San Luis Obispo, California*

I applaud most of your position on helping Ukraine win, but I take exception to your recommendation to "bring Ukraine's governance in line with the EU". In "The Light That Failed", a book that seeks to understand the crisis in liberalism, Ivan Krastev and Stephen Holmes put forward a theory that holding up one system of government as ideal has led to nationalist reaction and support for autocracy in some eastern European countries. Hectoring others to fall in line does not work everywhere.

NORMA ELLIOTT  
*Seal Rock, Oregon*

Missiles and drones have rendered armour-plated tanks as obsolete as cavalry for military purposes ("Loitering with intent", March 26th). Perhaps future versions of stealthy nocturnal drones could be developed to carry food and medical supplies, making it pointless to besiege a city.

GILES CAMPLIN  
*London*

**Delivering reform for Africa**

You are right to point out that non-tariff barriers are a key obstacle preventing the growth of African trade ("Long walk to free trade", March 26th). Logistics are a big part of that. Our members (DHL, FedEx and UPS) are increasingly subjected to draconian postal-licensing regimes in Africa. These licences are designed to stifle competition and extract revenue. They extend national postal monopolies to logistics and impose prohibitive fees that increase the cost of doing business. They fly in the face of regulation standards that a large group of WTO members have recently adopted.

An open and competitive market for delivery services would be an essential building

block for the African Continental Free Trade Agreement to yield its full potential. It would allow African traders of all sizes to reach foreign markets efficiently, both within Africa and worldwide. This can be achieved while maintaining a universal postal service, which is distinct from express delivery. Sadly, many African governments are choosing to go in the opposite direction.

CARLOS GRAU TANNER  
Director general  
Global Express Association  
Geneva

**A sign of our times**

There has, for good and ill, been a recent cross-pollination of anti-poverty policy between the United States and Britain ("The social experiment", April 2nd). A year ago the queues outside British food banks were shortening and hundreds of thousands of children were being lifted out of poverty. This was largely because of the government's decision to raise benefit payments.

However, as in America, the increase in benefit payments proved to be temporary and has now been withdrawn. With those payments now lagging far behind inflation, some food banks within our network are reporting their busiest weeks ever and families are arriving, in the words of one volunteer, with desperation written over their faces.

ANDREW FORSEY  
National director  
Feeding Britain  
London

**What is a taco?**

As a Mexican living in America who has accidentally ordered (and then proceeded to eat) hard-shell tacos, I think your article in praise of their mass marketing did not convey the main objection to them ("The unreal McCoy", April 2nd). It is not about the food content, but about the name. A taco is anything that is wrapped in a tortilla that has been warmed up. That's it. There are no canons on Mexican food, but we do need to get the names on

the menu right.

Something similar to hard-shell tacos already exists in our Mexican menu: the tostada, a deep-fried tortilla that has an assortment of stuff on top of it, such as ceviche or pig's trotter in vinegar. One of the classic versions has meat, lettuce, tomato, cheese and cream. Kudos to the American engineering innovation that fried these things in a wedge shape.

As far as taste goes, if you like hard-shell so-called tacos, go for it. Leave the good stuff for the rest of us.

JAVIER MADRID  
*Chicago*

I enjoyed your article and description of foodie culture. But I contest your claim that hard-shell tacos bear "little relation to the real thing". That would have been a surprise to my immigrant grandmother (born in Irapuato, Mexico) as she served us only hard-shell tacos her entire life. I can assure you she never went to a Taco Bell nor succumbed to "hard-shell" propaganda.

TONY ACOSTA  
*Redondo Beach, California*

**Also known as**

There may be something to the "name-letter effect", the subconscious bias that people have for the letters in their own name, and for their own initials in particular (Bartleby, March 19th). During my career I was known as a major S.O.B.

MAJOR STEPHEN BORKOWSKI  
United States Air Force, (Ret)  
*Pittsburg, Texas*

**Energarchy in the UK**

I read your leader on the new age of energy insecurity ("Power play", March 26th). Is it too soon (or late) to coin the term "Energarchy"?

M.J. (THINUS) BOOYSEN  
*Stellenbosch, South Africa*



## A country that comes together

KYIV AND LONDON

**The Ukrainian nation is based not on borders, institutions or ethnicity, but on bottom-up self-reliance**

ALL MAIN roads in Kyiv lead to Maidan, the open space at the heart of the city—even if, at the moment, some of them are blocked by concrete barriers and tank traps. The central space is, most of the time, a busy urban miscellany. The metro station and a labyrinthine shopping centre wrestle for space below ground; the Stalinist buildings on the perimeter boast franchises like McDonald's and one-offs like the jellyfish museum. And sometimes it is the heart of the nation.

It has had many names over the years: Dumskaya Ploschad (Parliament Square), Sovetskaya Ploschad (Soviet Square), Ploschad Kalinina (Kalinin Square). When student protests demanding independence were first held there in 1990 it was still Ploschad Oktyabrskoi Revolutsyi (October Revolution Square). It was only the year after, in the post-Soviet age, that it took its current name. No longer a Russian *ploschad*, or a Ukrainian *ploscha*, it became a *maidan*—a Persian term introduced by way of the Tatars of Crimea which enriches the architectural notion of a square with the connotations of a communal

meeting place. Specifically, it became Maidan Nezalezhnosti: Independence Square.

But nobody in Ukraine bothers with the qualifier. Since becoming the focal site of the Orange revolution, in 2004, and the revolution of dignity, in 2014, Maidan has not needed it. In the winter of 2013-14 it became a city within the city as diverse as the country itself, a place where tens of thousands of people cooked together on open fires, lived in tents, built barricades, pried loose cobblestones and died when fired on from the surrounding buildings. Today the name Maidan stands for independence in and of itself.

The identification of independence with a place for coming together gets to the heart of something very Ukrainian. Being Ukrainian is not rooted in a particular territorial claim, or a certain ethnic background, or an allegiance to a particular state and its institutions, or the profession

of a given faith. It is instead about an ability to come together when you feel that you need to and to get things done. It is a way of depending on each other, rather than on institutions or hierarchies, whether over cold nights of winter protest or when peltting tanks with Molotov cocktails.

When Roman Romaniuk, a journalist for *Ukrainska Pravda*, declared that “This war against Putin is our final Maidan,” he was saying that, after two previous Maidans against Mr Putin's placeman, Viktor Yanukovich, a battle against Mr Putin himself provided a fitting boss-level conclusion to the country's struggle for sovereignty and democracy. But he was also saying that the self-organising spirit of those revolutions is animating Ukraine's defence of itself. It goes a long way to explaining why a country which, when invaded, was widely expected to fold like a cheap suit has instead fought the aggressors to a temporary standstill.

Ukraine's gift for rising to challenges in its own way is not without downsides. On neither of the occasions when the people got rid of Mr Yanukovich did they put in place the sort of reform needed to curb the politically powerful oligarchs and pervasively corrupt bureaucracy that made such rulers possible. Coming together only when needs must means letting a lot of other things slide with the oft repeated phrase *to sia zrobity*: “it will have to sort itself out”. A flare for self-organisation may, remarkably, allow Ukraine to survive the Russian invasion in something like its cur-

→ **Also in this section**

20 The cost of rebuilding

rent shape. But without something extra it will never make the country as impressive in peace as it has proved itself in war.

Andrei Zorin, a professor at Oxford University, says that the unifying myth behind today's resistance, the two Maidans and much more is that of the Cossacks of the Zaporozhskaya Sich. The Cossacks were, as Andrew Wilson, a professor at UCL, in London, writes in his book "The Ukrainians: Unexpected Nation", "Free men" who took advantage of the 'wild field', the no-man's-land in the open steppe, to establish autonomous farming and raiding communities beyond the reach of the formal authority of the main regional powers—Poland, Muscovy and the Ottomans."

The Sich was the self-organised military democracy through which some Cossacks asserted their autonomy in the early modern era. Its capacities have been romanticised and lionised ever since. "[The Zaporozhian Cossacks] were not a standing army," Nikolai Gogol wrote in "Tara Bulba", a 19th-century novella. "But in case of war and general uprising, it required a week, and no more, for every man to appear on horseback, fully armed, and in two weeks such a force had assembled as no recruiting officers would ever have been able to collect." In the 1920s Nestor Makhno, an anarchist who found common ground with peasants who hated all kinds of state control, created a similar army to resist all those who sought to claim the wild field between Donbas and Kryvyi Rih where the Zaporozhskaya Sich had once held sway.

Such tales resonate because, for most of Ukraine's history, the state has been something foreign for the people to resist, ignore and get by without. When their country acquired a state of its own in 1991, those who ran it were as unscrupulous and divorced from the people as the foreign rulers had been, providing little reason for a change in attitude. Ukrainians continue to have low expectations of the state and rely instead on informal networks of friends, neighbours and relatives. Political reforms since 2014 have recognised this democratic bottom-upness, allowing local communities to amalgamate into larger ones called *hromady* as they see fit.

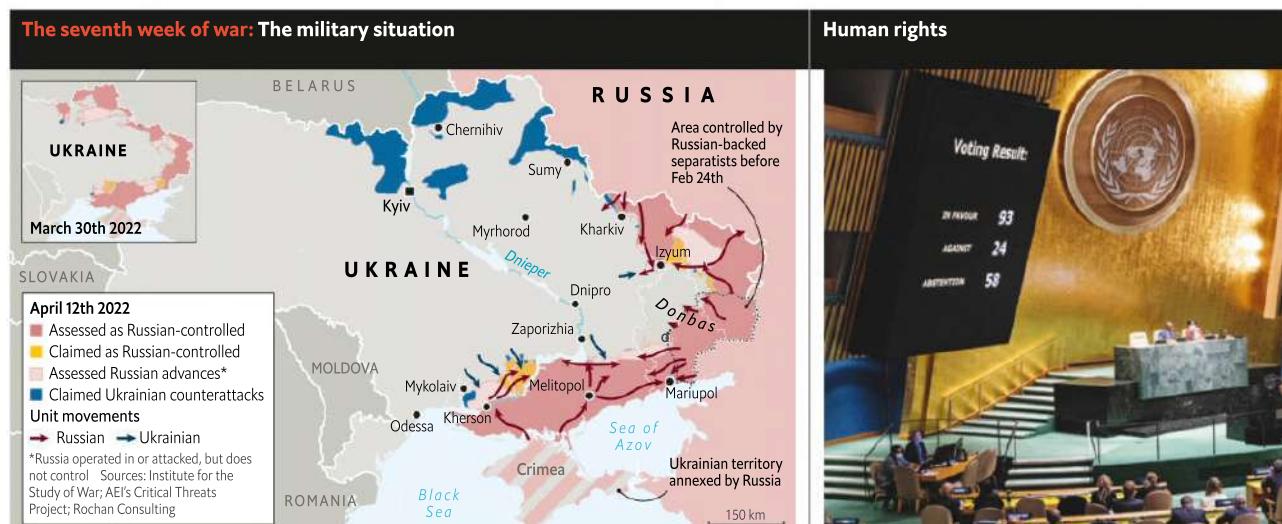
**Decentralised does not mean divided**  
Last year Arena, a project based at Johns Hopkins University and the London School of Economics, reported on what united Ukrainians after 30 years of independence. The researchers concluded that the most important things were not attitudes or values, but "shared, near-unconscious behaviours that have been shaped by the many centuries of Ukraine's pluralistic history." In his book "The Gates of Europe", which has become a standard text in Ukraine since its publication in 2015, Serhii Plokhy describes a nation defined not by its people's pre-existing identities as by its willingness to negotiate them, crossing and recrossing the "inner and outer frontiers" between regions, faiths and ways of life.

As well as distrusting states imposed on them by others, the Ukrainians have not

been very keen on states dominated by any one faction within the country. Mr Plokhy, who teaches history at Harvard, points to the way that, after the fall of the Russian empire in 1917, the primacy some nationalists placed on the Ukrainian language and its associated culture lost them allies among Jewish and Polish minorities worried by such ethno-nationalism. In 1991, on the other hand, Ukrainian sovereignty was supported by all the country's people. Soviet repression had forged an alliance between Ukrainian nationalists and Jewish dissidents, among others.

Attempts to make capital out of the country's regional and ethnic differences since then have ultimately proved fruitless, whether encouraged by Russian provocateurs or by factions in Ukraine itself. When Viktor Yushchenko, the president who was brought to power by the Orange revolution, hailed the mid-20th-century nationalist, anti-Semitic and sometime Nazi collaborator Stepan Bandera as a Ukrainian hero he alienated not just the Russian-speaking east but also the liberal intelligentsia across the country.

The war is laying all thought of division to rest: as Sergei Rakhamanin, a journalist and politician, wrote recently, it "has stitched us together without any anaesthetic". Russian-speakers, Jews, Crimean Tatars and Ukrainian-speakers are fighting as one for survival and their right to be who they want to be on their own land. It is Russian speakers in the south and east who, stalwart in resistance, are paying the ➤



Russia has completed its retreat from northern Ukraine as it prepares for the battle for Donbas in the east. But airstrikes continue at the rate of over 30 per day, targeting Ukrainian supply lines and air defences.

**30%**

The proportion of Russia's 120-125 battalion tactical groups no longer fit to fight.  
Source: Western official, April 11th

The UN General Assembly voted to suspend Russia from the organisation's human-rights council by a solid two-thirds majority, thanks to a huge number of abstentions. Members felt its atrocities in Ukraine disbarred it.

heaviest price. The war which Mr Putin launched on the basis of a belief that Ukraine does not exist and should not exist is proving the opposite.

Military improvisation has always been part of Ukrainian self defence. The *tachankas*—machineguns on horse-drawn carriages—fielded by Makhno's army were the forerunners of the armed Toyota pick-ups, or “technicals”, now seen in low-intensity conflicts around the world. In a Facebook post Anton Kolumbet, a fighter in Ukraine's territorial defence force, described the self organisation of the defenders in today's “wild field”:

In one small forest next to a village being fought over you can see the following: the Ukrainian army, the national guard, territorial defence units, the police, a few glorious patriotic fighters, military intelligence, the secret services, some other strange military professionals and some dodgy types jumping about with weapons... Whenever the enemy tries to enter the village, he is obliterated. When he is obliterated, dodgy-looking guys run under the shelling to get their hands on trophies drenched in blood. Some kick Russian helmets. Some take photos of the corpses. Others write combat reports. Suddenly, a tank appears and goes after three Russian armoured personnel carriers. It destroys them, and then trundles off somewhere else.... Where are all these people coming from? How are they armed? Where are they headed? The people don't know themselves... No military academy anywhere in the world can teach you how to fight such a thing.

“We are a very chaotic nation,” says Andriy Khlyvnyuk, “A nation of musicians and warriors.” The lead singer of a group called BoomBox, which is hugely popular in Russia as well as Ukraine, Mr Khlyvnyuk was on tour in America on February 24th. He immediately cancelled the rest of the tour and returned to Kyiv to join the territorial defence force. A viral video of him singing “Oh, the Red Viburnum in the Meadow”, a protest song from 1914, in front of Kyiv's St Sofia cathedral, rifle slung over his shoulder, has been embellished in mash-ups by Lithuanian opera singers, a South African producer and satirist called The Kiffness and, in their first new song for 28 years, Pink Floyd.

Volodymyr Zelensky, a television comedian before he was elected president in 2018, fits the same “you do what you can” picture. “The first thing that I understood,” he said in a recent interview with *The Economist*, was “that we the people have agency. People are leaders and political leaders are losers, some of them.” (The Arena research found that politicians were the group Ukrainians like least.) As with everyone else, his wartime role has been to do what he does best—communicate with his people and with the world. He is not trying to run the country so much as letting the country run itself.

Nowhere is this more visible than in the army, where Valery Zaluzhnyi, a charismatic 48-year-old, enjoys free rein as commander-in-chief. Unlike older officers, General Zaluzhnyi never served in the So-

viet army; on taking over last year he told his officers to “turn your face to the people, to your subordinates.” He has allowed local commanders to take a lot more initiative than is normal in post-Soviet armies; he listens to the advice of his senior officers.

How the self-organising spirit will fare after the war's end will depend a great deal on what sort of end it is. If Mr Zelensky survives in office he is likely to be the most powerful politician for generations. The machinations of the country's oligarchs, which have held the country back for 30 years, will matter much less. Giving in to the predilection to just let things sort themselves out once the crisis is over will look more culpable. That all argues for the possibility of reform.

But there will be a risk of backsliding on democracy and liberalism in a country which will be focused on its security as never before. “It is unlikely that Ukraine will have political elections in the next few years,” one observer of Ukrainian politics says. That may make eventual integration into the Europe of the EU harder. “Absolutely liberal, European—it will not be like that”, Mr Zelensky told journalists on April 5th. “It will definitely come from the strength of every house, every building, every person... We will become a ‘big Israel’ with its own face.”

The tank traps that have replaced occasional uprisings and everyday bustle on Maidan will in time be taken away. What the Ukrainian people will put in their place remains to be seen. ■



UN General Assembly resolutions, votes

Condemning the Russian invasion of Ukraine      Absent      Against

In favour 141      12      35      5

Suspending Russia from the Human Rights Council

In favour 93      18      Abstentions 58      24

### The war in the east



As Russia prepared a large-scale attack on Ukrainian forces in and around Donbas, a 13 kilometre convoy of military and supply vehicles is snaking its way towards Izyum. But Russia is struggling to muster the necessary manpower.



↑ In Volnovakha, between Donetsk and Mariupol, Russian infantrymen wait for the next assault.

**Economic costs**

## The builder's bill

BERLIN

**The Ukrainian economy is in tatters and much of its infrastructure wrecked. Setting things right could cost half a trillion dollars**

WHEN THE devastating war ended, the country resembled a wasteland. Its industrial infrastructure had been flattened by air raids and its great cities bombed out with terrible loss of life. Russian-led forces occupied the east, with millions fleeing their brutality. But West Germany's economy recovered strongly after 1945, in what would soon be coined the *Wirtschaftswunder* (economic miracle).

The parallels are hardly precise. Ukraine was not the instigator of the war currently laying much of it waste. It may end up being the victor, and even if it does not its devastation will not be as total. Nevertheless, rebuilding will be a monumental task. The war waged by Vladimir Putin has not only claimed thousands of lives and displaced millions of people, 7.1m internally, 4.6m abroad. It has laid waste to homes and hospitals, bridges and ports. With no end to the hostilities in sight, more destruction will surely follow.

Researchers from the Centre for Economic Policy Research (CEPR), a network of economists, have used data on property damage, figures on the country's capital

stock and historical analogies to estimate the overall cost of what will have to be done to rehabilitate the country after the war at €200bn-500bn (\$220bn-540bn). The upper bound is over three times Ukraine's pre-war GDP; the lower number is roughly four times the EU's foreign-aid budget.

As the war continues, the damage will increase and the economic wherewithal to put it right will be eroded as the economy contracts. Electricity consumption, a reasonably reliable proxy for economic activity, is currently down by around a third compared with a year ago. The Vienna Institute for International Economic Studies (wiiw), a think-tank, reckons that the regions directly affected by the war account for about 29% of Ukraine's output, and that in those areas economic activity has more or less ceased. According to a survey by the central bank, 30% of firms around the country have stopped producing entirely and another 45% have reduced their output. The World Bank reckons that GDP will contract by 45% this year.

The challenge is vast. Yet the way in which reconstruction happens, and the re-

forms that accompany it, will be just as important as the money spent. In principle such sums could do more than just restore Ukraine to its status quo—a good thing, since that status quo was corrupt and dysfunctional (see previous article). But if rebuilding is to transform the Ukrainian economy into something more open and dynamic a lot will have to change.

At the moment, the government is trying to limit the damage where it can. Around \$7bn in loans and financial aid from the West has just about kept the public finances afloat. In an interview with the *Financial Times*, Ukraine's finance minister put the fiscal deficit at \$2.7bn for March alone, and projected monthly losses of \$5-7bn in April and May.

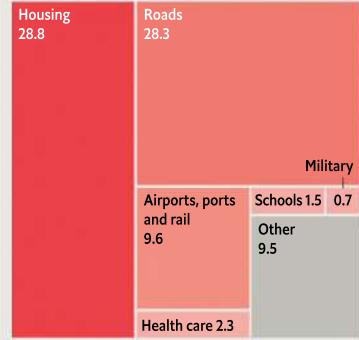
Despite this, various sectors of the economy are getting bespoke help. Farmers have been given 20bn hryvnia (\$675m) with which to buy inputs and seeds for the planting season now getting under way. Manufacturers can apply for help to relocate within the country. With Russia blockading Ukraine's main export route through the Black Sea, the government is working with the EU to make trading by land easier.

For all this, the post-war economy will be a lot smaller than the pre-war economy was even as it faces new challenges. One is clearing affected areas of landmines and other explosive debris. Before the invasion of February 24th Ukraine's defence ministry estimated it would cost €650m to demine the Donbas region, which was invaded by Russia in 2014. The figure will obvi-

### Damage to Ukraine

#### Cost of damage to Ukrainian infrastructure

Estimated, Feb 24th-Apr 11th 2022, \$bn



Source: Kyiv School of Economics



### Food prices



The damage to Ukraine's infrastructure so far has been put at more than \$50bn, according to a new estimate from Kyiv. The economy is devastated, so it will need a lot of outside help. Little has yet been pledged.

**45%**

World Bank estimate of the reduction in Ukraine's GDP this year.

World food prices soared to another record high, as fears grew about the impact of a poor harvest in Ukraine, sanctions on Russia, and a shortage of potash, a key ingredient of fertiliser, from Russia and Belarus.

ously be larger now; but the benefits demining brings will be substantial.

Rich in its farmland, Ukraine will probably be able to feed those in need. Shelter is another matter. A tracker put together by the Kyiv School of Economics puts the value of destroyed housing at \$29bn. Rebuilding damaged infrastructure and industrial facilities will cost even more—as will dealing with the problems caused by lost production, a lack of maintenance and missing investment in the stock that escapes destruction. A study published by the wiw in 2020 found that, in the five years following the invasion of Donbas in 2014, this sort of depreciation of assets made up 60% of \$9.5bn in total war-related infrastructure losses. Apply a similar surcharge to the Kyiv School's estimate of \$50bn in damages due to the destruction of power plants, factories, bridges and roads and the estimate of a \$119bn rebuilding bill recently suggested by Ukraine's prime minister, Denys Shmyhal, may not be far off.

Ukraine's government has already set up a recovery fund, and its various ministries are putting forward proposals for what needs rebuilding. With the government already heavily indebted and the economy badly damaged much of the money needed will have to come from outside. The idea of using frozen Russian assets has been floated by various people, including the head of Ukraine's central bank. In its absence money will have to come from Western governments, international organisations and private investors.

The difficulty is that the Ukrainian economy has long been dominated by crooks. The OECD thinks that Ukraine has made its process for tenders more competitive since 2014, but things are still less than completely kosher; the IMF has repeatedly urged the government to strengthen its anti-corruption framework and the rule of law, most recently last year. And this time the contracts will be much larger. The CEP suggests, in part, the use of framework agreements—standing contracts in which firms undertake to deliver a certain product to the government for a fixed price—to make it easier for both central and local municipalities to procure things reliably and transparently.

#### Old rope and oligarchs

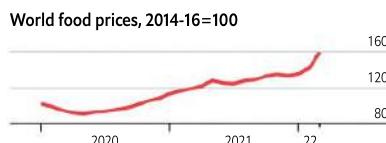
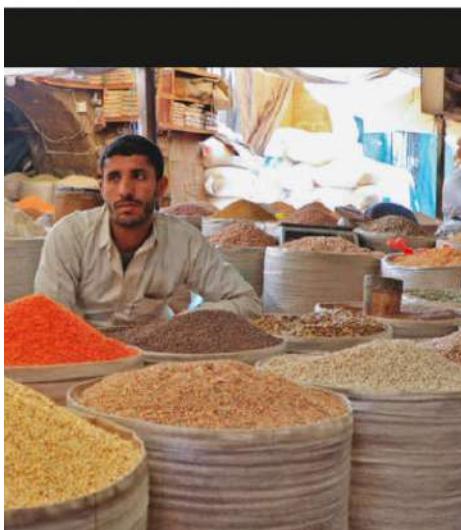
The problems with the economy that lead to worries about where reconstruction money will end up go deep. In 2019 GDP per person was lower than in any of the 27 countries in the EU: less than half that in Bulgaria, less than a quarter that in Poland. Indeed in real terms it was lower than it had been at the fall of the Soviet Union, a damning testament to the long-standing lack of reform (though the war in Donbas from 2014 on was also a factor). Many of Ukraine's 1,500 operational state-owned enterprises are loss-making or barely profitable. Political support for difficult reforms will be crucial to make reconstruction a success. It might help that the government seems to see the process as an opportunity to make the economy more

modern and competitive, with cheaper, greener energy and more IT.

Past reconstructions, meanwhile, suggest that success could also come from closer integration with Europe, as happened with West Germany decades ago. Poland's rapid growth is also often attributed to integration: in the 15 years after it joined the EU in 2004, a period during which it received over €160bn in assistance, its GDP per person increased by more than 80%.

Ukraine had already been turning westward. The share of its exports going to the EU rose from roughly 30% in 2014 to 36% in 2020, while the share going to Russia fell from 18% to 5.5%. One way to encourage reforms would be to make them a requirement for further integration into European markets and supply chains—say, through a path to EU membership. “The beauty of accession [to the EU] is that it would create consensus within Ukraine about the endpoint of a painful reform process and lock in the direction of the reforms,” argues Beata Javorcik of the European Bank for Reconstruction and Development.

None of this will be easy. Reforming entrenched institutions requires political will. The longer the war continues, the more damage is wrought upon Ukraine, and the harder the task of reconstruction becomes. Nor will any amount of spending ever make up for the horrors of war. But if Ukraine looks like an unlikely candidate for a *Wirtschaftswunder*, its reconstruction could, if well planned and carried through, ensure a brighter and stronger future. ■



#### Refugees



Russia's withdrawal from the north of Ukraine raises the possibility that refugees might soon start to return home to the capital and its surrounding areas. But for now the exodus continues, if at a much reduced rate.



# Navigating geopolitical tensions

## 2nd annual Global Trade Week

Prosperity powered by trust: technology, data and supply-chain resilience

June 27th-30th 2022, virtual and London

**More than:**

**5,000** attendees | **500** London attendees | **160** speakers | **70** sessions

Global Trade Week 2022 explores business adaptations to address supply-chain challenges, the trade-finance gap and how to capitalise on it, digital innovation and industry sustainability.

**More than 100 speakers, including:**



**Dr Ngozi Okonjo-Iweala**  
Director-general  
World Trade Organisation



**Sabine Weyand**  
Directorate-general for trade  
European Commission



**Hildegard Naughton, TD**  
Minister of state for transport  
Government of Ireland



**Ivan McKee**  
Minister for business, trade, tourism  
Scottish Government



Register free  
[globaltrade.economist.com](http://globaltrade.economist.com)

Platinum sponsors



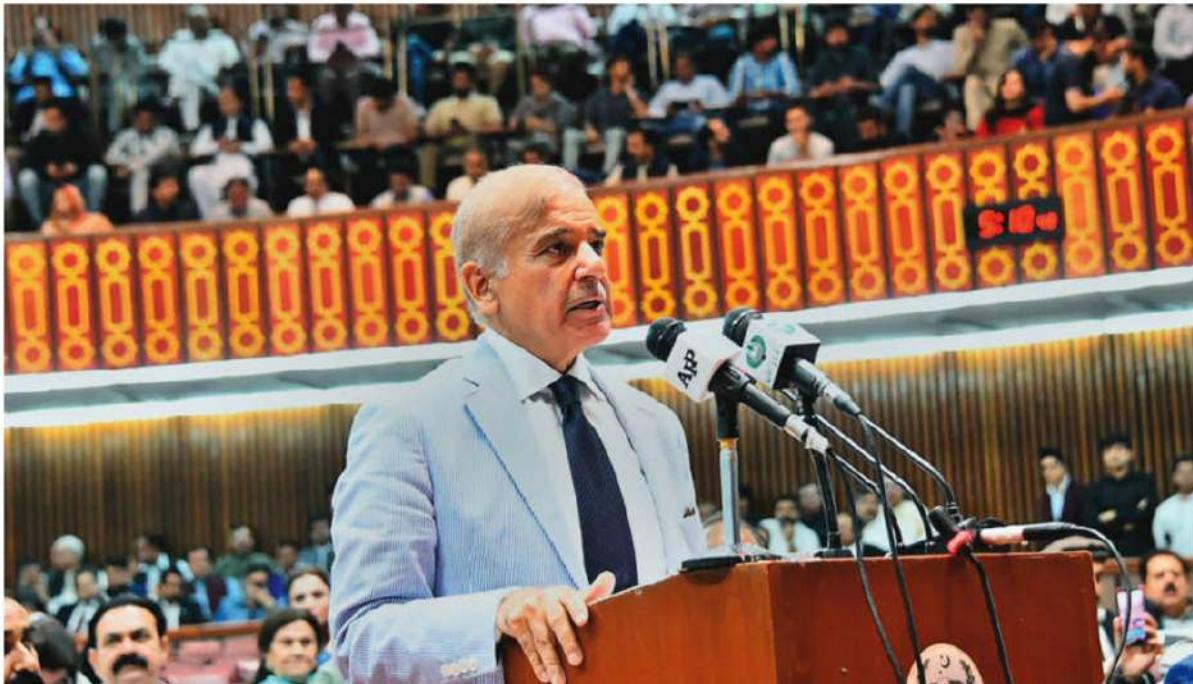
J.P.Morgan

Gold sponsor



Bronze sponsors





Pakistani politics

## A new Sharif in town

ISLAMABAD

**Shehbaz Sharif takes over from Imran Khan as prime minister. He faces a daunting to-do list**

IT WAS THE old Pakistan that Imran Khan, now the country's ex-prime minister, railed against. He promised to banish the self-serving political establishment, usher in an era of clean politics and create a new Islamic welfare state. So it was with visible glee that Bilawal Bhutto Zardari, whose mother, father and grandfather have all served as prime minister, president or both, declared to lawmakers after Mr Khan's downfall, "Welcome back to *purana* [old] Pakistan."

Mr Khan's last day was a dramatic one. He had already tried various tricks to cling on, dissolving Parliament and calling fresh elections to dodge a no-confidence vote on April 3rd. The Supreme Court ruled his tactics unlawful, and ordered that the vote go ahead on April 9th. Yet on the day, Mr Khan's colleagues carried on trying to obstruct it. As midnight neared with no sign of a ballot, the Supreme Court prepared to sit and rule the speaker in contempt. With pressure building, the speaker resigned. A former speaker presided over the motion in the early hours of April 10th. When the votes were tallied, Mr Khan's foes had 174—

two more than a simple majority.

The new prime minister is a political dynast of precisely the sort that Mr Khan wanted to drive out of Pakistani politics. Shehbaz Sharif, the younger brother of Mr Khan's predecessor, Nawaz Sharif, runs the main opposition party, the Pakistan Muslim League-Nawaz. He lacks the charisma of his elder sibling, or indeed the crowd-pulling power of his niece, Maryam Nawaz Sharif. Instead his strength lies in his reputation as a competent administrator.

The son of a wealthy industrialist, Mr Sharif worked in the family business before entering politics. While his brother had three terms as prime minister, Sheh-

baz, now 70, had three terms as chief minister of the country's most populous province, Punjab. His first stint was cut short by a military coup in 1999, when the army ousted the elder Sharif as prime minister and both brothers temporarily went into exile. Like Nawaz, he has also been accused of corruption. The Sharifs say the accusations are politically motivated. He is currently on bail in a money-laundering investigation. He denies wrongdoing.

Mr Sharif's purported competence will now be tested to its limits. At home, he will need to get a grip on Pakistan's crumbling economy. Inflation is a painful 13%, partly thanks to the war in Ukraine, and the rupee has been on the slide for months. A balance-of-payments crisis is looming. He must also tip-toe around the army. He will have learned from watching his brother that Pakistan's politicians can get in trouble if they bicker with the armed forces, which have directly ruled the country for about half its existence and played kingmakers the rest of the time.

Nawaz and his daughter have railed against the generals and their meddling, but Shehbaz (pictured) has been more conciliatory. The army appears to have smiled on his premiership. Mr Sharif will need to apply the same approach to fixing Pakistan's foreign relations. The new government will have to patch up relations with America, which Mr Khan damaged by suggesting, without making any evidence public, that shadowy figures in Washington were trying to push him out.

→ Also in this section

**24 Sri Lanka is officially broke**

**25 Nepal's Sherpas and the Ukraine war**

**25 Burmese refugees in Thailand**

**26 Tokyo's iconic capsule tower**

**27 Banyan: Australian defence**

► America is used to being blamed for things in Pakistan, however, and the army has already made soothing noises. Mr Bhutto Zardari's Pakistan Peoples Party, which has got on better with America when it was in power in the past, will take a prominent role in the new government. The damage Mr Khan did to bilateral ties will probably be short-lived.

Mr Sharif will also have to deal with China. When he and his brother were last in power, they were instrumental in setting up the China-Pakistan Economic Corridor, a package of investment from Pakistan's "iron brother" in ports, power plants and other infrastructure. The initiative slowed under Mr Khan and several important bits, such as a new railway, have stalled. It is unclear if this stemmed from mismanagement or cold feet about the huge debts Pakistan was running up.

Mr Sharif's government will have less influence on relations with Pakistan's closest neighbours. The armed forces have a lock on policy towards India and Afghanistan. General Qamar Javed Bajwa, the chief of the army staff, said on April 2nd that he wants talks with India and is ready to "move forward" over Kashmir, a disputed region. The border between India and Pakistan is quiet after the pair agreed to stop taking potshots at each other in early 2021.

Afghanistan, however, is a dangerous headache. The Taliban remain international pariahs despite Pakistan's attempts to persuade the West to establish ties with them. And the group's victory last year has emboldened Pakistan's own jihadists, who have been carrying out more attacks.

Mr Sharif will not have an easy ride. His coalition may be unified in its moment of triumph, but that will probably prove fleeting. His niece has for years been seen as the family's most appealing standard-bearer, and she may not want to remain in the back seat for long. Elections, which are anyway due next year, could be brought forward. As for Mr Khan, he will not disappear quietly. Lots of Pakistanis believe his allegations that perfidious foreigners and domestic traitors are to blame for his ousting. That populist gambit may be politically shrewd, but it is also dangerous.

Politics is already polarised and many of Mr Khan's young supporters are furious. In a poll conducted by Gallup on April 10th and 11th, 43% of Pakistanis said they were angry about Mr Khan's defenestration. Well over two-thirds, including a majority of Mr Sharif's supporters, wanted early elections. Mr Khan's Pakistan Tehreek-e-Insaf party is planning a series of rallies to pile on the pressure for a swift poll. The large crowds that responded to his call for a peaceful protest the day he was voted out show that he remains a force to be reckoned with. Mr Khan may be gone, but he is not forgotten. ■

### Sovereign default

## Going for broke

COLOMBO AND DELHI

### Sri Lanka says it will no longer service its foreign debt

**S**RI LANKA has suffered multiple crises and nearly three decades of civil war since it won independence from Britain in 1948. But it had never failed to pay back its debts. That changed on April 12th, when the South Asian island nation's finance ministry said in a statement that it would suspend payments on all foreign debt until it had come to an agreement with creditors on how to restructure the loans. The document stressed the country's unblemished record of meeting its obligations. But continuing to do so, it said, "is no longer a tenable policy". Recent developments, including the economic fallout from the pandemic and the war in Ukraine, meant paying up had become "impossible".

Though wrenching, the decision to suspend debt payments may be the first serious step towards fixing the country's deepening economic crisis. The government's admission brings it in line with the view of the IMF, which said last month that dwindling foreign reserves had made Sri Lanka's foreign debt "unsustainable". P. Nandal Weerasinghe, who took over as governor of the country's central bank on April 7th after his predecessor resigned amid protests, said that halting payments would allow Sri Lanka's remaining foreign exchange to be used on imports of food and fuel while the country negotiates with the IMF and other creditors.

The de facto default is the culmination

of a crisis that has been brewing for several years in the country of 22m people. A slew of ill-conceived tax cuts in 2019, combined with a pandemic-induced collapse in tourism, prompted rating agencies to downgrade Sri Lanka's bonds in early 2020, in effect locking it out of international credit markets. The agencies have since taken an even dimmer view. Yet the government denied that it needed help from the IMF until last month, spending its rapidly diminishing foreign reserves propping up the rupee and making debt payments.

Matters came to a head in recent weeks as power cuts of up to 13 hours a day, long queues for petrol and cooking gas and spiking food prices drove angry Sri Lankans into the streets in ever greater numbers. They demanded the government step down. Gotabaya Rajapaksa, the president, tried to quell the protests, first by imposing a state of emergency, then by quickly lifting it and appointing new ministers.

Mr Rajapaksa's slumping popularity and the failure of his attempt to intimidate the public have further eroded his authority to deal with the crisis. But at least his recent appointments have given Sri Lanka a new central-bank governor and a finance minister who appear clear-eyed about just how much trouble the country finds itself in. The suspension of payments follows a move by the central bank on April 8th to raise the interest rate by a staggering seven percentage points, to 14.5%, to curb runaway inflation. Both men apparently hope that the self-declared debt holiday will be only a temporary measure to gain breathing space as official talks with the IMF begin on April 18th over the conditions for a bail-out, which may eventually help with regaining access to global bond markets.

Reaching a deal will involve a complex set of negotiations. Sri Lanka owes around half of its \$35bn in external debt to private bondholders in international credit markets. China and Japan are the country's biggest state creditors, accounting for about 10% of its total debt each. Restructuring that will probably involve writing off some of it. The IMF is unlikely to offer a bail-out unless both countries agree to forgive at least some of the debt owed to them, to avoid any fresh assistance flowing straight back into China or Japan's coffers.

Such agreement may not be forthcoming. China, which has lent large amounts of money to a host of other highly indebted



Running on empty

► emerging markets, may be particularly reluctant to set a precedent by starting to accept haircuts. It has yet to respond officially to a request for restructuring which Sri Lanka made back in January.

A bail-out from the IMF will also require unpleasant economic reforms. Ali Sabry, who formally started as finance minister on April 8th after being appointed a few days earlier and immediately attempting to resign, said over the weekend that the government would raise taxes and fuel prices, reduce spending and begin to restructure unwieldy state-owned enterprises over the coming months. ■

These measures are also likely to form part of the IMF's stipulations. Designed to return the country to a sustainable fiscal state in the long term, they will probably make life even more painful for ordinary Sri Lankans in the short term. The government, which has lacked a parliamentary majority since its coalition partners abandoned it on April 5th, continues to be the subject of angry public protests. It may have a hard time convincing creditors that it has the popular support to see through unpopular reforms. Sri Lanka may at last be heading in the right direction, but it remains deep in the woods. ■

Ukraine, Russia and mountaineering

## No Everest for the wicked

The fallout from the war reaches the peaks of Himalayas

LIFE ON AND around the world's tallest mountain has been even harsher than usual in the past few years. Avalanches in 2014 and 2015 killed dozens, closing Mount Everest to adventurers. The pandemic pre-empted the climbing season in 2020. This year brings fresh bad news. On April 9th Nepal's tourism department announced it had issued 204 climbing permits—half of last year's record figure of 408. Nearly 30% of mountaineers attempting Everest's summit come from Ukraine, Russia and nearby European countries such as Poland. Most of them have cancelled their plans.

"A lot of Sherpa guides and porters have lost out on their income," says Dawa Steven Sherpa of Asian Trekking, one of the oldest expedition organisers in Nepal. Mountaineers aiming for the top typically spend \$60,000–100,000. They often bring friends who hang around at base camp, spending another \$1,500 a head. Most years some 50,000 breathless (literally) tourists visit base camp. This year even those will be fewer in number.

That may be good for the mountain. In recent years Everest has carried more people than it can handle. In 2019 a record 354 climbers queued to reach the summit on a single day. The place got so filthy that authorities cleared 11 tonnes of rubbish from its slopes that year.

But the dearth of climbers is bad for those who make their living from Everest and other tall mountains. Nepal is home to eight of the world's 14 peaks above 8,000 metres. Its 30m people rely heavily on tourism, which provides 8% of GDP and more than 1m jobs and is the second-biggest source of foreign exchange after remittances. "We may have to dig into our savings to survive," says Mingma Sherpa, the youngest person to have



A different kind of summity

scaled all 14 peaks, who runs Seven Summit Treks, a local company.

After the setbacks of the past few years mountain workers have learned to survive. They do odd jobs. Many are subsistence farmers, growing potatoes, carrots and radishes. Their wives run lodges in the low-lying Khumbu region. Sherpas also find it easy to borrow money as they are seen as a safe bet: in a good year they earn around \$6,000 and sometimes as much as \$12,000—Himalayan amounts compared to the average Nepali's annual income of \$1,070. Wealthy foreign climbers, too, chip in during hard times, says Mr Dawa Sherpa.

Little wonder that Nepal has resisted efforts to drag Everest into the war. Last month the Ukrainian embassy in Delhi, India's capital, sent a diplomatic note to the Nepalese authorities asking for a ban on the handful of Russian climbers coming this year. They politely declined.

**Myanmar's refugee crisis**

## Sold down the river

MAE SOT

**Thai soldiers are forcing Burmese refugees to return to Myanmar**

IF YOU DO NOT leave by tomorrow morning, we will burn your encampment to the ground, the Thai soldiers told Htun May (not her real name) and other Burmese refugees in the makeshift camp on the border with Myanmar. There was not much to feed the flames: tarpaulin tents, some clothes, disposable lunch boxes and whatever meagre possessions the refugees could grab before fleeing their country.

About 100 of them had been camped on this stretch of the Moei river, which marks the border with Thailand, since December. Life there was precarious, but it was a lot better than being mowed down by soldiers at home. And even though they were on the Thai side of the river, local authorities had turned a blind eye.

Their luck ran out in late March. The Thai army began ordering them back to Myanmar, according to two refugees interviewed by *The Economist*. For four days soldiers arrived at the river bank, threatening to destroy the camps, even though fighting between the Burmese army and a local rebel group had recently resumed.

The refugees are in an impossible position. Returning to Myanmar is not an option. The fighting is so close to the camp that Ms Htun May can hear the artillery fire. Yet the Thai authorities, she says, are preventing them from seeking safety in Thailand, even halting the delivery of food, water and medicine from aid organisations. Since March 25th she has remained on the Burmese side of the river. "Everyone is sad and scared," she says.

The Thais are used to dealing with refugees from their troubled neighbour. For generations of Karen, an ethnic minority group from eastern Myanmar, Thailand has been a haven from the fighting that has raged between the Tatmadaw, as the Burmese army is known, and local rebels. Many were temporary visitors, stealing into Thailand when clashes flared during the dry season and returning to their villages when the rains came and the shooting subsided. But in the 1990s the Tatmadaw encroached ever further into rebel-held territory, pushing many minorities right up to the border—or over it. Camps in Thailand have cumulatively housed some 250,000 Burmese refugees since they opened in 1984. Many more make it to the cities, where short-staffed employers will overlook their lack of papers.

The Thai government has long regarded

► refugees as unwanted guests. It does not allow them to resettle in Thailand. It hoped that they would eventually go home. That did begin to happen in 2011 when Myanmar began its decade-long experiment with hybrid democracy. By 2015 new arrivals, at any rate, had dried up.

The coup changed everything. Since the army seized power last year, violence has engulfed much of Myanmar as the junta tries to stamp out persistent opposition. In December the Tatmadaw conducted air strikes and ramped up its attacks in Karen and Kayah states, along the border. Nearly 10,000 Burmese fled to Thailand, according to the UN's refugee agency. That number shrank to about 2,000 when fighting abated, and grew again to more than twice as many when it resumed in mid-March.

It is the unofficial policy of the Thai government to return Burmese refugees to Myanmar once the war subsides, according to an aid worker based in Bangkok. Sometimes they send them back even as the violence continues. On March 25th, when 1,500 Burmese sought refuge along the river, the army sent them back, says Phoe Thingyan, the secretary of a volunteer group that works with refugees. This, he says, is "very common". If true, it would be a violation of international laws preventing the repatriation of refugees to a country where they would face harm.

Tanee Sangrat, a spokesman for Thailand's Ministry of Foreign Affairs, denies the charge. "It is our long-standing policy not to push them back," he says. According to Somchai Kijcharoenrungroj, the governor of the border province of Tak, "when they cross to our side, we take care of them", providing them with temporary shelter, food, clothing and medical treatment. Some refugees, he says, actually want to return, because they worry about the security of their homes and farms. In those cases, the Thai government transports them across the river. "We never chase them away."

Thailand is in a tough spot. The friendship between local Thais and Karens is deep, says a Karen community leader in Mae Sot, a Thai border city. But the central government is reluctant to improve conditions for refugees for fear it will encourage more to come. And the Thai government, itself dominated by its army, "does not want to compromise its relationship with the Burmese military", says Min Zin of the Institute for Strategy and Policy, a Burmese think-tank. Thousands of refugees camped on the river would look like a humanitarian crisis, not only embarrassing the Tatmadaw but also stiffening the resolve of Myanmar's rebel groups. That would be a recipe for more violence, and more refugees. Easier, then, to push the likes of Ms Htun May across the river, where they can remain Myanmar's problem. ■

### Architecture in Japan

## Metabolism, digested

TOKYO

### An ode to a landmark tower, and to a more optimistic time

THE NAKAGIN CAPSULE TOWER stands out from its unremarkable neighbours in Tokyo's Shimbashi district. Made up of 144 identical cuboids, stacked upon and jutting out from each other, the modular tower is both unabashedly futurist and subtly respectful of tradition. Each cuboid has a round window that evokes both space travel and the ancient architecture of Kyoto. They contain built-in living spaces composed of bath units, beds, desks and household electronics. Kurokawa Kisho, the building's architect, envisioned his cramped "capsules" as dwellings for what he called *Homo movens*, or highly mobile modern humans, such as the businessmen who lived in distant suburbs and worked late in Tokyo offices.

When the tower first went up in 1972, it became a prime example of Metabolism, an influential architectural movement in post-war Japan. Metabolism's chief exponents had studied under Tange Kenzo, an architect whose works included the park and memorial built in Hiroshima to commemorate the nuclear attack of 1945. The Metabolists designed buildings to be adaptable and replaceable, and resilient to threats such as wars and earthquakes. But not, alas, to neglect. On April 12th work

started on demolishing the tower, following a long but ultimately futile battle to preserve it.

Given that, it is ironic that Metabolists sought to shift thinking about architecture from the mechanical to the biological, conceiving of cities as organisms that grew and changed rather than as static constructions to be planned and maintained. "We regard human society as a vital process, a continuous development from atom to nebula," they declared in their first manifesto, written ahead of the World Design Conference in Tokyo in 1960.

Their ideas were informed both by Western modernism and Eastern philosophy, drawing particular inspiration from Japan's Ise shrine, which has been entirely reconstructed almost every 20 years since the 7th century. Metabolism also embodied the energy of Japan's rapid-growth era. The Metabolists did more than just design buildings: in their hands, architecture became a field for reimagining Japanese identity after the ravages of the war.

In their texts, the architects pondered the relationship between technology and humanity. They considered the demands of designing cities for a growing urban population and a humming economy. ►



Chipping off the old block

They envisioned structures that floated over the seas and reached for the skies. Kurokawa called his capsules "cyborg architecture", where "man, machine and space build a new organic body".

The ideas were characteristic of an era of change and possibility. "There was great momentum in society," says Maeda Tatsuyuki of Nakagin Capsule Tower Preservation and Restoration Project. "It was a period when society was bolder and could afford to do such things."

By the end, the structure was decaying and riddled with asbestos. Many of the

capsules were no longer habitable. The tower's destruction serves as a reminder of the relative caution of contemporary Japan. "These days, nobody would dare to build anything like that," Mr Maeda sighs. Yet it is also reflective of the same culture of impermanence that once inspired the Metabolists. In Japan, buildings are traditionally made of wood and paper, not intended to last centuries. There is not much of a preservationist movement. "Japan seems to demolish things before there's even debate," says Mr Maeda.

Still, fans and residents of the Nakagin

tower had hoped to raise funds to replace the capsules, in line with Kurokawa's initial concept. They had been in negotiations about buying the building. But the pandemic halted any momentum they had. Mr Maeda's group now hopes to rescue some 40 individual capsules, remove the asbestos, recreate the interiors and give them new lives at museums around the world. Mr Maeda compares the process to a "withered dandelion" spreading its seeds. "The capsules will take on a life of their own, scattered across different locations." It is in keeping with the spirit of Metabolism. ■

## Banyan Disagree to agree

*A bipartisan consensus on Australian security masks the need for more debate*

**N**Ow that Australia's prime minister, Scott Morrison, has set a date, May 21st, for a general election, expect his beleaguered conservative coalition to ramp up attacks on the Labor Party and its supposed incompetence. On the economy, it will paint Labor as a choker of growth. On security, it will call it soft on defence. In a particularly crass move, Mr Morrison has called Anthony Albanese, Labor's leader, Beijing's candidate.

In truth, when it comes to Australia's security priorities, a bipartisan consensus prevails. Both the ruling Liberal-National coalition and Labor deem the rise of an increasingly coercive China to represent what defence planners gloomily call the "most consequential strategic realignment" in the region since the second world war.

Defence spending has thus risen from about A\$30bn (\$22bn) in 2015 to almost A\$50bn in this year's budget, and will top A\$70bn by 2030, according to the Australian Strategic Policy Institute, a think-tank in Canberra, the capital. In September Australia, America and Britain formed AUKUS, an arrangement for diplomatic and technological collaboration on security, including a deal for at least eight Australian nuclear-powered submarines. These are intended to help thwart any Chinese bid for hegemony in the Asia-Pacific region.

Other proposals (some in the works for a while) have come thick and fast before the election, from an Australian space agency to the development of hypersonic missiles. Some A\$10bn is going on cyber and intelligence capabilities, and the procurement of new defensive missiles and sea mines has been sped up. The 60,000-strong armed forces will grow by a third by 2040.

The opposition has gone along with

all of this. The bipartisan consensus is striking. The question is whether it is healthy. Some Australian strategists argue not—that defence priorities and implications are confused and even at odds. It is far from clear how a war with China would be fought, or where. A clarifying debate about Australian defence is still needed.

Not since Japanese aggression in the 1940s has Australia been challenged by a potentially hostile power. Today, should the priority be defending Australia's territorial boundaries and the approaches to them, or should it be projecting power far away? The nuclear subs and hypersonic missiles embody the latter approach.

Sam Roggeveen of the Lowy Institute, a think-tank in Sydney, argues that they risk worsening Australia's security overall, because China will see them as provocative. They also reflect "near panic" in the defence establishment over the Chinese threat to Australia. Beijing, Mr Roggeveen notes, is closer to Berlin than to Sydney.

So to its critics, AUKUS reflects American priorities in its struggle with China more than it does Australian ones. No

doubt many of the priorities are shared. Yet by the mid-2050s, when (if all goes well) the subs will be in service, "the strategic contest between the United States and China will be over," claims Hugh White of the Australian National University—and not necessarily in America's favour.

The habit of thinking that America will "fix our defence needs", Mr White says, "runs very deep in the Australian psychology". Yet Donald Trump's "America-first" slogan, in which he disparaged alliances, suggested that America's long-term presence is hostage to domestic ructions and can no longer be taken for granted. Mr White argues for much greater self-reliance in preparing for the day when China can challenge Australia in its own waters.

Yet whether on the home or away side of the argument, a glaring hole exists in Australia's defence policy—a failure to tend better to its near-abroad. News of a Chinese security agreement with the Solomon Islands has alarmed policymakers in Canberra. Mr Morrison has protected Pacific islands' aid budgets, as part of his "Pacific step-up" campaign, intended to replace an episodic history of diplomatic engagement with something more consistent. But low-lying countries are underwhelmed by his refusal to take climate change seriously. And they resent his paternalistic talk of Australia's Pacific "family" and "backyard".

As for Indonesia, security co-operation falls well short of its potential, even though the giant archipelago to Australia's north could itself evolve into a powerful buffer in its own right against Chinese military ambitions. Whichever side forms the next government would do well to remember: the first line of defence is better diplomacy.





Covid-19

## Locked down, fed up

BEIJING

**China's zero-covid strategy is not changing. But the way people think about it is**

**R**EADING THE news backwards has long been a useful skill in China, where officials often obfuscate. Recently it has seemed like a matter of survival for some. Take the residents of Beijing, the capital, who are girding themselves for a covid-19 lockdown and all the hardship that might entail. When the city's officials announced on April 11th that there was more than enough food for everyone, people assumed the opposite. "Understood, hurry and go shopping now," a cynic wrote online.

Beijing has fewer than 100 cases of the virus. There are no clear indications of a growing outbreak or of an impending lockdown. But residents recall the experience of Shanghai, where local officials insisted there would not be a citywide lockdown right up to the moment they imposed one. First they tried to lock down half of the city at a time. Then they closed the whole place. Residents who had trusted the authorities quickly ran out of food. Now people in other Chinese cities are stockpiling supplies, determined not to make the same mistake.

China shows no signs of loosening its zero-covid approach, which uses mass

testing and strict lockdowns to crush outbreaks. If anything, the government is tightening its controls. A report by Gavekal Dragonomics, a research firm, found that all but 13 of China's top 100 cities (by GDP) were implementing covid restrictions (see chart on next page). Ten cities are in "severe lockdown", meaning more than half of residents are confined to their homes. Changchun, Xuzhou and Shanghai were recently in full lockdown. Shanghai has announced that areas with no cases for two weeks will see restrictions lifted.

For much of the pandemic the Chinese public has joined officials in hailing the zero-covid strategy as a success. Over the past two years China has had a lower mortality rate from the virus and stronger economic growth than any other big country. During a recent speech celebrating China's hosting of the Winter Olympics in February, Presi-

dent Xi Jinping claimed that some foreign athletes said China deserved "a gold medal for responding to the pandemic". Earlier Mr Xi said the country's anti-covid efforts "demonstrate the advantages" of the Communist Party's leadership.

But the current wave is changing the way people think about the virus—and about the government's strategy. No one wants mainland China to end up like Hong Kong, which was overwhelmed by the highly transmissible Omicron variant, leading to a spike in deaths among unvaccinated old people. The mainland's elderly population is similarly vulnerable, so a complete lifting of controls is out of the question. At the moment, though, anecdotal evidence suggests that more people are dying because of the Chinese government's restrictions than from the virus. The state needs to adapt, say critics.

The 98-year-old mother of Lang Xianping is one such victim. In a post on Weibo, China's version of Twitter, Mr Lang wrote that she died of kidney failure after waiting for hours at the entrance of an emergency room, unable to enter without a negative covid test. Mr Lang, meanwhile, argued with local officials until they let him out of his sealed compound. When he was finally released, there were no cars on the street to take him to the hospital. "I did not get to see my mother one last time," he wrote. "This tragedy could have been avoided."

These types of stories—tragic, troubling and widely shared—are growing more common. And they are causing some ➤

→ **Also in this section**

**29 English falls out of favour**

**30 Chaguan: China calls out its critics**

► people to fear covid restrictions as much as they do the virus. As provincial governments roll out pre-emptive measures to combat covid, citizens are sharing guides on how to freeze vegetables, as well as old film clips in which party officials are criticised for caring more about political correctness than starving commoners.

People are frustrated with the government's failure to adjust its covid policy by, for example, letting patients with mild symptoms quarantine at home, instead of at isolation centres where they use scarce resources. Experts believe covid rules are causing avoidable deaths. They point to a study published last year by a team affiliated with China's Centre for Disease Control and Prevention. It found that during an early lockdown in the city of Wuhan, deaths from chronic illnesses exceeded expected rates by 21%. Deaths from diabetes exceeded expected rates by 85% and suicides by 66%. Two years later, some ask, has the government learned anything?

#### Trust issues

Other countries that have moved away from strict covid policies now allow people with infections to self-isolate. That requires governments to trust that people will act responsibly. But the Chinese government, obsessed with control, does not. Instead, it tells citizens to trust the party. A recent editorial in the *People's Daily*, an official newspaper, called for Shanghai's residents to "grit their teeth" and hold tight to the party's leadership. "In fighting the pandemic, trust is more important than gold," it said. Residents of Shanghai are unmoved. "All the policies this month have been incomprehensible," says one. "They say one thing but implement another. We don't trust these policies any more."

Instead the people of Shanghai are relying on each other. They use the term *zijiu* (self-salvation), as they fill the gaps left by an overwhelmed party apparatus. Kelly

Wang, a volunteer in the district of Xuhui, describes how younger residents care for their elderly neighbours and organise bulk orders of food. The state, meanwhile, has censored the hashtag "buying groceries in Shanghai" on Weibo. "We know that we can't count on the government any more," says Ms Wang. But, she adds, "The people here are capable and brilliant."

Shanghai, home to the rich and powerful, gets a lot of attention. But other parts of China, such as Yunnan and Xinjiang, have gone through longer, more restrictive lock-

downs. The city of Jilin has been closed for over a month. Residents there have shared videos of police publicly shaming residents for criticising covid restrictions in a private online chat group. In Shenzhen a shop owner filmed state-media reporters who refused to interview him because he complained about not receiving lockdown subsidies. "We're only here to report on the people being helped," says one reporter. But as China's strict covid controls ensnare more people, it is becoming harder to convince them that all is well. ■

#### Language

## Lingua no thank ya

BEIJING

### Why China is turning away from English

WHEN CHINA made English a compulsory primary-school subject in 2001, the same year it joined the World Trade Organisation, it was taken as a sign that the once-insular country was opening up. The education ministry said the new language requirement was part of a national strategy to "face modernisation, face the world and face the future".

Two decades on, amid a surge of nationalism, English seems to be falling out of favour. Metro-riders in Beijing, the capital, will notice that the language has been removed from some station placards and maps (often replaced with pinyin, the romanised form of Mandarin). Some smaller cities, such as Taiyuan and Shenyang, are making similar changes. The province of Hainan has launched a campaign to "clean up and rectify" kindergarten names by purging a variety of words, including "world", "global", "bilingual" and "international".

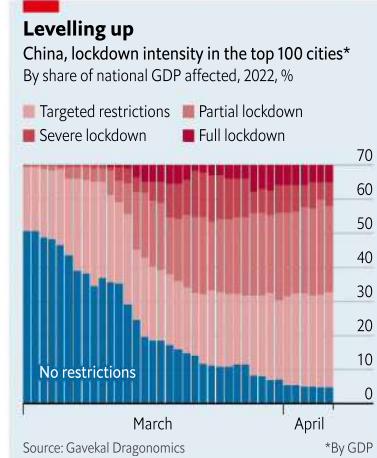
Other moves have served to downgrade English teaching. During last year's legislative meetings a government adviser proposed removing English and other foreign languages from schools' core subjects and university entrance exams. The Chinese, he claimed, spend too much time learning English—and too few go on to use it. Anyway, machine translation technology will soon obviate such needs, he said. Officials in Shanghai share these doubts. The city has long tried to downplay the importance of English as an exam subject.

China's leader, Xi Jinping, wants his country to show more "cultural confidence". A darker side of that campaign was revealed in 2013, the year after he took power, when the Communist Party circulated "Document Number Nine", a leaked policy paper brimming with paranoia about foreigners who fetishise constitutionalism and universal values,

and who seek to "infiltrate China's ideological sphere". It called for vigilance against foreign diplomats, journalists and scholars. Some Chinese intellectuals believe the anti-English measures are part of this drive for ideological purity.

The pandemic has sharpened China's inward turn. Its borders have been largely closed for over two years. Last month Chinese scholars were barred from attending a conference on Asian studies in Hawaii. That was no surprise, given China's strict covid controls. But, bizarrely, officials cited the same covid restrictions when keeping the scholars away from online sessions.

On social media some have questioned the anti-English moves. In doing so, they might invoke the Party's own words. Just a few years ago, its official mouthpiece, the *People's Daily*, made an impassioned argument online in favour of multilingualism: "Foreign language learning has become a tool for Chinese people to take the initiative to go to the world and understand the world."



## Chaguan | China sees no universal values

*Xi Jinping tells European critics that former colonisers may not judge China*



HERE IS NOTHING magic about the year 1945 to China's Communist Party. President Xi Jinping offered this history lesson at an online summit with the heads of European Union institutions on April 1st. It was prompted by efforts by EU leaders to explain why Europe's dark past obliges them to raise rights abuses with China, and to urge Chinese rulers to use their influence to curb Russian crimes of aggression in Ukraine. In particular, Mr Xi challenged comments by the president of the European Council, Charles Michel, that Europeans care greatly about human rights because of the extent of suffering on their soil, notably during the second world war and the Holocaust.

The Chinese have even stronger memories of suffering at the hands of colonial powers, Mr Xi retorted. He listed hostile Western acts, starting with the unequal treaties, as Chinese historians call them. Signed in the 19th and early 20th century, these forced China to open its markets and cede territory (at cannon-point). He spoke of colonisers hanging signs on gates reading, "No Dogs and Chinese Allowed". Though there is no solid evidence that such blunt signs existed, more verbose (and disgracefully racist) bylaws did. These banned Chinese people as well as animals from French- and British-run parks in central Shanghai and other foreign enclaves.

After this lecture about Europe's poor moral standing, Mr Xi recalled the massacre of civilians at Nanjing by Japanese invaders in 1937. Such aggressions, he said, had left Chinese with strong feelings about human rights, and about foreigners who employ double standards to criticise other countries. China stands by its record in Xinjiang, Hong Kong and Tibet, Mr Xi concluded. The EU must undo an impasse, caused by tit-for-tat sanctions relating to China's rule in Xinjiang, if it wants better relations, he said.

Diplomats in Beijing describe Mr Xi's combative performance as dismaying but clarifying. To be sure, it is not new for China to denounce former colonial powers. At a conference in Bandung in 1955, China's prime minister, Zhou Enlai, described his country's experiences of "colonial plunder and oppression" as he sought to make common cause with African and Arab countries, most of them newly independent. But the People's Republic of China was then a poor and isolated outsider. Until 1971 it was not even a member of the United Nations, a body founded in 1945 to defend a

rules-based order largely written by the winners of the second world war. (China's UN seat was held by the Nationalist regime that lost the Chinese civil war to Mao Zedong's Red Army in 1949, heading into exile on Taiwan.) The UN's rules were explicitly designed to prevent a repeat of the second world war's horrors, from genocidal nationalism to might-makes-right acts of aggression. To Mao and his heirs, though, other fights, from the Opium Wars to Korea, have as many moral lessons to offer.

In its first decades of UN membership, China was cautious and defensive, arguing that economic development takes precedence over abstract political freedoms. Its interpretation of the UN charter emphasises state sovereignty over individual rights. Under Mr Xi, China has gone on the offensive, using its economic heft and ever-deepening ties to countries in the global south to blunt criticisms of its autocratic system in such forums as the UN Human Rights Council. It seeks to redefine such terms as "democracy", calling China's one-party system more responsive to public needs than dysfunctional Western democracy. In 2018 Mr Xi declared that China must never take the "Western path" of constitutional governance, the separation of powers and judicial independence.

In February this year Mr Xi signed a joint statement with Russia's leader, Vladimir Putin, that reads like a manifesto for a new order. It held up the two authoritarian powers as leading advocates for "genuine democracy". That pugnacious joint approach has survived Russia's invasion of Ukraine, for all that Mr Putin's war tramples the territorial integrity of another nation—a supposedly sacred Chinese principle since Zhou's speech in 1955.

Unabashed, Chinese diplomats have cast Western angst about Ukraine as racist hypocrisy, when much non-European suffering is ignored. On March 28th a Chinese foreign-ministry spokesman asserted, "It is an unacceptable double standard to sympathise with refugees in Ukraine while turning a blind eye to refugees from countries in the Middle East, Africa and Latin America." Such Chinese assertiveness is prompting debate among rich-world governments. Some diplomats ask whether it is wise to lecture China about repression in Xinjiang at such a moment. Contemplating the challenge from China and Russia and the need to recruit allies to counter it, others question conditions attached to Western development projects in the global south, demanding transparency or high environmental or labour standards, when China offers loans with few questions asked. In the words of one diplomat: "These two superpowers want to change the world. We are capable of stopping it, but it depends on how many friends we have on our side. That will require flexibility and compromises."

### A matter of principle

In the face of such doubts, Gyude Moore, a former Liberian public-works minister now at the Centre for Global Development, an American think-tank, calls it insulting to assume that Africans are not interested in transparency or independent judges. He cites lawsuits in Kenya and elsewhere that seek to make public the terms of Chinese infrastructure loans, or that have successfully prevented stolen elections. An international official argues that the real problem is a lack of investment, as shrinking Western aid budgets undermine reformers who cannot offer rewards for good governance. But there is a simpler reason to defend universal values consistently. A selective approach would confirm China's suspicion that, deep down, all countries are guided by interests alone, and use principles as a weapon. China's challenge to the post-1945 order is in the open now. More cynicism is a weak defence. ■



### Taxation in America

## In praise of the IRS

WASHINGTON, DC

**The much-maligned tax agency, battered by the pandemic, has kept the economy going**

**N**ow you may only see a pile of receipts. But I see a story. I can see where this story is going. It does not look good." These lines, spoken by an Internal Revenue Service agent in "Everything Everywhere All At Once", a dark sci-fi comedy now showing in cinemas, is perfectly calibrated to strike fear into the hearts of Americans ahead of their tax-filing deadline on April 18th. The agent has a paper trail neatly arrayed on her desk as she conducts an audit. Reality is more frightening, for the exact opposite reason. "Paper is the IRS's kryptonite," Erin Collins, a watchdog within the IRS, recently told Congress. "The agency is buried in it."

The IRS entered this tax season with a

backlog of 2.4m returns, 20 times worse than normal, as it struggled to recover from pandemic disruptions. Good luck to anyone wanting help by phone: just one in nine callers reached an agent last year, according to Ms Collins. Now in the midst of

#### → Also in this section

**32 Student loans**

**33 Local-news startups**

**33 Brooklyn subway shooting**

**34 Abortion after Roe**

**36 Lexington: Ken Paxton and Texas**

a hiring drive, the IRS thinks it can clear the backlog by the end of 2022. But it will be up to two years late in processing many returns. "It's a crisis," says Mark Everson, former head of the IRS. "Millions of people and businesses who were due tax refunds don't have that money yet. This is very detrimental for compliance."

Even without the pandemic, the IRS was struggling, the victim of chronic underfunding. Spending on the agency has declined by nearly 20% since 2010. At the same time, the number of tax returns has increased by 20%. The backbone of the system, a nationwide taxpayer database, is built on top of a 1960s computer language rarely taught in schools. One major element of President Joe Biden's legislative programme is a funding boost for the IRS. Yet that is stalled, along with much of the rest of his agenda.

It is hard for lawmakers to summon enthusiasm for the IRS. Who enjoys paying taxes? Even for those who recognise the social value, the act of filing tax returns is a hassle. The 1040 form, the basic document for personal-income-tax reporting, came with just one page of instructions when introduced in 1913. This year's version has 230 pages of instructions when counting all the branches added to it, reckons Demian Brady of the National Taxpayers Union Foundation, an advocacy organisation.

Like any good story, though, there is also a plot twist. Despite its awful backlog, the IRS has, from another perspective, had a very good pandemic. It has played a critical role in delivering support to Americans. And it has been surprisingly efficient at it. For each of the three rounds of stimulus payments, the IRS was the conduit. Within two weeks of Mr Biden's signing of the stimulus bill in March 2021, for instance, it sent out \$325bn via 127m separate payments, mainly by direct bank deposit. Some people fell through the cracks and cheques took longer. But most got the money quickly. The IRS operated at even greater frequency in making child-tax-credit payments every month.

Along with doling out vast sums of cash, the IRS also took less in. The government gave the unemployed tax breaks on their benefits and gave businesses tax breaks for retaining workers. It also expanded the earned-income tax credit, a subsidy given to low earners, one of America's biggest anti-poverty programmes. Putting it together, a poor family with two young children could expect \$20,000 from the IRS last year, double what they would normally receive. In all, the agency paid out more than \$600bn in pandemic-related support in 2021, equivalent to about two-thirds of Social Security spending in the federal government's budget. "We have seen a substantial share of what used to be" ➤

► the social safety-net migrate from the public-expenditure side of the federal ledger to being run through the tax code," points out Gordon Gray of the American Action Forum, a think-tank.

By the agency's own count, Americans spend about 13 hours doing their taxes on average—mostly condensed into one frantic spring weekend. In fact this is an improvement: in 2010 the estimate was 18 hours. Increased use of software such as TurboTax, made by Intuit, has sped up the filing process. More could be done: the IRS provides a free-software option for poorer Americans but does a bad job advertising it (the Federal Trade Commission is suing Intuit for allegedly attracting customers in the belief that filing would be free, only to charge them). There are also perennial calls for the IRS to collect tax via withheld pay, allowing many to avoid filing returns altogether, as is common elsewhere, including Britain.

That, however, misses the point about the IRS as a welfare provider. It needs a range of information from taxpayers in order to assess their eligibility. "We don't look at stores like Walmart and say, oh, it's so complicated. We say, hey, that's convenient. A similar thing should apply to some extent to the income-tax system," says William Gale of the Brookings Institution, another think-tank. Using the 1040 form as the gateway to multiple social programmes and tax credits means that people do not have to go to a series of different agencies for each payout.

Eventually, the IRS will hack its way through the pandemic backlog. That, however, will do nothing to fix another serious problem: the degradation of its auditing abilities. About a fifth of agency staff are eligible for retirement, and many have taken covid as the moment to leave. "We're losing exactly the kind of people we need to be able to maintain enforcement scrutiny," says a senior Treasury official. The IRS audited 0.3% of corporate tax returns filed in 2018, down from 1.6% in 2010. The number this year may well be lower. Charles Rettig, who leads the agency as its commissioner, has estimated that the government loses about \$1trn in tax revenues annually because of cheating. The agency is "outgunned" against big companies, he says.

The answer to so many of the IRS's woes—antiquated tech systems, congested phone lines, threadbare enforcement—is more funding. It stands as one of the few federal agencies that would generate a large and nearly immediate return on investment were the government to spend more on it. The hope for the harried tax agents is that the highs and lows of IRS performance during the pandemic will have earned it grudging support in Washington, demonstrating that it is both overstretched and indispensable. ■

### Student loans

## Keep the change

WASHINGTON, DC

### Why America keeps delaying student-loan repayments

EMERGENCY MEASURES often outlast the crises that prompt them. So it is with federal student-loan repayments, which were suspended in March 2020 as a pandemic-relief measure. In August 2021 the Department of Education announced a "final extension" of the moratorium on payments for the \$1.6trn owed to the government, to January 2022. Then, one month before that deadline, the White House announced a final, final extension, to run to the end of May 2022. Then, on the cusp of that new cut-off date, a final, final, final date was announced on April 6th. This extends the moratorium to August 31st.

Most economic-relief programmes initiated in response to covid-19 have already been wound down: enhanced unemployment benefits, stimulus cheques and generous child benefits are all things of the past. A moratorium on evictions was struck down by the Supreme Court in August 2021. In May the Biden administration will lift "Title 42", a Trump-era policy that limited asylum-seeking on public-health grounds. It has usefully allowed Mr Biden to keep America's southern border mostly closed, at a time when the number of arriving migrants is the highest in a generation. If the unemployed, poor children, renters at risk of eviction and migrants are no longer receiving special support, then why are college-educated Americans?

Unlike other measures, which require congressional approval or have been subjected to judicial review, the decision to delay student-loan repayments can be made by the executive branch alone. The education department has been slow to set out the post-moratorium payments regime,

thereby justifying continued delays.

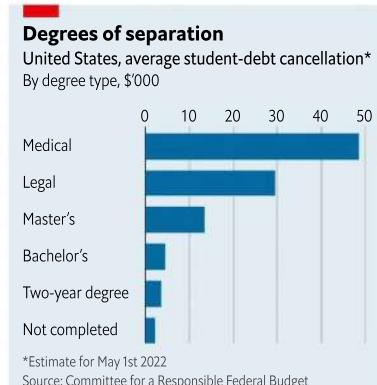
The stalling is also one of the few sops that Mr Biden can throw to progressives in the party who are dejected at the failure of his boldest proposals in Congress. Democratic senators such as Elizabeth Warren and Chuck Schumer, the majority leader, have been pushing for a more sweeping policy that would cancel debt of up to \$50,000 per student. They argue that the president has the authority to do so unilaterally because the Higher Education Act of 1965 grants the education secretary the right to waive and release loans. Mr Biden, who supports cancellation of a more modest \$10,000, is sceptical of such reasoning.

In announcing the latest extension, Mr Biden said resumption of normal payments would plunge millions of borrowers into "significant economic hardship". Yet in the same statement he crowed about "the greatest year of job growth on record".

The indecision is costly. The effective average cancellation has amounted to \$5,500 per student so far (based on the present-value cost of the delays), calculates the Committee for a Responsible Federal Budget (CRFB), a think-tank. Already, the policy has cost \$100bn (forgiving \$50,000 would cost almost \$1trn, or 0.4% of GDP).

And it is not particularly progressive. College-educated Americans command a sizeable wage premium. Those who attend graduate school often take out large loans at higher interest rates than for undergraduate degrees. The CRFB estimates that the effective debt cancellation for students who went to medical or law school is between \$29,500 and \$48,500 (see chart). For those with two-year degrees and those who did not finish college—the most economically vulnerable—the effective benefit has been less than \$3,500. "The problem with universal loan forgiveness is that you end up with a system where a lot of the money goes to successful, affluent, white students," says Adam Looney, a professor at the University of Utah and former official at the Treasury Department.

Government management of income-driven repayment plans, which are supposed to limit the burden on poorer borrowers, has been shambolic. An investigation by National Public Radio found that out of 4.4m borrowers eligible for forgiveness after 20 or 25 years of payment, only 32 had actually received it. There are also big disparities in financial outcomes based on



on race. "Black borrowers borrow more, they are more likely to borrow, and they struggle more with repayment than other borrowers do," says Victoria Jackson of the Education Trust, a research and advocacy group. Twelve years after starting college, white men have typically paid off 44% of their student-loan debts, her research shows; black students owe 12% more than when they started.

Targeted approaches to remedying this exist already. Federal Pell grants, which pay for poor students' attendance, have fallen far behind the increased cost of higher education. Granting relief based on debt-to-income ratios would be more progressive than less discriminating policies. But come August, with mid-term elections looming, Mr Biden may find yet more justification for pushing off hard choices. ■

#### Covering local news

## Enter the startups

BALTIMORE, MARYLAND

### New digital experiments aim to fill a glaring gap

**I**N ITS HEYDAY in the 1950s, the spacious five-storey redbrick building on North Calvert Street housed the hundreds of employees of the *Baltimore Sun*, the city's pre-eminent newspaper. Like other local papers across America, the *Sun* has since fallen on hard times. In 2018, after years of layoffs, it moved out of downtown.

Back at the city's Inner Harbour, construction crews hurry in and out of a former power plant. They are converting the building into office space for a new occupant aspiring to fill the gap left by the *Sun's* shrinking presence. When it launches online this spring, the *Baltimore Banner*, a non-profit news organisation backed by a local businessman and philanthropist, Stewart Bainum junior, aims to boast more writers than its crosstown rival. "Our goal is to make sure Baltimore doesn't become a news desert," says Imtiaz Patel, the CEO.

The slow death of local news in America is a well-documented phenomenon. The internet has ended the monopolies on news and advertising once enjoyed by local media. But a wave of startups is betting that a digital-first strategy, with its reach and low costs, can reverse the decline. The initiatives are experimenting with a variety of business models.

The scale of the collapse of local news has been stunning. In a report published in 2020 Penelope Abernathy, a professor now at the Northwestern University Medill School of Journalism, found that 1,800 communities that had a local news outlet

16 years earlier now had none. Two-thirds of counties lack a daily newspaper.

Political scientists believe the consequences have been severe. The demise of local news has been linked to greater political polarisation, declining participation in local elections and reduced accountability for local elected officials, leading to more corruption. It has also contributed to the growing nationalisation of politics, with a voter's choice for president increasingly predictive of their choice for school-board representative. Some people are now prepared to throw money at the problem.

One way is through philanthropy. Rich benefactors propping up local news is nothing new—the *Boston Globe*, *Los Angeles Times* and *Washington Post* all rely to varying degrees on patrons with money to spare. New ventures like the *Baltimore Banner* reckon it is an advantage not to be weighed down by the legacy infrastructure of print. The American Journalism Project gives grants to non-profit local news organisations across the country, with an eye to cultivating sustainable businesses. But what if the philanthropists lose interest? "What Stewart provides is seed capital," says Mr Patel. "Longer term, we are aiming for a diversity of revenue sources."

Other startups are leveraging one of the internet's oldest innovations: the email newsletter. In the vanguard is Substack, a technology company that provides the tools and infrastructure for writers to establish their own paid email subscriptions. Although many of the platform's best-known publications cater to a national audience, some are focusing locally.

After the national magazine he worked

on closed in 2018, Tony Mecia pondered a return to life as a freelancer in Charlotte, North Carolina. But after seeing how many local stories went unreported even by the city's main paper, Mr Mecia decided to start his own newsletter on Substack, the *Charlotte Ledger*. "It's a turnkey solution, I probably never would have started the *Ledger* without something like Substack," says Mr Mecia. With no need for external financing, the business can grow with subscribers, and Mr Mecia can focus on reporting.

Some national digital-news organisations believe their formula can work locally. Axios, mostly known for its daily email newsletters on national politics, started Axios Local last year to deliver regular email newsletters tailored to 14 cities, with 11 more soon to come. With its headquarters in Arlington, Virginia, handling operations, and leveraging a well known brand, Axios is betting that its ad-supported newsletters will allow it to invest in local journalists. "From a business perspective, we go where there's population, audience and money first, and then work our way out to the harder-to-reach areas," explains Jim VandeHei, the CEO of Axios.

The range of experiments is encouraging, and all are eager, like the *Baltimore Banner*, to stress the conservatism of their strategies, prioritising long-run sustainability ahead of growth at all costs. But success in local news, whatever the model, will not be easy. And Ms Abernathy worries that these new digital initiatives will leave much of the country untouched outside America's major cities. "In these places", she says, "there's no one left to hold the powerful accountable." ■



#### New York City subway shooting

On April 12th a gunman set off a smoke canister and shot ten people on a train as it pulled into a Brooklyn subway station during the morning rush hour. The shooting will add to fears that the subway and city are unsafe. Since January, transit crime is up by 68% compared with the same period in 2021. Major crimes in the city are up by 44%. The subway had already been struggling to restore ridership to pre-pandemic levels.



### Abortion

## What happens after Roe

FAIRVIEW HEIGHTS, ILLINOIS, AND JACKSON, MISSISSIPPI

### Defenders and opponents of abortion alike are preparing for a frenzy

A WOMAN IN Missouri who decides to end her pregnancy has a choice, of sorts. She can go to the state's last remaining abortion clinic, in St Louis, where state law dictates she must be told that "the life of each human being begins at conception" and warned of the psychological damage the termination could cause. She must then wait 72 hours before returning. Or she can travel 15 miles (24km) east, across the Mississippi River, to a larger clinic in Fairview Heights, Illinois, where the doctor (it may even be the same one) can speak to her patient as she thinks best. The abortion can be done that day.

This gulf between two neighbouring states illustrates the mess that surrounds abortion in America. Since 1973, when the Supreme Court ruled in *Roe v Wade* that abortion was a constitutional right, lawmakers in conservative states have introduced hundreds of regulations designed to make it hard for abortion clinics to function. Missouri is one of six states with only one clinic left.

The mess may be about to get much worse. This spring or summer the justices will rule on a law in Mississippi, blocked by a lower court, which bans abortions after 15 weeks of pregnancy. If they use the case to overturn *Roe* (thus sending decisions on abortion back to the states), the repercussions will be momentous. More than half the states are likely to make most

abortion illegal (see map on next page). In November, Americans will vote in midterm elections. Republicans currently look likely to win back Congress, but if *Roe* is overturned Democrats will hope it will energise a broad range of voters.

How likely is the Supreme Court to ditch *Roe*? At first, it seemed its conservative majority might use the case to lower the gestational limit on abortion on demand. The court had done this before: in 1992 it lowered that set by *Roe* (26 weeks) to fetal viability (around 23 weeks). Though abortion-rights activists rail against lowering the limit, it would change little: the vast majority of abortions happen in the first 12 weeks. It would also reflect popular opinion. Though many states impose stringent restrictions, America has one of the most liberal frameworks in the world: of 59 countries that allow abortion on demand, it is one of only seven that allow it after 20 weeks. Polls suggest most Americans' support for abortion drops dramatically after the first trimester.

But abortion-rights groups are increasingly concerned that the court will scrap *Roe* altogether. In September Texas banned all abortions after about six weeks of pregnancy, with no exceptions for rape or incest, and the court failed to stop it. That seemed to express five justices' belief that *Roe* is not worth upholding.

Then in December the conservative jus-

tices made this plain. During oral arguments in the Mississippi case, Brett Kavanaugh, one of Donald Trump's three nominees, cited many occasions when the court had overturned earlier decisions and suggested it should be "neutral" on an issue about which the constitution says nothing. Mary Ziegler, a legal historian at Florida State University, says that because introducing a new gestational limit would make it harder for the court to overturn *Roe* later, the likeliest alternative, "would be to do something more modest, such as saying viability is the wrong line and the right line could be decided in future cases". The question, she says, is whether *Roe* will be reversed "gradually or immediately".

A gradual reversal could come about if the court undermined the viability standard. Anti-abortion states could pass all sorts of bans and expect that the courts would be more likely to uphold them. In the event of an outright reversal, the impact would be immediate. Twelve states already have "trigger laws" that would click into effect the moment *Roe* was undone; a further 12 are expected to dust off pre-*Roe* bans or make new ones. Congress is unlikely to provide a remedy. Though House Democrats have passed a bill that would guarantee abortion rights, it has little chance in the Senate.

Texas offers a glimpse of how this would play out. On September 1st, the first day clinics in America's second-most-populous state were forced to turn away patients, those in nearby states saw a sudden influx. Kristina Tocce, medical director of Planned Parenthood of the Rocky Mountains in Denver, Colorado, says she saw a 1,650% increase in the number of patients from Texas in the 45 days to mid-January compared with the same period last year. "If *Roe* is overturned I fear Texas is a prologue to absolute chaos and confusion," she says.

When Sara (not her real name) drove from Texas into Oklahoma, having distributed her seven children among several sitters, and stayed in a hotel, it cost her half her monthly income. Groups which help women with such costs say they have been flooded with requests for support. Anna Rupani, the director of Fund Texas Choice, says donors have been quick to step up, but she worries about what will happen if a lot more cash is suddenly needed.

### Getting ready for the rush

Even before the Texan law, clinics in states with decent abortion provision had become used to serving women far from home. This has helped them prepare for the demise of *Roe*. In Illinois, Planned Parenthood, the biggest supplier of abortions in America, has been readying itself for years. The clinic in Fairview Heights was built in 2019 to handle growing numbers of ↗

abortion refugees from nearby states. Planned Parenthood has also built clinics on the Illinois borders of Indiana and Wisconsin, two of five neighbouring states that are likely to ban abortion if *Roe* goes.

In January the Fairview Heights clinic and an operation nearby, the Hope Clinic, opened a regional logistics centre to deal with the expected surge in non-clinical workload: arranging transport, hotels and funding for the many more women who were expected to arrive. Colleen McNicholas, Planned Parenthood's chief medical officer in the region, says staff are preparing to put in longer days and work seven days a week instead of six.

Where pregnant women go, anti-abortionists follow. Local armies have moved their campaigns from states like Missouri, where the battle has been largely won, into Illinois. As patients drive into the Fairview Heights clinic they pass a large gallows from which the image of a fetus is hanging. Parked trucks, operated by an anti-abortion group, try to entice pregnant women into conversation by offering "free on board" ultrasounds and pregnancy testing; posters advertise "abortion pill reversal". At Planned Parenthood's clinic in Missouri, by contrast, it is quiet: a couple of softly spoken protesters wait with leaflets encouraging women to have their babies; the only ones they saw, one recent morning, were there for contraception.

### Only in America

Elsewhere, smaller abortion providers are weighing their options. Tammi Kromenacker, director of the Red River abortion clinic in Fargo, North Dakota, the only one in that state, says she is often asked why she doesn't move a few miles east into Minnesota, where abortion will remain legal if *Roe* is overturned. She is torn, she says, between practicality and principle ("our community needs us to be here"), adding that in no other field of health care would providers face such uncertainty.

This points to another example of American exceptionalism. In other countries abortion tends to be embedded in broader health-care systems. In the United States it is practised almost exclusively in stand-alone clinics, largely so that providers can avoid the costly billing systems found in hospitals. Yet this has made the job of anti-abortion campaigners easier, allowing them to find the right women to shout at and enabling them to portray abortion as being separate and different.

Partly as a result, clinics have become powerful defenders of abortion rights, including in the courts. When these places close, says Carole Joffe, a professor at the Bixby Centre for Global Reproductive Health at the University of California, San Francisco (USCF), "huge political clout and grassroots support for the rights of women

is lost". Several clinics in Texas, she says, are close to shutting.

As great as the post-*Roe* upheaval is likely to be, it would be greater still but for three mitigating factors. First, it is not just the likes of Planned Parenthood that have been making preparations. A handful of states have scrapped all regulations on when or for what reason a woman may terminate a pregnancy. In California, lawmakers are expected to consider a plan to make the state a "sanctuary" for anyone seeking an abortion.

Second, the abortion rate today is half what it was in 1980. That is mostly down to improved access to more effective methods of contraception. It may also be linked to better sex education, especially in states that used to teach only abstinence (although in Jackson, Mississippi, Shannon Brewer, the director of the state's last abortion clinic, which is at the heart of the case the Supreme Court will soon rule on, raises her eyebrows exaggeratedly when asked whether many young patients lack basic knowledge about reproduction).

A third element is the increasing use of abortion medication, which has transformed abortion care globally (because tracking it is hard it may also make America's abortion rate look lower than it really is). By taking two drugs several hours apart, women are able to abort at home without a clinic appointment. The pills can be posted after an online consultation. Several telemedicine startups now offer the pills more cheaply than clinics do. The drugs are also available illegally from Aid Access, a charity in Europe, and from online pharmacies overseas. Their efficacy and safety up until 11 weeks of pregnancy mean America should not return to an era of backstreet abortions.

Anti-abortion lawmakers are onto that. Last year, 15 states introduced bills restricting medication abortion. If *Roe* is overturned, more will surely follow. Even if women can get hold of the pills, they could

still be in trouble. The cramping and heavy bleeding that these pills cause prompt some women to seek medical help. A number of abortion providers suggest they tell doctors they are having a miscarriage if necessary. They worry that such women—or doctors who have helped them—may be charged with a crime. Such fears have intensified since several states have said they plan to copy Texas's law. It enables private citizens to sue anyone who "aids or abets" an illegal abortion, and for every case that is successful it authorises "damages" (in effect a bounty) of \$10,000.

### How much will voters care?

Some women—those who wish to keep their abortion secret from their parents or partner, say, or those whose pregnancy has passed 11 weeks—will continue to need care in an abortion clinic. And the number of those needing abortions later in pregnancy will grow if women have to travel farther, with the time-consuming burdens that entails. Thus the number who fail to have an abortion altogether will also increase, with woeful consequences.

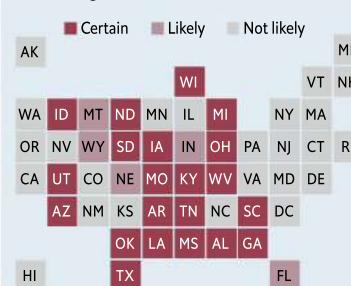
Using data from a nationwide longitudinal study that investigated the effects of either having an abortion or being turned away, researchers found that women who were denied abortions experienced a sharp spike in financial hardship. Their children suffered. Some obstetricians worry that overturning *Roe* could push up America's maternal and infant mortality rates.

Democrats are ready to use such fears to try to boost turnout in the mid-terms in November. This may work among some educated women in suburbs where many of the competitive Senate races will be decided. But whether it would prevent Republicans from taking the House and Senate is far from clear. In Virginia's gubernatorial race last year, Terry McAuliffe, a Democrat, repeatedly castigated Texas's new law. But he lost to Glenn Youngkin, his Republican rival, who has supported abortion restrictions. Exit polls revealed, as they have done before, that abortion is a bigger voting issue for Republicans than it is for Democrats.

Overall, however, abortion is some way behind a lot of other issues in voters' minds. The end of *Roe* may not necessarily prompt huge protests. After Texas banned most abortions some businesses in the state offered to relocate employees; otherwise their response was subdued. Terminating *Roe* would undoubtedly cause a bigger stir, but it is unclear how the effects would really be felt beyond the lives of women and the abortion providers who serve them. And on that, "The only thing we know for sure is that it will be a mess," says Dr Joffe of the USCF Bixby Centre, "and that rich women will do better than poor women. What else is new in America?" ■

### States of termination

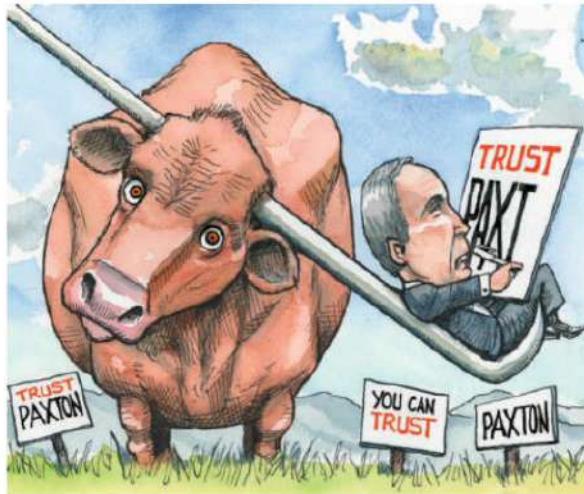
Likelihood\* of banning abortion following an overturning of *Roe v Wade*



\*Based on state-level regulations and other indicators at Oct 2021  
Source: Guttmacher Institute

## Lexington | The heart of Texas

*Ken Paxton's bid for re-election is a high-stakes test of Texas Republicans' values*



**I**N 2013 A little-known state senator passed through the security check at a courthouse in Collin County, Texas, and noticed a few pens that had been left behind. He pocketed one of them, a \$1,000 Montblanc. Later, the pen's rightful owner asked officials to review video footage, which revealed they had been grabbed by Ken Paxton, the state senator who would soon be elected Texas's attorney-general. After a sheriff's deputy called Mr Paxton, he returned the Montblanc and said it was a mistake.

The incident was minor enough not to attract much attention, but Mr Paxton has since become a prominent symbol of red-state resistance to Democratic policies. He has sued the federal government 25 times since President Joe Biden was inaugurated in January 2021, on issues such as immigration enforcement, covid-19 restrictions, guns, energy policy and the minimum wage. His pugnaciousness, and devotion to Donald Trump, have endeared him to the Republican base.

On May 24th Mr Paxton will be in a Republican primary run-off for attorney-general against George P. Bush, Texas's land commissioner and a nephew of George W. Bush, a former governor and president. Both candidates competed for Mr Trump's endorsement, which is high-octane fuel in Texan Republican primary-voter circles. Although his father, Jeb Bush, was insulted by Mr Trump during the Republican presidential primary in 2016, on the campaign trail George P. Bush handed out beer koozies with a quote from Mr Trump: "This is the only Bush that likes me...I like him." In the end, Mr Paxton won the endorsement, probably thanks to his willingness to use his office to challenge the 2020 election results of four swing states in court on Mr Trump's behalf.

Will Republican voters care whether the supposed protector of laws follows them himself? Mr Paxton's resilience so far suggests they won't. In 2014 the Texas State Securities Board fined Mr Paxton \$1,000 for violating securities laws in soliciting investments three times without registering as an investment adviser. Voters shrugged and elected him as attorney-general anyway. A few months after assuming office in 2015, he was indicted on three securities-fraud charges, including allegedly encouraging people to invest in a technology startup without revealing he was being compensated. (Mr Paxton denies wrongdoing.) The federal char-

ges were dismissed by a judge, and the state's case has yet to proceed due to wrangling over lawyers' fees and jurisdiction. Even some efforts to help protect Mr Paxton have raised eyebrows. Soon after his wife, Angela, became a state senator in 2019, she proposed a bill to modify Texas's securities laws so that it would no longer be a felony for individuals to act as investment advisers without registering (one of Mr Paxton's alleged offences) and granting greater control to the attorney-general's office to oversee consumer fraud.

Bigger allegations followed. In September 2020, eight of Mr Paxton's deputies reported him to the FBI, accusing him of "criminal bribery, tampering with government records, harassment, obstruction of justice and abuse of office". The deputies, several of whom filed a lawsuit under the Whistleblower Act, said the attorney-general used his office to benefit a campaign donor, Nate Paul, who had allegedly hired a woman with whom Mr Paxton had an extramarital affair. According to their complaint, Mr Paxton intervened improperly in a federal investigation into Mr Paul (who has also denied any wrongdoing).

Mr Paxton has rejected the whistleblowers' claims, accused them of being "rogue employees" and has even argued that the Whistleblower Act should not apply to him as attorney-general. His own office released a 374-page report in an attempt to clear him. But a federal investigation is reported to be ongoing.

Mr Paxton's resilience tells a broader story about politics in Texas today. A recent poll found that only 11% of Republicans had an unfavourable view of him, and 75% a favourable one. A different poll gives him a 42-point lead over Mr Bush. This is due not least to Mr Trump's continued support. Although Texas helped to send its former governor to the White House, the run-off election for attorney-general is likely to result in "the imminent end of the Bush dynasty", argues Mark Jones, a professor at Rice University. The Bushes are considered too establishment these days.

Mr Trump has also helped Mr Paxton in a less direct way. By shaking trust in institutions, such as the media and law enforcement, Mr Trump has conditioned voters not to believe what they hear. It's all "fake news", as Mr Paxton is happy to claim. This has helped him sail through his scandals. He can accuse whistleblowers of being rogue, partisan employees, without primary voters questioning whether people who had worked in his office for years would really turn on him for political reasons. Those who reported him were his deputies and allies, not his enemies.

### Lone Star litmus

Democrats have not won a statewide office in Texas since 1994. The election in November for attorney-general should, in theory, be their best shot. Everything will hinge on whether a Democratic candidate can woo independents and Republicans who dislike Mr Trump and acolytes like Mr Paxton. The party would have to offer a moderate candidate to fit Texan tastes. Joe Jaworski, an ex-mayor of Galveston and grandson of the former Watergate special prosecutor Leon Jaworski, would be the most electable Democrat statewide, although among Democratic primary voters he is currently polling behind the progressive candidate, Rochelle Garza. Some Democrats are hoping that Mr Paxton may be indicted after the primary but before the general election, giving them an edge.

Whatever happens, the race for attorney-general will not just be a test of Republican primary voters' values but of Democrats' priorities and standing too. If they cannot win against Mr Paxton, Democrats' dreams of soon turning Texas blue seem as improbable as finding an orphaned \$1,000 pen. ■



## Catholicism

# Losing their religion

BUENOS AIRES

## Latin America is becoming far more secular

**A**LEJANDRA LEMONNIER joined the convent of the Handmaids of the Sacred Heart of Jesus when she was 20. She came from a religious family, attended a Roman Catholic school and lived in a conservative part of Buenos Aires. Her four younger siblings were all, to varying degrees, Catholic—at least officially. Today Sister Lemonnier, who is now 31, is the only devout member of her family. Her oldest brother became a New Age spiritualist. One of her sisters came out as a lesbian and became an apostate, formally renouncing her Catholic faith. Another sister is “indifferent”. For the youngest brother, who is 18, religion is “just not part of his universe”.

The diversity of belief in Sister Lemonnier’s family reflects a growing trend. Latin America holds more than a third of the world’s Catholics, but their numbers are shrinking. In 1995 80% of people in the region identified as Catholic. Today just 56% do. Many have become evangelical Christians instead. Since 1995 evangelicals’ share of the regional population rose from

3.5% to 19%, according to Latinobarómetro, a pollster (see chart on next page).

Yet an even more striking trend is the rise of those who do not profess adherence to any religion, known as *ningunas* (or “nones”). Their share of Latin America’s population has quadrupled to 16%, and is particularly high among young people. That may help explain the region’s growing liberalism on matters like abortion and same-sex marriage.

The data on religion is not always consistent. In Latinobarómetro’s survey, only 5% of Mexicans identified as evangelicals, whereas 11% did so in the 2020 census. There is also wide variation across the region. In Uruguay a whopping 40% are “nones”, while another 10% are agnostic or atheist. In some countries, such as Guatemala and Honduras, there are now as many evangelicals as Catholics. Bolivia, Mexico, Paraguay and Bolivia appear more immune to religious competition, with Catholicism remaining dominant. Yet even here, change is afoot. The share of Mexican

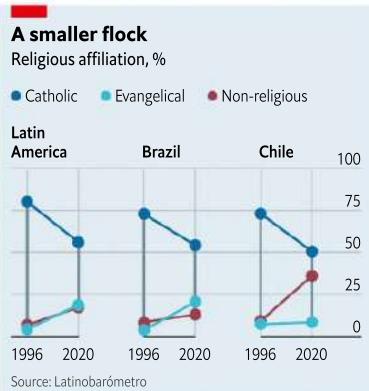
“nones” in the census has almost doubled in a decade, to 10m people in 2020 (or 7% of the population).

Evangelicalism is particularly widespread among poorer people and prisoners. In Argentina evangelical pastors negotiated with prison authorities in the 1990s and early 2000s to set up separate wards for their adherents, says Verónica Giménez Béliveau, a researcher. Such wards tend to be less violent and cleaner, attracting further converts. Over time, however, evangelicals have joined the mainstream. In 2015 Guatemala elected the region’s first evangelical president.

## A secret chord

Those with no religious affiliation are more homogenous, in that they tend to be more educated. Having a university degree appears to reduce religiosity. Nowhere is this more evident than in Chile, which has experienced one of the biggest increases in its share of “nones”. Access to higher education has quintupled since 1990, and GDP per capita has grown sixfold. At the same time, the share of “nones” has tripled, to around a third of the population.

The secular trend is far from absolute. Many “nones” continue to have spiritual beliefs. In Chile almost 70% of people continue to believe in life after death, including more than half of those with no religious affiliation. In Colombia 80% of people believe in miracles, including 14% of



agnostics and a whopping 65% of the unaffiliated. There are also new beliefs. In Argentina 72% of the unaffiliated, whose ranks have almost doubled in the past decade, say they believe in spiritual "energy" and a third believe in astrology. And despite the increase in "nones", very few people describe themselves as atheists.

This reflects the strength of cultural Catholicism, says Andrés Casas of Pontifical Xavarian University in Bogotá, Colombia. He notes that even members of former communist guerrilla groups in Colombia say things like, "Thanks be to God". When a Swedish satanist heavy-metal band tried to host a concert in Bogotá in 2018, officials quickly had the venue shut down. Dr Giménez Béliveau notes that there are crucifixes in police stations and courts in Argentina. "Religion is inscribed culturally," she says.

But religious identities are becoming more fluid. A Brazilian Catholic may attend an evangelical service every now and again because they like the style of worship. They might also dabble in *candomblé*, a belief system with African roots first imported to the country by slaves, says Arlene Sánchez-Walsh of Azusa Pacific University in California. Charismatic Catholicism, which mimics some aspects of evangelicalism, has grown, too.

The political implications of these changes are already being felt. The evangelical lobby in Brazil's Congress includes 195 of 513 federal deputies. Jair Bolsonaro, Brazil's right-wing president, courted the evangelical vote. Although he is a Catholic, he was re-baptised in the River Jordan shortly before his election in 2018 by an evangelical pastor.

Evangelicals are a political force elsewhere, too. In Costa Rica an evangelical singer reached the presidential run-off in 2018 after the Inter-American Court on Human Rights, which is based in the country, ruled that same-sex marriage should be legal. Mexico's president won office partly because of evangelical support. "Con mis hijos no te metas" (Don't mess with my kids), an educational pressure group

## Canada's budget

### Going for growth

**The Liberal government shuffles towards the centre**

OVER THE next four decades Canada's growth per person is expected to be the lowest in the OECD, a club mostly of rich countries. On April 7th Chrystia Freeland, the finance minister, sought to correct that. In presenting the federal budget for the 2022-23 fiscal year, which began on April 1st, she vowed to tackle the "insidious" problem of low productivity growth. She coupled that with a promise to reduce debt, which soared during the pandemic, as a share of GDP.

The budget looks like an attempt by the Liberals, in office since 2015, to reclaim their reputation for centrism after years of rising federal spending. Critics say it falls short. It comes as the fortunes of Justin Trudeau, the prime minister, are improving after a rough patch. Police removed anti-government protesters from the streets of Ottawa, the capital, in February. The recent jump in the prices of commodities Canada exports should help protect its economy from an expected decline in global growth. In March Mr



**A cautious Chrystia Freeland**

Trudeau, who leads a minority government, struck a "confidence-and-supply" agreement with the left-leaning New Democrats (NDP), which will probably keep him in power until elections in 2025. The opposition Conservatives are preoccupied with choosing a new leader in a vote due to take place in September. Ms Freeland also has some money to spend, partly because of a post-pandemic economic recovery. She plans to fork out C\$9.5bn (\$7.5bn) over five years, 0.4% of total spending, on measures to spur home-building. A 50% rise in house prices over the past two years is among voters' biggest concerns. Construction is supposed to double over the next decade. Foreigners, who are implausibly blamed for pushing up prices, will be barred from buying houses for two years.

Despite the deal with the NDP, Ms Freeland "did show some restraint" on spending, says Rebekah Young, an economist at Scotiabank. The budget sets almost nothing aside for a proposal, backed by both parties, to provide universal coverage of the cost of prescription drugs. Debt is projected to fall from 46.5% of GDP last year to 41.5% in 2026-27. But the government should do more to restrain deficits "when times are good", says Ms Young. She argues that the government's plans to sustain growth lack "a coherent vision".

Ms Freeland's most notable idea is to establish an "arm's-length" Canada Growth Fund. Initially capitalised at C\$15bn, it is supposed to attract at least three times that from the private sector to boost green businesses and exports. Missing from the budget are measures that would have a bigger payoff, such as giving incentives to provinces to remove barriers to trade. Ms Freeland's quest for growth could have been bolder.

founded by the son of a Pentecostal pastor, successfully agitated for the dismissal of an education minister in Peru. In Colombia an alliance of religious groups caused an openly gay education minister to resign after her ministry tried to reduce discrimination against LGBT youths in schools.

As Latin Americans' spiritual choices become more varied, their politics could become more polarised. Although the trends are not uniform across the region, believers tend to vote for right-wing parties, whereas "nones" lean far more to the left. In Chile's recent presidential election,

José Antonio Kast, a hard-right Catholic candidate with nine children, courted religious voters. Gabriel Boric, the leftist who won, was supported by young graduates.

Father Fabián Báez, a Catholic priest in Argentina, hopes that the church can win back adherents. He loosely quotes Pope Francis, an Argentinian and the first Latin American pontiff, when he insists, "The priest and the church need to be where the people are, on social media, in the villages, in the *barrios*." But even if the priests do go to those places, it is unclear that people will follow them again. ■



## A truce in Yemen

# Hope against hope for a lasting peace

DUBAI

## A truce and a fragile new government may mean only a lull

SOON AFTER iftar, the fast-breaking meal during Ramadan, a group of influential Yemenis was summoned to the Saudi royal court. They were in Riyadh on April 6th for peace talks to help end Yemen's long war. But there was little to discuss: the Houthis, a rugged Shia group from northern Yemen who have conquered much of the country (see map on next page), refused to attend, saying they would talk only in a neutral country. Instead the peace conference became a venue for palace intrigue. The balance of power continues to shift against the Saudis and their Yemeni allies. But a lasting peace remains elusive.

As several Yemenis tell the tale, the grandees in Riyadh were relieved of their mobile phones and put in separate rooms. The Saudis ordered Yemen's feckless president, Abd Rabbo Mansour Hadi, to cede power to an eight-man council. His resignation was duly announced to the media. Only then were the council members, who had been cooling their heels for hours, told of their unexpected promotions.

The shake-up came after a two-month

ceasefire began on April 2nd, the first nationwide truce since 2016. Both the Houthis and the Saudi-led coalition fighting them have accused each other of violations. Still, violence has dropped from its highest level in almost four years (see chart on next page), giving Yemenis a bit of relief during the Ramadan holiday. Some diplomats are hopeful that the truce could be extended and lead to a more durable peace.

That still seems unlikely. The presidential council is meant to forge a united front, either to fight the Houthis more effectively or to broker a peace deal. But its members do not like each other and cannot agree on much. That the Saudis presented the council as a *fait accompli* suggests they

are eager for a quick way out of a ruinous war. But a deal that creates a viable Yemeni state looks further away than ever.

The coalition invaded in 2015 after the Houthis seized large parts of the country, including the capital, Sana'a. It expected to dislodge them within weeks. Instead it got stuck in a quagmire. No one is winning, but the Saudis are certainly losing vast amounts of money and prestige.

Yemen's 30m people are the chief victims. An estimated 377,000 have died from fighting, hunger and disease. The UN says 17m go hungry. Three-quarters rely on aid to survive. Only half the country's hospitals and clinics are working.

The Saudi-led coalition has largely refused to allow fuel shipments through the port of Hodeida, which the Houthis control. The blockade has caused a severe fuel shortage in the Houthi-controlled areas, where black-market petrol can fetch more than \$3 a litre. Under the terms of the truce, the Saudis will let oil tankers unload at Hodeida. The first two of a promised 18 docked earlier this month.

Two commercial flights a week will also be allowed to and from Sana'a; its airport has been closed to ordinary traffic since 2016. But it is unclear when they will start or who will be let aboard. There is talk of reopening roads to Taiz, which the Houthis have been encircling for years. These are all modest gestures, given the scale of Yemen's suffering. Though they are welcome, many Yemenis doubt they will last.

## → Also in this section

40 A wave of terror in Israel

41 Financing terror in Africa

42 Ethiopia's civil war

42 South Africa's Marmite crisis

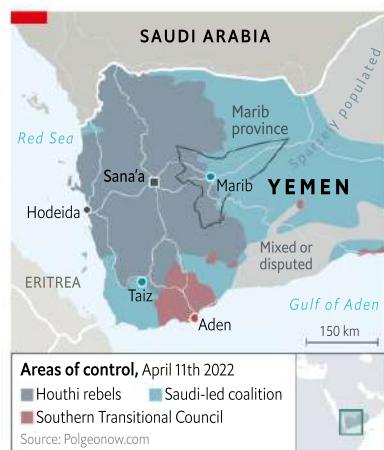
For more than a year the heaviest fighting has been around Marib, a city under the government's control. The area is home to 1m people displaced from other parts of the country and most of Yemen's oil. The Houthis want to capture it. They have lost tens of thousands of fighters trying to breach its defences. Witnesses say they have continued attacks on Marib during the truce, albeit at a lesser scale, and are using the lull to reinforce their positions.

"This is both a precious and precarious moment," says Hans Grundberg, the UN's envoy to Yemen. "Ceasefires rarely hold if not supported by progress on the political track." The UN has spent years cajoling the Houthis and Mr Hadi's government to share power. The effort was doomed from the start. Mr Hadi was both too weak and too obstinate to be an effective negotiator. The Houthis thus saw little reason to talk, thinking they could win a better bargain on the battlefield than by diplomacy.

Few Yemenis will miss their ousted president, who was meant to serve a two-year transitional term but stayed for ten. An insular leader, he was surrounded by a small circle of relatives and cronies and ran a government-in-exile that was good at stealing money and not much else.

Unlike Mr Hadi, many of the new council's members wield influence on the ground. They have little else in common: the body embraces Islah, an Islamist party, and the Southern Transitional Council (STC), a secessionist group that wants to restore an independent South Yemen. Islah and the STC despise one another and have clashed repeatedly. Even if they set aside personal and ideological animosity, the STC (which is focused on the south, where the Houthis have no presence) will be loth to send its men to fight in the north.

Saudi Arabia is keen to end the war. Apart from its financial and reputational costs, it has exposed the kingdom to increasingly accurate cross-border Houthi attacks. But a face-saving exit for the Saudis will not end the civil war that long predates the involvement of foreigners. That



would require consensus among a vast constellation of armed groups, including the Iranian-backed Houthis.

More likely is that Yemen will continue its steady disintegration. The south, backed by the United Arab Emirates, will pursue greater autonomy. The north will try to negotiate an awkward power-sharing deal. Parts of the country will remain ungoverned. For all the optimism about the truce, it may prove just an intermission before another round of fighting. ■

## Israel

### Keep your cool

#### JERUSALEM

**A fragile government is being tested by a spate of random terrorist attacks**

ISRAEL PRIDES itself on having some of the world's finest counter-terrorism units. But when a lone Palestinian gunman roamed the streets of Tel Aviv on April 7th, it seemed to have too many of them. After a shoot-up outside a popular night spot, which left three Israelis dead or dying, hundreds of special forces, airborne commandos and police rushed to the scene, then milled around chaotically without co-ordination. Some ran with guns cocked into restaurants and residential buildings, hoping to flush out the killer, who had fled to Jaffa, a few miles south. He was tracked down and shot dead eight hours later.

The attack was the fourth in an Israeli city in 16 days. Fourteen victims and five perpetrators have been killed, ending ten months of relative calm in the conflict between Israel and the Palestinians. The attacks were not jointly planned nor attributed to a single group. The attackers came from different communities and backgrounds. Three were Arab citizens of Israel

(one was a Bedouin from the Negev desert) who had tried to join Islamic State; two were Palestinians from the West Bank.

Israelis and Palestinians were bracing themselves for another round of violence in the Muslim holy month of Ramadan, which this year coincides with the Jewish festival of Passover. A year ago there was a month of constant clashes on the eastern, Arab side of Jerusalem. Hamas, the Islamist group that runs the Gaza strip, then joined in, firing rockets at Israel for 12 days, provoking a devastating wave of Israeli air raids on Gaza and widespread riots in mixed Jewish-Arab towns in Israel proper.

So far none of last year's flashpoints has erupted again. Bar a few scuffles, east Jerusalem has been tense but calm. Prayers have taken place undisturbed at the al-Aqsa mosque. Crowds of young Palestinians have been quietly enjoying themselves after breaking their Ramadan fast near the city's Damascus Gate, the scene of several of last year's violent confrontations.

"There's a general feeling in Jerusalem that this Ramadan has got to be different," says a Palestinian stall-owner. "The Israeli police are behaving better, not firing skunk all over the place." Last year Israeli anti-riot police sprayed the area with a putrid liquid that lingered in the air for days. Now the strongest smell is from *shisha* pipes.

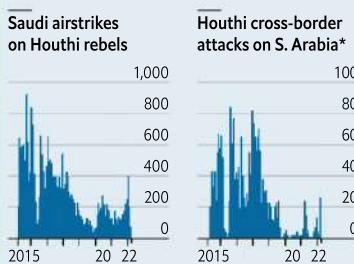
Gaza, still under a state of semi-siege imposed by Israel and Egypt, has been calm this year, too. Hamas has not fired any of its arsenal of rockets since a ceasefire, in May 2021. While congratulating the recent attackers, it has prevented smaller Palestinian factions such as Islamic Jihad from launching rockets.

All the same, the outbreak of violence has come at a bad time for Israel's government. Not yet ten months into its term, the unwieldy coalition of eight disparate parties lost its majority in the 120-member Knesset when a member of the party of Naftali Bennett, the prime minister, defected. The government can persevere without a majority, at least for a while, but if it were to lose another right-wing waverer, an election could be called.

This political pressure could prod Mr Bennett to act tougher on security. So far Palestinian workers are still allowed to travel from the West Bank to jobs in Israel. A limited number may enter for prayers at the al-Aqsa mosque. But the government has closed the West Bank town of Jenin to Arab visitors from Israel, since two of the attackers were from there. Israel has also doubled the number of troops in the West Bank. On April 10th a Palestinian woman, who turned out to be unarmed, was shot dead at an Israeli roadblock because she was "moving suspiciously". "If the politicians try to show they're tough and more people get killed, things can kick off very fast," warns an Israeli security official. ■

#### Tit for bloody tat

Yemen and Saudi Arabia, monthly totals



\*Includes air/drone attacks, shelling/artillery/missile attacks  
Sources: Yemen Data Project; ACLED

## Financing terrorism

## Following the money

NAIROBI AND PRETORIA

### How jihadists in Congo and Mozambique are linked to South African money men

**D**EFEATING INSURGENCIES is hard and dangerous work. Most of all, according to a book on the subject by John Nagl, a retired American soldier, it requires patience. He likens it to eating soup with a knife. That makes the rapid successes achieved by a hotchpotch of African forces against jihadists affiliated to Islamic State (is) in northern Mozambique in the past year all the more remarkable.

The violent jihadist insurgency that has engulfed the northern Mozambican province of Cabo Delgado since 2017 had claimed perhaps 3,200 lives by the middle of 2021. Yet it attracted little outside attention until a year ago, when the militants swept into the coastal town of Palma, where they killed dozens of people, including several foreigners, and halted progress on a huge gas project. Soon after, Rwanda sent the first of about 2,000 troops. These were followed by about 1,000 more soldiers from eight other African countries, led by South Africa. In short order these forces have driven the insurgents out of most of the province's populated areas.

Yet even as South Africa earns praise for battling jihadists in Mozambique, it is also gaining a reputation as a hub and money-laundering centre for jihadists from across the continent. In March America's Treasury imposed sanctions on four people in South Africa accused of raising money and recruiting for is activities and branches across Africa. The American action cast



new light on the connections between is's core in Iraq and Syria, which has suffered crushing defeats in recent years, and its growing networks in Africa.

In 2019 is received pledges of allegiance from two rebel groups almost 2,000km apart that seemed to have little connection: the insurgents in Cabo Delgado and the Allied Democratic Forces (ADF), a Ugandan outfit notorious for massacres in eastern Congo (see map). These affiliates have since mounted attacks not just at home but also in Tanzania and Uganda.

Their entrepot is South Africa. Police sources there say that suspected members of the ADF and other jihadists from as far

afield as west Africa and Somalia freely hobnob in the country with like-minded locals. Dozens of South Africans went to Syria and Iraq to join is in the heyday of its so-called caliphate. Among those who tried to go are twin brothers, Brandon-Lee and Tony-Lee Thulsie, who were arrested in South Africa in 2016 and jailed this year for terrorist offences. South Africans have been spotted among the jihadists in Mozambique, according to South African officials. Some have built networks at home.

Take Farhad Hoomer, a businessman from the coastal city of Durban. America's Treasury slapped sanctions on him, alleging that he had established and led an is cell in Durban and that he was in contact with the ADF in Congo. It claimed that he funded his cell by raising more than 1m rand (\$69,000) through extortion and kidnapping. He denies the allegations. Also placed under sanctions was Abdella Hussein Abadiga, an Ethiopian with alleged links to is in Somalia, whom the Treasury accused of extorting money from members of two mosques in South Africa that he sent to is groups elsewhere.

It is not clear how much money flows from South Africa to terror groups but officials reckon it may add up to hundreds of thousands of dollars a year. Investigators believe that a good chunk of this money comes from crime of one sort or another, possibly including drug smuggling (though there is little public evidence for this). From South Africa it then takes many paths. Police in Kenya, for example, recently arrested a middleman who had received money from South Africa and sent it on to suspected militants in Mozambique and ADF operatives in Uganda.

Counter-terrorism officials in the region suspect that is is using its money to buy the loyalty of radicals associated with al-Shabab, the Somali affiliate of al-Qaeda, is's rival. Defections of al-Shabab loyalists have "a lot to do with money", says a Somali intelligence officer. is currently backs an al-Shabab splinter group in Puntland, northern Somalia. UN investigators monitoring the group have found evidence that one of its commanders has visited Mozambique to train insurgents there.

Cutting these financial cords will not be easy. South Africa's security institutions are poorly run, under-resourced, riddled with corruption and infiltrated by criminals. The Financial Action Task Force, a money-laundering watchdog, says South Africa has "failed to demonstrate that it is effectively identifying, investigating or prosecuting terrorist financiers". One frustrated South African cop following the is money trail says his bosses have ignored most of the cases he has sent them. "It makes it harder for us to really dig into where all the money is being generated from in the first place," he sighs. ■



If only the money trail were as clear

**Ethiopia's civil war**

## Horror heaped on horror

ADDIS ABABA

**Widespread ethnic cleansing may make the conflict harder to end**

**T**HE LUCKY ones were frogmarched onto buses and driven across the river. The less fortunate were slung into detention camps and left there to rot. Others were murdered in the streets or hacked to death as they cowered in their homes. "We don't need a single one of them any more," a militiaman told a foreign researcher last year. "They cannot be trusted."

Since the start of Ethiopia's bloody civil war 18 months ago, there have been frequent allegations of ethnic cleansing targeting people from the northern region of Tigray. Antony Blinken, America's secretary of state, first levelled this charge more than a year ago, infuriating the government of Abiy Ahmed, Ethiopia's prime minister, which strongly denied it. Because the government has imposed a tight blockade of the region, it has been hard to assess the claims of atrocities. But some horrifying hints have emerged, such as the corpses with their hands bound that have washed up on river banks in Sudan.

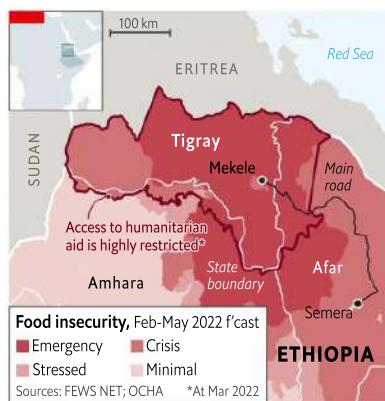
Now a thorough investigation by Human Rights Watch and Amnesty International, two pressure groups, leaves little doubt of the enormities committed by government forces and their allies. The joint report, published on April 6th, concludes that authorities from the Amhara region have systematically killed or evicted hundreds of thousands of ethnic Tigrayans from territory seized from Tigray since the start of the war. The campaign, carried out with the connivance of federal authorities, was as methodical as it was brutal. Notices ordering Tigrayans to leave were pinned around towns. Freshly appointed Amhara officials handed out title deeds for plots of

stolen land. Identification cards were given to new Amhara arrivals, but denied to Tigrayans, who were prevented from receiving aid and government services. The new authorities even granted permits for shipments of looted sesame, a lucrative cash crop at the heart of the territorial dispute between the two regions.

This matters not only because of the frightful human toll. The contested area, known officially as Western Tigray before the war, is now arguably the biggest obstacle to ending the conflict. "It's definitely the thorniest issue," says a senior official of the ruling party. Both sides have long claimed this land. Both are hardening their stances. Just days before the report was published Amhara investigators announced the discovery of mass graves,

which they allege contain the remains of Amharas murdered decades ago by the Tigrayan People's Liberation Front (TPLF), the party-cum-militia that runs Tigray.

Meanwhile, hundreds of thousands of Tigrayans are starving. A "humanitarian truce" that started on March 24th is already teetering. The government has allowed just one aid convoy to enter Tigray (the first since mid-December) and has been withholding permission for more until the TPLF withdraws to Tigray. The TPLF wants aid to flow freely before it pulls back entirely, ideally in tandem with the withdrawal of Amhara forces from Western Tigray. Without a breakthrough to ease the blockade, the horror of ethnic cleansing will be matched by an equally grotesque abuse: deliberate, mass starvation. ■



Sources: FEWS NET, OCHA \*At Mar 2022

South Africa

## Marmageddon

JOHANNESBURG

**There is no end in sight for the nationwide Marmite shortage**

"**I** AM DISTRAUGHT because I am about to finish my last jar," says Irene Mbowneni, a resident of Johannesburg and mother of two. "There is no Marmite on the shelves and I do not know what to do." Amid the many tragedies befalling the world, a shortage of glossy dark goo to spread on bread is surely small beer. But not to the millions of South Africans who, quite inexplicably, like the salty sludge and are struggling to cope with the worst Marmite shortage since the end of apartheid.

The love-it-or-loathe-it spread, invented in Britain at the start of the 20th century, is an extract of yeast. It is most commonly eaten spread thinly on buttered toast, but it can also be used to add a rich, vegan-friendly umami flavour to soups, stews and sauces.

In South Africa Marmite is indeed thinly spread. Shoppers first noted shortages at the beginning of the covid-19 pandemic, when South Africa banned alcohol sales in an attempt to free up beds in hospitals that would otherwise be filled with tipsy drivers or drunken brawlers. The ban had an unexpected consequence. With beer sales on ice, South Africa's main breweries sharply reduced their production. With much less lager fermenting in their vats, they were also producing far less brewer's yeast, the beer by-product that is the main ingredient of Marmite.

Through the course of the pandemic, South Africa imposed four separate alcohol bans, each one of which dealt a blow to Marmite production. Nine months since the lifting of the last prohi-

bition, production ought to have recovered, allowing shops to refill their shelves. Yet it has not. When your correspondent recently walked the aisles of 15 grocery stores in Johannesburg, 12 had no Marmite at all. In the three remaining shops a total of just seven jars could be found, of which three appear to have escaped purchase by hiding behind jars of Bovril, a beef-based cousin of Marmite. The branch manager of a large store in eastern Johannesburg says that deliveries still dribble in but fly off the shelves in an instant.

That the shortage continues is because of another hiccup in the supply chain. Pioneer Foods, the local manufacturer of Marmite, reportedly said that its production has been slowed by a shortage of sodium carbonate, which is used in the manufacturing process. Muckraking by the *Daily Maverick*, a local paper better known for exposing political scandals than for scrutinising sandwiches, found that intermittent cuts in the water supply were also affecting the country's only Marmite factory.

Perhaps, though, some good may yet emerge from South Africa's forced diet of dry bread. In a country that is often divided along lines of race or wealth, all boundaries are transcended by love (or hatred) of Marmite. "Whether black or white, rich or poor, most South Africans have a jar of Marmite in their cupboard," says Mrs Mbowneni. Your correspondent will neither confirm nor deny snagging Johannesburg's last seven jars. Suffice it to say that Mrs Mbowneni is no longer short of sludge.



The French presidential election

## Macron v Le Pen, again

PARIS

### The two finalists go head-to-head in the closing phase of the campaign

THERE WERE 12 candidates to pick from, but in the end the French chose the same presidential finalists as in 2017. In the first round of voting on April 10th, Emmanuel Macron, the centrist president, came top, with almost 28%. Marine Le Pen, a populist nationalist, came second with 23%. In the run-off in 2017 Mr Macron beat Ms Le Pen by a resounding 66% to 34%. When voters return to the polls on April 24th to choose the next president, the result is likely to be far closer.

Three features of the vote stand out. First, Mr Macron drew in more votes than in 2017, pushing his score four points higher to the best first-round result for an incumbent president since François Mitterrand in 1988. Mr Macron may be unloved, but, partly thanks to his competent management of the economy, the pandemic and European affairs, his approval rating is over 40%—higher at the end of his term than his two predecessors, François Hollande and Nicolas Sarkozy (though neither of those got a second term).

Second, the result confirmed the total

collapse in presidential politics of the mainstream parties on both the left and the right. In 2017 the Socialists' and Republicans' candidates between them secured 26% of the vote. This time, they could not even muster 7%. Neither scored even the 5% minimum to qualify for maximum reimbursement of campaign expenses. Valé-

rie Pécresse, the Republicans' nominee, pleaded for donations, saying she is now personally €5m (\$5.4m) in debt. Even Yannick Jadot of the Greens, a movement in tune with the times, failed to reach 5%.

The flipside of Mr Macron's remarkable success at building a broad centrist church, however, is the third and more sinister element of this vote. The combined score for all populist, radical and extremist candidates was nearly 58%, sharply up from just below 50% in 2017. Tactical voting may have inflated this total. The radical-left Jean-Luc Mélenchon supplied the biggest surprise, coming in third with 22%. Half of this haul, according to one poll, came from Socialists, Greens and others on the left who hoped to keep Ms Le Pen out of the run-off. But much of the populist total is truly extreme. Among those eliminated was Eric Zemmour, a toxic far-right former television pundit, who scored 7%.

The force of the populist vote reflects deep discontent. Many voters reject outright the pro-European, broadly liberal centrism on offer from Mr Macron, with his sharp suits, diplomas and abstract nouns. Both Ms Le Pen and Mr Mélenchon, who jointly secured 45%, speak to this anger in former industrial cities, rundown tower blocks and rural France. In the northern former mining village of Auchy-les-Mines, Ms Le Pen scored a massive 48% in the first round. In Seine-Saint-Denis, a depressed *banlieue* north of Paris, Mr Mélenchon bagged 49%.

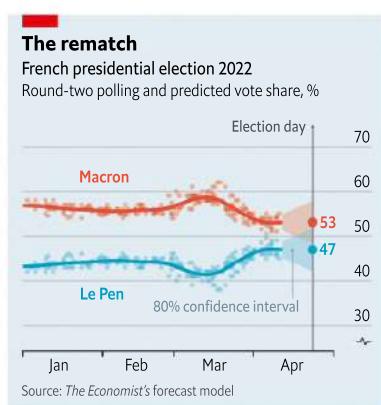
### → Also in this section

44 Finland and NATO

45 Russian-speakers in Germany

45 Spain's far right

46 Charlemagne: Older voters' power



The two finalists are now back on the campaign trail. Ms Le Pen can expect 82% of the far-right vote that went to Mr Zemmour, says a Harris Interactive poll. Mr Macron can hope for 54% of the Greens' vote, 52% of the Socialists', and 46% of Mrs Pécresse's. She, Mr Jadot and the Socialists' Anne Hidalgo, as well as the Communists' Fabien Roussel, all urged voters to back Mr Macron to keep out Ms Le Pen. Yet none of these eliminated candidates has many voters to offer, and a lot of them will abstain.

Instead the key to the second round is in the hands of those who backed Mr Mélenchon in the first. On election night, the sharp-tongued, 70-year-old radical urged his supporters not to give "a single vote" to Ms Le Pen. But some of his vote is primarily anti-establishment and anti-liberal. This makes it less compatible with the pro-European Mr Macron, who wants to raise the retirement age from 62 years to 65, than with Ms Le Pen, who promises to lower fuel prices and the pension age. She, like Mr Mélenchon, is anti-NATO, Eurosceptic and pro-Russia. Around a third of Mr Mélenchon's voters say they will now back Mr Macron; 20% will support Ms Le Pen. The rest are undecided, or likely not to vote.

On April 11th Mr Macron took his campaign to hostile territory in northern France's former mining basin. He stopped in Carvin, a village that put Ms Le Pen top, followed by Mr Mélenchon. Sitting in Le Bellevue café, Mr Macron declared himself "the candidate who speaks to everyone" and said that he would fight Ms Le Pen's ideas "until the last second". His pensionage hike, he said, could be phased in more gradually. Firms that pay high dividends could be compelled to give employees tax-free bonuses. She, meanwhile, is posing as the "candidate of unity", who would bring calm after the chaos.

As French minds turn to the hard choice ahead, the candidates will come under greater scrutiny. One concern will be Ms Le Pen's past sympathy for Russia's Vladimir Putin. Another will be her plans for "national preference" for French citizens, in jobs and benefits, a direct clash with EU law. "A Le Pen presidency would turn France away from the Franco-German axis towards Hungary and Poland," says Tara Varma, of the European Council on Foreign Relations. "They are trying to transform the EU from the inside."

With little time left, a crucial moment will be a televised debate on April 20th. In 2017 Ms Le Pen was woefully unprepared. This time, she will be better briefed. Her task will be to come across as a competent leader-in-waiting; Mr Macron's will be not to appear condescending. On April 12th *The Economist's* election model gave Mr Macron an 81% probability of winning, against 19% for Ms Le Pen. He remains the clear favourite, but it is not over yet. ■

### Finland and NATO

## Stretching the border

HELSINKI

### Finland is hurtling towards membership of NATO

EVEN AS RUSSIAN troops were massing on Ukraine's borders in January, Sanna Marin, Finland's prime minister, insisted that it was "very unlikely" her country would join NATO during her time in office. Three months and one invasion later, Finland is hurtling towards membership. On April 2nd Ms Marin told Finns that the country would have to reach a decision "this spring". As she explained, "Russia is not the neighbour we thought it was."

After two grinding wars with the Soviet Union, Finland (unlike most of eastern Europe) kept its independence throughout the cold war. The price of doing so was neutrality. Finland bought arms from both East and West, but stayed out of formal alliances. That arrangement, and the way in which Soviet pressure distorted Finland's domestic politics, became known by the pejorative term Finlandisation. When the Soviet Union dissolved, Finland, along with Sweden, took the leap of joining the European Union, binding it closer to other European countries. And after Russia's first invasion of Ukraine in 2014, both countries intensified joint exercises and other forms of co-operation with NATO.

In 2019 just over half of Finns were opposed to NATO membership. On February 28th, four days after Russia invaded Ukraine, the polls showed majority support



for the first time. The latest, taken between April 6th and 11th, revealed 68% in favour, 12% against and 20% undecided. That includes majorities among supporters of all parties bar the Left Alliance. It is widely assumed that if Sauli Niinistö, Finland's popular president, were to give his endorsement, support would grow yet more.

Both Ms Marin and Mr Niinistö are keeping silent, to allow a political process to play out. "April, May and June are important—and in many ways historic—months in Finland," says Henri Vanhanen, a foreign-policy expert and adviser to the centre-right Kokoomus party. A government report setting out the new outlook for Finland's security since the Russian invasion was due to be published on April 13th.

Parliament will then debate the issue. After that, a second government report could make a formal recommendation on NATO membership. A special parliamentary monitoring group, made up of party leaders and committee chairs, will play an important role in signalling the political consensus. A committee of government ministers and Mr Niinistö will take their cue from that. The final call remains with parliament, though whether it will need a two-thirds majority depends on its constitutional committee.

Once a bid goes in, Finland would be especially vulnerable: subject to Russia's ire, but not yet covered by Article Five, NATO's mutual-defence clause. One answer to that is to move fast. On April 3rd Jens Stoltenberg, NATO's secretary-general, said that Finnish or Swedish accession could be done "in a relatively quick way". (Sweden's debate is proceeding much more slowly, but its armed forces are intertwined with Finland's, so if Finland jumps, Sweden probably will, too.) Mr Stoltenberg has also hinted at interim security guarantees, in effect giving Finland the benefits of membership before it formally joins.

In the 1990s NATO shared a border of only 196km with Russia, in the uppermost fringes of Norway (although Turkey used to border the Soviet Union). When Poland joined in 1999 that rose to 428km, thanks to its border with the Russian exclave of Kaliningrad. After the accession of the three Baltic states in 2004, the shared frontier leapt to 1,233km. If Finland takes the plunge, as seems likely, the common border will more than double (see map).

That has implications for both sides. A country that has prized stable relations with Russia for 74 years would face a new and sustained level of threat, as Mr Niinistö warned recently. But Russia, too, would have to reconsider the security of the Gulf of Finland and the ports around Murmansk. The irony is that a war in Ukraine launched by Vladimir Putin ostensibly to keep NATO at bay looks set to bring the alliance closer than ever before. ■

## Russian-speakers in Germany

## Truth and lies

MARZAHN

## How the Kremlin seizes on hostility toward Russians

**I**N THE EARLY hours of a night in mid-March, a man in a hoodie threw a Molotov cocktail at the International Lomonosov School, a Russian-German establishment in Marzahn, a working-class district in eastern Berlin that is home to around 30,000 Russian-Germans. It was the second arson attack on the school that month.

The incident was one of a series of episodes of harassment and hostility against the Russian diaspora in Germany and other European countries. Such attacks are rare in France, Italy and Spain, where Russian communities are relatively small, but Germany's 3.5m migrants from the former Soviet Union say that conditions have deteriorated rapidly since the war in Ukraine started on February 24th.

The fact that many Russians in Germany are supporting the war has not helped. Vladimir Putin's atrocities have prompted some Germans with Russian roots to believe stories about Ukrainian outrages that would help to justify it. Russian-speakers in Germany are mostly ethnic Germans whose families lived for centuries in Russia and who emigrated after the fall of the Berlin Wall. Many are critical of the Russian president's policies, but a sizeable minority remains adamant in its support for him. On April 10th pro-Russian demonstrators marched in the streets of Frankfurt and Hanover waving Russian flags. A day earlier pro-Russian motorcades had crossed Stuttgart and other smaller cities.

It is hard to determine precisely the extent of the backing among Russian-Germans for Mr Putin's war. Most Putin supporters tend hide their views, doubtless fearful of reprisals. These fears are fanned by accounts on the website of the Russian embassy in Berlin. Russian restaurants, for example, have allegedly received anonymous, threatening calls and abuse on social media ("Your food tastes like blood"). Russian-speakers are said to have been harassed on public transport. In Cologne a boy from Kazakhstan whose parents are Russian-German was beaten up by his classmates, says Roman Friedrich, a social worker in Cologne. Since the war started the German authorities have registered several hundred anti-Russian incidents.

"The annexation of Crimea brought out cleavages that are deepening," says Jannis Panagiotidis of the University of Vienna. In many families attitudes are split along generational lines: the older folk support

## Spain's far right Vox populi

MADRID  
A taboo is broken as Vox joins a regional government



**A DAY AFTER** Marine Le Pen reached the second round in France's presidential election, the regional parliament in Spain's Castilla y León approved a new government, the country's first to include Vox, a hard-right party. Visiting the region for the investiture vote, Santiago Abascal, Vox's leader, took time to tweet congratulations to Ms Le Pen on a "great result", saying France, like the rest of Europe, faced a choice between "sovereignty and reindustrialisation or progressivist globalisation that is ruining us".

It is easy to see Vox as the renaissance of a far right that never disappeared even after Francisco Franco, Spain's dictator for nearly 40 years, died in 1975. Mr Abascal calls the current government the worst in 80 years—that is, worse than Franco's. Vox wants to replace a law on gender-based violence with one on "intra-family violence", turning the focus away from male perpetrators. It wants to recentralise Spain, eliminating the 17

powerful regional governments (like the one it has just joined in Castilla y León). This makes Vox radioactive to regional nationalists in places like Catalonia and the Basque Country.

Vox sometimes shows a more acceptable face. Unlike Ms Le Pen, its leaders have not been photographed with Vladimir Putin. It has criticised his war in Ukraine and welcomed Ukrainian refugees. Its parliamentary spokesman, Iván Espinosa de los Monteros, says in perfect American English (acquired as a student in Illinois) that the party is not against all immigrants. Many integrate well, and Spain needs them, he concedes. But Vox still wants to encourage native Spanish women to have more babies, a point reiterated at the investiture.

The party is a big headache for Alberto Núñez Feijóo, the new leader of the conservative People's Party (PP). He is known for pragmatism, a welcome change to Spain's vicious polarisation. He has kept his attacks on the Socialists in government to matters of policy, saying he wants to defeat them, not insult them. But the PP-Vox alliance in Castilla y León means that he will be asked endlessly about Vox. A Vox deputy recently compared Pedro Sánchez, the Socialist prime minister, to Hitler. Mr Feijóo says he has not yet spoken to Mr Abascal, but he says he has talked to Catalan separatists and his Socialist opponents and he would talk to Vox.

Spain faces elections next year, with no party likely to win a majority. It now has a three-party-plus system, with the PP, Socialists and Vox trailed by assorted minnows, and no tradition of grand coalitions. Mr Sánchez broke a taboo and governed with the radical left. Mr Feijóo may face competing taboos: deal with the hard right, or the Socialists.

Mr Putin, whereas the youngsters say their parents have been brainwashed.

Lies and propaganda also play their part. In late March a sobbing woman lamented in a video clip widely shared on social media that Ukrainian refugees had beaten to death a Russian volunteer called Daniel at a home for asylum-seekers in the state of North Rhine-Westphalia.

But the murder of "Daniel" never happened. "I helped to uncover the fake news," says Mr Friedrich. The case reminded the 46-year-old Mr Friedrich, who grew up in Russia and moved to Germany in 1996, of

Lisa, a Russian-German teenager also from Marzahn, who in 2016 concocted a story that she had been abducted and raped by a group of migrants.

The arm of Kremlin propaganda is long. Some suspect that even the arson attacks on the Lomonosov school were orchestrated in Moscow. There is no proof, but the woman outraged by the murder of "Daniel" later realised that she was the dupe of a propagandist who had told her the story. In another video on the same platform she said she had been entrapped, and apologised. But the damage has been done. ■

## Charlemagne | The boomer bulwark

*The elderly are keeping Europe's extremists out of power. For how long?*



**I**F EMMANUEL MACRON, the youngest-ever president of France's Fifth Republic, gets to keep his job he will have its oldest voters to thank. Had only the ballots of those under 60 been counted in the first round on April 10th, Mr Macron would have come third—leaving France to pick between extremists of the left and right in the run-off a fortnight later. Across Europe, many mainstream leaders owe their jobs to a grey-haired (and no-haired-at-all) electoral bulwark loyally trudging to the polls. They will not be around for ever. Either today's youngsters will have to mellow into the middle ground as they age, or Europe will drift away from the predictable centrism it has comfortably espoused for decades.

In Europe as elsewhere, voters' preferences were supposed to follow a predictable pattern as they aged. Brimming with idealism and compassion their parents apparently lacked, younger citizens tended to lean left. As they got older, took out a mortgage and discovered the pleasures of income taxation, the right's appeal became more obvious. But this ideological drift often took place within the same political party. "Big tent" affairs like Germany's centre-right CDU, or PSOE on Spain's centre-left, contained factions that could accommodate just about everyone from bleeding hearts to the fiscally righteous. (Americans and Brits will also be familiar with, in essence, two-party systems spiced up by the occasional and usually marginal interloper.)

Many European countries today consist of two superimposed polities. Voters in their 70s are hanging on to the big tents, American-style. German pensioners are turning out for the CDU and its rival SPD, parties their own parents might have recognised. Doddering Irish stick with Fine Gael or Fianna Fail, near-centenarian political stalwarts. Their Italian counterparts are more likely to cast a ballot for the Democratic Party or Silvio Berlusconi's Forza Italia; the Spanish for their rough equivalents and so on.

For the young, in contrast, centrist big tents are merely one option among many. Ties that might have bound their parents to a party—belonging to a church, say, or to a trade union—often no longer apply. Their resulting political adventurism has helped launch new movements across Europe: a slew of Green parties, the odd (sometimes very odd) nationalist one, a few liberal splinter groups. Some outfits that have emerged as a result are quirky, like

the Five Star Movement in Italy, a shape-shifting party that got a higher share of votes from younger voters than older ones in Italy's most recent elections. A few have nasty histories, like Sinn Fein in Ireland: once a terrorist-adjacent group, among the young it is now polling at well over the combined tally of the erstwhile Fine/Fianna duopoly. In Spain both liberal parties and demagogues have sprung up on the far right and left. Outright xenophobes like Jobbik in Hungary and the Sweden Democrats, now both somewhat reformed, got their breakthroughs from young voters before establishing wider bases. In Germany AfD, another migrant-bashing party, has been held back by voters over 70, who are only half as likely as the wider electorate to support it.

The most successful of these political insurgencies can morph into their own big tents. The *En Marche!* movement that propelled Mr Macron to power in 2017 did so with roughly as many young as old voters. Five years later, having become part of *l'establishment* (and having pillaged the most recognisable talents from the Socialists and Republicans, France's old mainstream parties), Mr Macron has baby-boomers to thank for his success. Around 36% of French voters aged 60 or above backed him, nearly twice the rate of the under-25s. Given that turnout increases with age, it was this ballot bonanza which won him a clear first-round victory.

Why the generational divide? Young and old people think of politics differently. Pensioners are loth to ditch parties that helped secure the peace after a war they might remember, or decades of subsequent economic growth. But all that millennials and those in generation Z, from first-time voters to 30-somethings, have lived through are two economic crises since 2008, with covid-19 curfews to boot. The extreme left doesn't seem so threatening to those who do not remember the cold war. To older French voters Jean-Luc Mélenchon, a lefty firebrand, is alarmingly reminiscent of crusty French communists who showed fealty to all things Soviet. Younger ones merely like his plan to soak the rich.

Plenty of youngsters rightly feel that mainstream politicians mollycoddle senior citizens, who bought their homes before prices boomed, enjoy inflation-proof pensions and leave behind high public debts and an environmental mess. The class warfare of old has been replaced by a generational divide. The boomers have their political parties; later generations have theirs now too—radical new ones, increasingly. Conventional wisdom once held that youngsters, having sown their electoral seeds, would mature into big-tent voters as they aged. That seems ever more doubtful. The slide of the centrist electoral mastodons has continued for well over two decades now.

### Oldies but goodies

Sticking to a dominant duo of entrenched parties is no guarantee of moderation: look at America's Republicans. Nor is fragmentation a sure path to extremism. France ditched its two big tents in favour of more centrism, not less. In Belgium and the Netherlands, a dozen or so parties now sit in parliament. Elections are a mere starting gun for the building of arcane coalitions that can take months or even years. Parties on the fringes sometimes shore up governing coalitions, but thus far have not controlled them.

The fragmentation of politics prompted by the young has injected competition into the public sphere. Good. But the old parties that dominated European politics at least did a decent job of forcing extremists to fit their centrist mould or struggle for relevance. A new model is gaining ground. It will include a place for those whom older voters are currently keeping on the sidelines. ■



**Partygate**

## Waiting for Boris

The Conservative Party cannot move forward with its current leader. But it cannot face life without him

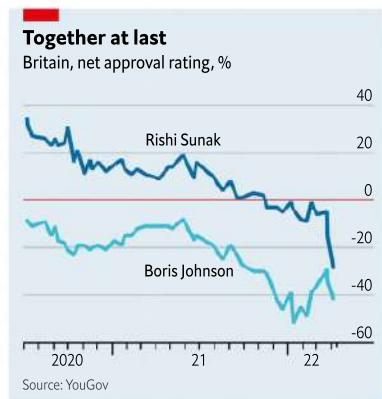
**N**OTHING HAPPENS, nobody comes, nobody goes, it's awful!" Estragon, a character in Samuel Beckett's play "Waiting for Godot", is not a Conservative MP. But he has the same view of the world.

On April 12th Boris Johnson was fined for attending an illegal birthday party in the summer of 2020, at a time when Britons were banned from seeing loved ones indoors. He thereby became the first prime minister to be found to have broken a law in office—a law introduced shortly before by his own government. Snap polls showed a majority of voters want him to step down. But, with the Conservative Party, excuses can always be found for inaction. The MPs who decide Mr Johnson's fate increasingly resemble characters in Beckett's play, in which action is frequently promised but usually delayed.

Some of their justifications for inaction are bureaucratic. At the start of the year, MPs promised to act against Mr Johnson, but only once an internal government report had been published. When the report by Sue Gray, a senior civil servant and ethics chief, appeared in an abridged form, the

trigger changed. MPs would move against their leader only if the police took action against him. Now that the police have played their part, the excuses have become procedural: parliament is in recess and the corridors of power are empty. Conservative WhatsApp chats are alive but indecisive.

Voters may jolt them. Local elections are due at the start of May. But even if vot-



→ Also in this section

48 Prisons in the wrong places

49 Bagehot: The mighty Martin Lewis

— Read more at: [Economist.com/Britain](https://Economist.com/Britain)

ers deliver a slap to the Conservative government, more excuses could be forthcoming. Few people vote in local elections, runs one ready-made line of defence for Mr Johnson. Those who do tend to be politically engaged, unlike the disgruntled working-class voters whom Mr Johnson managed to drag over to the Conservatives for the first time in 2019. Better to wait for a general election for a true test.

The war in Ukraine provides yet another excuse. The prime minister has handled the invasion with uncharacteristic skill. Moving against him now would seem simultaneously unserious and churlish. It may give succour to Vladimir Putin, MPs argue. That the same happened in the second world war, when Tory MPs forced Neville Chamberlain to resign, makes no odds to Conservative lawmakers who seem to prefer their Beckettian hell.

Hardly any MPs are happy. But Mr Johnson is all they have. To move against him is to move against a man who, in just a few months in 2019, took them from the worst result in their history in the European elections (9% of the vote) to their largest majority in Parliament since Margaret Thatcher (and 44% of the vote). MPs cling to Mr Johnson like shipwreck survivors who continue to wear life jackets even after they are safe on land. Mr Johnson does not have a decent political operation, counsels one former cabinet minister. But nor do any of the alternatives. The likely option is more waiting.

Rishi Sunak, the chancellor of the ex- ➔

► chequer, was supposed to be the alternative. He is diligent, thoughtful and serious, especially compared with the prime minister—a family man next to a man of many families. When revelations of parties in Downing Street first emerged, Mr Sunak was slow to support the prime minister and quick to chide him. Mr Johnson “was right to apologise”, he said, primly. But now Mr Sunak too has been fined. His popularity was fading anyway as living standards fall (see chart). It may vanish entirely as Britons digest the fine and recent revelations that his wife, Akshata Murthy, is a “non-dom” for tax purposes.

Other potential successors have blundered to a lesser degree. Liz Truss proved to be an efficient and energetic trade secretary. As foreign secretary, she has been a Thatcher-like hawk, mixing photo-ops in tanks with an aggressive, now vindicated, position on Russia. Jeremy Hunt, the former foreign secretary, is highly regarded within the party. But both have doubters. Ms Truss splits opinion among those who have worked with her. Ten years ago Mr Hunt had a reputation as a slightly peculiar, if pleasant, cabinet minister. The fact that he has become the party’s wise elder suggests in part how few untarnished MPs it now contains.

#### Don’t just do something, sit there

While no one moves against Mr Johnson, little moves in government. In the 1980s the party launched an economic revolution that changed Britain for good. Those who wait for similarly sweeping legislation will do so for a long time. Trivial measures such as privatising Channel 4, a broadcaster, are advanced; bold ones such as changing planning laws are ditched.

Mr Johnson is accused of misleading Parliament. Such an offence is supposed to be a resigning matter. Little holds back the executive other than Parliament and a prime minister’s own sense of restraint. For all that successive governments have attempted to codify the constitution, the country still runs on the “good chap” theory. But the prime minister has never pretended to be a good chap. That the Conservative Party saw fit to place him in the job is an indictment of the party rather than him.

Those expecting Mr Johnson to resign will be disappointed. If he were the type of person to resign over attending an illegal party in a pandemic, he would not have attended an illegal party in a pandemic. If Conservative MPs want Mr Johnson gone, they will have to move against him. But if they wanted him gone, they had reason enough to move months ago. Instead, they appear doomed to copy Estragon and Vladimir at the end of Beckett’s play. “Well,” says Estragon. “Shall we go?” Vladimir replies: “Yes, let’s go.” The final words are a stage direction: *They do not move.* ■

#### Prisons

## Victorian values

#### Britons don’t want to open new prisons or close old ones

ON APRIL 7TH Harborough District Council in Leicestershire refused planning permission for a new prison that would have housed 1,700 inmates. Buckinghamshire County Council and Chorley in Lancashire have in the past few months voted down requests from the Ministry of Justice to build new prisons. It would seem as though Britons do not want prisons in their backyards. But things are not quite that simple.

Violent crime in England and Wales peaked in 1995 according to the British Crime Survey, the best guide to the true level of offending. But the adult prison population has risen. Some 80,000 people are inside today—a figure that is expected to rise to 98,500 by 2026 thanks to stiffer sentencing, a rise in the number of police officers and a push to clear the backlog in the courts that was caused partly by covid-19.

Many of the prisons in England and Wales are old and inadequate—the maintenance backlog is estimated to amount to £1bn (\$1.3bn). A recent inspection of Wandsworth, a Victorian edifice in London, described it as a “crumbling, overcrowded, vermin-infested prison”, with some areas inhabited by mice, rats and pigeons. The Ministry of Justice wants to build six new ones by the end of 2026, including a prison called Five Wells that opened earlier this year.

The easiest way to do that is to build on land the government already owns. Finding and getting planning consent on new

property is expensive and slow, says Julian Le Vay, a former finance director for the Prison Service. Former industrial sites are ideal—in 2017 a prison opened near Wrexham in north Wales on the site of a former tyre factory. The next best thing is property adjacent to existing prisons, since a place that already has a prison might be amenable to another one.

The proposed prisons in Leicestershire, Buckinghamshire and Lancashire are next to smaller existing ones. They were opposed anyway. (The Ministry of Justice will appeal against the Lancashire prison decision. It has not said if it will appeal against the others.) Locals argue that prisons increase car traffic and drain local government resources. In Buckinghamshire, planners cited the threat to butterflies.

But closing prisons is also unpopular, largely because so many local people work in them. A plan to shut the 19th-century Dartmoor Prison (pictured) has been dropped after objections, including from the local MP. In 2012 the government closed Wellingborough Prison, drawing criticism from the local MP, Peter Bone, who called the decision “disgraceful”. Five Wells prison opened on that site.

The tug-of-war over opening and closing prisons often omits a crucial question: what would be best for prisoners and society as a whole? A study published in 2016 in the *British Journal of Criminology* found that visits from parents made incarcerated men less likely to reoffend upon release. The Ministry of Justice itself found that prisoners who did not receive family visits were 39% more likely to reoffend. That suggests prisons ought to be built in or near large population centres. A prison might provide jobs for a struggling town; it may or may not disturb local butterflies. But if prisoners’ families cannot reach them easily, the prison population could well continue growing as people cycle in and out. ■



At least the views are good

## Bagehot | An expert runs out of road

*Martin Lewis has become one of the most powerful people in politics*



THE WEEKLY email from Money Saving Expert is a superb guide to Britain's collective mood. Usually, the missive from the consumer-finance website brings an incoherent mix of bargains into the inbox of its 7.5m subscribers. "£12 broadband, free wills...£4.50 dresses", ran one perky subject line.

But in recent weeks the messages have become darker. "Heat the human, not the home" was the headline above one section of advice on how to avoid freezing as energy prices soar. Martin Lewis, who has become one of Britain's most recognisable figures since starting the site in 2003, is now calling for government intervention to cope with annual energy bills that could soon hit £3,000 (\$3,900) per household. Without help, warns Mr Lewis, civil unrest is likely.

As the cost-of-living crisis intensifies, the usually apolitical Mr Lewis has a good claim to be the most influential man in British politics. The readership of Money Saving Expert rivals the collective reach of Britain's newspapers. "The Martin Lewis Money Show" on iTV is watched by up to 4m people per week. Mr Lewis estimates he is stopped on the street 30 or 40 times per day. Polls put him among the country's most popular figures. He is part national treasure, part firm parent: think David Attenborough, but with mortgage advice rather than gorillas.

Mr Lewis's fame might seem odd to people outside Britain. But then, British capitalism is odd. The country has gone further than others in opening services to the market. Elsewhere, state suppliers dominate the energy market. By contrast, Britons could until recently choose between dozens of firms. Switching mortgage providers every year or two would strike people in France or Belgium on 20-year fixed deals as insane. In Britain it is normal; those too lazy to do it end up paying higher prices.

It is a hassle, though. As the saying goes, the trouble with socialism was that it took too many evenings. The trouble with neoliberalism is that it involves too many evenings comparing prices. Mr Lewis emerged as a fair guide through the maze. It is a valuable service: he sold the business to Money Supermarket, a price-comparison website, for £87m in 2012 although he is still involved. Arms folded, his picture glares from the top of the homepage.

Money Saving Expert has played a subtle but significant role in

British politics. While austerity immiserated poorer Britons after the financial crisis, those in the middle were able to dodge the worst with a bit of financial wiliness. Mr Lewis's company helped Britons claim back £38bn in mis-sold payment protection insurance, keeping their bank balances positive. At the peak in 2012, compensation payments amounted to 0.3% of GDP. For years, Labour called on voters to be angrier than they were. But for most of them, things were all right. Why smash the system when one can work it instead?

That world is quickly vanishing. Many of the energy firms that Mr Lewis encouraged people to jump between have gone bust, taken down by a sharp rise in wholesale gas prices. With inflation forecast to hit double digits, changing broadband suppliers will not touch the sides. Bluntly, there is little Mr Lewis can do to help, as he admits. There are no more micro solutions to what is ultimately a macro problem.

Mr Lewis finds himself in an increasingly political position. He built his fame via a technocratic approach to the British economy—a kind of policy without politics. (Despite his popularity, Mr Lewis has ruled out an entry into politics proper, but he is keen on becoming a crossbench peer in the House of Lords.) It is easy to tell people which car insurance is cheapest. It is harder to say exactly how much the government should spend on ensuring people can heat their homes. But, now, Mr Lewis is clear: more.

Usually, celebrity interventions in politics can be dismissed as the wailing of well-paid luvvies. But they work well when the celebrity in question has experience of what they are talking about, says Luke Tryl from More In Common, a think-tank. Marcus Rashford, a Manchester United footballer, had success campaigning for wider access to free school meals because he grew up in poverty. Having spent two decades berating people for failing to pay off their credit-card balances, Mr Lewis has earned his chops.

His chivvying puts the Conservative government in an awkward spot. It has cut fuel duty and tried to help in other ways, but its measures are poorly targeted. A cap on household energy bills delayed rather than avoided pain for consumers. It acts more like a price beret—a little hat to put on top of a huge price rise, rather than an upper limit. Consumers face an extra £38bn in energy bills. Covering a significant chunk of that cost, as Mr Lewis suggests, would be an intervention to rival the furlough scheme during the pandemic.

### Penny wise, pound foolish

How the government responds to Mr Lewis's call will determine its fate at the next election. Living costs are the main problem facing Britain's politicians, although they do not always recognise it. Westminster suffers from collective attention-deficit disorder: there is always a non-dom wife or a sex-pest MP to snatch attention from long-term but more important crises. But Britons are anxious, and the full horror of rising prices is yet to be felt. Most of the old homeowners who so reliably vote Conservative are yet to receive a giant heating bill.

Mr Lewis personified a particular era of British capitalism. It featured a fight between consumers and capital, with the state playing little role. *Homo economicus* had to fend for himself, with Mr Lewis whispering tactics in his ear. Now things look so grim, only the government is big enough to help. Mr Lewis has changed his tune accordingly. Rather than chide the British public as usual, He is shouting at the British government. The Conservatives would do well to listen. ■



## Geopolitics

## Friends like these

BUENOS AIRES, DELHI, DUBAI, ISTANBUL, MEXICO CITY, NEW YORK, SAN FRANCISCO

## Why so much of the world, including big democracies, won't stand up to Russia

WHEN THE leaders of the world's two biggest democracies held a virtual meeting on April 11th, Narendra Modi, India's prime minister (no. 1) approvingly quoted President Joe Biden (no. 2) back to himself: "Democracies can deliver," Mr Modi declared. But when it came to the war in Ukraine, just what it was that democracies should be delivering went unspecified. Both men worried about the plight of Ukrainian civilians. Although Mr Biden left no doubt whom he blamed for their suffering, Mr Modi sounded less certain. Rather than point a finger at Russia, he called for "an independent inquiry" into the horrors reported from the Ukrainian town of Bucha.

India is perhaps the most inconvenient of the serial abstainers from the West's campaign to punish Vladimir Putin, Russia's president, for invading Ukraine. But it is far from alone. In Asia, the Middle East, Africa and Latin America, even longtime

allies and clients of America are rebuffing its entreaties to impose sanctions on Russia or merely to criticise it.

Few countries have been as brazen as Pakistan, which, under its since-ousted prime minister, Imran Khan, signed a trade deal with Russia shortly after the United Nations voted on March 2nd to deplore the invasion and demand that Russia withdraw. But many are refraining from either openly criticising or penalising Russia, owing to commercial incentives, ideological commitments, strategic ambitions or simple fear. Turkey, for example, has economic reasons to cling to the sidelines—it buys 45% of its gas from Russia—but it also has citizens endangered by the war. On March 13th Turkey's foreign minister announced he was negotiating with Russia to extract dozens of Turkish residents from the Ukrainian city of Mariupol, which was being crushed to rubble by Russian bombs. A month later, many remain trapped.

For its part, India has a number of reasons to avoid antagonising Russia: its tradition of neutrality in global conflict, its strategic priority of confronting China, its dependence on Russian military equipment. As an added incentive, democracy itself may argue for staying on the fence: "pulling the lion's tail" by refusing America or Britain plays well with the domestic audience. For all these reasons, when asked why India will not ally with America in this democratic cause, the mandarins who run its deep state and shape its foreign policy respond with looks of cynical scorn.

It is tricky to gauge the degree to which countries resisting Russia's isolation might undermine the sanctions regime organised by the West. But considered as a bloc, the 40 countries that opposed or abstained from the UN resolution condemning the invasion will probably matter more in terms of geopolitics than economics. Together they account for a quarter of the world's GDP and 20% of its exports. Yet they are not very important to the Russian economy. Their median GDP per person is about a third of the global average, suggesting they may not muster demand for much more than the quarter of Russian exports they already consume. And they lack the capacity to provide the more sophisticated goods and services Russia once bought from the West.

► On the surface, Russia has had several lonely weeks at the UN. The invasion struck so egregiously at the organisation's foundation—"the principle of the sovereign equality of all its Members," as the charter reads—that nations rallied to support not just the first resolution but a second criticising Russia for menacing civilians. The first passed with the support of 141 of the 193 member states, the second with that of 140. Last week the UN's members went beyond mere exhortation by kicking Russia off the Human Rights Council. It was only the second time any country had been ejected (after Libya in 2011) and the first time for a member of the Security Council. Russia, which had warned before the vote that even abstaining would be seen as an unfriendly act, announced afterwards that it was leaving the council. "You do not submit your resignation after you are fired," retorted the Ukrainian ambassador, Sergiy Kyslytsya.

But the margin on the vote was far narrower: 93 to 24, with 58 abstentions. Support for Ukraine in much of the world is thin, diplomats caution, as is the patience of abstainers, which could curdle into opposition. The pattern of abstentions speaks in part to concerns that sanctions on Russia are driving up food and energy prices. A European diplomat summarising their view says, "Two elephants are fighting, and the little guys get hurt." He continues, "There's a big attack from many sides on sanctions being the problem, not the aggressor in this war. That's something we have to push back on constantly, and it's coming from everywhere, including the Indias and Pakistans of the world."

A related objection is that the West is obsessing over a European conflict that is not a true global concern, while downplaying or ignoring conflicts and human-rights abuses elsewhere. To these critics, a self-righteous inconsistency on questions of international law is a hobgoblin of great powers. "There's a good deal of what you might call geopolitical whataboutism," says Richard Gowan of the International Crisis Group (icg), a think-tank.

In recent years, the reluctance of rich countries to invest in mitigating climate change and the slow and uneven distribution of covid-19 vaccines had already reinvigorated the Non-Aligned Movement, the organisation of states that professed neutrality during the cold war. "There's been an underlying trend that I've observed around the UN in the last couple of years, which is that a lot of the countries from the global south have been increasingly co-ordinated in articulating criticisms of the West," Mr Gowan says. These countries, he continues, "have been feeling more a sense of unity and common purpose than was the case in much of the post-cold war era."

Particularly across the Middle East, and

in Turkey, the West's concern for Ukraine's sovereignty is seen as self-serving and hypocritical, partly in light of America's war in Iraq and the NATO-led bombing of Libya in 2011, which toppled its dictator, Muammar Qaddafi. The warm European welcome granted to Ukrainian refugees, compared to that accorded Syrian refugees, prompts eye-rolling. These sorts of concerns are of long standing among Arab states. What has been surprising is the degree to which even American clients have felt free to act on them.

Some diplomats were stunned when Iraq's ambassador to the UN abstained from the resolution condemning the invasion, citing his country's "historical background", in an apparent jab at the American invasion to which he may owe his job. Even Saudi Arabia and the United Arab Emirates (UAE), despite having only weak ties to Russia, have assessed more cost than benefit in standing with the West. They do not want to antagonise a crucial partner that has co-operated with OPEC to prop up oil prices. Moreover, they see a chance to send a signal. They want more help from America dealing with problems in their backyard, such as the missiles and drones fired from Yemen and the Iranian-backed militias spreading mayhem from Beirut to Baghdad. "If you're not there for us, we won't be there for you," an Arab official says. In the Middle East, only Israel and Libya voted to boot Russia off the Human Rights Council; the abstentions by the Gulf states were a particular disappointment to Western diplomats.

Russian propaganda in the region feeds grievances against the West. Russia's state-run media, such as the Arabic service of the network RT or the Turkish edition of Sputnik, are popular, and its foreign ministry has a cadre of diplomats who, unlike their Western counterparts, speak Arabic fluently. "Every time I turn on the television,

there's a Russian making the case for the war," says a Western ambassador in Jordan. While the big Arabic channels, which have reporters on the ground in Ukraine, have not shied away from recounting the war's horrors, their coverage is often interspersed with pro-Russian or anti-Western takes. Last month Sky News Arabia, based in the UAE, ran a segment about how "duplicious" Western countries were trying to "demonise" Mr Putin.

#### The enemy of my frenemy

With the exception of Russian fellow travellers such as Cuba, Nicaragua and Venezuela, Latin American countries supported the first two UN resolutions condemning Russia for the war. But several, including Brazil and Mexico, balked at kicking Russia off the Human Rights Council, and there is little appetite in the region for joining the sanctions regime. Signalling independence from the West is an old game in Latin America, where some states seek to balance American power in the Western hemisphere "by laying out the red carpet for us adversaries", as Benjamin Gedan of the Wilson Centre, a think-tank, puts it. In early February Argentina's president, Alberto Fernández, endorsed this strategy when he sat down for lunch in Moscow with Mr Putin as Russian forces massed to invade Ukraine. Referring to the International Monetary Fund, Mr Fernandez told him, "I am determined that Argentina has to stop being so dependent on the Fund and the United States, it has to open the way to other countries, and Russia has a very important place there."

Since the invasion, Russia has been at pains to encourage that attitude. In late March Sergei Lavrov, the foreign minister, remarked that certain countries "would never accept the global village under the command of the American sheriff". Citing Argentina, Brazil and Mexico among oth-



Flying Russia's flag in the Central African Republic

ers, he added, "These countries do not want to be in a position where Uncle Sam orders them to do something and they say, 'Yes, sir.'" On April 5th Russia added Argentina to its list of 52 "friendly countries" with whom it will restart direct flights. Still, Argentina, the current president of the Human Rights Council, voted to remove Russia.

Brazil's strongman president, Jair Bolsonaro, has made no secret of admiring Mr Putin and his "masculine qualities". Mr Bolsonaro also happened to pay a visit to Moscow in February, and hailed the two countries' relationship as a "more-than-perfect marriage". It is a marriage fertilised, apparently, by fertiliser. Though Brazil joined in condemning the invasion, Mr Bolsonaro has since said he cannot cut ties with Russia because of the "sacred" importance to Brazil of imported fertiliser, more than a fifth of which comes from Russia. Mr Bolsonaro now says Brazil will remain neutral in the conflict, a position in harmony with his political opponents and, polling suggests, the public. Similarly, Mexico, despite having condemned the invasion, has a long-held policy of non-intervention and a habit of shrugging off events far beyond its borders. It doesn't help that President Andrés Manuel López Obrador shows little concern for democracy. He is also playing to his leftist party, elements of which set up a friendship group with Russia following the invasion.

It is in Africa that Russia has found the most outright sympathy. Almost half of African countries—25 of 54—abstained or stayed away from the first UN vote. The history of colonialism makes some reluctant to throw support behind what is seen as a Western cause. But others are acting out of growing affinity with Russia. That is true of South Africa, the other big democracy to shrug off the West's call for unity. It has abstained in all the UN votes.

In southern Africa many countries see Russia as the successor of the Soviet Union, which armed and trained the guerrilla armies that fought colonial powers and segregationist regimes. Such nostalgia partly explains South Africa's swerve towards Russia during the presidency of Jacob Zuma, from 2009 to 2018. But South Africa's relationship with the West was also strained by the bombing of Libya. In 2015 leading figures in the African National Congress published a foreign-policy paper lamenting the collapse of the Soviet Union because it had "altered completely the balance of forces in favour of imperialism", meaning America and the West.

#### Arms across the sea

Mr Zuma's departure from office—he is now on trial for corruption—has not cooled the ANC's ardour for Russia. President Cyril Ramaphosa mouths Kremlin talking points, arguing that NATO is responsible for the conflict because of its eastward expansion. He has also criticised Western sanctions on Russia. One reason may be pecuniary. Although overall trade between the countries is puny, Russia is South Africa's second-largest market for apples and pears and its fourth largest for citrus fruit. Even as Russian-flagged ships were being turned away from European and American ports, the *Vasily Golovnin*, a freighter, docked in Cape Town on April 4th. South Africa is also reportedly pursuing a \$2bn-a-year deal to buy gas from Gazprom, a Russian state-owned energy firm.

In other parts of Africa, support for Russia reflects its success in spreading influence by selling weapons or supplying mercenaries. Russian guns-for-hire have been seen in five of the 17 African countries that abstained on the first UN vote: the Central African Republic, Madagascar, Mali, Mozambique and Sudan. Many more of the abstentions or no-shows are buyers of Rus-

sian arms. These include Algeria, Angola, Sudan and Uganda, according to data collected by the Stockholm International Peace Research Institute, a think-tank. Eritrea, a gulag state, was among the five countries in the world that voted with Russia on March 2nd.

As the conflict grinds on, the West will increasingly confront the question of how aggressively to use its own leverage to prod fence-sitters onto their feet. Some countries might be encouraged to see an opportunity to repair relations with the West. That could be the case with Pakistan, particularly now that Mr Khan has been ousted in a no-confidence vote. Trade with Russia is meaningless to Pakistan, and its armed forces, which tend to call the shots, are showing signs of discomfort with its deep and growing dependence on China.

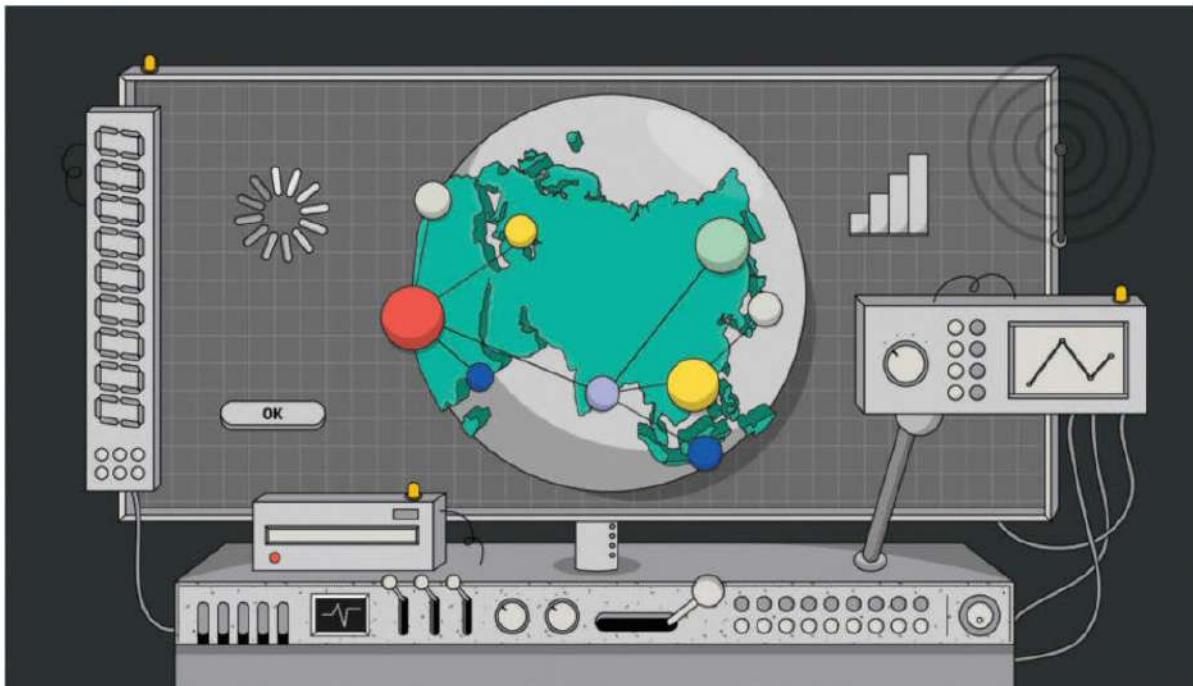
General Qamar Bajwa, the commander-in-chief, has lately sounded surprisingly conciliatory to the West. In a speech on April 2nd he nudged China to fix its border troubles with India, and then said that Russia's "aggression" against Ukraine could not be condoned and "must be stopped immediately". He also noted the war showed how a smaller country could defend itself by having stronger morale and making clever use of simple technology—an allusion to Pakistan's struggle with India, its larger neighbour.

The West has even greater leverage with India. All told, Russia, with a GDP just over half of India's, accounts for barely 1% of India's trade. Trade with the West is of vastly greater importance, as are India's ties to America via people-to-people exchanges. Under a law authorising sanctions against countries making "significant transactions" with Russia, America placed sanctions on China in 2018 and Turkey in 2020 for buying the S-400 missile defence system. India has bought the same system, but the Biden administration has so far danced away from the question of whether it will apply the same standard. "We have not yet made a determination," Antony Blinken, the secretary of state, said when asked about such sanctions at a press conference after the meeting between American and Indian officials on April 11th. Meanwhile, India is not merely refraining from criticising Russia but increasing its purchases of Russian oil.

Mr Biden's strategy is clearly to woo India rather than pressure it, an approach that has appeared so far to bear little fruit. Pressed in the same exchange with journalists as to why India was not moving to reduce any dependence on Russia, Subrahmanyam Jaishankar, the minister of external affairs, sarcastically thanked reporters for their "advice and suggestions" and then shot back, "Believe me, we have a decent sense of what is in our interest and know how to protect it and advance it." ■



Nothing says friendship like a Russian grenade launcher



### The geography of innovation

## A new atlas

BENGALURU AND SINGAPORE

**Startup hubs are mushrooming around the world. For real this time**

**T**AKE AN EVENING walk on 17th Cross Road in Bengaluru's HSR Layout district, and you bump into tech types stepping out of their startup's office and into one of the local microbreweries. They might work for Udaan (e-commerce), Vendantu (education technology) or another of the growing herd of private startups valued at \$1bn, whose proliferation in the area has prompted locals to dub it "Unicorn Street". That name might be outdated, says Mohit Yadav, co-founder Bolt.Earth, a unicorn wannabe housed in the MyGate building. "Unicorn neighbourhood" would be more apt, he chuckles.

HSR Layout was not always the startup hub of Bengaluru, itself the startup capital of India. Five years ago Koramangala, a few kilometres to the north, was the place to be—until rising office prices pushed out new startups. The fact that young firms are beginning to eye an ever-wider region to set up shop hints that Bengaluru is maturing as a venue for ambitious technologists. The city is home to 26 unicorns, and last year attracted \$13bn in venture capital (vc).

For decades Silicon Valley's position as

the birthplace of high-growth technology companies was unassailable. The small patch of land has given the world, among others, Hewlett-Packard (founded in Palo Alto in 1939), Intel (Mountain View, 1968), Apple (Los Altos, 1976), Google (Menlo Park, 1998) and Uber (San Francisco, 2009). Mark Zuckerberg moved in only four months after founding Facebook in Cambridge, Massachusetts, in 2004. As recently as 1999 the valley attracted a third of global vc investment. In 2011, 20 of the world's 27 unicorns had their headquarters in America, according to CB Insights, a data provider. Only four other countries boasted even one.

#### → Also in this section

**56 Sanctioning Russia: What next?**

**56 Boycotting brazen brands**

**57 Bartleby: How to sign an email**

**58 Hybrid dealmaking**

**59 Schumpeter: Opaque Shein**

San Francisco is home to 136 unicorns (see chart on next page), with 220 in the Valley as a whole, more than any other place in the world. But as Bengaluru shows, such clustering is no longer confined to a strip of land in California. Unicorns can be found in 45 countries. Over 1,000 trot the globe; nearly half are outside America. The share of all vc flowing into American startups has declined from 84% two decades ago to less than half.

The diffusion of capital reflects huge growth in tech in recent years that lifted many boats. But it will endure beyond the ups and downs of the investment cycle. Even as tech valuations slid during the fourth quarter of 2021 and first quarter of 2022, the share of funds flowing to firms outside Silicon Valley and America has remained high at 82% and 51%, respectively.

Of the places that have burst onto the startup scene, some are mature, such as Beijing, London or Tel Aviv, and often global in their ambition. Others, including Bengaluru, Singapore or São Paulo, are in earlier stages of hub-dom. All enjoy a broad pool of technical talent, deep links to other parts of the world and local risk capital. Together, they are redrawing the map of global innovation—creating one that is more dispersed, diverse and competitive.

Many of the new clusters look different from Silicon Valley—although some share its pleasant climate. They also differ from each other. The more mature hubs tend to spawn more "deep tech" firms working in complex areas like artificial intelligence ➤

► and other sophisticated software aimed chiefly at corporate customers rather than consumers. But whereas Israeli and British startups often look across their borders, Beijing's are focused almost entirely on the domestic market.

Younger innovation hubs, including Bengaluru, São Paulo and Singapore, look a bit more alike in that their focus is regional rather than global. Instead of breaking new ground they often adapt existing business models to local market conditions. As disposable incomes rise in new regions, consumers become willing to pay for similar "technification of services", says Peng Ong of Monk's Hill Ventures, a Singaporean vc firm. Anand Daniel of Accel, a Silicon Valley vc firm, calls this the "x of y" playbook. And so Flipkart (e-commerce) is the Amazon of India; Nubank (fintech) is the Revolut of Brazil; Grab (ride-hailing) is the Uber of South-East Asia. This helps explain why 70% of South-East Asian unicorns and 80% of Latin American ones are either in fintech or consumer internet (see chart on next page). Still, hyper-localisation means each hub is distinct.

The boom in tech clusters has been fuelled by several structural developments. The worldwide spread of high-speed internet and smartphones has allowed startups to serve customers just about everywhere from just about anywhere. "Rapid technology adoption has made the market so much deeper," says Abheek Anand of Sequoia India, the Indian arm of a Silicon Valley vc stalwart. Cloud computing and freely available developer tools have made starting a firm much easier. At the same time, as growth rates in mature markets have slowed and competition for investments has risen, venture capitalists are looking elsewhere for their next big bet.

The pandemic appetite for all things digital has fuelled these trends. Some 60m South-East Asians, nearly a tenth of the region's population, became new netizens in

the past two years alone, according to Bain, a consultancy. The number of companies in India and South-East Asia generating \$100m of annual revenue has jumped by an order of magnitude in recent years, observes Mr Anand.

If the democratisation of technology and global vc were the whole story, however, startups would be springing up everywhere. They aren't. *The Economist* has looked at startup funding and valuation data for the ten countries with the most billion-dollar startups. We have found that nearly 40% of these unicorns herded in the country's top startup city. Between 2011 and 2021 the top city's share of national vc funding rose from less than 50% to nearly 70% for London, from 24% to 60% for Berlin and from 15% to 34% for Bengaluru.

#### Where to startup?

That suggests that clustering remains no less powerful a force than when Alfred Marshall coined the notion of "agglomeration economies" in the late 19th century. Once a city gains a foothold, additional activity is pulled in because of increasing returns to scale. It is easier to do business and recruit when suppliers and talent pools are nearby. Ideas flow more easily when employees from rival firms frequent the same pubs (or microbreweries). Even wide adoption of hybrid work is unlikely to change that; people will still want to meet in person and it is easier to do this when the persons are nearby.

A deep talent pool is the most obvious ingredient of a successful cluster. Famously, Silicon Valley benefits from proximity to brain trusts such as Stanford or the University of California, Berkeley. Tel Aviv has both universities and recruiters from the Israeli Intelligence Corps, which like elite universities enlists the best and brightest. Participation in such elite units is an immediate signal for a venture capitalist looking for a startup founder to back, or a

startup seeking to hire young technologists. Bengaluru has nearly 70 engineering colleges. More than 55% of Indians on LinkedIn, a professional social network, boast technical skills, such as those needed for programming. Only Germans are technically savvier; for Americans and Britons the share is around 42%. "Where else can you quickly hire a few thousand engineers?" marvels Shailesh Lakhani, a colleague of Mr Anand's at Sequoia India.

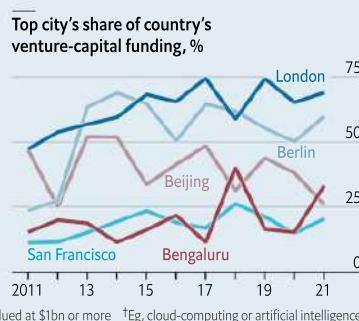
Talent alone is not enough, however. Tokyo had the brains to produce global tech giants such as Sony (in electronics) and, more recently, Rakuten (in e-commerce). Yet the Japanese capital has struggled to nurture a vibrant startup scene. One possible reason is the continued dominance of Japan Inc by *keiretsu* (conglomerates). Another is the country's insularity. In one survey from 2019 the country ranked 53rd in the world in English proficiency; less than 8% of Japanese speak it fluently. Foreigners tend to have a hard time gaining status in Tokyo's business circles. Outside venture capitalists have been shunned.

That hints at the second critical factor: openness to people and ideas. Migrants are a disproportionately enterprising bunch. Around 60% of America's most valuable tech companies were started by immigrants or their children. European hubs such as Berlin, London and Paris, each of which is home to ten or more unicorns, have large immigrant populations. China lacks foreign founders but its startup hubs like Shanghai and Shenzhen draw plenty of "sea turtles", returnees who have studied or worked abroad.

It is hard to determine to what extent connectedness spurs startup activity, as opposed to the other way around. But the two go hand in hand, and almost certainly feed off each other. René Belderbos of Maastricht University has examined how often inventors in a city co-author patents with inventors abroad, and how this ➤



### What's your magic?



► changes over time. Unicorn-rich Bengaluru, San Francisco, Singapore and Tel Aviv all feature in the top ten of Mr Belderbos's ranking of cities based on the growth in such linkages. Unicorn-poor Tokyo has seen a decline in connections.

Bengaluru illustrates how talent and openness combine to create startup magic. The city's fondness for newfangled technology dates back to at least 1905, when the local maharajah diverted a nearby supply of hydropower to make it the first city in Asia with electric streetlamps. Four years later it built the Indian Institute of Science, a prestigious university that remains a magnet for clever Indians. Migrants make up more than half its population—a statistic India's tech grandese invariably cite when explaining the city's success.

It has also long been connected to the world. Texas Instruments, an American electronics-maker, chose Bengaluru for its first regional office in 1985. Infosys and Wipro, Indian information-technology (IT) giants based in Bengaluru since the 1980s, have served global software customers, making the city "the world's back office". When India's closed economy opened up in 1991, the city was the natural place for foreign companies and capital eyeing the country's vast market, says Nandan Nilekani, co-founder of Infosys. That in turn drew ambitious domestic upstarts seeking connections and cash.

Yet Bengaluru might not be where it is were it not for a third ingredient: the presence of local risk capital. For an enterprise to thrive, it needs backers who understand the ecosystem and are willing to feed it. This can be founders and employees of earlier startups, who become angel investors for the next generation, notes Rana Yared of Balderton Capital, a vc firm. Former employees of Flipkart, which Walmart bought in 2018, have gone on to found 225 startups, including five unicorns, according to Tracxn, a data provider. Those from Grab, Lazada and Sea Group, a trio of Singaporean tech darlings, have founded or run more than 1,000 firms.

A local capital base also encourages another important type of risk-taking. Employees must be able to leave existing firms and join or start competitors. AnnaLee Saxenian of Berkeley has argued that Boston's Route 128, also near to top-notch universities, was outcompeted by Silicon Valley in the 1980s because it lacked this free flow of people between firms, perhaps in part because of stricter enforcement of non-compete agreements than in California.

In some cases, the state can provide early backing. Besides having a long bench of angels that stretches back at least to Bill Hewlett and David Packard, Silicon Valley enjoyed its share of government contracts in its formative post-war years, particularly from the Defence Department. Fairchild Semiconductor, whose employees included the future founders of Intel, Sequoia Capital and Kleiner Perkins, depended on government procurement for much of its early growth. Bengaluru, home to military-research outfits, and Tel Aviv also have strong links to their countries' armed forces, which can act as buyers of first resort.

Some governments support startups with capital rather than contracts. Take Singapore, which has more unicorns per

person than anywhere bar Israel. Edwin Chow of Enterprise Singapore, a government agency in charge of the city-state's startup policy, puts this down to schemes aimed at attracting investors and founders. For instance, a big programme from 2009, modelled after a similar one in Israel, matched every \$1 from investors with nearly \$6 from the public purse. At least 15 funds qualified for the scheme, which allowed the investors to buy out the government's stake at its original face value, adds Mr Ong of Monk's Hill.

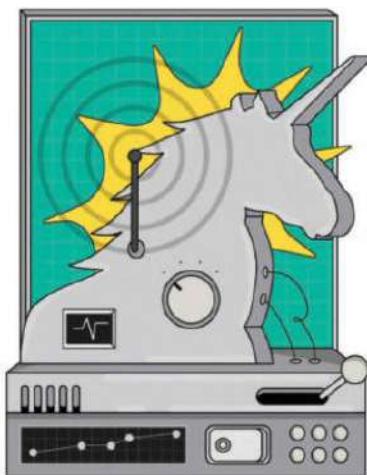
How much credit such top-down policies deserve is hotly debated. Attempts to will clusters into existence have mostly founded. In 1999 Germany poured €1.5bn (\$1.6bn) into a Bavarian cluster initiative. France funnelled a similar amount to its *pôles de compétitivité* in 2005. Malaysia's BioValley complex, launched the same year at a cost of \$150m, was soon derided as "Valley of the BioGhosts". A Canadian experiment in supporting startups failed because it was so well-funded that private investors stayed on the sidelines. In 2009 Josh Lerner of Harvard Business School concluded that "for each effective government intervention, there have been dozens, even hundreds, of failures, where substantial public expenditures bore no fruit".

### There be unicorns

Most investors and even some policymakers agree that Singapore's success has more to do with its entrepot status, pro-business laws and political stability. That said, Justin Hall of Golden Gate Ventures, a Singaporean vc firm, reckons that the leg-up from the state may have accelerated Singapore's ascent by a few years.

The importance of talent, openness and risk capital will persist. But the clusters that thrive thanks to a combination of the three will continue to evolve. As the younger clusters mature, the "x of y" playbook will gradually give way to more advanced tech, as is happening in China. They will also become more globally minded. Already about 30% of India's current herd of 60-odd unicorns primarily target international markets, says Dev Khare of Lightspeed India Partners, one more vc firm.

And new cities may join the ranks of tech hubs. Lagos, Nigeria's commercial capital, already looks poised to become the dominant player in the African fintech scene. In March Nigerian startups were better represented than those of any other country except two at y Combinator, a famed Silicon Valley startup accelerator. Hot technologies such as the decentralised world of cryptocurrencies and so-called Web3 may seek out places with favourable regulations (or lack thereof). FTX, a cryptocurrency exchange valued at \$32bn, has just moved to Nassau, in the Bahamas. The weather is nice there, too. ■



**Russian sanctions**

## The ordnance in the arsenal

### What other weapons could the West wheel out?

PRESIDENT JOE BIDEN has promised to "ratchet up the pain" for Vladimir Putin over Russian atrocities in Ukraine. The EU vows wave after wave of "rolling sanctions". Momentum is growing in the West to fire the two big economic weapons that have so far been kept largely locked in the arsenal: an embargo on Russian oil and gas, and "secondary" sanctions, which would penalise people and entities from other countries that trade with Russia.

The European Commission is pushing hard for the EU to curb Russian energy imports, payments for which help fund Russia's armed forces. So far, however, the bloc has banned just coal, which makes up only around 5% of Russian hydrocarbon exports to the EU—and with a four-month phase-out. Big importers, including Germany and Italy, remain wary of an immediate ban on oil or gas. Hungary, whose support is needed because of the EU's unanimity principle, is more strongly opposed, and has called the issue a "red line".

However, pressure is growing on the foot-draggers to accept some sort of blockade. A former adviser to Mr Putin has said a full oil-and-gas embargo could end the war. Ukraine's president has stepped up criticism of Germany for its coyness. Paul Krugman, an economist and commentator, has contrasted Germany's reluctance to accept sharp economic pain with its insistence that Greece and other countries do just that in the euro-zone crisis of 2009-12. An energy embargo was not formally discussed at a meeting of EU foreign ministers on April 11th. But several ideas short of an outright ban are percolating.

One is to impose tariffs on Russian hydrocarbons. Another, emanating from America, is to take a page out of the Iran playbook. When several allies complained that sanctions against the Islamic Republic a decade ago would leave them short of oil, America developed a workaround. Other countries could continue to buy Iranian oil if they pledged to reduce reliance on it over time. The payments went into escrow accounts. Iran agreed to this arrangement in part because it was permitted to use a chunk of the parked money for non-sensitive goods like consumables. "It functioned like pocket money," says Adam M. Smith of Gibson Dunn, a law firm.

Russia would almost certainly reject such an arrangement. But Mr Smith thinks it could be tempted by sweeteners. One

might be to allow it to use some of the cash in escrow to buy high-tech items that have been hit with Western export controls.

Support for secondary sanctions is strongest in America's Congress. Its lawmakers are keen to "get back on the game" after leaving sanctions policy mostly to Mr Biden so far, says another sanctions lawyer. More than a dozen sanctions-related bills are circulating on Capitol Hill. Several could become law in the weeks after Congress returns from Easter recess. But when America imposed secondary sanctions on Iran, they were controversial: Europe even created a legal mechanism to try to neutralise them (which failed). With the outrage over Russian war crimes as strong in Brussels as in Washington, however, this time is different.

Such sanctions could be imposed in one of two ways, says Mr Smith: explicitly, through official measures, or implicitly, by leaning on other countries. American officials are understood to have raised the issue on a recent visit to India. "The threat could be sanctions, or curbs on correspondent banking, or increased red tape such as enhanced checks on investment and trade," reckons Mr Smith. "Iran is still fresh in minds. When America says to other countries, 'Be careful', they know what it is talking about."

The big question with secondary sanctions is how China would react. It has circumvented Western sanctions on Iran and North Korea by trading with them through small Chinese banks with no connections to Western financial centres—and which are thus less exposed to sanctions. Whether it could do the same with Russia's much larger, more globally connected economy is unclear. The stakes would be a lot higher, for both China and the West. ■



Heat from the streets

**The Russia remainers**

## Reputation v revenue

BERLIN

### Companies are fearful of calls for consumer boycotts

ANDRIJ MELNYK, the Ukrainian ambassador in Berlin, did not hold back. Mocking Ritter Sport's advertising slogan, he tweeted on March 29th "*Quadratisch, Praktisch, Blut*" (square, practical, blood), replacing *gut* (good) in the firm's slogan. A couple of days later Dmytro Kuleba, Ukraine's foreign minister, called for a boycott of the maker of chocolate snacks tweeting: "Ritter Sport refuses to pull out of Russia citing possible 'serious effects' for the company. However, remaining in Russia brings worse effects, such as a fatal damage to reputation."

Companies often comply with at least some of these type of demands for reasons unrelated to the immediate impact on the bottom line. "Calls for boycotts usually have very little impact on sales, but the media spotlight can do much harm to the brand equity," says Brayden King at Northwestern University in Illinois. The more media coverage a company gets the bigger the potential future damage.

Ritter Sport, a family-owned firm that is over 100 years old, is taking the risk. It tried to explain its decision to continue doing business in Russia, its second-biggest market after Germany, accounting for around 10% of sales. If it stopped deliveries in the country, many of its suppliers, cocoa farmers in west Africa and Latin America, would lose out. "We are not an international conglomerate that can simply stop some business activity here to shift to another over there," says the firm. But it promised to cease advertising and investing in Russia and donate all profits from sales there to charity.

This is not enough for activists, who continue to call for a boycott, spreading the word through social media. They tend to go after firms with a good reputation such as Ritter Sport because their criticisms are likely to be more damaging and hence more effective. Recent efforts to burnish its image include promises to become carbon neutral by 2025, and using only sustainably-grown cocoa from decently paid farmers. "Ritter Sport is a high-involvement product," says Colin Fernando of BrandTrust, a marketing consultancy, which means that it is supposed to represent its customers' self-image. Continued involvement in Russia may leave a nasty taste in the mouth.

Campaigners will take heart that they have forced Nestlé, a Swiss giant, to change ►

its ways both in the past and recently over doing business in Russia. The world's largest foodmaker stopped pushy marketing of its baby formula in poor countries several decades ago after a campaign by American activists, who argued Nestlé discouraged breastfeeding, spread around the world. And after initially refusing to pull out of Russia Nestlé relented at the end of March, joining over 450 firms that have left or suspended operations there, depriving Russians of KitKat chocolate bars and Nesquik, a chocolate-drink powder. Nestlé will still provide essentials, such as food for babies

and hospitals, but donate the profits to humanitarian organisations.

The success of a boycott depends on how you measure it, says Eric Wohlgemuth, chief executive of Future 500, a consultancy. It can alert bosses to their missteps, such as with Nestlé. Nike also fell foul of activists over its alleged use of child labour to make its sportswear, encouraging it to take more care over the farther reaches of its supply chain. And sometimes it can have a meaningful financial impact. Shell, an Anglo-Dutch oil giant, which has previously been the target of protests over drill-

ing in the Arctic, faced calls in February for a boycott over its purchases of cheap Russian crude oil. On March 8th Shell announced its intention to make a gradual retreat from Russia at a cost of up to \$5bn in write-downs and other losses.

There is a chance that this will blow over for Ritter Sport, with only a minor dent to its do-gooding reputation. But it is on probation, warns Mr Fernando. Another public upset could cost it more dearly. The former darling of Germany's Mittelstand will monitor Ukrainian foreign-office Twitter accounts closely. ■

## Bartleby How to sign off an email

### *Epistolary etiquette for the 21st century*

**R**EGARDS". "BEST WISHES". "Warmly". "Cheers". "Take care". The words at the end of a professional email may seem banal. Still, the sign-off matters. Even the ubiquitous "Sent from my iPhone" can act as a justification for brevity and typos or as a virtue-signal that the sender has taken the time to reply although clearly not at their desk. It is therefore worth considering how your missive's ending will be perceived on the other end, not least because it is likely to be archived away in perpetuity.

The appropriate sign-off depends on your position in the corporate pecking order, your relation to the recipient and the nature of exchange. Your columnist, a guest Bartleby, has a few general tips.

First, go easy on informality. Use proper grammar and spelling. It is hard to imagine that you could do a lot with the seconds saved with a "see ya" or "thx" instead of writing the words out in full. Bartleby herself often hides in the intersection of the busyness of life and artificial intelligence. "Got it!" Gmail's predictive algorithm suggests, and your columnist often clicks on the box. This is maybe lazy but also efficient. It removes the need for a greeting (part of whose job is done instead by the affectionate exclamation mark). Resort to this tactic if truly in a hurry or too melancholic to engage with the world.

Spelling things out also helps avoid confusion. A senior editor at *The Economist* signs as "X"—because his first name starts with that letter, not because he is overly fond of osculation (he uses "XX" for his close friends; his surname does not start with X). Especially when emailing someone for the first time, it is essential not only to include your full name and last name but to avoid folksy terms such as "Ciao" and "Be well".

Bartleby's heart sinks every time she sees a sign-off trying to exude a chilled vibe. They ooze neediness. Affectionate terms such as "toodles" or "lots of love" do not enhance proximity to the recipient unless the closeness is already there. "Smiles" is unspeakable. "High five from down low", which one publicist used in an email exchange, is worse.

Avoid being prescriptive. "Have a nice day", "Happy Monday" or "Take it easy" emphatically do not promote relaxation. "Stay safe", popular amid lockdowns, evokes sex-education manuals. "Eagerly waiting for a response" will invariably delay the response's dispatch. "Check out my latest book", especially with Amazon links, is uncouth. "Follow me on Twitter" lacks graciousness.

Next, be consistent. "Yours truly" was a common way to conclude a business letter in the 19th century. But in that era correspondence was layered with nuance. "Yours faithfully" could be preceded only by "Dear Sir" (or, on rare occasions in commerce, "Dear Madam"). If the recipient was named ("Dear Mr So and So") then

the book-end was "Yours sincerely". Today writers fasten the formal to the informal. If your subject line is "Now in paperback" don't overcompensate by personalising your sign-off. If you send out a press release on emissions cuts, do not end your note with "Hugs".

Do not cry out for attention. Latin began to die out in the sixth century and was later abandoned for the vernacular. So resist including dictums in a dead language ("nil posse creari de nilo" as a default salutation is a bit outré). One of Bartleby's venture-capitalist correspondents signs off with Bertrand Russell's observation that "The trouble with the world is that the stupid are cocksure and the intelligent full of doubt"—which sounds, well, cocksure.

Lengthy automatic salutations can be tiresome ("I'm using Inbox When Ready to protect my focus" is simply too much information). If you want to cut a thread short, consider "Thank you in advance". Yes, it may strike some as presumptuous. But it has the virtue of saving you from a follow-up email.

Some elements of the corporate sign-off are beyond your control. It may include the company's logo or disclaimers mandated by company policy ("Please consider the environment before printing this email"). But the function of sign-offs is to sign off. Technology may have disrupted the epistolary form, but as with all last words, much still depends on the echo they leave in your mind.

Thank you for your consideration.  
Talk soon.

This column may contain confidential material. If you are not an intended recipient, please notify the sender and delete all copies. It may also contain personal views which are not the views of The Economist Group.



## Hybrid dealmaking

## Screening transactions

## The unforeseen advantages of virtual negotiations

IT WAS ONCE thought that investment bankers, like sharks, needed to keep on the move to survive. Then pandemic lockdowns put paid to their perpetual motion between headquarters, airports and meetings. Greasing the wheels of mergers and acquisitions (M&A) took a backseat to corporate concerns about survival. Deals were scrapped or put on hold and bankers focused on clients that they knew already. Virtual dealmaking became the norm. As in-person interaction returns, will the new ways of working persist?

Video conferencing has led to unexpected benefits for companies and their investment bankers. When travel restrictions grounded Wall Street's jet-setters, negotiating multi-billion-dollar deals on Zoom made firms more productive and cheaper to run. Bankers swapped business-class lounges for virtual calls from their designer kitchens. Suddenly, with more free time, they could contact twice as many potential bidders for their clients, increasing the odds of a suitable match.

The hyper-efficiency has been welcomed. In an earnings call in 2020, executives at Citigroup remarked on the ease with which client visits that once required months of careful planning could be scheduled in days in the virtual environment. Moelis, a boutique firm, slashed its spending on travel from \$10m each quarter to a fraction of that amount. As restrictions are lifting, some in-person meetings have returned but the punishing travel sched-



ules have not. A recent poll by Deloitte, a consultancy, shows that more than half of companies and private-equity investors now expect to manage M&A in a predominantly virtual environment (see chart).

The pandemic also turbocharged the adoption of technology. Increased use of big data and analytics hastened the automation of grunt work normally delegated to junior bankers. Acquirers also got creative with due diligence. Virtual tours became commonplace for inspecting far-flung sites including mines, factories, ports and warehouses. Goldman Sachs among others flew drones over the facilities of companies to capture high-quality

photos or to produce slick videos. Lawyers and others used artificial intelligence to sift through thousands of company documents, spotting red flags in a fraction of the time it would take humans.

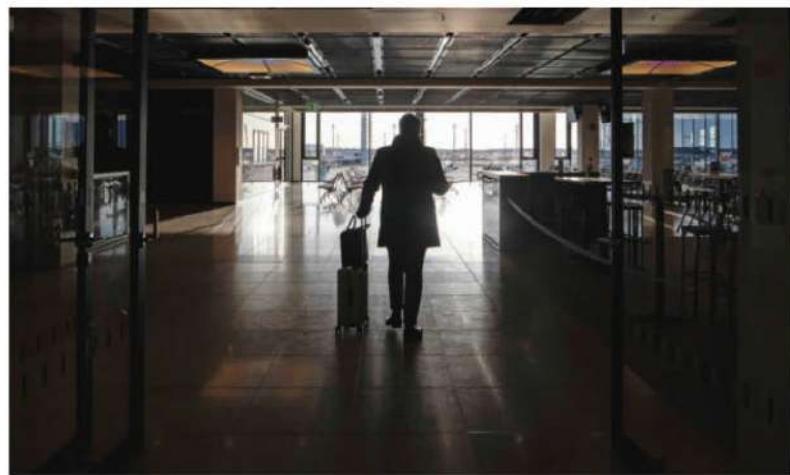
Cultural shifts borne out of the pandemic prompted even deeper soul-searching. As the corporate world embraced flexible working arrangements, many banks ushered in hybrid schedules—somewhat reluctantly—for their staff. Firms raised salaries, paid out bumper bonuses and more in an attempt to stop young, disgruntled staff from leaving the industry (see Finance and economics section). Jefferies bought them Peloton exercise bikes and Citi offered them jobs in Málaga, a Spanish coastal city, while JPMorgan Chase obliged them to take at least three weeks off a year. For those accustomed to the industry's hard-nosed culture, it was perplexing.

A frenzy in 2021 put this kinder, gentler model of dealmaking to the test. Private-equity buyouts and special-purpose acquisition companies drove the value of global M&A to a record \$5.9trn. Annual fees earned by dealmakers surged by nearly 50% to more than \$48bn in 2021, accounting for nearly a third of investment-banking income, up from a quarter in 2020, according to Refinitiv, a data firm.

The boom exposed the limits of virtual schmoozing. Even with drones carrying out critical due diligence, polling by Deloitte suggests that the inability to travel or meet management teams in person was more likely to trigger cancellations. Most respondents (78%) abandoned at least one deal in 2020 while nearly half (46%) quashed three or more. For young recruits, automation of arduous tasks did little to cure burnout. A survey of 13 analysts in 2021 at Goldman Sachs laid bare their gruelling working conditions: 95-hour weeks and an average of five hours of sleep a night meant mental health suffered.

Digitisation has raised thornier questions about dealmaking. A growing reliance on technology suggests that huge swathes of the M&A value chain can be automated. Meanwhile the availability of big data erodes the information advantage that banks once had. Can executives run the process without retaining expensive bankers? Apple acquired Beats in 2014 without the help of banks, as did Facebook when it bought WhatsApp the same year. Spotify and Slack both went public, in 2018 and 2019 respectively, without involving underwriters.

Few firms have the resources to manage the process internally and much of the investment-banking workload, at least in the senior ranks, is contingent on old-school relationship-building. But even as face-to-face meetings resume the digital transformation means the old days of M&A are not coming back. ■



You have to get up early to beat the stay-at-home dealmakers

## Schumpeter | The TikTok of frocks

*How much of a risk is Shein's Chinese opacity?*



**I**F YOU FANCY a look into the razzmatazz-filled future of e-commerce, type #Sheinhaul into TikTok, suspend your ethical scruples, and watch young influencers tear open boxes of garments, yell things like "My Shein order is here... holy shit!", and then pour hundreds of dollars-worth of cheap garments over their heads. It's hype, for sure, but not entirely frivolous. Shein, a Chinese online retailer, is the TikTok of the \$1.5trn apparel industry. It is one of two Chinese firms (ByteDance, TikTok's owner, is the other) to be privately valued at \$10bn or more. Like TikTok, it is an obsession of Gen z-ers in their teens to late 20s. And yet it is so opaque that even the American investment funds that back it, such as Tiger Global and General Atlantic, won't divulge a thing about it. Could it be that it wants to keep its Chinese heritage under wraps?

In America, where it faces an incumbent that is almost impregnable, Amazon, its success is extraordinary. In the first three months of 2022, it accounted for almost a third of fast-fashion sales in the country, more than stalwarts Hennes & Mauritz (17%) and Inditex's Zara (10%) combined, according to Earnest Research, a consultancy (Amazon does not break out its own apparel sales). Although Shein's sales growth slowed from triple digits to 35% year-on-year in the quarter, it still bucked the trend: fast-fashion sales excluding Shein (and Amazon) fell by 12%. Morgan Stanley, a bank, forecast in October that Shein could become the world's largest apparel retailer this year, with annual sales of \$20bn. Not bad for a company that came out of nowhere a decade ago. It publishes no financial data, so profitability is a secret. But a recent report said it is closing in on Amazon as America's second-most-popular shopping app, leapfrogging Shopify, a platform for individual brands, and Walmart, a retailing behemoth. For all the air of mystery, the company is worth examining not just as a harbinger of the future of fast fashion, but of online shopping in general.

What distinguishes it? In a nutshell, Shein (pronounced Shee-in) looks like a hybrid of two of the most successful forces in online retail—customer-obsessed Amazon and data-obsessed China. Like Amazon, it uses low prices to lure customers, and seeks to keep them constantly engaged—even compulsively so—while operating with ruthless efficiency. Yet it is China that provides the alchemy. Though it is not a big seller there, it has introduced the

speed and effervescence of Chinese e-commerce to the outside world in three ways: via an integrated supply chain; data-driven design; and a grasp of the social-media hype cycle. These are what mainly sets it apart from its Western competitors. Even Amazon, which looks dowdy by comparison, could learn a thing or two.

Start with the supply chain. Based in Guangzhou, Shein taps into thousands of suppliers that stitch and sew garments. Standard stuff in the world's factory. What makes it different is that it pays them on time, which foments trust, enabling it to commission small orders at low prices, bolstering the frequency with which it can launch new styles. Sheng Lu, of the University of Delaware, calculates that last year Shein offered 1.3m new styles in America, versus 35,000 at Zara and 25,000 at H&M. He says typically Shein's prices were 40-60% cheaper. That combination of limitless variety and skimpy prices is at the heart of its business model.

Second, the suppliers are harnessed together by Shein's own software, which provides them with constant updates, measured by algorithm, of what is hot or not. That enables them to adjust output constantly to suit the latest tastes, without amassing unwanted inventory. Shein's international data-gathering, from scouring social-media sites, is crucial. It doesn't obsess over what season it is or what's on the catwalk. Instead, writes Packy McCormick, a business blogger, "it's a mirror that reflects each country's current style back to it." Like TikTok, it doesn't seek to impose a cultural stereotype (least of all a Chinese one) on the markets where it sets foot. Surveys suggest few of its shoppers know—or even care—where it comes from.

Third, it is a master of what Allison Malmsten of Daxue Consulting, a China-focused market-research firm, calls "gamification"—another feature of e-commerce in China. She describes browsing Shein's app as like walking through a shop, not scrolling down an Amazon page. Discounts crop up at random, giving a sense of excitement. Micro-influencers, supported by small inducements, promote discounted products. She likens it to the way that Zara pioneered fast fashion on Western high streets in the 1990s, with short supply chains, high turnover and new designs. "Shein is the online version of that—on crack," she says.

For all its strengths, Shein generates a wide variety of questions—mostly because of its lack of transparency at a time when fast-fashion firms are under intense pressure to open up, particularly about their supply chains in China. There have been on-again, off-again rumours about an initial public offering. While Shein remains private, its commitment to sustainability, working conditions in its factories and sourcing of raw materials is relatively unknown. As a Chinese firm, its gathering of data, especially those of young shoppers, may arouse concern in the West. Its success itself poses a conundrum. Surveys suggest Gen z-ers are motivated to reduce their environmental footprint. And yet Shein's performance is an indication that bargain-basement prices exert as much pull as ever.

### Rags to riches

As for the future, much depends on how robust its growth-first, profits-later financial model is. One message from its jet-propelled ascent is that barriers to entry, even in countries dominated by Amazon, are not prohibitively high, provided you get the technologies right. That works both ways; Shein itself is not impervious to competition. But while people are paying fortunes just to dump its stuff on the floor, it can afford itself a smile of satisfaction—even if an overly shy one. ■



Tech in China

## Xi's incubator state

SHANGHAI

### China's plan to become the world's next centre of innovation

THINGS ARE looking bright for Zhuzhou. The city of 4m people in landlocked Hunan province has often caught the run-off of industrial business from the more populous provincial capital, Changsha, to its north. In the 1990s it became a regional hub for chemicals and metals production. But that caused horrible environmental destruction; more than 1,000 polluters were eventually shut down, with dire economic consequences. Zhuzhou's inland economy has remained behind that of coastal cities. Over the past decade its moderate growth has been typical of the mid-tier cities that dot China's interior.

Now, however, its officials talk as if it were a tech hub. Hundreds of artificial-intelligence (AI), robotics and data companies have sprung up in the past year. Local planning documents reflect the exuberance of a boomtown in the making, something Zhuzhou could only watch from afar in the 1990s as eastern ports became rich.

The documents refer to "great changes not seen in 100 years", a phrase that has

been used by Xi Jinping, China's president, to signify the start of a new era. He believes China is on the verge of a revolution in which dozens of cities will begin producing breakthroughs in robotics, cloud computing and automation. Zhuzhou's officials also believe they are poised to reap the rewards of Mr Xi's "common prosperity" campaign—a plan to redistribute wealth from richer regions to poorer ones, and from the dominant internet platforms to consumers and workers.

Mr Xi's strategy is best understood as a weighty bet that China is on track to be-

come the world's centre of innovation over the next decade. A shift towards home-grown tech is altering the geographical layout of China's manufacturing machine. New investment and migration are being rerouted from rich coastal hubs to inland cities such as Zhuzhou. A second feature is an unprecedented rise in the number of new tech companies. The government is nurturing thousands of groups, big and small, in the fields of data science, network security and robotics. Mr Xi and his advisers are also taking firmer control over markets. Their ability to direct capital flows is already evident in how private-equity groups invest in China.

This shift comes at a definitive moment. The narrative that America and the West are in decline, and that China is rising, appears frequently in state media. And yet China has not been more inward-looking since it was condemned internationally after the Tiananmen Square massacre in 1989. The business hub of Shanghai, a city of 25m people, has been locked down as Mr Xi seeks to eradicate covid-19. His support for Russia during the war in Ukraine has raised the potential for more sanctions on Chinese firms. These conditions seem only to strengthen his desire for self-reliance.

Mr Xi is building an incubator state: an economy that relies heavily on government nourishment to create productivity gains with domestic research and technology. In doing so he is also signalling a pre-►

#### → Also in this section

**63** How broad-based is inflation?

**63** Sri Lanka's trend-setting default

**64** Talent wars on Wall Street

**65** Buttonwood: The politics of crypto

**66** Free exchange: Guns v butter

► mature break with the technological convergence that has served China well since the 1980s, when foreign companies began setting up factories using advanced technologies. This tech was eventually transferred to local firms or reverse-engineered at little cost.

The payoff, argues Raymond Yeung of ANZ, a bank, was the realisation of productive efficiencies. One crucial feature of the convergence model was that it presented few risks. China needed only to continue liberalising, and foreign companies only to continue to bring in capital and high-tech gear, to reap the reward.

But the era of convergence is drawing to a close. China's total-factor productivity growth languished at just above 1% per year between 2010 and 2019. Tech transfers are now far more restricted by America. Mr Xi can surely imagine the sanctions devastating Russia being aimed at China. The response has been to end reliance on foreign tech and to refocus the growth model on what can be created at home.

#### High-stakes gamble

Rather like a venture-capital investor taking high-risk, high-reward bets, Mr Xi will shoulder more risk in this era. His plan requires the creation of big, globally competitive groups akin to Huawei, a telecommunications giant. "But they will have to develop lots of Huaweis," says Mr Yeung. If the investments do not produce returns, the plan will have saddled the economy with yet more debt, and too little growth.

Past Chinese leaders have focused their reforms in coastal cities, where manufactured goods could easily reach ports. Shenzhen, 700km south of Zhuzhou, became emblematic of China's rise as the factory of the world in the 1990s. Some of that business crept westwards to cities such as Chengdu and Chongqing. Mr Xi's time in power at first focused on boosting consumption, which also favoured the largest coastal cities. On his watch, Alibaba and Tencent, based in the eastern and southern entrepôts of Hangzhou and Shenzhen, respectively, rose to prominence as engines for consumption and were often hailed as such by Party officials.

This has changed rapidly over the past two years. Mr Xi is reorienting the economy back towards manufacturing. The move away from consumer-internet tech, or soft tech, was made clear in the 14th five-year plan published in 2021. It emphasised instead rapid development in hard tech, or areas such as AI, semiconductors, industrial software and big-data processing. The new industrial policy does not require easy access to ports.

The efforts could redraw China's economic map. An emphasis on manufacturing had pushed migrant workers not just to coastal towns but also to inland cities

where new factories could be built cheaply, says Chi Lo of BNP Paribas, a bank. The last great pulse of inland migration began in 2001, when China joined the WTO, and lasted until 2013, when Mr Xi came to power and consumption became the focus for growth. The past eight years witnessed a shift, with migration out of inland centres to cities in the east. Mr Lo believes China is near the start of another wave of inland migration that will power Mr Xi's new industrial revolution.

Migration is essential if the new tech firms are to be staffed. A review of company-registration data by *The Economist* shows that firms dealing in big data, AI, the internet of things, robotics, cloud computing and clean energy are setting up at an unprecedented pace in China's interior. Many of the new hubs are capitals of poor provinces. But many smaller cities, too, such as Zhuzhou, are also experiencing explosive growth in tech firms (see chart).

Hefei in Anhui province, one of China's poorer regions, is a city of about 9m. It has reinvented itself in recent years as a tech hub, with thousands of firms opening in a short period. In 2021 alone more than 2,500 companies claiming to develop basic AI software set up in the city, up from just 370 in 2020. Thousands more say they offer related services. The far northern rustbelt city of Shenyang welcomed more than 860 companies that say they are doing robotics

research over the past two years, up from a combined 170 in the four years before that. Some 4,400 groups claiming to be involved in the internet of things set up shop in the south-western city of Chengdu in 2021, four times the number in 2020.

The rapid growth in these cities is closely connected to local-government planning and the offer of generous tax and land incentives. Indeed the figures should also come as a warning to planners that the tech boom they have induced is leading to potentially wasteful investments. Take data-centre and cloud-computing businesses. The pandemic created great demand for consumer-internet firms and, in turn, data services. Local policies encouraged companies of all types to set them up, or at least try. Property developers needed only to convince local officials to sell them land and power cheaply in order to tap into the lucrative data-centre industry, says Edison Lee of Jefferies, an investment bank.

Guiyang, a large city in the poor south-western province of Guizhou, witnessed an explosion in data-centre-company registrations in 2020, many with no experience in the area. Some have even tried to move into cloud computing, which requires more technological input than data centres. The wave of innovation in AI, robotics and climate tech is carrying with it many wannabes that will drain government funds, not add to GDP.

Several investors have questioned where the talent needed to power this boom will come from. The government has announced academic programmes to train people up. But a shortfall seems clear. The rerouting of migrants does not take into account that their skills have not kept up with Mr Xi's industrial shift. Almost 70% of the labour force has not had one day of high-school instruction, notes Scott Rozelle of Stanford University.

The government needs more than a startup scene to make its plan work. And so it is nurturing a new cohort of champions. These are not the consumer-internet groups that dominated China's digital economy. Instead they are companies engaged in enterprise software, industrial digitisation, data security and state-owned cloud computing. Few investors in Silicon Valley will have heard of Baosight, Maxscend, Sangfor, Supcon or Youedata. Many are listed in Shanghai or Shenzhen, not New York and Hong Kong. They are a mix of state and private firms, but almost all are close to the government. And they are working to upgrade China's industrial infrastructure in order to usher in Mr Xi's new revolution.

Baosight is a state-owned industrial-software firm. It builds the enterprise-resource-planning software and manufacturing-execution systems that are integrating and digitising industrial plants across





► China. These systems aim to drive efficiency within the steel, pharmaceuticals and chemicals industries. Baosight recently completed work for a state steel group in what was considered the largest, most complex integration project of its kind. Its market capitalisation has risen three times over since 2018, to 62bn yuan (\$9.7bn).

Sangfor Technologies, a private network-security and data group based in Shenzhen, is helping the government build advanced big-data platforms. Supcon, also privately controlled, builds network ecosystems for state-owned firms.

A small but growing number of international investors has cottoned on to these companies. Their thinking could not be more different from the past generation of tech-watchers. Companies such as Alibaba attracted funding as investors bet that only the private sector could provide the dizzying array of online shopping and financial services that would in turn support hefty valuations for a few big platforms.

#### Soft tech, hard line

That thesis has been dealt a heavy blow. The government believes the consumer-internet craze widened inequality. Companies' market dominance allowed them to manipulate pricing while hoovering up unregulated personal data. Their clout also dwarfed the influence the Party had over the digital economy. These imbalances have been "rectified", as officials say, by sweeping regulatory crackdowns.

The state not only succeeded in knocking tech-market valuations by more than \$2trn in the span of about a year. It has pushed the giants into submission and decline. Many executives, such as Richard Liu of JD.com, have stepped down. Companies are laying off workers; few are pursuing capital-intensive acquisitions.

For the new champions to achieve scale, they will need to be globally competitive and gain market share in developed

economies. Huawei was on this road before it was knocked back by America. Mr Xi wants China to produce its own hard-tech companies in order to become more self-sufficient from the hostile West. But even if this new phalanx of state-backed tech companies is less reliant on foreign inputs than Huawei, it can still be barred from foreign markets, denying it the business needed to grow to sufficient size.

How China's new boom is funded has become a vexing question for venture capitalists eager to find the next Alibaba but wary of running afoul of government policy. Mr Xi is now six years into a reordering of capital and financial markets. China's 58trn-yuan shadow-banking market was first targeted in earnest in 2017. A three-year, \$450bn wave of speculative outbound investment, driven by flamboyant tycoons, was subdued the same year. Meanwhile property developers were cut off from the supply of credit that financed a 20-year frenzy.

In 2021 senior officials began referring to the enemy by name: a "disorderly expansion of capital" that has recklessly pursued high returns at the expense of the common good. Hundreds of officials and businessmen have been taken down in recent years on corruption charges but only recently have some been accused of being "influenced by capital". Zhou Jiangyong, a former Party secretary of Hangzhou, the prosperous eastern city that is home to Alibaba, is being investigated for such crimes. He has also been linked by local media to companies affiliated with Alibaba.

Mr Xi is already offering up a plan for an "orderly development of capital". He personally oversaw the launch of a new stock exchange in Beijing in 2021 that is focused on channelling investments to small tech groups. State funds are raising ever more cash and investing in private tech firms. The "little giants" programme, launched by the Ministry of Industry and Internet

Technology, is hand-picking thousands of firms that will be granted tax incentives and public funding. According to Bloomberg, China plans to spend some \$2.3trn this year on new projects, many of which will be focused on high-tech manufacturing and technology development.

Han Wenxiu, a leading economic adviser, recently said the crackdown on disorderly capital is not about turning it away. Instead it is about capital following the Party's lead. This is already starting to happen. Private-equity (PE) investments in consumer tech collapsed last year, for instance, while investments in microchips and software soared to new highs.

Today the tech investors eyeing companies such as Sangfor and Supcon rely on policy and the amount of state-linked business to assess whether they have promise. Analysts at investment banks often cite a company's inclusion in a large government project as a strong "buy" signal, and avoid anything that runs counter to the state's message. "Every time we look at a sector, investors are asking us if this area is going to be seen as promoting inequality," says Kiki Yang of Bain, a consultancy.

Many venture-capital (vc) firms in China are finding fewer constraints on their investments as long as they focus on the areas in the party's good graces—the hard-tech and clean-energy companies that are cropping up at rapid pace. vc investments in clean energy surged in 2021 to about \$8.7bn, up from \$5.6bn in 2020, according to PitchBook, a research firm. A growing number of private investors hopes to invest alongside state funds, or to find startups that have already taken state money, says one investor. A green light from the state is now a powerful market signal.

Many of the imbalances in the Chinese economy—the targets of Mr Xi's attacks—arose or worsened on his watch. The tech tycoons largely made their billions over the past decade. Mr Xi oversaw one of the largest accumulations of property-sector debt in the world. His administration relaxed controls that allowed for a wave of speculative overseas buying. Mr Xi's regulatory crackdown was in many ways an attempt to correct market distortions caused by his own policy failures.

Some experienced global investors worry the cycle of errors and corrections will repeat. Few have been able to swallow the talk of a "disorderly expansion of capital". Only through the introduction of market forces and foreign capital did China build an advanced, modern state. Its world-class tech scene has been nurtured by global vc and PE funds. For Mr Xi and his team of technocrats to turn their back on this, says one big investor, shows they have not learned from the past 40 years. That they believe they are ready to do the job of the market sends all the wrong signals. ■

## Consumer prices

## Pervasive problems

### Inflation in America is becoming more broad-based

**U**NHAPPY ECONOMIES are often unhappy in their own ways. Today most, however, are battling a common foe: a surge in consumer-price inflation. According to figures released on April 12th, consumer prices rose by 8.5% in March in America, compared with a year earlier—the fastest pace since 1981. In Britain and the euro area consumer prices rose by 7% and 7.5%, respectively, in the year to March. Across most rich and emerging economies, inflation is now well above central banks' targets.

In summer 2020, after a period of too-low inflation, America's Federal Reserve said that it would tolerate inflation that was a little above its 2% target for a time, in the hope of making up for undershoots. In the subsequent 20 months, consumer prices have blown past where they would have been had the Fed achieved its 2% target on average, putting pressure on the central bank to raise interest rates fast.

In many places a big chunk of current headline inflation reflects rises in energy prices, which soared after Russia's invasion of Ukraine jolted commodity markets. In March these explained about half of the euro area's annual inflation rate. In America, however, the pressure is

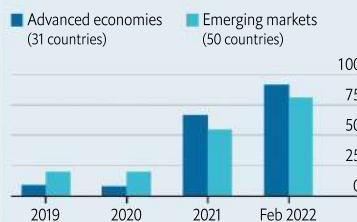
broad-based. "Core" consumer prices, which strip out food and energy prices, rose at an annual rate of 6.5% in March.

Core inflation is one way to assess the breadth of price surges. Another is to exclude the items for which prices have swung the most, typically owing to idiosyncratic factors. The Dallas Fed, for instance, constructs a "trimmed mean" measure, which sorts the components of the personal-consumption expenditures index (the Fed's preferred gauge of prices) by their inflation rates, and drops the bottom 24% and the top 31%. On that measure inflation has risen by 3.6%—still above the central bank's target, but by much less.

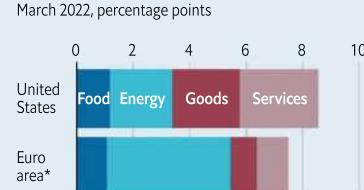
The problem with trimmed means, however, is that they involve abrupt cliffs, lopping off the top and bottom of the index while giving adjacent percentiles their full weight. In November *The Economist* devised an alternative index, which applies smooth weights. Components with inflation near the median get the most emphasis, and those with the most dramatic price changes get the least. Our measure suggests an inflation rate of close to 6%—hot enough to keep Jerome Powell, the Fed's chairman, sweating at night.

### Pressure gauges

#### Countries with inflation above target, %



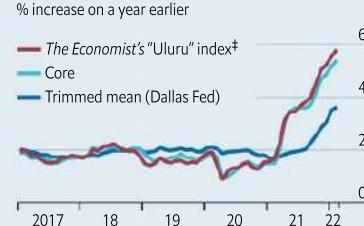
#### Contribution to annual inflation rate



#### United States, personal-consumption expenditures prices, January 2012=100



#### United States, measures of inflation



\*Advance estimate. Food includes tobacco

†Personal-consumption expenditures index

‡Index applying gradually lower weights to more extreme price moves

Sources: BEA; BLS; Eurostat; Federal Reserve; Haver Analytics; World Bank; *The Economist*

### Emerging economies

## Default settings

### Sri Lanka's sovereign default may be the first of many

THE ECONOMIC fallout from Russia's invasion of Ukraine now includes a sovereign default. On April 12th Sri Lanka said that it would suspend payments on the \$35bn its government owes foreign creditors. Surging food and energy prices, the result of wartime disruption to commodity markets, have dealt a heavy blow to an economy that was already mismanaged, and brought even erstwhile government supporters onto the streets in protest. Sri Lanka may not be the only country to run aground in the hazardous conditions prevailing in the global economy.

Rising inflation and higher interest rates are painful everywhere, but the stakes are particularly high in poor and middle-income countries. Food prices, which are up by nearly 20% this year, make up a greater share of consumer spending. Inflation is more likely to spiral out of control. And policymakers must also worry about capital flight and falling exchange rates when the Federal Reserve raises interest rates—as it will over the next year.

As investors have priced in such tightening, the yields on ten-year Treasuries have risen by 1.2 percentage points in the past six months. That is roughly the same increase as during the "taper tantrum" of 2013, when emerging markets suffered capital flight because of a hawkish Fed. There is no sign of a repeat retrenchment on that scale, in part because many middle-income countries now have stronger balance-sheets, and also because many emerging-market central banks have been raising interest rates to get ahead of the inflation problem. (Brazil's central bank has increased rates by nearly ten percentage points in little more than a year.) But investors have pulled some money out of emerging markets, and the Fed may yet have to raise rates further still.

Often higher rates in the rich world are associated with a stronger world economy, which boosts exports for emerging markets. This time, however, America is overheating, and may face a recession as it slams the monetary brakes. Europe is being squeezed by expensive energy. Though countries that pump oil or grow soyabeans will benefit from higher commodity prices, they must still fight inflation and cope with tighter financial conditions. Commodity importers like Sri Lanka face the sort of pressure that can unseat governments as well as disrupt the economy (see ↗)

► Asia section). Food and energy prices are fuelling unrest in Tunisia and Pakistan.

Several middle-income countries face idiosyncratic crises: China is locking down to battle a coronavirus outbreak, and Argentina continues to stagger under the weight of unsustainable debts. But the greatest vulnerability is found among the poorest economies, nearly 60% of which are in debt distress or at high risk of it, according to the World Bank. One worry is that almost a third of their total debt now carries a floating rate of interest, up from 15% in 2005, making them more exposed to monetary tightening. ■

It does not help that it is harder than ever to provide emergency support to struggling poor countries. In aggregate they owe more to China than to the "Paris Club" of rich governments who have typically cooperated to restructure debts. So far attempts to include China and other new lenders like Saudi Arabia and India in debt-restructuring efforts have flopped. The IMF only lends to countries with sustainable debts, and the West does not want to see its aid being siphoned off by other creditors. Geopolitical conflict is making the poor world's economic problems worse, and harder to resolve. ■

#### Working in finance

## Talent wars

### The latest industry to suffer labour shortages: investment banking

AFTER A DISMAL decade, bankers of all stripes had reasons to be cheerful last year. Eighteen months of soaring corporate dealmaking generated blockbuster fees for mergers and acquisitions (M&A) desks. Their counterparts in debt advisory played midwife to a deluge of newly minted bonds. Bouts of high volatility buoyed traders' revenues. Though the dealmaking frenzy may have cooled a little in 2022, lenders are licking their lips at the prospect of sharply rising interest rates.

Yet the industry faces a talent squeeze. Bank bosses used the last earnings season of 2021 to gripe about the problem. Deutsche Bank's Christian Sewing was "very concerned" about a war for talent; Goldman Sachs's David Solomon said it caused "wage inflation everywhere". The subject seemed likely to raise its head again as Wall Street banks reported their first-quarter earnings after we went to press.

A survey of 267 financial-services employers, conducted in November by Hays, a London-based recruitment firm, found that 83% had suffered from a skills shortage in the past year. More than half attributed that to competition from rivals. This is a sector more used to causing shortages than suffering from them, sucking in would-be maths teachers and disaffected doctors. Nor has its promise of riches dimmed: average pay at Goldman last year was \$400,000. Why the struggle to hire?

One popular line of argument holds that banking is the victim of a generational shift. Everyone from hiring managers to university careers services reports that young workers care less about salary and more about work-life balance. Most of all, they want to work for a company with a



Willing to walk away

clear social purpose. All of that puts the recruitment model for traditional financial firms—high pay in return for gruelling hours, and work with a social value that is not immediately obvious—at risk.

These apparent preferences are hard to square with the behaviour of younger applicants. Darren Burns of Morgan McKinley, another recruiter, says they are becoming more hard-nosed in salary negotiations, not less. "Decent candidates will line up half a dozen offers when they used to only pursue one," he says. They are also more aware of their market value. As a result, even back-office roles are having their salaries bid up. One senior Wall Street banker puts it bluntly: "They say they care less about salary, but they absolutely care if the bank across the street is paying more."

Banking's attractions, then, do not seem to have lost their appeal. Instead the battle for talent is driven by three other factors. Start with the scale of the demand for bankers' work. According to Refinitiv, a data provider, companies announced M&A deals worth \$5.8trn in 2021, 64% higher than the year before and easily beating the previous high in 2007. Initial public offerings had a record-breaking year, too, with newly listed firms raising \$608bn. And of the \$10trn in American corporate bonds, 42% was issued in the past two years.

All that equates to an avalanche of work for investment bankers. The industry's staffing model, meanwhile, is ill-suited to spikes in demand. "If the large banks aren't able to pay their best people well, they lose them all," explains one headhunter. The only way to do that and remain profitable is to be ruthless about headcount, running teams with "very little fat" in normal times. When business balloons, as it did in 2021, those lean teams very quickly end up working at full capacity—at which point the only options are to poach people from elsewhere or to turn down business. The result is a fierce, zero-sum skirmish between banks for skilled staff.

At the same time, the list of other firms offering bankers eye-watering salaries has lengthened. Private-equity funds have long piggybacked off the training offered by the big investment banks, luring talent away with better pay and slightly gentler working hours. Banks in America are particularly vulnerable, with a supersized private-investment industry offering just as supersized compensation. (Blackstone, one of the biggest such firms, received 29,000 applications for 100 junior-level jobs in 2021.) In recent years, these have been joined by a growing cohort of dealmakers going it alone and taking firms public via special-purpose acquisition companies. M&A boutiques, which advise on mergers without the full-service offering of an investment bank, entice still more bankers away from banking.

Third, there has indeed been a shift in workers' attitudes—just not one that results from them being unwilling to hack the hours of their predecessors. Florian Pollner of McKinsey, a consultancy, describes how in conversations with human-resources bosses, a theme that comes up time and again is younger workers' more modular approach to their careers. Instead of looking for jobs for life, they seek out roles they can spend a few years in and then leave with broader options.

That works in banks' favour for recruiting junior staff: their graduate schemes are still seen as excellent preparation for a career. But it also puts pressure on attrition rates in an industry already known for the mercenary outlook of its employees.

These forces are changing the way ►

► banks recruit and retain their staff. Many have long tried to draw employees from a more diverse pool. That task is now more urgent, and goes beyond lines like race and gender. Mr Pollner sees banks at all levels recruiting from a much broader range of universities than they used to—and, just as important, trying to hire people with personalities “different to the stereotype of the average banker”. Retention efforts have a darker side, too: an investment manager at a London private-equity fund reports having hired juniors from two separate banks, only to have both receive letters

from their former employers suggesting they might have to repay bonuses (in the end, they did not).

The net result within investment banking is likely to be a widening gap between the largest and most profitable banks, chiefly American ones, and “second-tier” firms, including European banks. The latter have long had to pay more, and take greater risk, to compensate for not having the prestige and huge domestic market of the Wall Street giants. That has sometimes had dire consequences: Credit Suisse and Deutsche Bank have suffered such fre-

quent losses from scandals and exposure to dubious clients that they have become the butt of industry jokes.

As second-tier banks struggle to muster the financial firepower to recruit senior talent, that problem will only worsen. The fewer skilled staff they attract, the less deal-flow they capture, and the faster their investment banks must shrink. In recent years many European banks have been forced to flee Wall Street, or close their racier outfits altogether. More of them may become casualties of the talent war raging at the cutting edge of capitalism. ■

## Buttonwood Satoshi-alism

*Does crypto represent a libertarian dream or a socialist Utopia?*

“IT’S VERY attractive to the libertarian viewpoint if we can explain it properly,” wrote Satoshi Nakamoto, the pseudonymous creator of bitcoin, in an email in 2008 to Hal Finney, a developer, describing the appeal of the “e-cash” he planned to launch. The attraction stemmed from bitcoin’s potential role as a currency free from verification by centralised third parties and from oversight by governments. Bitcoin would instead be verified cryptographically and governed by its users.

Bitcoin doubtless appeals to those on the right. At a conference in Miami on April 7th Peter Thiel, the co-founder of PayPal, a firm he once imagined as a young libertarian could supplant the world’s monetary system, waxed poetic about bitcoin’s potential. He views the technology as inherently political, saying in 2020 that “if AI [artificial intelligence] is communist, crypto is libertarian.” AI represents the advance of centralised machines making top-down decisions; crypto requires many individuals and computers making decisions from the bottom up.

Mr Thiel is not alone in thinking there is something inherently right-wing about crypto. Marc Andreessen, co-founder of Andreessen Horowitz, a venture-capital firm, agrees with the characterisation. In 2021 he wrote that crypto could represent a “right-wing tech” that is both more decentralised and more comfortable with entrepreneurialism than the tech industry.

Mr Andreessen is most animated by the opportunities stemming from “distributed consensus”. Until now, he argues, collaborative online effort either adopted corporate norms from the real world, or worked as open-source projects, with no money involved. By com-

parison, crypto allows for new kinds of incentive systems, where participants can be paid without a real-world company needing to exist. Take Helium, a decentralised wireless network, for instance. It encourages individuals to install “hot spots” in their homes for use by nearby internet-connected devices, by compensating them in HNT, a crypto token. The more the hot spot is used, the more tokens are paid out.

Such architecture is commonly called “web3”, a nod to its potential to be the next phase of the internet. Chris Dixon of Andreessen describes the infrastructure as making it possible for organisations to be owned by token-holders, who then vote on governance matters. Modern tech firms are incentivised to build mammoth platforms that show users as many ads as they will bear. By contrast, developers and users of a web3 application could earn rewards for building and interacting with the platform. In this world users would be able to vote on how Facebook’s or Twitter’s algorithms work. Crucially, they would also gather up their share of the profits.

At first glance, the idea that these applications or projects can be built or contributed to by anyone is the stuff of freedom-loving libertarian dreams. But the way projects themselves are being run has quite a lot in common with left-wing ideas. Antonio García Martínez, a former manager at Facebook and the author of “Chaos Monkeys”, a book about Silicon Valley culture, says that “you will never hear a venture capitalist sound more like a communist than when they are talking about web3.” Blockchain-based enterprise might not be quite what Marx had in mind. But the model behind it seems closer to the idea that the community should own the means of production, distribution and exchange than modern capitalism does.

There is a comedy to venture capitalists talking like communitarian socialists, notes Tomicah Tillemann of Haun Ventures, a crypto fund. As a former adviser to Joe Biden, he is no libertarian. Still, a real shift is under way. Virtually everyone agrees that the big-tech model is flawed, he says. Mr Thiel and his ilk loathe its de-platforming of right-wing voices; the left takes aim at its concentration of power and wealth. Messrs Thiel, Andreessen and Tillemann all see crypto as a serious threat to the status quo.

The truth may be that web3 is simply nascent enough that people across the political spectrum see in it whatever they want. If crypto really does make it possible for developers or users to build any kind of economic system, then the applications that flourish will be the ones that work best. Perhaps those will be libertarian Utopias where the Satoshis of the world retain their privacy. But they could just as well be social-democratic metaverses with automatic wealth taxes and paternalistic officials.



## Free exchange | Guns and butter

*What a coming wave of bigger military budgets means for the economy*



**I**N THE WAKE of the war in Ukraine, military budgets around the world are about to get bigger. This is most notable in Europe, where the threat of Russian aggression looms largest. Germany, Italy and Norway, among others, have already decided to spend more on defence. America and China, the world's two biggest military spenders, are also ramping up their allocations. Pressure on smaller countries to do likewise seems inevitable. What are the economic consequences of this push? When governments spend more on soldiers and arms, they have less available for other things. A common assumption, therefore, is that extra spending on armies is harmful to growth and development. But the relationship is not so straightforward. In some cases bigger defence budgets may in fact yield substantial economic benefits.

That there is a trade-off between spending on the army and on, say, roads or hospitals is a lesson that students of economics internalise early on. The classic model for illustrating the concept of opportunity costs is guns versus butter: the more you produce of one, the less you can of the other. In any given year, that simple model holds true. Governments have finite budgets, which can only be pulled in so many different directions.

It is thus easy to see how spending on defence, taken to an extreme, could be corrosive for an economy. If a government short-changes the education system in order to buy shiny new weapons, the long-run impact on productivity and, ultimately, growth would be baleful. Some economists think America is nearing that danger zone. The RAND Corporation, an influential think-tank supported by the Air Force, not exactly known as a peacenik outfit, published a report in 2021 laying out two risks. First, when the government allocates money to defence at the expense of infrastructure, that may undermine long-run growth prospects, since America has a pressing need for better roads, ports and more. Second, defence spending contributes to the public-debt load. In both cases, the analysts conclude, anything that erodes America's economic strength will ultimately hurt the armed forces.

Perhaps there is something to the point that these trade-offs are damaging to the economy at America's levels (over the past decade its military budget averaged more than 4% of GDP, second-highest in the OECD club of wealthy countries). But a complication

emerges when examining trends over time. The OECD member that spends the most on defence, at about 6% of GDP, is Israel. It also consistently boasts one of the fastest-growing economies in the group. By contrast, Japan is one of the lowest military spenders as a share of GDP in the OECD, and one of the slowest growers. In fact, it is almost impossible to discern a pattern in the data: there are also countries such as Ireland, with military budgets similar to Japan's and growth records similar to Israel's. A basic regression reveals no consistent relationship between GDP growth and military spending for the 38 countries in the OECD.

A sprawling body of research has come to a similar, albeit more nuanced, conclusion. In a discussion paper at Monash University in 2014, Sefa Awaworyi Churchill and Siew Ling Yew examined 42 separate studies. Effects are generally quite small, but they found two distinct categories: military expenditure in poorer countries is often detrimental to growth, whereas in wealthier countries it is more likely to be beneficial. One possible reason, they suggest, is weaker governance in developing countries; a big military budget is a juicy target for corrupt officials. Another possibility relates to the gun-versus-butter framework. The potential returns on civilian investments, from health care to education, are so great in poor countries that military spending has a particularly high opportunity cost. In rich countries with good schools and hospitals, the opportunity costs ought to be lower.

One way in which defence spending might be said to boost the economy is as a jobs programme. If the armed forces were a corporation, they would be America's largest employer with 2m workers (counting active-duty personnel and civilians), beating Walmart and Amazon. That said, it would be an eye-wateringly expensive jobs scheme, running at nearly \$400,000 per employee a year.

Defence spending may deliver better returns as an undeclared form of industrial policy. In a paper last year Enrico Moretti of the University of California, Berkeley, and two colleagues looked at government funding for research and development (R&D), with a focus on defence spending, in OECD countries. On average, they found that a 10% increase in government-financed R&D leads to a 5% increase in privately financed R&D in the targeted firm or industry. Moreover, there are knock-on benefits for productivity. If France and Germany raised their defence spending to roughly the same level as in America, Mr Moretti estimates that their productivity growth rates would be slightly higher as a result.

### Dividends of deterrence

An obvious objection is that the government could achieve the same results by supporting R&D in general, without pumping money into the armed forces. In an economic sense that may be true. But there is a political constraint—namely, how to marshal support for experimentation that may fail. Public support for defence is less susceptible to mood swings. Without having to worry about its next grant application, the American military system has been free to churn out innovations, from duct tape to the internet, without which modern life would be scarcely imaginable.

Important as it is to trace the impact of military spending on growth or innovation, such exercises risk missing the wider context as demonstrated by Russia's war in Ukraine. A foundational element for any successful economy is peace and stability, giving firms the confidence to invest and people the space to flourish. Textbooks may talk of guns or butter. But in a world unsettled by revanchist powers, the truth is that it is both guns and butter. A strong defence is, regrettably, a necessity for a strong economy. ■

**Tracking shipping**

## Who's who on the ocean blue

Crowdsourced data, satellites and clever algorithms try to catch ocean-going blockade runners

NEVER BEFORE have the activities of ocean-going vessels been under so much scrutiny. So says Oleg Ustenko, the economics adviser to Volodymyr Zelensky, Ukraine's president, and a leader of a government initiative called the Russian Tanker Tracking Group (RTTG). Working with tips from a network of experts and spies, including foreign officials who contribute on the sly, the RTTG, Dr Ustenko says, tracks the energy shipments with which "Russia is desperately trying to finance its military machine".

Despite the sanctions imposed by America and Europe, most of Russia's energy shipments have remained legal. Outrage over its war on Ukraine, however, has left many firms keen to avoid the reputational risks of dealing with entities or goods of Russian origin. Beyond that, as the pandemic and war have tightened commodity markets, the value of detailed data on shipments has risen. As Reid Lanson of the Houston office of Kpler, a firm of commodities analysts, notes, even traders who won't buy illicit oil can make better decisions if they can gauge how much

sanctioned countries such as Iran are managing to smuggle out.

Technology hopes to provide such information. The RTTG, for example, uses "network analysis" software to find revealing relationships among disparate bits of information. The group is already notching up successes. These include identifying shipments of Kazakh oil believed to contain portions of clandestinely loaded Russian crude, says Dr Ustenko. Alerts are sent to relevant governments and firms, as well as several Ukrainian ministries.

Data from ship transponders inform much of the analysis. Big commercial vessels must transmit their location and an identifying code to networks of terrestrial and satellite receivers known as the Automatic Identification System (AIS). Some-

thing as simple as an unusual acceleration may be a clue that a crew is buying time for an illicit deal. But the key to flagging potential mischief, says Ivan Ladan, the boss of Marine Digital, an analytics firm in Lübeck, Germany, is to use software that analyses the behaviour of ships in light of many different bits of information.

Marine Digital's software, for instance, examines a ship's declared cargo, route, and insurance details, as well as historical navigation patterns in various weather and market conditions. Crime and corruption in different places are also taken into account. The software is even fed port records on how low a vessel sits in the water, revealing the tonnage of cargo aboard. When it smells something fishy, the firm alerts authorities and its clients, mostly shipowners unhappy to hear that one of their leased vessels may be up to no good.

Sanctions-busting often involves transfers of cargo between ships, far from the eyes of port authorities. Vortexa, a London-based firm, runs software that looks for these "trans-shipments". One clue is when a full and an empty vessel built to carry the same type of cargo meet away from crowded shipping lanes. Vortexa's software also looks for encounters between a vessel that has a dodgy reputation and one that does not (or does not yet). The latter are preferred for passing off sanctioned cargo as a legitimate delivery. A ship's age also matters. The riskier the voyage, the older the vessel is likely to be.

It is too soon to see how efforts to dodge ➤

---

→ **Also in this section**

---

**68 Cracks in the Standard Model?**

**69 Soldering wounds**

**70 Drugs and genetic screening**

► sanctions on Russia will shape up. But Ioannis Papadimitriou, a Vortexa freight analyst, reckons illicit ship-to-ship transfers will be concentrated in the Baltic Sea and eastern Mediterranean. He also expects ships to meet in those areas and swap transponders, a trick sometimes done near Malaysia to deliver Iranian oil to China.

But AIS has its shortcomings. Satellites struggle to distinguish signals from crowded ports and littoral waters. To improve resolution, AIS receivers are being built along some coasts, but more are needed. A company based in Athens called Marine Traffic is posting AIS antennae to seaside building owners around the world, who volunteer to install the kit on rooftops. Marine Traffic's network of roughly 3,600 antennae collects data that it fuses with information from other terrestrial networks and satellites. The resulting analytics are sold to trading firms, financial outfits and government bodies. Spokesman Georgios Hatzimanolis notes rising demand for information on vessels linked to Russia, be they tankers or superyachts.

Risks remain. One is that a vessel's AIS transponder can be switched off. Ami Daniel, the boss of Windward, a shipping-analytics firm based in Tel Aviv, sees "a huge spike" in the number of ships that have recently cut AIS transmissions. Many are in waters near Russia, including the Black Sea. Some have no doubt "gone dark" to reduce their visibility to Russian warships, which have fired upon merchant vessels. Even so, Mr Daniel, a former officer in Israel's navy, reckons that the drop in transmissions heralds an increase in "deceptive shipping practices".

#### Eyes in the sky

But there are other ways to keep tabs on ships. These include satellites with cameras and synthetic-aperture radar, which sees objects at night and through clouds. A more recently developed approach uses satellites in low orbits to hoover up signals from shipborne radars. These are used for navigation and to avoid collisions, so mariners are disinclined to switch them off. Fancy software for signal processing geolocates the signals' sources, at times within just several hundred metres.

A handful of firms track ships in this way. Their clients include coast guards, navies and America's National Geospatial-Intelligence Agency. This autumn a British firm, Horizon Technologies, aims to begin providing radio-frequency intelligence to Britain's Royal Navy and governments in Greece, Italy and Singapore. It will also compile, in partnership with the International Maritime Organisation, a library of radar-pulse "fingerprints" of ships worldwide, made possible by minute idiosyncrasies in componentry in radar units of even the same make and model.

It adds up to a heap of data. Making sense of it, however, can be quite tricky. For one thing, a growing number of ships "spoof" AIS by transmitting bogus data that changes the vessel's apparent identity or location. TankerTrackers, a firm with analysts in London and Stockholm, monitors more than 40 vessels, some with links to Russia, that visit Iranian and Venezuelan ports. Nearly half, the company says, transmit counterfeit AIS data. Such spoofing used to require hard-won expertise with fiddly software. These days, one manufacturer in Istanbul advertises a model smaller than a shoebox that transmits bogus data for up to ten vessels—"position offset, false identity, fake type, fake echo", and so forth.

Beyond that, ships themselves are only one part of the game. Analysts must also figure out who is behind ships and their cargo. This is hard, for the shipping industry is a notorious mess of shell companies, flags of convenience and opaque accounting. To complicate matters further, many outfits are attempting to disassociate from Russia. Recent weeks, Windward reports, have seen an unprecedented number of vessels "flag out" of Russia and register with other countries.

Which comes back to the role of network-analysis software. Like Ukraine's RTTG, Kharon, a Los Angeles firm, feeds its software with corporate records, shipping documents, court filings, news articles, police reports and regulatory paperwork. The software, says Benjamin Schmidt, head of product, even sucks up obscure databases "hosted by some random country where we're able to identify one thread of information"—an address, perhaps, that connects a shady entity to a certain businessman. Social media helps. If a snapshot of that businessman at a trade show reveals another logo in the background, Kharon's analysts begin poking around that company, too.

Kpler, for its part, is eyeing a different type of software upgrade. Mr l'Anson sees future iterations of Kpler's software taking into account the political developments likely to shape appetites for busting sanctions, whether on Russia or other countries. He notes that when Joe Biden became president, China, presumably expecting "a little more leeway", began to smuggle in greater amounts of discounted Iranian oil.

For technologists and technocrats, all this is heady stuff. But not all recent developments have worked in their favour. Western sanctions on Russia have shut off access to Russian registries of corporate filings. Jessica Abell of Sayari, an American business-intelligence firm that makes extensive use of such data, says that will make it much harder to work out who is doing what on the high seas. There is plenty, in other words, to play for. ■

#### Particle physics

## A hint of excitement?

#### Data contradicting the Standard Model are piling up

THE STANDARD MODEL of particle physics—completed in 1973—is the jewel in the crown of modern physics. It predicts the properties of elementary particles and forces with mind-boggling accuracy. Take the magnetic moment of the electron, for example, a measure of how strongly a particle wobbles in a magnetic field. The Standard Model gives the correct answer to 14 decimal places, the most accurate prediction in science.

But the Standard Model is not perfect. It cannot explain gravity, dark matter (mysterious stuff detectable only by its gravitational pull), or where all the antimatter in the early universe went. Physicists have spent much time, effort and money performing ever-more elaborate experiments in an effort to see where the Standard Model fails, in the hopes of finding a clue to the theory that will replace it. But the Standard Model has fought back, stubbornly predicting the results of every experiment physicists have thrown its way.

But that may perhaps be changing. In a paper published last week in *Science*, a team of researchers from the Fermi National Accelerator Laboratory (Fermilab) in America announced that the mass of an elementary particle called the  $w$  boson appears to be greater than the Standard Model predicts. The difference is small—only a hundredth of a percent—but the measurement's precision exceeds that of all previous experiments combined. It places the odds that the result is spurious at only one ▶▶



A big machine to hunt a tiny quarry

in a trillion ("seven sigma", in the statistical lingo), well above the one in 3.5m (five sigma) that physicists require to consider a finding robust.

The scientists at Fermilab analysed historical data from the Tevatron, a circular particle collider which was the most powerful in the world until the Large Hadron Collider (LHC) came online in 2009. Between 2002 and 2011 (when it ran for the last time), the Tevatron produced approximately 4m w bosons in collisions between particles called quarks and their antimatter counterparts, antiquarks. Using detailed recordings of the scattering trajectories of the menagerie of particles present in such collisions, the scientists could calculate the mass of the w boson with unprecedented accuracy.

The finding has big implications. The w boson is a force-carrying particle. Together with its sibling the z boson, it mediates the weak nuclear force that governs radioactive decay. Unlike other force-carrying particles, however, the w and z bosons have mass—and a lot of it. The w boson is 90 times heavier than a hydrogen atom. The z boson is even more massive. What really distinguishes the w boson, however, is its ability to change the type—or "flavour"—of other elementary particles it comes across. For example, it can transform the electron (and two of its cousins, the muon and tau) into neutrinos. It can also flip quarks from one type to another—up to down, top to bottom, and the whimsically named "strange" quark to a "charm" one.

These protean powers mean that the mass of the w boson is linked to the mass of several other elementary particles. That allows scientists to use the w boson to calculate the mass of those other particles. That is how they predicted the mass of the top quark (discovered in 1995) and the mass of the Higgs boson (discovered in 2012), before either particle had been detected. If the w boson is more massive than the Standard Model predicts, it implies that something else is tugging on it too—an as-yet undiscovered particle or force. For particle physicists, that is an exciting prospect.

It is not the only one. In March 2021 scientists from CERN—Europe's particle-physics laboratory—reported evidence that the bottom quark decays into electrons and muons in uneven numbers, contradicting the Standard Model. Only three weeks later, Fermilab announced that the magnetic moment of the muon appears to be greater than predicted by the Standard Model too. Like the mass of the w boson, the magnetic moment of the muon is partly determined by the properties of other particles. If it is greater than the Standard Model predicts, that hints at an as-yet undiscovered particle or force too.

Assuming, that is, the results are real. Exciting as they were, neither result from

2021 crossed the 5-sigma threshold (they hit 3.1 and 4.2 sigma, respectively). That means further confirmation is necessary. The more recent Tevatron result, though, contradicts the previous best measurement of the w boson mass, made in 2017 at the LHC. That was in close agreement with the Standard Model, presenting a puzzle.

On the other hand, the latest Tevatron result aligns well with previous data provided by the Large Electron-Positron Collider, the LHC's predecessor. It is consequently the strongest evidence yet of the physics that must lie beyond the Standard Model. Anyone who prefers interesting errors over yet more dull confirmation will be hoping it holds up. ■

#### Medical technology

## Heat treatment

#### Soldering offers a new, better way to treat wounds

**I**F YOU CUT yourself, your options are to reach for a plaster or, if the cut is nasty, go to a doctor to have it stitched or glued. That seems a rather limited choice. Medical researchers have been trying to develop another way to join the edges of a wound, inspired by something routinely done to gas pipes and electronics: soldering. And an innovation developed at the Swiss Federal Institute of Technology (ETH) in Zurich, in co-operation with the Swiss materials-science institute Empa, suggests this might soon become a practical reality.

In soldering, an intermediate material is heated until it melts and bonds with the two surfaces that are to be joined. The material of these edges has a higher melting

point and remains solid (otherwise it would count as welding).

For tissue, the intermediate material is not a metal alloy, but a paste of biocompatible material, such as albumin, a protein that is an important constituent of blood. When heated, the paste develops chemical bonds with living tissue on both sides. As healing progresses, the two sides reconnect and the paste is removed by the body's natural cleaning procedures.

Closing wounds by soldering has several important advantages, says Oscar Cipolato, a PhD candidate at ETH, who presented preliminary results on April 5th at the Photonics Europe conference in Strasbourg, France. The bond it produces is strong and watertight, something that cannot be guaranteed with stitches. If a wound is internal—after surgery, for instance—a leak could cause an infection.

But soldering tissue has turned out to be difficult in practice, which means it is not commonly done. Heating the soldering paste is done by shining a laser onto it, from which the paste absorbs energy. But controlling the heating precisely is tricky. The paste needs to reach about 80°C to work. If the temperature is too low, the soldering material will not fully melt and the bond will be weak. But if it is too high, it risks burning the surrounding tissue. Existing attempts at wound-soldering rely on thermal imaging to measure temperature. But that only measures the temperature at the surface of the solder, rather than throughout the material.

Mr Cipolato and Inge Herrmann, a chemical engineer at ETH, hope their improved paste can get around such problems. It is made up of two kinds of nanoparticles, specks of material of only about 20-billionths of a metre across. Between them, these help direct the energy of the laser to the places it should be, and help doctors gauge the conditions in the paste.

The first set of particles are made of titanium nitrate. They eagerly absorb photons of red or near infrared light, precisely the colours that most easily penetrate living tissue, and release the energy as heat to their surroundings. That efficient absorption means the paste can be heated by a relatively weak laser beam, which helps protect the surrounding tissues.

Using such tiny particles is in itself not new. But until recently most researchers used tiny rods of gold, which are expensive. Nanoparticles of titanium nitrate, on the other hand, are easily and cheaply produced by spraying the right mix of precursor chemicals into a flame.

The second set of particles are a new development in the soldering world. They are specks of a material which fluoresces. In other words, it absorbs the laser light, but immediately re-emits the energy as light again, at a few very specific wavelengths. ■



Firing up the soldering iron

Two of these wavelengths are also in the infrared and red colour range. That allows some of the re-emitted light to emerge from the paste to where it can be analysed by an external instrument called a spectrometer. By precisely measuring the difference between the two wavelengths, the temperature of particles that are emitting it—and thus of the paste as a whole—can be worked out.

Thus far, the researchers have tested the technique only on pieces of pig intestine that they obtained from a slaughterhouse. Soldering a cut is done in a matter of minutes. Similar "ex vivo" tests of the strength and permeability of the bond will also be needed for human tissue, followed by clinical tests on actual pigs and, eventually, humans. But the researchers are optimistic. At the conference, they were cagey about exactly what the fluorescing particles are made of. They are applying for a patent, which could be quite valuable if the tools at the ready in a doctor's office one day include a laser soldering gun. ■

#### Personalised medicine

## An ounce of prevention

### Genetic screening can make drugs work better

PETER LEY, a retired civil servant who lives in London, was diagnosed with colon cancer in 2017. An operation to remove the tumour was successful. But the chemotherapy that followed caused a severe reaction that required a two-week hospital stay and a pause in his cancer treatment.

All that could have been avoided had a simple test been done. The test examines a gene that encodes a liver enzyme called dihydropyrimidine dehydrogenase (or DPD for short). The enzyme breaks down several common cancer drugs. Without it, toxic levels of the drugs build up in the body, sometimes with fatal results. A complete inability to make DPD is rare, but there are four mutations in the DPD-regulating gene that are known to reduce its production. As it turned out, Mr Ley had one of them.

Screening for such "pharmacogenes" is an idea that is catching on among doctors. Several big hospitals in America are testing their patients for a dozen or more of them. Separate pilot projects are under way in at least seven of the European Union's member states. Britain's National Health Service (NHS) is doing screening tests for some patients being prescribed cancer and HIV drugs. A report on March 29th by the British Pharmacological Society (BPS) and the Royal College of Physicians (RCP) proposed

widening that testing to cover the 40 drugs among the 100 most-prescribed that are known to be affected by pharmacogenes. The report's authors reckon testing could feasibly be rolled out across the NHS as soon as 2023.

Genetic screening promises big benefits. Mutations can affect drugs in all sorts of ways, determining a pill's efficacy, toxicity, how well it is absorbed, and how well it is broken down. Some genetic variants affect several drugs at once, because they alter common enzymes in widely used metabolic pathways. Britain's 100,000 Genomes project has shown that almost 99% of people carry at least one pharmacogene; 25% have four. About 9% of Caucasian people have, like Mr Ley, DPD deficiency; one in 200 lack the enzyme completely. Roughly 8% of Britain's population get little pain relief from codeine, because they lack an enzyme responsible for metabolising the drug into morphine (they instead metabolise it into other substances that have little influence on pain).

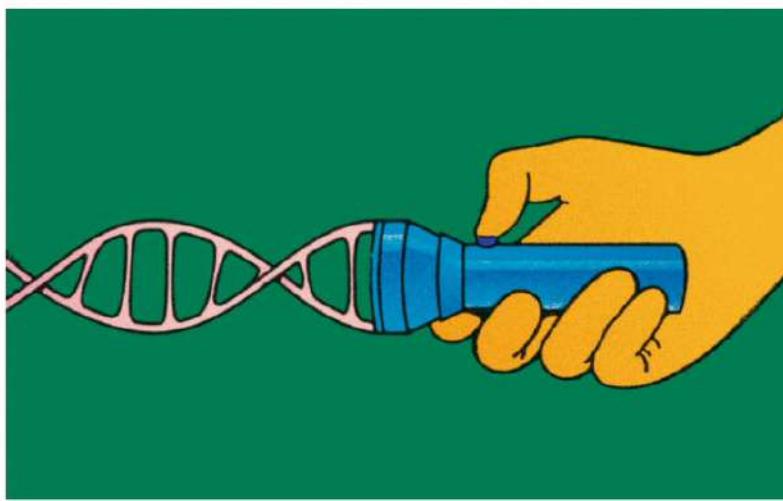
All told, scientists have identified about 120 such drug-gene pairs so far. Roughly half of them are "actionable", says Henk-Jan Guchelaar, a pharmacologist at the University of Leiden in the Netherlands—meaning that changing the dose or replacing the drug can lead to a better clinical outcome. And most people will be prescribed at least one of those drugs at some point in their lives. In Britain people over the age of 70 have around 70% chance of taking at least one drug whose safety or efficacy is compromised by their genes, says Munir Pirmohamed, a pharmacologist and geneticist at the University of Liverpool.

Currently, clashes between a patient's genome and his drug regimen are dealt with by trial-and-error prescribing. But that is time-consuming, and may be harmful. If a drug is being prescribed for high blood pressure or artery-clogging levels of

cholesterol, time spent trying different drugs means time in which a stroke, heart attack or organ damage may occur. And cleverer prescribing would have benefits for the health-care system overall, as well as for individual patients. Adverse drug reactions account for 6.5% of hospital admissions in Britain.

The chief issue, as ever, is cost. In the Netherlands a test for 50 pharmacogenes costs about €200 (\$217). In Britain a panel test for 40 such genes costs £100-150 (\$130-195). Carrying out testing on an entire population would, therefore, be extremely expensive. Some light on whether it is worth the cost will be shone later this year when PREPARE, a study that began in 2017, publishes its results. The project, which is led by Dr Guchelaar, recruited 7,000 people across seven European countries for a study of mutations affecting 42 different drugs. Half the participants were screened, and given cards listing the drugs flagged up. That information, in turn, was made available to doctors, pharmacists and the like. Dr Guchelaar and his colleagues are analysing how much this reduces adverse drug reactions compared with the un-screened participants—and, crucially, the health-care costs averted as a result.

Such cost-benefit analyses will be vital in making the argument that governments or insurance firms should pay for widespread genetic testing. In the meantime, though, doctors are already pondering ways to get the most bang for their buck. The BPS and RCP study suggests several ways to expand pharmacogene screening. One is to test for the genes the first time a drug known to be susceptible is prescribed. Another option is to offer that test to everyone over a certain age, perhaps 50—though the NHS is also pondering the idea of comprehensive genetic screening for all newborn babies. That could pay off handsomely later in their lives. ■





Turmoil in Hong Kong

## Indelible or invisible?

**Two accounts of Hong Kong's recent history offer little hope for its future**

**I**N RETROSPECT, SOME calamities quickly assume the inevitability of tragedy. Of course Vladimir Putin could never accept an independent, Western-aligned Ukraine. Of course the Taliban would triumph in Afghanistan; just glance at the history of foreign involvement there. And, more certain still, of course China's Communist rulers would never tolerate a free, open, democratising city in a southern corner of their country. "One country, two systems"—the simple Sino-British formula under which Hong Kong would remain politically distinct from the rest of China for 50 years from 1997, when Beijing resumed the exercise of sovereignty—was always doomed.

But nobody told Hong Kong. After all, it was supposed not to care. Many outsiders swallowed China's habitual line that Hong Kong was an "economic" city, a place of business that was not concerned with politics. Yet the generation that has grown up since 1997 has always posed and faced an awkward question that Karen Cheung formulates at the beginning of "The Impossi-

**The Impossible City.** By Karen Cheung. Random House; 319 pages; \$28 and £23  
**Indelible City.** By Louisa Lim. Riverhead Books; 293 pages; \$28

ble City", her fine new book: "Why are we not the ambivalent, apolitical generation that our leaders want us to be?" Every few years since 2003, the territory has seen huge protests, building up to the occupation of parts of the city centre in the "umbrella" movement of 2014, and what amounted to an abortive insurrection in

### → Also in this section

- 72 Financing America's civil war
- 73 A pathbreaking Omani artist
- 74 The joy of gardening
- 74 Speculative fiction
- 75 Back Story: The genius of "Atlanta"

2019. Whether to take part was a decision that Hong Kong's people could not dodge.

Ms Cheung and Louisa Lim, author of the equally good (and similarly titled) "Indelible City", both grew up in Hong Kong. Both occupy what Ms Cheung calls the "liminal space of being local enough to write stories that white writers can't and 'international' enough to write about Hong Kong for overseas readers". And both offer illuminating accounts of how the city descended into the mass street unrest of 2019, as demonstrators agitated for a more representative political system, and of the pandemic-abetted repression that has crushed protest since. Tear-gas, water cannons and police batons eventually cleared the streets. Covid-19 kept them empty.

Their perspectives are very different. Ms Lim is a journalist-turned-academic, who long covered China and Hong Kong for the BBC and National Public Radio; her previous book told of the Chinese Communist Party's efforts to erase the memory of the protest movement that roiled China in 1989 and its bloody suppression. She writes mostly as a coolly objective observer, but opens with an account of crossing the line into activism, on September 30th 2019, the eve of a big protest to mark China's National Day. On the roof of a skyscraper, she finds herself "painting expletive-laden Chinese characters onto a protest banner eight storeys high, and wondering if I had just killed my career in journalism".

Though dominated by events since 1997, "Indelible City" also attempts a revisionist telling of Hong Kong's history. This challenges both the traditional Western view that it was nothing but a "barren rock" until British opium traders found a use for it, and the Chinese version: that it has been an integral part of the Chinese polity since time immemorial. Rather, in the past Hong Kong was "a sanctuary for rebels and fugitives from central power" and a haven for free-thinking.

#### The mermen's song

Ms Lim describes Hong Kong people's efforts to rebuild a link with this past, including through the resurrection of an indigenous creation myth about the Lo Ting, fish-headed mermen who had come to Hong Kong's Lantau island in the fifth century, after a failed rebellion against the imperial dynasty. The character who gives her book its name is Tsang Tsou Choi, who died in 2007 and left behind a vast body of graffiti over public spaces in Hong Kong—much of it supporting his eccentric claim to be the king of Kowloon, the peninsula opposite Hong Kong island.

For those brought up in Hong Kong, questions of identity were unavoidable and virtually impossible to answer. Almost uniquely among colonised peoples, they were never offered independence. In 1972, shortly after it joined the United Nations, China asked the decolonisation committee to remove Hong Kong from its list of colonial territories, and Britain, as became customary in its treatment of its colony, ceded in this implicit condemnation of Hong Kong to eventual Chinese rule. Ms Lim quotes an early British governor, from 1858, who pithily summed up the ethos of British sovereignty: "We rule them in ignorance, and they submit in blindness."

So Hong Kongers, a term that, for her part, Ms Cheung says she has never heard anyone apply to themselves, "defined themselves in negatives—not Communist, no longer colonial subjects". Her book, like Ms Lim's, shows how they did acquire a sense of identity. Sadly, it was still couched in the negative: in the thwarted struggle against the gradual erosion of their civil liberties under Chinese sovereignty—and the repeated frustration of their demands for a representative political system.

Like Ms Lim, Ms Cheung is a leading character in her book as well as its narrator. Hers is more personal, building up a sense of a unique Hong Kong identity through an account of her own life and interests and immersion in the local indie-music scene. A journalist for various outlets, still in her 20s, she complains of some foreign editors: "It's best if our family stories are somehow representative of the rest of the Hong Kong population...They want your life stories, not your opinions."

Indeed. But her story is also Hong Kong's. The painful struggle with depression that she recounts becomes emblematic of a stunted generation living on the edge of desperation. She notes that between 2012 and 2016 the suicide rate among students jumped by 76%.

Both these books were largely written before the pandemic further cut off Hong Kong from the rest of the world—a shared isolation that has seemed more acute this year, as first Hong Kong and then parts of the mainland suffered widespread outbreaks of the Omicron variant. The joint pursuit with China of a zero-covid policy has been among the most powerful symbols of where Hong Kong's future lies. That future may indeed have been inevitable, but it has rarely looked so grim. ■

#### War economies

## Battle of the bonds

**Ways and Means.** By Roger Lowenstein. Penguin Press; 448 pages; \$30

**W**AR CAN expose a society's weakness or give expression to its latent potential. This lesson, apt today, applied in spades to the American civil war, as a new financial history of the conflict explains. Though Roger Lowenstein, a journalist, surely had no idea that when "Ways and Means" was published, Russia would invade Ukraine, his engaging history nonetheless makes for timely reading.

In hindsight, it is hard to imagine that the triumph of Union forces could ever have been in doubt, given the North's

advantages in population and industry. But the Confederacy did not need to win the war outright; it had only to struggle on until the people of the North grew tired enough of fighting to seek a peace. President Abraham Lincoln, whose victory in the election of 1860 precipitated secession, was determined to preserve the Union. But the patience of his people in the face of hardship could not be taken for granted, and the tools available to him were limited.

At the outset of the struggle, the federal government was still a bare-bones affair, which in most respects deferred to the authority of "these United States". It lacked a central bank to help manage the government's credit. Neither did the federal government control its own currency; in the antebellum economy, the role of money was played by private notes, issued by banks. And the main source of federal revenue—tariffs on traded goods—was hard hit by the crisis. A third of the ports at which customs duties were collected were in the Confederacy.

Chief responsibility for addressing these problems fell to Salmon Chase (pictured), a prickly figure and aspirant to the presidency who served as Lincoln's Treasury secretary. At first neither North nor South expected a long war, and Chase's initial financial requests were a mere drop in the bucket of money that would be needed to subdue the rebellion. After he secured a loan of \$50m from a bank syndicate (around \$1.5bn today), a banker said he hoped the sum would be sufficient to win the war. The government would ultimately spend some 60 times that amount. Both sides sought to borrow from Europeans, with minimal success. This newspaper declared it "utterly out of the question" that the Americans could obtain "anything like the extravagant sums they are asking".

Yet while the Union's finances seemed in danger of collapsing early in the war, Lincoln's administration soon began constructing the machinery to effectively tap the strength of the American economy. From 1862 the federal government started issuing a fiat currency—called "greenbacks", for the colour of the ink used in printing on the reverse side. In 1863 Congress enacted Chase's plan for a national banking system, in which federally chartered and supervised banks issued Treasury notes and held federal bonds. The inflationary potential of such measures was kept in check by a big expansion of federal taxation—including the central government's first-ever income tax.

The government's measures did not just make the financing of the war possible; they also knitted together an ever more powerful national economy. The new currency facilitated commerce, spurring economic growth in the North which benefited the war effort. As the fighting broke



Shots and Chase

► down the age-old bias against government intervention in the economy, a wave of transformational legislation was passed—boosting investment in continent-spanning railways, providing free land to Americans willing to move to the country's Western fringes, and laying the groundwork for a network of public universities that would provide practical higher education to the masses.

None of this was possible in the South, where slaveholders' deep suspicion of government, and indeed of the trappings of modernity, was essential to the rebellion. Unable to produce its own goods—or to sell its cotton, thanks to the Union blockade—the Confederate economy ground to a halt. Without the capacity to tax, the South struggled to borrow and relied heavily on money-printing, which fuelled runaway inflation. Illusions of a glorious victory gave way to ruin and humiliating defeat.

The rebels seethed at the economic power wielded by their enemy. "The Yankees did not whip us in the field," noted one Confederate soldier. "We were whipped in the Treasury Department." But the fight was a clash of values and outlooks as much as a contest of arms or bond issues. Through it, a more cohesive and capable United States was forged. ■

#### Contemporary art

## Watery depths

**In the Omani pavilion at the Venice Biennale, look out for Radhika Khimji**

A SKINNY LITTLE fish of indeterminate colour, the *Garra barreimiae* lives in the freshwater lakes of the Al-Hajar mountain range in Oman. When it is young it can see, but as it ages a layer of skin grows over its eyes and it gradually becomes blind. Every year the blind fish of Oman draw thousands of tourists to the Al Hoota cave, a five-kilometre cavern of rocky grottoes and watery depths. Under strings of electric lights, men in white robes and women with covered heads inch along walkways and peer into the dark water. For Radhika Khimji, a 42-year-old Omani artist now living between London and Muscat, the challenge in the cave was less to spot the *Garra* than to imagine its world.

The result will feature in Oman's first pavilion at the Venice Biennale, which opens on April 23rd, alongside work by four other artists. For "Under inner under", Ms Khimji took impressionistic black-and-white photographs of the cavernous rock face, blowing them up and printing them on thick fabric to make a wall curtain. The



An artist of the floating world

visual effect is crepuscular, volcanic and reminiscent of Dante's underworld. On that backdrop she painted strings of pale-pink oval lozenges: globules of light in a gloomy world (the most a half-blind fish could see), or perhaps a new dawn spied through a dark window. The piece defies easy interpretation, but urges the viewer to keep looking. "In scale and imagination, I think this represents a big leap forward for Radhika," says Aisha Stoby, curator of the Omani pavilion in Venice.

Oman has taken to contemporary art more slowly than its Gulf neighbours. Over the past two decades, Abu Dhabi, Dubai and Qatar have projected themselves as art hubs, midway between Europe and Asia. Even Sharjah has held a contemporary-art biennale since 1993. Art in Oman, however, has mostly meant tourist souvenirs—views of long beaches, rocky landscapes and ancient forts hidden in the hills.

Ms Khimji's work is different. A member of a Gujarati family that moved to Oman many generations ago, she is not trying to picture or even describe the world around her. Instead she reimagines it using an ever-shifting array of styles, materials, techniques and dimensions.

At school she found writing hard, she says, but drawing was a respite. As a young child she spent her holidays sketching for an aunt, a fashion designer—often images of buxom figures with heavy breasts and large thighs. A teacher from England suggested she apply to Slade School of Fine Art in London. At 20 she returned to Oman and entered an arranged marriage. Within six months she had fled, determined to make a life alone as an artist.

Admitted to a postgraduate course at the Royal Academy of Art, she steered away from ideas about decolonisation and diasporas—themes that are now almost automatically associated with up-and-coming artists from Africa, Asia and the Middle

East. She took up voice-movement therapy, yoga and weightlifting. These helped her get over her failed marriage, she explains, and also to engage in a far more emotional way with making art. She experimented with sculpture, cut-outs and collages. In a return to the large-thighed subjects of her childhood, she painted a huge triptych of prancing figures which were decorated with the same lozenge shapes that she would use in her work on the blind fish.

The triptych was eventually bought by the Guggenheim Abu Dhabi, the only Omani work in its collection. "I'm not really a very good painter," Ms Khimji says now. But painting dancing figures in acrylic, on paper backed by MDF, led to a breakthrough when she began cutting the figures out and arranging them in conceptual pieces. Placed upright, they might be running or climbing; laid flat on the ground, they seem sunk in post-coital oblivion. At times they look bent or disfigured, at others, whimsical and lithe. On one occasion she tied a group of them to a collapsed parachute at the Barka Fort in Oman. As so often with her work, the effect was ambivalent: it was hard to tell if they had crashed or landed safely, whether they were tethered or free to walk away.

Her figures have been shown in Austria, India and America. Since 2015, meanwhile, she has filled seven volumes of notebooks with ink portraits and drawings, sketches and dreams. Some of the colours are inked so thickly as to bleed through the pages. The notebooks are private and not for sale, but they chart the journey of an artist who refuses to be tied down.

For the Marrakech Biennale of 2016, where Ms Khimji's installations first reached a big international audience, she omitted the figures and arranged the parachute on a crumbling wall. "I think of her most of all", says Reem Fadda, that exhibition's curator, "as an artist of freedom." ■

World in a dish

## The garden path

**Home gardens produce delicious food. But that is not their main virtue**

**I**MAGINE A PLATE holding two strawberries, identical in appearance. One came out of a clamshell supermarket box, meaning it was probably harvested when it was still unripe, immediately placed in a forced-air cooling unit, loaded onto a refrigerated truck and driven hundreds of miles. By the time it reached the plate it may have been off the vine for two weeks. The other strawberry was picked from a garden minutes before being eaten.

The first one will probably taste like a slightly mushy cucumber, with a vague hint of berry tang and strong sour undertones. The second is likely to be sweet and floral; the flavour will linger in the mouth, as the scent will on the hands. Supermarket strawberries are not entirely without advantages: they are convenient and available in the northern hemisphere in February. But the two berries differ from each other in the same way that hearing Bach's Mass in B Minor in a concert hall differs from listening to it on a threadbare cassette. The home-grown fruit is an edible case for cultivating a home garden.

Your columnist, who long deemed gardening a twee waste of time, advances this argument with a convert's zeal. Planting cool-weather greens, as gardeners across the north-east of America are now doing, can seem nonsensical. Convenient, perpetually well-stocked supermarket shelves are available all week, in many places supplemented on weekends by farmers' markets, which offer a jolt of virtuous seasonality. But the same could be said of cooking: cheap and decent restaurants abound,

so why bother to make your own meals?

That attitude misconstrues the ultimate appeal of gardening: it mistakes the product for the purpose. It is true that a garden can yield peas that taste like the vibrant, green essence of spring; tomatoes and carrots of incomparable sweetness; lettuces and herbs that taste like themselves rather than the plastic they are usually packaged in; and potatoes with the biscuity richness of earth itself. Finding, say, fenugreek leaves or celtuce in the shops can take some time, effort and expense; growing your own vegetables, exotic or routine, ensures a reliable supply.

On the other hand a garden, especially in the early years, can also yield little but frustration. Novice gardeners may plant the wrong crops for their soil. Squirrels have an infuriating habit of taking single bites of cucumbers, beans and tomatoes, then leaving the rest on the vine to rot. And even expert gardeners can lose a season's harvest to unco-operative weather.

No matter. The real joy of gardening is the time spent doing it. The deepest pleasure—as with cooking, writing, bringing up children or almost anything worthwhile—is in the work itself. A gardener's memories revolve not around the food produced, but around long summer afternoons with hands in the dirt, surrounded by family, if the garden is at home, or deepening acquaintances with friends and neighbours in an allotment or community garden. To garden is to patiently, lovingly and diligently help life flourish, in the ground and above it. ■



Speculative fiction

## Worlds elsewhere

**Sea of Tranquility.** By Emily St John Mandel. Knopf, 272 pages; \$25. Picador; £14.99

**I**N HER TWO most recent novels, Emily St John Mandel introduced a broad cast of characters who emerge from the wreckage of a unifying upheaval. Now adapted for television, "Station Eleven"—a smash hit published in 2014—plays out in the aftermath of a flu pandemic that decimates the world's population. "The Glass Hotel" (2020) deals with the fallout from a multi-billion-dollar Ponzi scheme that wipes out fortunes, reputations and savings.

The characters in the Canadian author's latest book find themselves struggling to make sense of a moment of dislocation, rather than a life-changing disaster. Compared with its predecessors, the low-stakes set-up hints at a scaled-back drama. But "Sea of Tranquility" proves to be a bold and exciting novel, which manages to explore modern-day concerns while travelling in and out of the familiar world and backwards and forwards in time.

It begins in 1912 with 18-year-old Edwin St Andrew, the son of an English aristocrat, who is banished to Canada after making an unpalatable comment about empire during a dinner party. At a remote spot on Vancouver Island he enters a forest and is disorientated by a flash of darkness, notes from a violin and the fleeting sensation of being in a vast, cavernous space.

The next section unfolds in New York in 2020. Paul Smith, a composer and video

## Back Story Once upon a time

*Donald Glover's "Atlanta" matches method with message to sensational effect*

A SHE DRIVES away from a coffee shop, Marshall Johnson (played by Justin Bartha) is trailed by a mysterious turquoise car. It pulls up at his house, he answers the door—and is served with a reparations claim. His ancestors were slave-owners and, amid a rippling restitution push, Marshall's life unravels. Colleagues frantically take DNA tests to prove they are of blameless stock. "I'm Peruvian," his estranged wife declares. "You were white yesterday," he replies.

Unsettling, funny and deadly serious, episode four in the third and latest season of "Atlanta" is—at least for white viewers—a kind of satirical anxiety dream. Neither Donald Glover, the show's creator and lead actor, nor its other regular stars appear. These surprises are to be expected. Since it first aired in 2016, "Atlanta" has conducted an escalating experiment in form, even as it crafts an offbeat exposé of poverty and racial injustice. The perfect fit between method and message makes it a powerful and original work of art.

At first, the show felt like a sitcom—if Samuel Beckett and James Baldwin had written one together. Mr Glover is Earn, a Princeton drop-out whose cousin Alfred (Brian Tyree Henry) raps under the name Paper Boi. Earn wants to be his manager and has a child with Van (Zazie Beetz). Alfred has a trippy, philosophical housemate called Darius (LaKeith Stanfield). From the start, "Atlanta" dispensed with the niceties of exposition and tired machinery of plot. Banality bled into surrealism and hallucination: an invisible car, a bow-tied shaman on a bus.

Things spiralled from there. An entire episode consisted of a mock talk show on which Paper Boi argued with a white activist about trans rights in a dizzying, multifaceted satire; a spoof news report

featured a black teenager who identified as a 35-year-old white man. In the second season Darius was trapped in a Gothic mansion by a psychopathic music legend who resembled Michael Jackson. The gun Earn acquired in the season premiere went off in the finale, but not as Chekhov might have predicted.

The guiding principle of "Atlanta" seems to be never to compromise with the executives at FX, the network that commissioned it, nor with the audience (in Britain the latest series will be available on Disney+). After a four-year hiatus, the new run opens with two unknown men fishing on a haunted lake; most of the first episode tells the tale of a black child adopted by a pair of sinister white women.

The content is as discomforting as the form. Mostly the villains are not frothing bigots but presumptuous white liberals, like the condescending host of a Juneteenth party in season one. The microaggressions add up, though. Gatekeepers in "Atlanta" will admit its black characters only on soul-crushing, pigeonholing terms. Charm and talent are not enough,



artist, shows his audience footage of his half-sister Vincent—a main character in "The Glass Hotel"—having a similarly strange experience in a forest. Then in 2203 Olive Llewellyn, an author, leaves her home in the second Moon colony and journeys to the Atlantic Republic on Earth to promote her novel about a pandemic, just as a new virus is rearing its head in Australia. One odd scene in Olive's book, inspired by an event in her life, involves a character who, like Edwin and Vincent, suffers a hallucinatory funny turn, in this case in the Airship Terminal in Oklahoma City.

These disparate narrative strands are woven together in the book's fourth section, set in 2401. Gasperry-Jacques Roberts, a detective in the Night City, is tasked with travelling back through the centuries to solve a mystery. What Paul thought was a glitch on a tape turns out to be an anomaly in time. But Gasperry's mission comes freighted with great difficulty—"How do you investigate reality?" he asks—along with considerable danger.

"Sea of Tranquility" is Ms Mandel's most ambitious novel yet (which is saying something). It is consistently inventive

and nor, for Earn and Van, is love. Their mistakes count triple; small gains are liable to be snatched back. The humour is less laugh or cry than both at once.

Even success isn't enough, it turns out. Like the actors—above all Mr Glover, not only a "Star Wars" hero but, as Childish Gambino, an internet-breaking musician—in season three the characters have made it and are touring Europe. But good fortune is less an escape than a new kind of trap. In Amsterdam they stumble into a blackface winter festival. At a party in London, an off-key remark is a chance for white onlookers to perform their piety. Racism, the show insists, transcends borders and bank accounts.

The drama's elastic shape, and a mood both urgent and woozily dreamlike, work because they reflect the unstable conditions that "Atlanta" depicts. If you stop to think about it, the story's surreal moments are no crazier than its everyday indignities, not least the violence that throbs at its margins, often perpetrated by police. The narrative digressions mirror the involuntary detours in lives that are short on autonomy. When mundane errands can lead to disaster, as they do for Alfred and Earn, or a day can begin as screwball comedy and lurch into horror, established genres won't do.

Except perhaps one. The basic template in "Atlanta"—in which fantasy and reality blur, anything can happen yet the ending seems predetermined—is the fairy tale. As with the consoling repetitions of the sitcom, fairy tales run on a loop, but sometimes the effect is nightmarish. Like Hansel and Gretel, Mr Glover's characters keep getting stuck—in a spooky forest, mazy nightclub or depraved frat house. They search for a way out, but sense that there isn't one. They are caught in a story written long ago.

and occasionally mind-bending, thanks to her disrupted timelines and fully realised vision of lunar settlements and parallel universes. And yet her sci-fi realm is not entirely alien.

Amid the speculation she prioritises the human factor, following individuals as they fall out of love, miss and mourn those dearest to them and search for meaning and fulfilment. Her depiction of a future pandemic is recognisable and touching. It adds up to an illuminating study of survival and, in the words of one character, "what makes a world real". ■



## Economic data

	Gross domestic product % change on year ago latest quarter*			Consumer prices % change on year ago latest 2022†		Unemployment %	Current-account balance % of GDP, 2022‡	Budget balance % of GDP, 2022‡	Interest rates 10-yr govt bonds change on latest, %	Currency units per \$ Apr 12th	% change on year ago					
United States	5.5	Q4	6.9	3.0	8.5	Mar	6.6	3.6	Mar	-3.4	-7.5	2.7	103	-		
China	4.0	Q4	6.6	5.5	1.5	Mar	2.0	5.5	Feb‡§	1.8	-5.4	2.5	\$§	-49.0	6.37	2.8
Japan	0.4	Q4	4.6	2.8	0.9	Feb	1.7	2.7	Feb	1.1	-5.9	nil	-8.0	125	-12.6	
Britain	6.6	Q4	5.2	3.9	6.2	Feb	6.4	3.8	Jan††	-3.3	-5.5	1.8	97.0	0.77	-5.2	
Canada	3.3	Q4	6.7	3.8	5.7	Feb	4.5	5.3	Mar	0.3	-4.8	2.6	114	1.26	nil	
Euro area	4.6	Q4	1.0	3.3	7.5	Mar	4.6	6.8	Feb	2.4	-4.3	0.8	109	0.92	-8.7	
Austria	5.5	Q4	-2.0	3.2	6.8	Mar	4.0	4.8	Feb	1.0	-3.8	1.3	134	0.92	-8.7	
Belgium	5.6	Q4	2.1	3.9	8.3	Mar	4.6	5.6	Feb	1.3	-4.7	1.3	134	0.92	-8.7	
France	5.4	Q4	2.9	3.4	4.5	Mar	3.7	7.4	Feb	-1.3	-5.8	1.3	134	0.92	-8.7	
Germany	1.8	Q4	-1.4	2.5	7.3	Mar	5.3	3.1	Feb	5.5	-2.4	0.8	109	0.92	-8.7	
Greece	7.4	Q4	1.7	3.5	8.8	Mar	5.8	11.9	Feb	-5.2	-5.1	2.9	195	0.92	-8.7	
Italy	6.2	Q4	2.5	3.4	6.7	Mar	4.2	8.5	Feb	2.5	-5.7	2.4	168	0.92	-8.7	
Netherlands	6.5	Q4	4.1	3.1	9.7	Mar	6.4	3.4	Feb	5.9	-4.9	-0.2	36.0	0.92	-8.7	
Spain	5.5	Q4	9.2	5.4	9.8	Mar	4.5	12.6	Feb	1.4	-5.7	1.7	135	0.92	-8.7	
Czech Republic	3.7	Q4	3.2	2.7	12.7	Mar	9.5	2.5	Feb‡§	-1.6	-4.8	4.2	229	22.5	-2.8	
Denmark	6.8	Q4	12.5	2.7	5.4	Mar	2.0	2.5	Feb	8.6	nil	1.1	107	6.84	-8.6	
Norway	5.4	Q4	0.3	3.3	4.5	Mar	3.6	3.2	Jan††	9.2	2.6	1.4	76.0	8.74	-2.9	
Poland	7.6	Q4	7.0	4.2	10.9	Mar	7.9	5.4	Mar§	-1.0	-4.0	6.2	463	4.27	-10.8	
Russia	5.0	Q4	na	-10.1	16.7	Mar	15.0	4.1	Feb§	8.5	-6.7	10.8	338	85.2	-9.2	
Sweden	5.2	Q4	4.6	3.3	4.3	Feb	3.0	7.9	Feb§	4.3	0.1	1.5	118	9.47	-9.5	
Switzerland	3.7	Q4	1.1	2.9	2.4	Mar	1.2	2.2	Mar	5.6	0.5	0.9	116	0.93	-11	
Turkey	9.1	Q4	6.2	3.0	61.1	Mar	50.5	11.4	Feb§	-2.8	-3.9	23.1	562	14.6	-44.2	
Australia	4.2	Q4	14.4	3.2	3.5	Q4	4.3	4.0	Feb	2.0	-3.0	3.1	141	1.34	-12	
Hong Kong	4.8	Q4	0.8	1.7	Feb	4.5	4.5	4.5	Feb‡‡	-1.6	-6.9	2.8	150	7.84	-0.9	
India	5.4	Q4	26.6	7.2	7.0	Mar	4.9	7.6	Mar	-1.1	-6.4	7.2	118	76.1	-14	
Indonesia	5.0	Q4	na	5.1	2.6	Mar	3.6	6.5	Q3§	0.2	-4.9	6.9	33.0	14,362	16	
Malaysia	3.6	Q4	na	4.0	2.2	Feb	2.9	4.1	Feb§	2.9	-6.1	4.1	100	4.23	-2.4	
Pakistan	6.0	2021**	na	3.0	12.7	Mar	8.0	6.3	2021	-5.1	-6.3	11.9	†††	174	182	-16.1
Philippines	7.8	Q4	13.0	6.0	4.0	Mar	4.1	6.4	Q1§	-1.7	-7.4	6.0	173	52.1	-6.8	
Singapore	6.1	Q4	9.5	3.8	4.3	Feb	2.9	2.4	Q4	17.5	-0.9	2.6	105	1.36	-1.5	
South Korea	4.1	Q4	5.0	2.7	4.1	Mar	3.2	3.0	Mar§	2.2	-3.0	3.3	130	1,236	-9.0	
Taiwan	4.9	Q4	7.6	4.5	3.3	Mar	3.8	3.7	Feb	13.1	-1.2	1.1	64.0	29.2	-2.5	
Thailand	1.9	Q4	7.5	3.2	5.7	Mar	2.8	1.5	Dec§	0.5	-4.6	2.6	87.0	33.6	-6.5	
Argentina	8.6	Q4	6.3	3.2	52.3	Feb	54.5	7.0	Q4§	1.2	-4.3	na	113	-17.9		
Brazil	1.6	Q4	2.2	0.3	11.3	Mar	9.5	11.2	Feb‡‡	-0.9	-7.7	12.1	289	4.66	21.5	
Chile	12.0	Q4	7.5	3.2	9.4	Mar	7.9	7.5	Feb‡‡	-2.7	-4.5	6.5	316	808	-12.3	
Colombia	10.7	Q4	18.2	4.2	8.5	Mar	7.9	12.9	Feb§	-4.0	-5.3	9.5	333	3,737	-2.3	
Mexico	1.1	Q4	0.1	1.9	7.5	Mar	7.4	3.8	Feb	-0.9	-3.5	8.8	251	19.8	1.2	
Peru	3.2	Q4	-12.9	3.1	6.8	Mar	6.5	9.4	Feb§	-3.1	-2.6	6.9	195	3.72	-1.9	
Egypt	9.8	Q3	na	5.1	10.5	Mar	9.7	7.4	Q4§	-6.3	-7.0	na	na	18.5	-15.2	
Israel	11.0	Q4	17.6	4.1	3.5	Feb	3.8	3.9	Feb	3.4	-2.7	2.4	134	3.20	3.1	
Saudi Arabia	3.2	2021	na	6.7	1.6	Feb	2.1	6.9	Q4	17.8	12.1	na	na	3.75	nil	
South Africa	1.7	Q4	4.7	2.1	5.7	Feb	4.8	35.3	Q4§	-0.9	-6.0	9.7	31.0	14.5	0.6	

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	% change on:			% change on:				
	Index	Apr 12th	one week	Dec 31st	index	Apr 12th	one week	Dec 31st
United States S&P 500	4,397.5	-2.8	-7.7		46,407.3	5.6	4.1	
United States NasComp	13,371.6	-5.9	-14.5		3,303.0	-3.3	6.6	
China Shanghai Comp	3,213.3	-2.1	-11.7		2,666.8	-3.4	-10.4	
China Shenzhen Comp	2,047.9	-3.8	-19.1		16,990.9	-3.6	-6.7	
Japan Nikkei 225	26,335.0	-5.2	-8.5		1,674.3	-1.6	1.0	
Japan Topix	1,863.6	-4.4	-6.5		90,345.9	-1.6	8.2	
Britain FTSE 100	7,576.7	-0.5	2.6		116,146.9	-2.3	10.8	
Canada S&P TSX	21,715.4	-1.0	2.3		53,907.3	-4.3	1.2	
Euro area EURO STOXX 50	3,831.5	-2.2	-10.9		10,898.7	-4.2	-8.5	
France CAC 40	6,537.4	-1.6	-8.6		2,108.8	-1.9	1.7	
Germany DAX*	14,125.0	-2.1	-11.1		13,646.1	3.3	20.4	
Italy FTSE/MIB	24,667.3	-1.2	-9.8		73,801.9	-2.0	0.1	
Netherlands AEX	716.4	-2.7	-10.2		World, dev'd MSCI	2,959.8	-2.9	-8.4
Spain IBEX 35	8,578.0	-0.5	-1.6		Emerging markets MSCI	1,110.4	-4.0	-9.9
Poland WIG	63,863.2	-1.6	-7.8					
Russia RTS, \$ terms	1,004.7	nil	-37.0					
Switzerland SMI	12,378.9	nil	-3.9					
Turkey BIST	2,463.8	5.9	32.6					
Australia All Ord.	7,735.5	-1.2	-0.6					
Hong Kong Hang Seng	21,319.1	-5.3	-8.9					
India BSE	58,576.4	-2.7	0.6					
Indonesia IDX	7,214.8	0.9	9.6					
Malaysia KLSE	1,597.1	nil	1.9					

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

## Commodities

The Economist commodity-price index	2015=100	Apr 5th	Apr 11th*	month	year
Dollar Index	194.7	190.5	-0.2	13.6	
All Items	162.9	162.4	-2.8	27.5	
Food	179.5	179.2	-6.4	12.9	
Industrial	179.2	179.2	0.0	1.2	
All	224.4	216.8	1.6	5.5	
Non-food agriculturals	237.8	228.0	3.7	3.9	
Metals	237.8	228.0	3.7	3.9	
Sterling Index	226.4	223.5	0.2	19.8	
All items	197.4	194.5	0.8	24.7	
Euro Index	197.4	194.5	0.8	24.7	
Gold	1,930.8	1,952.8	1.4	12.1	
\$ per barrel	106.8	98.7	-0.6	54.6	

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.

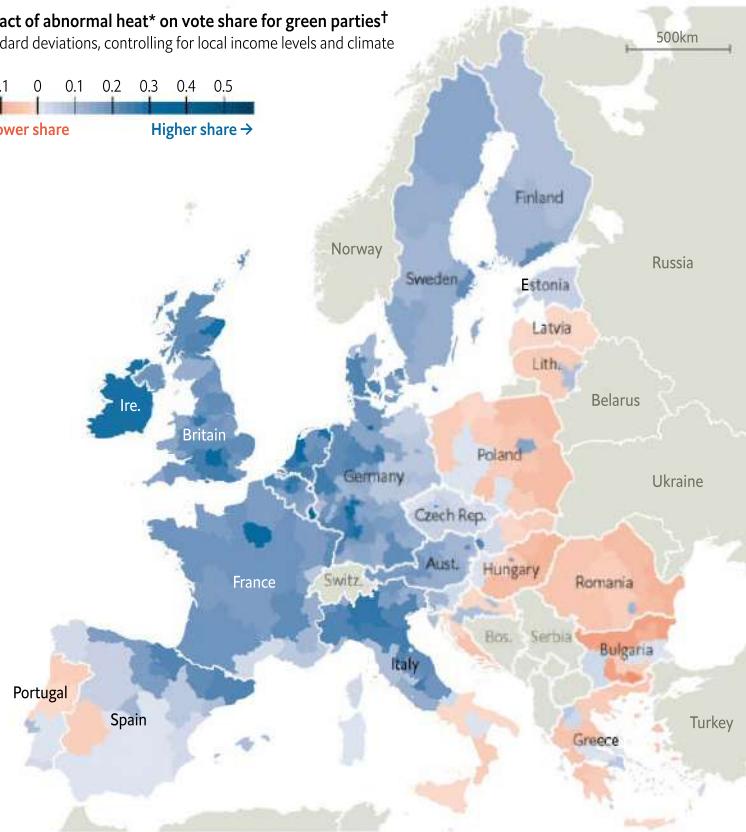
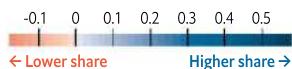
For more countries and additional data, visit [Economist.com/indicators](http://Economist.com/indicators)

## Graphic detail Climate change and voting

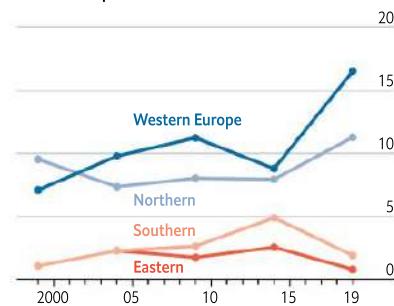
The Economist April 16th 2022 77

→ Extreme weather is most helpful to green political parties in northern and western Europe

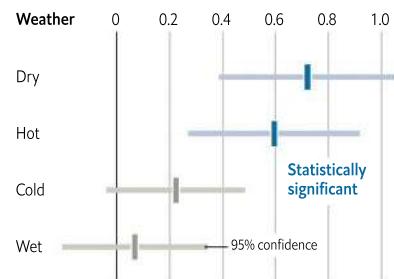
Impact of abnormal heat\* on vote share for green parties†  
Standard deviations, controlling for local income levels and climate



Green parties' vote share in elections  
for the European Parliament, %



Change in green parties' vote share† after  
one-standard-deviation increase\*, % points



\*One standard deviation from long-term monthly average

†European Parliament, 1994–2019. Sources: "Climate change experiences raise environmental concerns and promote green voting", by R. Hoffmann et al., *Nature Climate Change*, 2022

## Feeling the heat

In rich, chilly parts of Europe, heatwaves bolster environmentalism

**T**HE BIGGEST obstacles to slowing climate change are political. Although carbon emissions can be slashed with current technologies, such cuts are perceived to require sacrifices today in order to reduce the risk of calamity in future. Many voters refuse to shoulder these costs.

Global temperatures are already rising fast. Even if today's weather extremes may look mild by future standards, they are still more severe than those of the past. In theory, unusual weather events like dry or warm spells might have a silver lining: providing a wake-up call to complacent voters. A recent paper by Roman Hoffmann, Raya Muttarak and Jonas Peisker of IIASA, a think-tank, and Piero Stanig of Bocconi University finds evidence for this pattern, with a caveat. It shows up mostly in rich countries with cool climates.

To test the link between weather and

environmentalism, the authors compiled data on wildfires, droughts, floods and temperatures in 1,239 European administrative areas in 1994–2019. They also tracked two measures of public concern about the environment: responses from a long-running European survey, and the performance in European Parliament elections of green parties, whose voters tend to be particularly focused on climate change.

The researchers found that unusual weather, particularly in the form of heat, did focus people's minds on climate. The more unseasonably warm days (when compared with the average in 1971–2000) in a given region during the year preceding a poll or European election, the more people in that area said that they were concerned about the environment, and the greater the share of votes green parties went on to win. The same was true of droughts, and to a lesser degree of wildfires.

The impact of other types of weather was much less clear. Cold snaps did seem to help green parties, but to a lesser degree. Extreme wet periods had little effect. And green parties may in fact have fared worse in elections following floods (though further study is needed to confirm this effect). The authors speculate that use of the spe-

cific term "global warming" rather than the broader "climate change" may prevent the public from attributing weather events other than heatwaves or droughts to human activity. Another study found a similar discrepancy in America: hot, dry days raised the chances that poll respondents said they believed in climate change, but floods and low temperatures did not.

Even high-temperature episodes do not consistently strengthen environmentalism. Instead, the effect is limited to specific contexts. It is greatest in the temperate and colder regions of northern and western Europe, and mostly absent in the arid Mediterranean basin. One possible explanation is that southern Europeans are already used to hot weather, and may be less perturbed by extreme heatwaves. They are also more likely to have air conditioning.

Another source of variation is income. In rich parts of the EU, such as Brussels, votes for green parties tend to surge following high temperatures. No such increase occurs in poor areas like western Bulgaria, where green parties are uncompetitive regardless of recent weather. For families struggling to put bread on the table, worrying about the fate of the planet decades hence might seem like a luxury. ■



## Highly methodical madness

Vladimir Zhirinovsky, the court jester of Russian politics was 75. His death was announced on April 6th

**H**E LIKED TO dress in bright colours. Acidic yellow, fluorescent red and purple were his favourites for a jacket. His top shirt button was always undone, his tie loose, his suit crumpled and covered in his last dinner. On occasions he wore a bow tie; sometimes a Soviet military uniform, replete with medals. The leader of the right-wing and misnamed Liberal Democratic Party, Vladimir Zhirinovsky was first and foremost a showman. He was after fame, money and sex—not political office. But he played an important role in Russian politics, stripping it of meaning, faking opposition, turning it into buffoonery and providing an outlet for nationalism and xenophobia.

Zhirinovsky was a prized guest at Moscow's political *beau-monde* parties. Actors loved to do imitations of him in variety shows. His eccentricity, his direct slightly twitchy manner was easy to mimic; his every utterance a caricature of the scandalised, embittered, vodka-swilling dolt of Moscow's back streets—disgruntled in equal measure by personal misery, sexual frustration and the humiliation of his once-mighty nation.

His fans called him "Zhirik", a nickname better suited to a circus clown. Stage characters don't talk about the biography of the actors who play them. He was born in 1946 in Almaty, then the capital of Soviet Kazakhstan, to an ethnic Russian mother and a Ukrainian Jewish father, Wolf Edelstein, who had been deported from western Ukraine and who later emigrated to Israel. "My mother was Russian, my father was a lawyer," he said of his background.

He burst onto the stage in late 1993. Russia had just stepped back from the edge of a civil war. Street battles between a Stalinist-fascist coalition and President Boris Yeltsin ended in the president's favour after he shelled the parliament building where the hardliners were holed up. It seemed, at last, that Russia could forge ahead with creating a market-oriented democratic system and living in peace with the world. At a televised party held on the

night of the parliamentary elections in 1993, liberals were sipping champagne and congratulating each other on their victory.

Zhirinovsky gate-crashed their celebrations when his ultranationalist party topped the poll with 23% of the national vote, compared with the 15.5% attained by pro-Western liberals. "Russia, come to your senses, you have gone bonkers," said Yury Karyakin, a liberal deputy and literary academic. A scholar of Dostoyevsky, Karyakin took Zhirinovsky for a real threat. He did not recognise in him one of the novelist's favourite types—those who revel in scandals, make mockery of any value, and break taboos.

In Zhirinovsky's 1995 electoral campaign a nearly naked dancer in an erotic floor-show gyrated to the song: "I'm looking for a man who will spank me, spank me..." In the same campaign he threw a glass of orange juice at Boris Nemtsov, the liberal opposition leader who was murdered in 2015. "We must always exploit the worst in the people. Such is the fate of the opposition," he once said.

He was not, of course, opposition in any real sense. His party was brought into being by the Soviet KGB, which in the spring of 1990 reluctantly concluded that the communist monopoly on power was over and some version of multi-party democracy had to be accepted. But Russia's security services—going right back to tsarist times—had vast experience of manipulating and fostering tame "opposition" groups. After the authorities had announced that non-communist political parties could be legally registered, a mysterious group called the Liberal Democratic Party of Russia sprang into existence.

His party was meant to split the democratic electorate. But as a showman in search of an audience, Zhirinovsky sensed that popular demand was in the field of imperial nostalgia and *resentiment*—a mixture of frustration, jealousy and resentment. His electorate was the disenchanted and the lumpenised. He had a knack for articulating their basic instincts, forbidden desires and dark thoughts. He told them he dreamt of a day "when Russian soldiers can wash their boots in the warm waters of the Indian Ocean".

While he was entertaining the public with his antics, those with real political power looted their own country. As Kirill Rogov, a chronicler of post-Soviet politics, noted, Zhirinovsky's confident dominance on that stage kept real right-wing nationalists with their permanent hangover and stern gloominess at bay, thus shielding the Russian centrist kleptocratic bureaucracy from a nationalist revanche.

Perhaps it was partly his success that made the Kremlin realise just how fertile that nationalism and xenophobia were. As it came to adopt his slogans of imperial resurgence, Zhirinovsky spotted another fertile ground—the resentment of Moscow by the regions. His Liberal Democratic Party became a refuge for populists across the country who rivalled and rattled Kremlin nominees. The Kremlin responded with its usual thuggery and repressions.

He, in turn, warned them of the growing rage. "Do you want a Maidan, like in Ukraine? Then you will get one! Just one match will be lit somewhere, a fire will erupt everywhere, the people will not stand for it...Don't try to bring people to the boil; don't provoke conflict out of the blue. You have no shame and no conscience." The Kremlin took his warning of rising anger in Russia seriously and doubled-down on nationalism, xenophobia and aggression.

Zhirinovsky understood the Kremlin's intentions because he taught them the language in which they spoke. Last December he made an eerie prediction. "At 4am on February 22nd, you will feel [our new policy]. I would like 2022 to be a peaceful year. But I love the truth. For 70 years I have been telling the truth. It will not be peaceful. It will be a year when Russia becomes great again." He was out by two days: Vladimir Putin launched his invasion in the small hours of February 24th. By then he was already in hospital and did not join in the fascistic frenzy. It is not known exactly when he died, but his act was over and he took his exit just in time. He was a cynical jester, not a war criminal. As Russia descended into darkness, there was no room for his bright colours. ■

*Subscriber-only live digital event*

# Analysing the results of the French presidential election

**Monday April 25th**  
**5pm BST / 12pm EDT / 9am PDT**

Join us to discuss the election outcome on the day after voting takes place. *The Economist's* editors and a guest expert will debate what the results mean for France and its position in Europe, as well as the global repercussions.

Please submit your questions in advance to:  
[subwebinar@economist.com](mailto:subwebinar@economist.com)



**Edward Carr**  
Deputy editor



**Sophie Pedder**  
Paris bureau chief

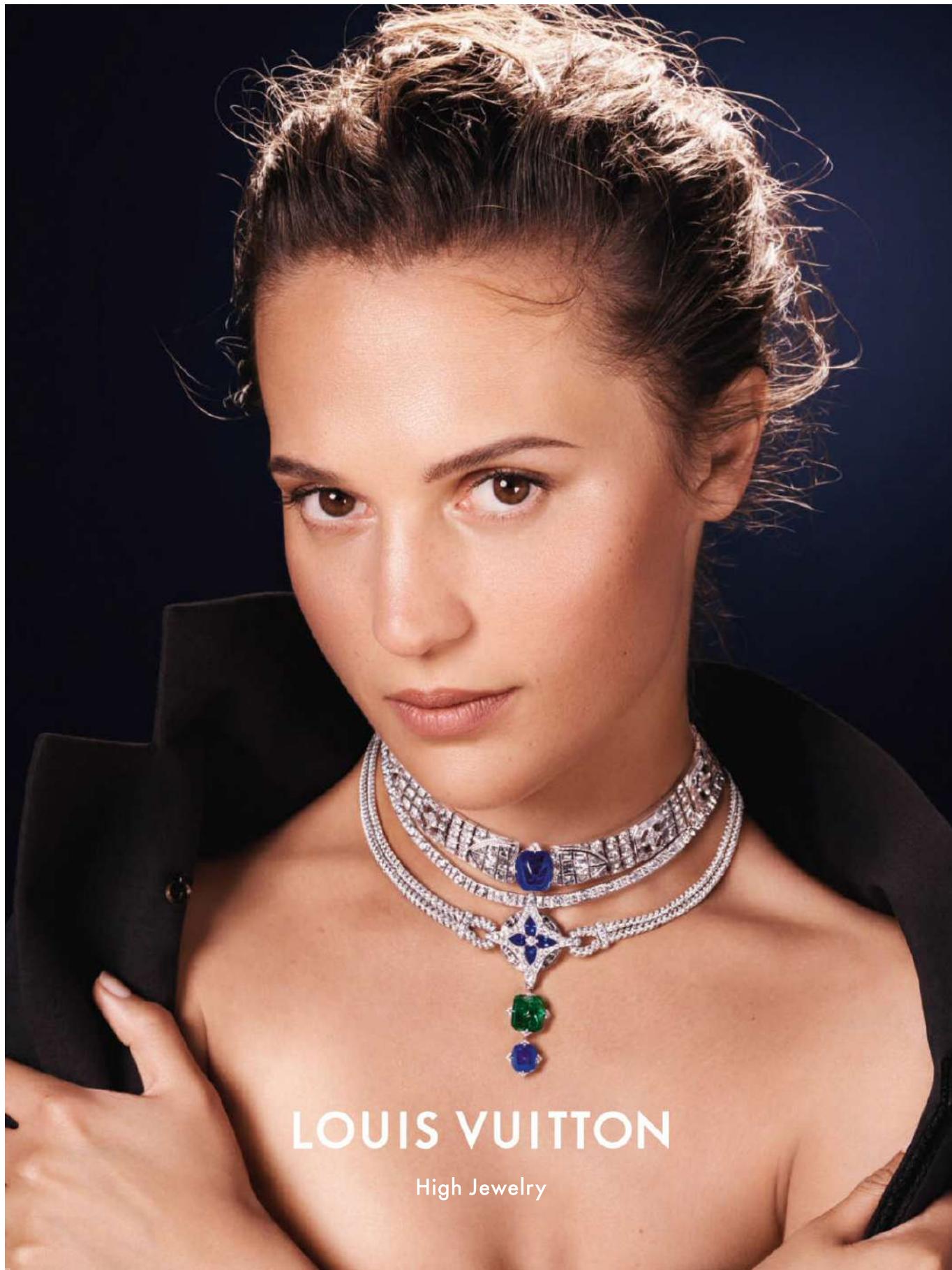


**Benjamin Haddad**  
Senior director, Europe  
Centre, Atlantic Council



Reserve your space:  
[economist.com/french-election](http://economist.com/french-election)





LOUIS VUITTON

High Jewelry