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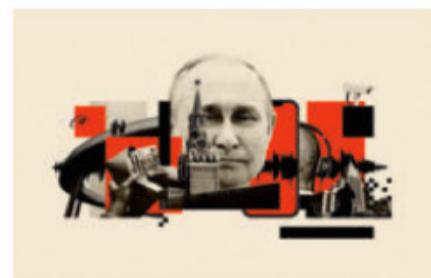
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 and an unworthy, timid ignorance  
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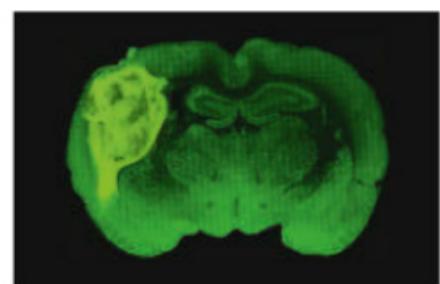
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A large explosion badly damaged the Kerch road-and-rail bridge, which connects Russia with occupied Crimea and is vital for resupplying Russian forces operating in the south of Ukraine. Although Ukraine neither confirmed nor denied that it had carried out the attack, many assumed that it had done so. Only very limited traffic is now able to use the bridge. It was unclear whether the explosion was caused by a lorry-bomb, an underwater drone or a missile.

Russia retaliated by pounding cities across Ukraine with often-inaccurate cruise missiles and drone strikes. The centre of Kyiv was struck for the first time since the start of the war. Ukraine's engineers sought to repair damage to infrastructure and its leaders argued that the attacks would feed the will to fight. In response, NATO countries vowed to speed up their deliveries of air-defence systems to Ukraine. So far, Mr Putin's attacks appear to have accomplished little militarily.

Alexander Lukashenko, the dictatorial president of Belarus, sent troops to join a Russian task-force that is assembling on the country's border with Ukraine, possibly to launch another front in the war. Mr Lukashenko claimed the task-force was preparing for a Ukrainian attack on Belarus, for which there is no evidence.

Britain's Supreme Court heard arguments on whether there should be another Scottish independence referendum. The Scottish National Party's leader, Nicola Sturgeon, claims that the issue has gone to court

because the British government has no respect for Scottish democracy. If the court finds against the nationalists, Ms Sturgeon says she will use the vote in Scotland at the next general election as a de facto referendum on independence. The court will deliver its ruling in the coming months.

### The truth will set you free

A jury in Connecticut ordered Alex Jones, a conspiracy theorist, to pay \$965m in damages to eight families who lost loved ones in the Sandy Hook school massacre in 2012. For years Mr Jones has peddled falsehoods across his media empire that the shooting was staged by the government. His lies caused great distress to the parents. He remains defiant. After the verdict he claimed to be "proud" of being attacked for his views.

Joe Biden said there would be "consequences" for America's relationship with Saudi Arabia following OPEC's decision to cut oil production in order to increase the commodity's price. Some Democrats said OPEC was supporting Russia's war (Russia also benefits from higher oil prices). Bob Menendez, the chairman of the Senate Foreign Relations Committee, promised to freeze arms sales to the Saudis.

Turbulence persisted in Iran, nearly a month after it was sparked by the death of a young woman in the custody of the "morality" police for being "improperly" veiled. University students remained prominent in the nationwide protests. It was unclear how the army, as opposed to the hardline Islamic Revolutionary Guard Corps and the loyalist Basij militia, would respond.

Under American mediation, Israel and Lebanon agreed on a maritime boundary that should allow each country to co-operate in the extraction of undersea gas. The deal may still need official approval in both countries.

**Japan's** Epsilon-6 space rocket was sent a self-destruct command less than seven minutes into its launch. The rocket and the commercial satellites it was carrying fell into the sea east of the Philippines. The aborted launch was Japan's first rocket failure in nearly two decades.

Kim Jong Un, North Korea's dictator, oversaw the launch of two long-range cruise missiles. State media said the objective was to test the reliability of nuclear-capable weapons. The launch follows two weeks of tactical nuclear exercises by the dictatorship in response to joint naval drills by South Korea and America.

Local elections in New Zealand resulted in a tilt to the right, as big cities elected conservative mayors. This may indicate a turn away from the governing Labour Party led by Jacinda Ardern.

Nepal faced severe disruption from torrential rain and landslides, which have killed at least 33 people. The country's western region is the worst affected, with more than 18 people still missing and hundreds of houses flooded.

An outbreak of Ebola in Uganda has killed 19 people, including four health workers. A total of 54 people are known to have been infected in the current outbreak by the virus, which usually kills about half the people who catch it.

Mahamat Idriss Déby, who declared himself president of Chad 18 months ago after a coup, extended his rule by another two years. This came shortly before a mid-October deadline for holding elections and handing power to a civilian government.

Revolution for Prosperity, a political party set up just six months ago by a tycoon, won 56 of 120 seats in parliamentary elections in Lesotho. The shift away from established parties is part of a broader trend across Africa, where

growing numbers of voters are backing a new style of candidate. In Nigeria Peter Obi, an outsider, took an early lead in polls as campaigning started for presidential elections in February.

### Please send help



Haiti's prime minister, Ariel Henry, asked for intervention by a foreign armed force to avert a "major humanitarian crisis". Gangs have been blocking deliveries from the main fuel terminal since September and have seized control of motorways, forcing businesses and hospitals to close and causing shortages of food and bottled water. A woman was killed in clashes between police and protesters. An outbreak was reported of cholera, a disease that has killed 10,000 Haitians in recent years.

At least 43 people died and more than 50 were missing in landslides in Venezuela. Heavy rains caused by La Niña, a weather pattern that cools the Pacific Ocean near South America, caused the landslides, in Las Tejerias, 67km south of Caracas, Venezuela's capital.

Mexico has agreed to accept unauthorised Venezuelan migrants expelled by America. Until now most have been allowed to remain in the United States. At the same time, the United States agreed to take in for two years 24,000 Venezuelans who fly directly from their country. Some 6m have fled poverty, violence and repression in Venezuela over the past five years, mostly to other Latin American countries.

The Bank of England acted again to stabilise **bond markets** and increased its maximum daily purchases of long-dated gilts. The central bank is buying the bonds through a temporary programme it created after markets took fright at the government's plans for unfunded tax cuts. The programme is supposed to end on October 14th. British pension funds want it to be extended. They are taking a hit from collateral calls on derivatives linked to bond prices, leaving them with a short-term financing problem.

#### Dire straits

The turmoil pushed up the costs of financing Britain's **government debt**, with the interest rate on ten-year bonds climbing back to levels that prompted the Bank of England's first emergency intervention in September. In an attempt to regain credibility in the markets, Kwasi Kwarteng, the chancellor of the exchequer, brought forward the date of his "fiscal plan", which will explain how his tax cuts are to be paid for, to October 31st.

With markets expecting the Federal Reserve to continue raising interest rates, the yield on American government bonds has also increased. That has pushed up **mortgage rates** in America, which are linked to the yield. The rate on a 30-year fixed-rate mortgage has climbed above 6.8%, the highest level since 2006, according to the Mortgage Bankers Association.

Global inflation is expected to peak later this year but remain elevated in 2023, said the IMF in its latest outlook. Russia's invasion of Ukraine continues to "destabilise the global economy", said the fund, which shaved its forecast for global GDP growth next year to 2.7%. With the **world economy** "headed for stormy waters" the IMF thinks that investors will turn to safe assets, such as US Treasuries, pushing the dollar even higher. Kristalina Georgieva, the IMF's managing

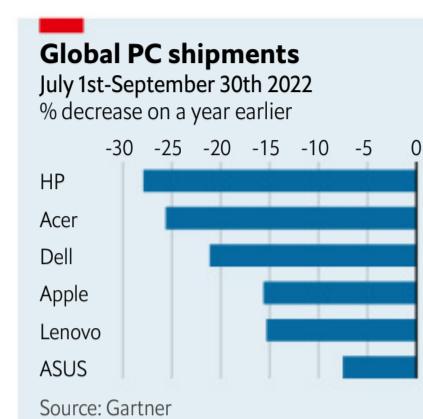
director, predicted that the near future will be "more volatile, more fragile".

General Motors launched a new business to help customers charge their electric cars and keep their power bills down. **GM Energy's** energy-management system is similar to the one sold by Tesla.

A consortium backed by private equity agreed to pay \$7.9bn for **Westinghouse Electric**, which provides nuclear services including nuclear fuel and maintenance to around half the reactors worldwide. The deal is seen as a big investment in the future of nuclear power. In order for the world to hit net-zero carbon goals, nuclear generation needs to double by 2050, according to the International Energy Agency.

Billions of dollars were wiped off the stockmarket value of **Chinese chipmakers**, after the Biden administration issued new export controls that severely curtail their access to American technology. The sell-off in shares soon extended to chipmakers in other countries. The new rules will make it much harder for Chinese companies to develop supercomputers and will slow their advance in artificial

intelligence, a technology in which China claims to be a world leader.



Global shipments of **personal computers** fell by 19.5% in the third quarter, year on year, according to Gartner. It is the biggest decline in the consulting firm's survey since it began tracking the market in the mid-1990s. Sales boomed during the pandemic, before inflation ate into spending budgets. Chipmakers are feeling the effects. **Intel** is reportedly planning to cut thousands of jobs as demand for its PC processors slows.

Personal computers could become a thing of the past if **Meta's** new virtual-reality headset takes off. Facebook's parent company launched the Quest Pro this week, which is marketing itself to companies as a means of improving employees' interaction. It is

Meta's first headset with inward-facing sensors, which can replicate a person's smile, or even eye contact with someone. Meta also announced partnerships with Microsoft and Zoom, as it seeks to expand the metaverse to home working.

The share prices of DoorDash, Lyft, Uber and other **gig-economy companies** fell sharply after America's Labour Department proposed new guidelines to determine if workers at such firms are contractors or employees. As contractors, the workers do not receive many benefits. However, the terms of the government's proposal are limited to issues over pay.

#### Why worry

**LVMH** reported a 28% rise in revenue for the first nine months of 2022, year on year. The return of the jet-setters after lockdown, and a weaker euro, boosted the luxury-goods company's business in Europe. Sales highlights included the Tambour Twenty collector's watch (as "embodied" by Bradley Cooper, an actor). "Despite everything going on in the global economy", demand for LVMH's wares remains "vigorous", said its chief financial officer.



# A new chapter

## The Communist Party's obsession with control will make China weaker but more dangerous

IT WILL BE an orderly affair. From October 16th the grandes of China's Communist Party will gather in the Great Hall of the People in Beijing for their five-yearly congress. Not a teacup will be out of place; not a whisper of protest will be audible. The Communist Party has always been obsessed with control. But under President Xi Jinping that obsession has deepened. After three decades of opening and reform under previous leaders, China has in many ways become more closed and autocratic under Mr Xi. Surveillance has broadened. Censorship has stiffened. Party cells flex their muscles in private firms. Preserving the party's grip on power trumps any other consideration.

This is evident in Mr Xi's response to covid-19. China's initial lockdown saved many lives. However, long after the rest of the world has learned to live with the virus, China still treats every case as a threat to social stability (see China section). When infections crop up, districts and cities are locked down. Compulsory movement-tracking apps detect when citizens have been near an infected person, and then bar them from public spaces. It goes without saying that no one thus tagged may enter Beijing, lest they start an outbreak at a politically sensitive time.

Some hope that, once the congress is over, a plan for relaxing the zero-covid policy may be unveiled. But there is no sign yet of the essential first steps to avoid mass deaths, such as many more vaccinations, especially of the old. Party propaganda suggests that any loosening is a long way off, regardless of the misery and economic mayhem that lockdowns cause. The policy has failed to adapt because no one can say that Mr Xi is wrong, and Mr Xi does not want China to be dependent on foreign vaccines, even though they are better than domestic ones.

Such control-freakery has wider implications for China and the world. At home Mr Xi makes all the big calls, and a fierce machinery of repression enforces his will. Abroad, he seeks to fashion a global order more congenial for autocrats. To this end, China takes a twin-track approach. It works to co-opt international bodies and redefine the principles that underpin them. Bilaterally, it recruits countries as supporters. Its economic heft helps turn poorer ones into clients; its unsqueamishness about abuses lets it woo despots; and its own rise is an example to countries discontented with the American-led status quo. Mr Xi's aim is not to make other countries more like China, but to protect China's interests and establish a norm that no sovereign government need bow to anyone else's definition of human rights. As our special report argues, Mr Xi wants the global order to do less, and he may succeed.

Rightly, the West finds this alarming. No despotic regime in history has had resources to match modern China's. And unlike the leader of a democracy, Mr Xi can snap his fingers and deploy them. If he wants China to dominate technologies such as artificial intelligence or drugs, public and private funds pour into research. Size and single-mindedness can produce results: China is probably ahead of the West in such fields as 5G and batteries (see Briefing). The more powerful its economy grows, the greater its geopolitical muscle is likely to be. This is especially so if it can

dominate certain key technologies, make other countries depend on it and set standards that lock them in.

This is why Western governments now treat Chinese innovation as a national-security issue. Many are boosting subsidies for industries such as chipmaking. President Joe Biden's administration has gone much further, seeking openly to cripple the Chinese tech industry. On October 7th it banned the sale of high-end chips to China, both by American firms and by foreign ones that use American kit (see Business section). This will slow China's advances in fields America considers threatening, such as AI and supercomputers. It will also harm Chinese consumers and foreign firms, which may ultimately find ways around the new rules. In short, it is too blunt a tool.

It also suggests that Mr Biden overestimates the strengths of China's top-down model and underestimates the democratic world's more freewheeling one. Mr Xi's obsession with control may make the Communist Party stronger, but it also makes China weaker than it would otherwise be. Throwing resources at national goals can work but is often inefficient: American firms produce roughly twice as much innovation for the same outlay as their Chinese peers, by some estimates. Having a leader who hates to admit mistakes makes it harder to correct them.

Even as Mr Xi strives to make China a superpower, his and the party's authoritarian urges have isolated it (see Culture section). The great firewall slows the inflow of foreign ideas. Zero-covid has curbed movement in and out of the country: Chinese scholars have all but stopped attending conferences abroad; Chinese executives barely travel; the number of European expats in China has halved. A less connected China will be less dynamic and creative. And the government is ag-

gravating China's isolation by making it less hospitable for foreigners to live or work in. For example, foreign firms must make sensitive data they send abroad accessible to the state, which often owns their main competitors. This is an incentive to do research and development outside China. Finally, China's dire human-rights record ensures that it has few real friends, and limits co-operation with countries at the cutting edge of technology.

## Know your rival and yourself

That China is weaker than it appears is scant comfort. Even much weaker powers can be dangerous, as Russia has shown under President Vladimir Putin. A more isolated, inward-looking China could become even more belligerently nationalistic.

The West's best course is to stand up to China where necessary, but otherwise allow collaboration. Restrict exports of the most sensitive technology, but keep the list short. Resist China's attempts to make the global order more autocrat-friendly, but avoid overheated martial rhetoric. Welcome Chinese students, executives and scientists, rather than treat them all as potential spies. Remember, always, that the beef should be with tyranny, not with the Chinese people. It will be a hard balance to strike. But handling the most powerful dictatorship in history was always going to require both strength and wisdom. ■



## Bond markets

# The Iceberg Lady

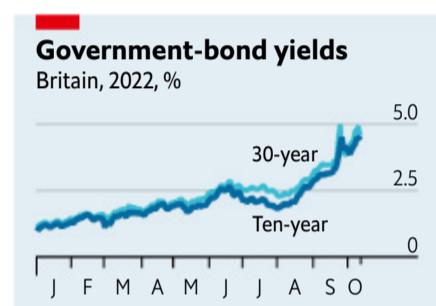
## Britain's prime minister wilts in a mess of her own making

LIZ TRUSS has already secured her place in British political history. However long she now lasts in office, she is set to be remembered as the prime minister whose grip on power was the shortest. Ms Truss entered Downing Street on September 6th. She blew up her own government with a package of unfunded tax cuts and energy-price guarantees on September 23rd. Take away the ten days of mourning after the death of Queen Elizabeth II, and she had seven days in control. That is roughly the shelf-life of a lettuce.

If this judgment sounds severe, look at gilt yields, which have this week been climbing again (see Britain section). One problem is financial stability. The Bank of England has twice widened its emergency bond-buying programme to try to prevent a spiral of forced selling of assets by pension funds. As a sign of markets' continuing unease, sterling slid when Andrew Bailey, the bank's governor, said on October 11th that purchases would end as planned three days later. Officials had reportedly been briefing bankers that they might be extended after all.

It is tempting to conclude from rising gilt yields, the falling pound and Mr Bailey's ham-fistedness that the bank's interventions are failing. Tempting, but wrong. The combination of a cheap currency and high bond yields reflects the second problem, which is that investors have decided Britain has become riskier. The central bank cannot solve this by itself, however much Ms Truss and her hapless chancellor, Kwasi Kwarteng, may wish otherwise.

The steps that this pair have taken thus far to reassure markets have been the easy ones: a u-turn on a small part of the tax-cutting package; an accelerated timetable for Mr Kwarteng to unveil a fiscal plan on October 31st; and belated shows of deference to institutions, like the Treasury, that they initially disparaged.



The Iceberg Lady will find that the remaining choices are hard.

One is to undertake massive spending cuts. The Institute for Fiscal Studies, a think-tank, reckons that the government needs annual savings worth around £60bn (\$67bn) to fill in the holes created by the tax cuts, rising debt-interest costs and a deteriorating economic outlook. Cutting departmental spending across the board by 15% would get you only a little more than halfway to the necessary savings. Conservative MPs will not wear cuts on such a scale; neither will voters.

The second hard choice is to reverse more of Ms Truss's tax cuts. The sensible course for the government would include measures to unwind the income-tax cut for basic-rate taxpayers

and to focus on encouraging investment incentives instead of cutting headline rates of corporation tax. Ms Truss shows no sign of abandoning her flagship policy—if only because to do so would destroy her administration.

So Ms Truss and Mr Kwarteng will probably try to pass the October 31st milestone with a great dollop of fudge: sticking to tax cuts; promising implausible growth dividends and unspecified spending cuts; claiming that government-bond yields are rising everywhere. If so, they will confirm the verdict of the markets that Britain is now a more dangerous place to lend to. The damage done by the “mini-budget” on September 23rd will be embedded in needlessly higher borrowing costs for the government, homeowners and businesses.

The prime minister is trapped. Right now her choices are to slash the state, reverse course on tax cuts or carry on as though nothing is really wrong. In the end, though, either financial markets or Westminster politics will force her to stop pretending that she has any prospect of toughing it out. That is why Ms Truss's premiership is already fatally spoiled. ■

## Europe's energy crisis

# Less is more

## Europe has not done enough to curtail energy demand and boost the supply of gas

UKRAINE CANNOT repel Russia's invasion without the support and strength of its allies. The recent rapid advance of the Ukrainian army has shown the huge pay-off it reaps from Western arms shipments and intelligence-sharing. Russia's missile attacks on civilian targets this week are a sign of its desperation in the face of military defeats (see Europe section).

Unfortunately, away from the battlefield there is a growing and under-acknowledged threat to the Western resolve on which Ukraine relies. Europe is mishandling the energy crisis Russia has inflicted on it. Its failures could not only harm Europe, but also sap public support for the war effort.

On the surface Europe's predicament seems less perilous than it did. Despite Russia this year reducing flows of gas into

Europe to half their normal levels, the EU's gas-storage facilities are over 90% full, having been topped up with abundant imports of liquefied natural gas (LNG). October looks likely to be unseasonably warm, reducing energy demand. The price of European gas for delivery in December is down about 33% from mid-September and 50% from its highs during a panic this summer.

Yet this balmy picture is fuelling complacency. Long-range weather forecasts suggest November and December could be cold. And gas storage is not enough to replace lost Russian inflows. If these fall to zero, normal energy consumption would leave storage perilously low by March, which can be chilly. Cold weather in Asia or a rebound in China's economy may make LNG dearer. And a huge challenge looms in preparing for the winter ►

► of 2023-24. Europe needs to refill its storage all over again, but this time possibly without any Russian gas. Every unit of stored gas that Europe burns now is one it must replace next year.

Curbing demand is an urgent task. Yet governments have so far focused on subsidising energy prices and protecting households and businesses from the shock. Italy did not cut its consumption at all in the first six months of 2022. At the end of September, cold weather in Germany briefly took gas consumption to 14.5% above the 2018-21 average. Britain is capping energy prices and is only belatedly pledging a public-information campaign on conserving energy—while lobbying neighbours to keep sending electricity. An incipient plan for the EU to buy gas jointly could lower prices, but will not solve the shortage.

Some countries have unveiled energy-saving plans. On October 6th France lined up ministers for a long presentation advising cooler swimming pools and slower driving. Spain's cabinet approved a set of measures on October 11th. Germany has unveiled a clever scheme to reduce bills while preserving incentives to conserve energy. But the overall effort is piecemeal, and is unlikely to meet the EU's target of a 15% reduction in demand. Achieving that goal will be essential if Russian supplies are cut off fully, even if LNG remains plentiful. Yet the target is voluntary and littered with exemptions.

The alternative to cutting demand is boosting supply, but governments have been dragging their feet here, too. Germany is reluctantly extending the life of two of its nuclear plants, but only until April 2023. France objects to a new gas pipeline from

Spain to Germany, which would enable more of Spain's LNG imports to flow to the rest of the continent. The French government says the pipeline clashes with Europe's climate goals, but cynics suggest its real aim is to protect its nuclear-power industry.

Most short-sighted is Europe's failure to take advantage of its own gas reserves. The Netherlands boasts a gasfield in Groningen which could, without any new infrastructure, provide about half as much gas as Russia used to supply to Germany. Yet production is minimal and the field is scheduled to close by 2024. The Dutch government fears the wrath of local homeowners

who have suffered in the past when pumping gas has triggered earthquakes.

Only about 22,000 houses that are yet to be reinforced are assessed as being at risk of damage should Groningen produce at full capacity. The costs of compensating those homeowners, or indeed all residents of Groningen, for their losses are only a fraction of the revenues that could be earned from the field's gas. And those

revenues do not account for the knock-on economic and strategic benefits of replacing Russian gas. Given the stakes of the conflict in Ukraine, closing the Groningen field as scheduled would be astonishingly blinkered.

Europe's politicians must stop acting as if the energy shortage is a one-winter affair that can be weathered by handing out subsidies. Unless they redouble their efforts to bring supply and demand into balance, they risk a worse and more costly energy crisis in 2023 or beyond—one for which Ukraine could end up paying a big share of the price. ■



#### Financial markets

## Keep your powder dry

**Emerging economies have coped with the rate shock surprisingly well. But the real test is yet to come**

THE PROSPECT of rising interest rates in America has long stoked anxiety as far away as Mexico City, Delhi and Jakarta—with good reason. When Paul Volcker, then the chairman of the Federal Reserve, tightened monetary policy to tame inflation in the early 1980s, Latin American countries were plunged into crisis as they fell behind on their dollar debts. A decade later American rate rises precipitated Mexico's tequila crisis. And in 2013 the Fed's attempt to scale back its bond-buying led to a "taper tantrum", in which panicking foreign investors fled fragile economies including Brazil, India and Indonesia.

By comparison, this time seems curiously calm. Although the Fed is raising rates at its most furious pace since the Volcker era, much of the market drama has centred on rich countries rather than emerging ones. It is the central bank in Britain, not Brazil, that is scrambling to avert a bond-market crisis, triggered by the government's reckless budget (see leader). In part this resilience is testimony to the fact that emerging markets are in better health today. But it would also be a mistake for countries to lower their guard. The real test is yet to come.

As the Fed has raised rates this year, the dollar has rocketed. The DXY, a measure of the greenback against half a dozen major currencies, has risen by 18% in 2022 and is at its mightiest level in nearly two decades. Underlying the headline surge, however, is a complex picture. During the taper tantrum emerging-market

currencies suffered most. Between May and December 2013 the Brazilian real and the Indian rupee fell by 10-13% against the dollar, and the Indonesian rupiah by 20%, even as the euro and sterling rose. This year the real has gone up against the greenback, while the rupee and rupiah have depreciated by 7-10%. If you earn in euros or pounds, though, your wages are now worth a staggering 15-18% less in dollar terms.

Why have emerging markets got off relatively lightly? Part of the answer lies in the reason for the dollar's strength. Rather than being fuelled by an aversion to risk and a flight towards safe American assets, much of it reflects differences in economic fundamentals and anticipated interest rates. And the fundamentals for emerging markets have vastly improved, with decent growth, bigger reserves and deeper local capital markets that can help absorb shocks (see Finance & economics section).

Rather than letting inflation spiral, central banks in emerging markets were also quick off the mark, raising rates well before their peers in the rich world. Annual inflation averaged 10% across emerging countries in the second quarter of this year, barely higher than in energy-crisis-stricken Europe and overheating America. Today it is the European Central Bank and the Riksbank, not the Reserve Bank of India or the Banco Central do Brasil, that are vying to prove their inflation-fighting credentials as they race to keep up with the Fed. ►

► Emerging economies have also so far intervened in currency markets only modestly. Their aim has been to prevent depreciation and to reduce the inflationary effects of a stronger dollar. Those outside China have spent around \$200bn this year, reckons JPMorgan Chase. That is a small fraction of their total reserve pile of nearly \$4trn.

The trouble is that much of the adjustment is yet to come. The Fed is intent on raising rates until it sees “compelling evidence” that inflation is moving down; investors expect them to rise by roughly one and a half percentage points by the spring. The economic pain from higher rates has yet to hit home. In forecasts published on October 11th the IMF predicted that a third of the world economy would experience recession this year or next, with growth in America, Europe and China stalling.

That will translate into less demand for Apple handsets made in Vietnam and for Indian IT services. Energy and metals producers reaped a bonanza after Russia invaded Ukraine, but they are unlikely to be spared if demand slows. And as the global fi-

nancial system adjusts from cheap money to higher borrowing costs and a slowing economy, it could yet suffer the kind of dysfunction and investor panic that hurts financial markets in the rich world and emerging markets alike. Speaking on October 10th, Jamie Dimon, the boss of JPMorgan, America’s biggest lender, warned that the next percentage point of rate rises would be more painful than the first.

#### Special FX

It is this risk that emerging markets need to keep in mind. They may be tempted to use their foreign-reserve ammunition more quickly in order to defend their currencies and avoid raising interest rates at home. But they must resist that urge, so that they can save their reserves of firepower for the moment when emergency truly strikes. Better instead to let the market set the exchange rate, and keep using interest rates to tame inflation. Sounder fundamentals have helped emerging markets defy history, but vigilance is still required. ■

#### Cocaine

## Legalise it

### The costs of prohibition outweigh the benefits

**I**T MAKES NO sense,” said Joe Biden on October 6th, as he pardoned the 6,000 or so Americans convicted of possessing a small amount of marijuana. Although cannabis is fully legal in 19 American states, at the federal level it is still deemed to be as dangerous as heroin and more so than fentanyl, two drugs that contributed to more than 100,000 Americans dying of opioid overdoses last year. But the president’s admission applies to drug policy more broadly. Prohibition is not working—and that can be seen most strikingly with cocaine, not cannabis.

Since Richard Nixon launched the “war on drugs” half a century ago, the flow of cocaine into the United States has surged (see International section). Global production hit a record of 1,982 tonnes in 2020, according to the latest data, though that is likely to be an underestimate. That record high is despite decades of strenuous and costly efforts to cut off the supply. Between 2000 and 2020 the United States ploughed \$10bn into Colombia to suppress production, paying the local armed forces to spray coca plantations with herbicide from the air or to yank up bushes by hand. To no avail: when coca is eradicated on one hillside, it shifts to another.

The worst harm falls on producing and trafficking countries, where drug profits fuel violence. Murder in Colombia is three times more common than in the United States; in Mexico, four times. In some areas, drug gangs are so wealthy and well-armed that they rival the state, giving cops and officials the choice of *plata o plomo* (silver or lead): be corrupted or be killed. Prohibition also sucks children out of school, as drug gangs favour recruits who are too young to be prosecuted (see Graphic detail).

Two presidents, Gustavo Petro of Colombia and Pedro Castillo of Peru, are clamouring for change. Mr Petro has suggested steering the police away from coca farmers by decriminalising coca-leaf production and allowing Colombians to consume cocaine safely. These are good ideas, but the cocaine gangs will re-

main powerful so long as their product is illegal in the rich countries that consume most of it, such as the United States.

Half-measures, such as not prosecuting cocaine users, are not enough. If producing the stuff is still illegal, it will be criminals who produce it, and decriminalisation of consumption will probably increase demand and boost their profits. The real answer is full legalisation, allowing non-criminals to supply a strictly regulated, highly taxed product, just as whisky- and cigarette-makers do. (Advertising it should be banned.)

Legal cocaine would be less dangerous, since legitimate producers would not adulterate it with other white powders and dosage would be clearly labelled, as it is on whisky bottles. Cocaine-related deaths have risen fivefold in America since 2010, mostly because gangs are cutting it with fentanyl, a cheaper and more lethal drug.

Legalisation would defang the gangs. Obviously, some would find other revenues but the loss of cocaine profits would help curb their power to recruit, buy top-end weapons and corrupt officials. This would reduce drug-related violence everywhere, but most of all in the worst-affected region, Latin America.

If cocaine were legal, more people would take it. For some, this will be a choice: snorting a substance they know is unhealthy because it gives them pleasure. But cocaine is addictive. A paucity of research makes it hard to know how it compares with alcohol or tobacco on this score. More study is needed, as are greater efforts to treat addiction. This could be funded (and then some) by the money saved if the “war” were wound down.

In private, many officials understand that prohibition is not working any better than it did in Al Capone’s day. Just now full legalisation seems politically impossible: few politicians want to be called “soft on drugs”. But proponents must keep pressing their case. The benefits—safer cocaine, safer streets and greater political stability in the Americas—far outweigh the costs. ■





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**Keep Russians out**

You recommended that European countries accept Russian deserters ("Let them in", September 30th, digital editions). Letting in such a large group of young men would pose a serious threat to the security of the European Union. Vladimir Putin's regime has repeatedly demonstrated that it will use every opportunity to sow confusion and chaos. It is naive to think that opening the EU's borders to tens of thousands of young Russian men would help weaken Russia.

It is all too easy to conceal pro-Kremlin provocateurs within an uncontrolled mass migration flow. During the annexation of Crimea, Russian "green men" without identifying insignia entered the region. And let us recall the migration crisis of 2015, when European countries were unable to protect their borders. At last it was understood that external borders must be brought under control. In this context, the decisions of Estonia, Latvia, Lithuania and Poland to impose a ban on Russian entry, since mid-September, is the only correct approach. Finland has now also joined that approach.

There has been a cardinal change in the situation in Europe. As a result of the war started by the Putin regime, the Ukrainian people have had to endure incredible suffering. Yet the majority of Russian people approve of these crimes. It does not matter whether this approval is expressed in clear support for Mr Putin or by inaction. Being a "draft-dodger" does not mean being against the regime. Saving your own skin does not equate to opposing the war.

Any progress for Ukraine weakens Mr Putin's grip. A clear message must be sent to those who want real change in Russia: you must fight at home to make Russia a democratic country that respects international law.

RIHO TERRAS  
Member of the Isamaa party in the European Parliament  
Tallinn, Estonia

**Academic prestige**

I read your article on "status bias" in peer-reviewed science papers ("Peer pressure", September 17th). The research described in the article has little relevance for social-science journals, where double-blind reviewing is the norm. The identity of authors is not disclosed to peer reviewers, and the identity of reviewers is not disclosed to authors. Although reviewers may sometimes think they can guess the identities of the authors, especially when the topic is one which has been researched by only a handful of scholars, in my experience this is not habitual (I am a former editor of a social-science journal).

The most common source of bias in social-science journals is not the reviewers, but the editors, who may have a particular, and sometimes too limited, view of the discipline covered by the journal, and who are in a position to select reviewers who they think are most likely to share their views. To avoid, or at least limit, this source of bias, journal publishers can adopt two practices. First, be very careful in choosing journal editors, and second, insist that their editors have an advisory editorial board, the members of which represent different perspectives on the research from which the journal draws its authors.

PHILIP STENNING  
Eccleshall, Staffordshire

Open peer review is "the worst system except for all the others"? No. It is the worst system. And better systems exist. A randomised trial has demonstrably shown that double-blind peer review reduces biases and is fairer and more effective.

The rise of the pre-print format is not the only barrier to implementing better systems. Having to focus on content in the absence of reputation increases review times and disagreements between reviewers. Open review makes it more difficult to find reviewers who are prepared to take on

the job in the first place. All of these factors make the editor's life more difficult and discourages editorial reform.

Perhaps it is time for academics to challenge their habits and take responsibility for collectively improving the quality of new scientific contributions.

KATHARINA SCHLEICHER  
DUN JACK FU  
Artificial Intelligence Hub  
Moorfields Eye Hospital  
London

An interesting insight into status bias came from James Crow in 2006. The theoretical geneticist noted that, some decades earlier, *Genetics*, a leading journal, had received two manuscripts, one by Theodosius Dobzhansky, who was a well known contributor to the modern synthesis of evolutionary theory, and one by a young geneticist.

Crow quoted the editor at the time as saying: "The first paper is careful work by a serious, deserving young scientist, but it does not quite measure up to *Genetics* standards. I say, reject with regret. The Dobzhansky paper must surely be published. But it is too long for its content and generally overstated. I say, accept with regret."

DAVID INNES  
Denman Island, Canada

**Defending Sir Keir Starmer**

I feel compelled to defend Sir Keir Starmer from the criticism that he is the "Default Man" in British politics (Bagehot, October 1st). Sir Keir has made his background central to his character; raised in a pebble-dashed semi-detached house with his father, a tool-maker, and disabled mother, a nurse. And yet for some his career as a lawyer and politician does not quite scream "working-class hero".

He is "middle class", but not in the way that the Eton-educated Boris Johnson, David Cameron or Kwasi Kwarteng are middle class. To look at Sir Keir solely through his party political career is to miss the point that his story comfort-

ably fits the tale of an industrious and ambitious young man of modest means, working his way to the very top.

A better candidate for Default Man is Jeremy Corbyn, Sir Keir's predecessor as Labour Party leader. Here is a man who was privately educated to no great academic success, leading a largely undistinguished career in politics before accidentally leading Labour into two elections, and apparently against his own wishes.

PERRY HEWITT  
Welwyn Garden City,  
Hertfordshire

**Covert insects**

"Hide and seek" (September 17th) mentioned certain moths that have evolved a "stealth coat" to reduce their detection through echolocation by bats. Even more impressive is the *Melese laodamia* moth. It produces ultrasound that blocks the bats' sonar.

The RAF 360 Squadron, tasked with developing equipment and tactics to jam enemy radars during the cold war, had the moth on its insignia.

PENDEXTER MACDONALD  
Instructor in psychiatry  
Tufts University School of Medicine  
Boston

**Political self interest**

The title "Bail-outs for everyone!" (October 1st) of an article on governments underwriting the entire economy reminded me in a contradictory way of John F. Kennedy's exhortation, "Ask not what your country can do for you, ask what you can do for your country."

Espousing such a noble sentiment today, JFK wouldn't be elected dog-catcher, let alone president.

DAVID PERRY  
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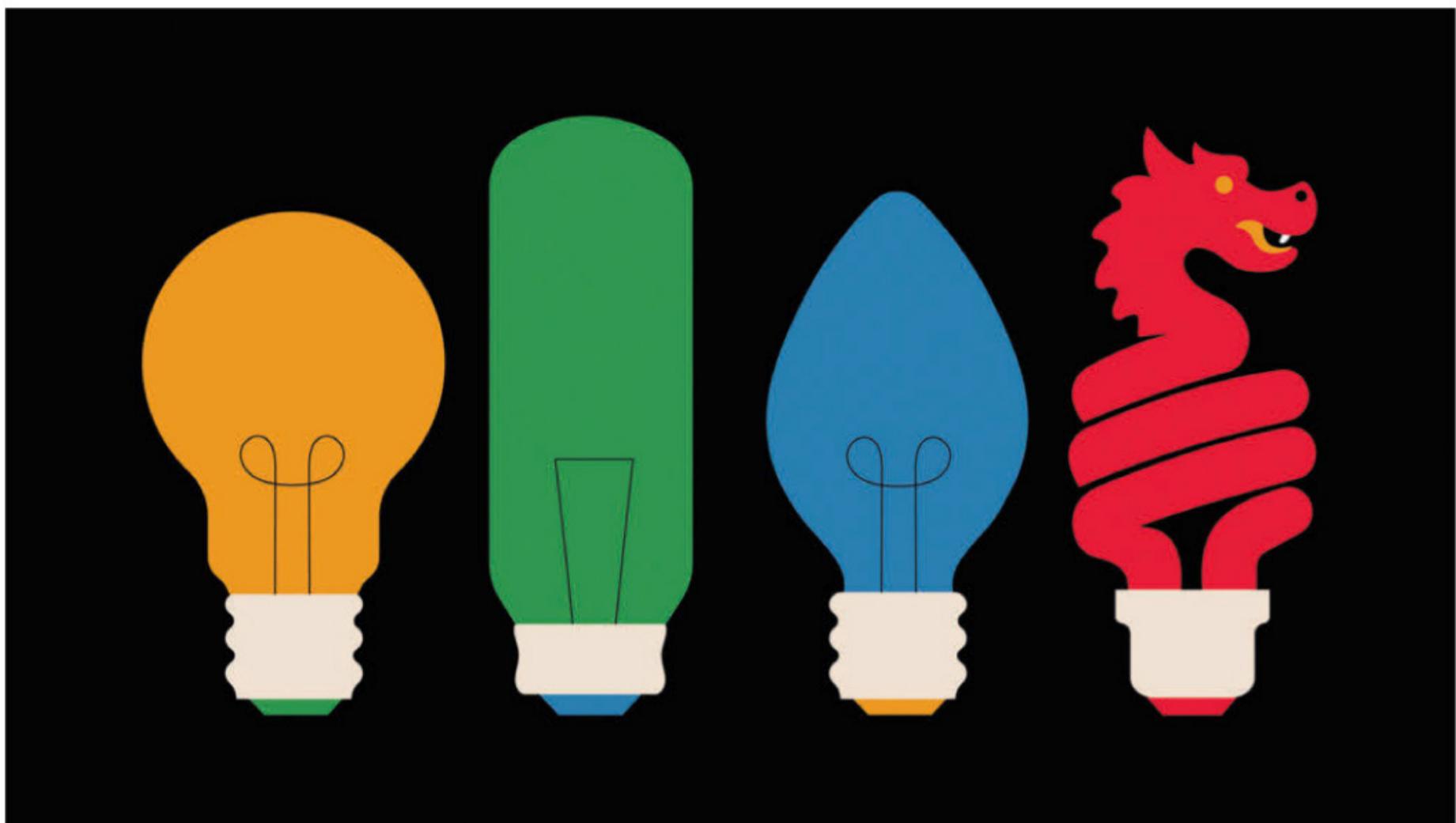
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## Mothering invention

WASHINGTON, DC

### China and the West are competing frantically to foster innovation

**C**HINA'S GOVERNMENT is planning on winning the AI race, winning future wars and winning the future," warned Todd Young, an American senator, in July. "At stake" in the West's technological competition with China, echoed a report from American officials and businessmen in September, "is the future of free societies, open markets, democratic government, and a world order rooted in freedom not coercion." This week the head of a British intelligence agency joined the chorus, urging "deep investments" in new technology to counter China's growing prowess.

The anxiety is easy to understand. In 2008 China spent a third as much as America did on research and development (R&D) and about half as much as Europe, after adjusting for differences in the cost of living. By 2014 it had surpassed Europe. By 2020 its spending was 85% of America's.

The fruits of this investment are becoming apparent: in August a Japanese research institute calculated that China now produces more of the world's most highly cited academic research than America does. Since 2015 more patents have been is-

sued in China than in America. China's output of a basket of sophisticated goods including information technology, pharmaceuticals and electronics is expected to surpass America's this year, according to a report published by the Information Technology and Innovation Foundation, an American think-tank. "China has become a serious competitor in the foundational technologies of the 21st century," concluded another report last year from the Belfer Centre at Harvard University.

Small wonder, then, that Western countries are embarking on a frantic effort to retain or regain their technological edge. On October 7th America issued fierce new restrictions on exports to China of advanced semiconductors and related equipment. The new rules could be as crippling to the Chinese chip industry as previous American sanctions were to Huawei, a Chinese telecoms firm, says Greg Allen, who used to head the artificial-intelligence (AI) unit at America's Department of Defence. "It's a total clamp down, trying to cut off every head of the hydra of China's chip industry."

As well as trying to disrupt the flow of

technology abroad, America's government is investing more in innovation. In August Congress approved \$370bn of spending on green energy, including lots of money for research. The month before it passed the Chips and Science Act, which provides \$52bn over five years for the semiconductor industry, some of which will incentivise private R&D.

The act also revamps the National Science Foundation (NSF) to put more emphasis on applied science and technology and potentially doubles its funding. Germany, Japan and South Korea are making multi-billion-dollar investments in computer chips. Last year Britain announced the \$1bn Advanced Research and Invention Agency (ARIA) to supercharge high-risk, high-reward science.

The result of all this is a global boom in investment in innovation. In 2020 the world's spending on R&D exceeded \$2.1trn, over 2.5% of global GDP, a record. The binge has three notable features. The first is the heavy involvement of governments, which are unwilling to leave investment to capital markets and are instead both funding R&D and subsidising production of certain high-tech goods. Both China and the West explicitly link such spending to geopolitical competition. "Technological innovation has become the main battlefield of the international strategic game," said China's president, Xi Jinping, in a speech last year to Chinese scientists. "We're in a multi-generation era-defining competition against the CCP [Chinese Communist Par-

ty]," rhymes Mr Young, one of the sponsors of the Chips Act.

The second feature of the new era is experimentation with different types of funding that couple industrial policy with efforts to promote risk-taking or private-sector rigour. America and Britain, for instance, are reviving research missions akin to America's cold-war quest to put a man on the Moon. China, meanwhile, is using "guidance funds", in which the state takes a stake alongside private investors, to steer money to startups in AI and chips, among other advanced technologies.

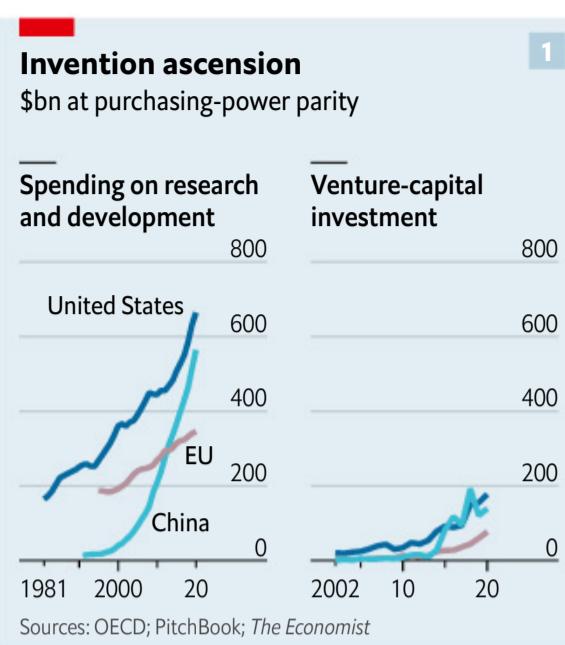
Third, governments are trying to ensure their country captures more of the benefits of innovation. That can mean both preventing exports of some goods and using industrial policy to promote domestic production.

But there remain big differences in approach between China and the West—most notably the far more muscular role the state still plays in directing innovation in China to favoured industries. The West, in contrast, relies on a more diffuse network of universities, non-profits and private businesses that have more freedom to set their own priorities. There is little doubt that China's system has helped it catch up with the West in some existing technologies, but analysts question whether it will be as good at generating future breakthroughs. The answer will determine the outcome of the global battle for technological dominion.

America's government invested lavishly in innovation during the cold war, through such organisations as the NSF and the Defence Advanced Research Projects Agency (DARPA). Its spending peaked at 1.86% of GDP in 1964. But after the fall of the Berlin Wall federal spending on R&D fell well below 1% of GDP. Private investment, meanwhile, doubled from 1% of GDP in 1979 to 2% in 2017. Giant tech firms such as Google, Facebook (now Meta), Amazon and Apple sprouted in America. China spawned similar titans, such as Alibaba, Baidu, JD.com and Tencent.

But on both sides of the Pacific the age of free-flowing private capital left many disappointed. The Communist Party has called the spread of big consumer-tech firms a "disorderly expansion of capital". It has obliged China's internet giants to follow its priorities, blocking share sales and issuing abrupt regulations to cow wayward firms. It seems to want less video-gaming and online commerce and more AI, chips and green tech.

Many Americans have similar misgivings. Peter Thiel, a fabled investor, has argued that there has been too much investment in "bits" (software and analytics) and not enough in "atoms" (hardware and manufacturing). "With chips we were caught behind the eight ball," says Eddie



Bernice Johnson, a Democrat from Texas who chairs the committee that drafted the Chips Act, "It was a national security imperative." Mr Young of Indiana agrees: "The totally free-market theories of Friedman, Hayek—they don't make sense when you're facing an existential threat that plays with market forces."

### Buying breakthroughs

To allow a proper comparison of the sums devoted to innovation on the two sides of the Pacific, *The Economist* has totted up corporate spending on R&D, venture-capital investment, direct government funding and, for advanced technologies, implicit funding through subsidies, and subtracted the overlap among these categories. This calculation confirms that America maintains a slight edge (see chart 1), spending about \$800bn or 3.8% of GDP in 2020. That compares to about \$660bn in China after adjusting for differences in the cost of living, or 2.7% of GDP.

But China's spending is growing far quicker than the West's. China's investments are also more co-ordinated. Although its government and America's both

directly dispense only about 15-20% of their country's expenditure on innovation, state-owned enterprises and industrial subsidies massively increase the influence of the state in China (see chart 2). Different arms of government have also set up nearly 2,000 "guidance funds" in which the state invests alongside private capital. The Chinese government began investing in semiconductors in this way as early as 2014, with a \$20bn "Big Fund". The second iteration of the fund has raised nearly \$30bn. The state is now China's biggest investor in venture-capital and private equity, contributing over 30% of the total.

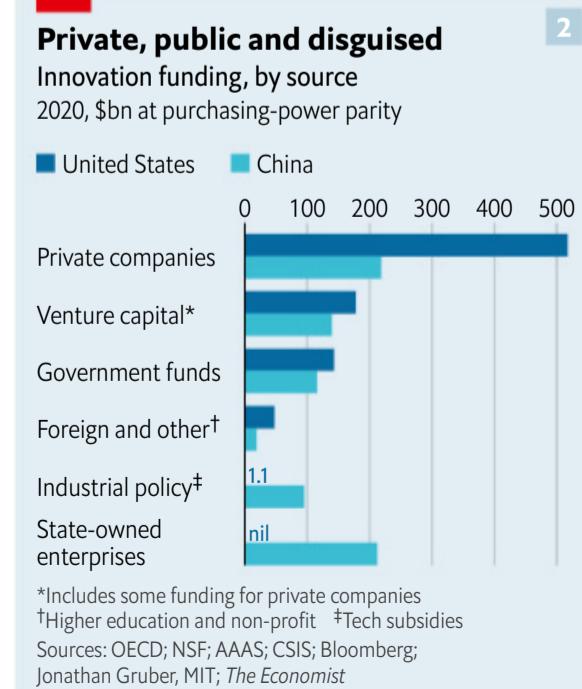
All this allows the government to steer money towards its goals, in what is called *juguo tizhi* or the "whole-of-the-nation system". Whereas in America the share of vc devoted to strategic industries as defined by the Belfer Centre report (AI, semiconductors, biotech, energy and quantum computing) has gradually grown from 10% to 20% over the past decade, in China it soared from 15% in 2019 to 35% in 2020 in line with government directives (see chart 3 on next page).

Yutao Sun and Cong Cao, two Chinese academics, argued in *Nature* last year that *juguo tizhi* had helped develop "a few state-led sectors with clear goals, such as high-speed rail and large passenger aircraft". It was less effective, however, in "areas where there is no leader to follow". Only 6% of China's R&D spending is on basic research, compared with 17% of America's.

What is more, *juguo tizhi* can also lead to misallocation of funds. A paper published in the journal *Econometrica* in July suggests that Chinese spending on R&D spurs less growth in productivity than that of neighbouring Taiwan. That is in part because the state often supports SOEs, even if they are less productive. Several studies suggest that corporate R&D in China is about half as productive as in America (although they do not focus exclusively on advanced technology).

America's expenditure, meanwhile, is much more diffuse. Private businesses account for about 60%, venture capital for nearly 20% and foundations, charities and universities more than 5%. In a recent presentation, Pierre Azoulay, a professor at MIT, notes that the "Cambrian explosion of philanthropic funders" is a "silver lining" compared with the perceived sclerosis in government funding. From 2010 to 2019, research funding from non-profits nearly doubled, from \$12bn to \$22bn. "Our system is unique because its more distributed and bottom-up; not top-down," says Maria Cantwell, another senator.

America may also be more daring in its investments. The Institute for Progress (IFP), an American think-tank, is helping government agencies distribute grants more effectively, says Caleb Watney, a co-



► founder. Erwin Gianchandani of the NSF cites “golden tickets” as an example. Rather than the standard consensus-based process to allocate funding, a single reviewer can champion a project.

Michael Lauer, head of extramural research at America’s National Institutes of Health (NIH), lists a handful of new programs where labs receive funding with far fewer strings attached than normal. The Other Transactions Authorities, a recent NIH program that quickly funds unconventional projects, disbursed over \$2bn in 2020 and 2021.

### Hunting for lightbulbs

America is also creating more “moonshot” programs in an effort to replicate the success of DARPA. Last year it launched the \$1bn Advanced Research Projects Agency for Health (ARPA-H) to focus on ambitious biomedical research. The total amount of funding in this category increased from about \$4bn in 2021 to nearly \$6bn in 2022. Tom Kalil of Schmidt Futures, another organisation that aims to shape policy on innovation, says this heralds a shift towards more risk-taking. China lacks any equivalent funding agencies, notes Mr Cao of Nottingham University China.

It is possible to exaggerate the strengths of both the American and Chinese systems. For all the talk of moonshots, notes a former White House official, NIH was still slow to fund research on covid-19 at the beginning of the pandemic. And researchers are still often buried in paperwork. The new funding does little to address the administrative burden in the current system—researchers lose about 40% of their time to that, notes Tony Mills of the American Enterprise Institute, another think-tank. By the same token, although thousands of new firms have sprung up in China in favoured industries, such as AI and semiconductors, most of them do not seem to have achieved much.

Neither system has a monopoly on results. According to a report published in September by the Special Competitive Studies Project, a research group organised by Eric Schmidt, a former CEO of Google (and a former member of the board of *The Economist*), China is dominant in some industries, such as 5G telecoms. It makes some 80% of the world’s lithium batteries. But the West is ahead on biotech, cloud computing and AI. It has been the source of most fundamental advances in these fields, such as CRISPR (a gene-editing technology) and the transformer architecture that underpins many big AI models.

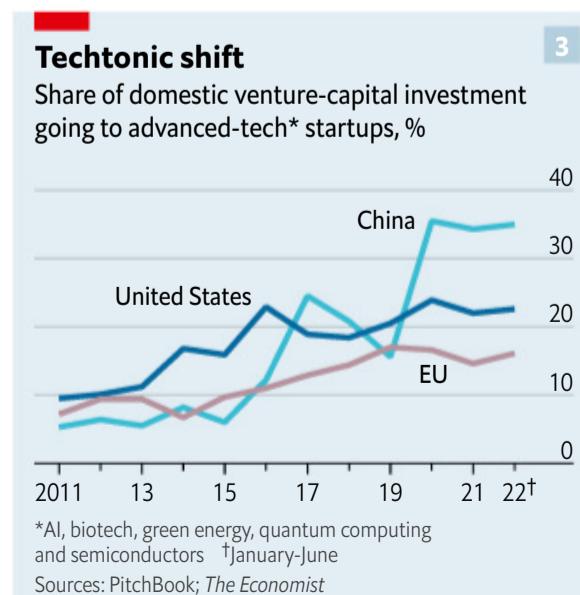
Although few advanced computer chips are made in America, American firms tend to design them. ASML, a Dutch manufacturer of chipmaking equipment, has a monopoly in the advanced lithography needed to make the fanciest ones. And the

Chips Act is prompting Intel and TSMC, two of the biggest chipmaking firms, to build new semiconductor fabs in America. Intel is also set to spend nearly \$20bn on new chip factories in Germany.

China has built first-rate AI models by throwing money at researchers and firms. Wu Dao, its version of GPT-3, an American AI model that can write like a human, uses ten times more parameters to train itself. Yet the chips used for much of this sort of machine-learning, GPUs, were originally developed to generate graphics for video games—one of the industries on which the Chinese government has cracked down most ferociously. By the same token, it was not until September that a Chinese firm developed a vaccine against covid-19 that is as effective as Western ones—a recent high-stakes test of its capacity to innovate. “China does best in products where manufacturing is complex but the science is mature, for example in batteries,” says Dan Wang, an analyst at Gavekal Dragonomics, a research group.

But China is trying to mend some of the failings of its system. It boosted funding for basic research by 16% last year, in an attempt to foster more breakthrough discoveries. It is also trying to reduce centralisation. In July the party announced new rules to increase scientists’ autonomy. “There is evidence that China has recognised the limits of using a blunt metric to evaluate scientists,” adds Mr Wang. “Thus universities are starting to move towards the peer-review system of the West.”

There are some mistakes, however, from which China shows little sign of retreating. Mr Xi’s decision to rein in the tech industry contributed to an 11% contraction in venture-capital investment from the first three quarters of 2019 to the same period in 2022. In America vc investment grew by 70% in that time. China’s stubborn zero-covid policy, meanwhile, is driving foreign capital and talent out of the country. A survey by the German Chamber of Commerce in May found that nearly a third of foreign workers plan to leave.



Such talent is crucial to competitiveness. In the past China benefited from both foreign investment and large cohorts of “sea turtles”, students and researchers who work or study abroad and later return. The share of Chinese students studying abroad who eventually returned home rose from 25% in 2004 to 65% in 2019. And from 2015 to 2019, the number of academic papers published involving co-operation between American and Chinese researchers grew by over 10% a year, according to *Nature*.

Yet in 2020 this growth in academic collaboration between the two countries abruptly stalled. Less than half as many Chinese received visas to study abroad in the first half of 2022 as in the first half of 2019. This pulling apart is bad for the world, but China may suffer more. It does not have as diverse a pool of researchers as the West. According to data from MacroPollo, a think-tank, although 60% of the world’s best AI researchers work in America, over two-thirds of them are foreign (and over a quarter of them Chinese). In contrast, China draws overwhelmingly on domestic talent: almost all its best AI researchers are Chinese, and 70% of them have studied only in China.

America is not only open to foreign expertise, it also benefits from a big network of alliances with other technologically advanced countries. Collectively, America, Britain, France, Germany, Japan and South Korea spend over twice as much on R&D as China. China, by contrast, has few allies, and none that are powerhouses of research and innovation.

### Bulbs blown

American politicians do not seem to understand the advantage conferred by their country’s openness, however. The original draft of the Chips bill included a provision to boost skilled immigration. Although some politicians, including Mr Young, gave it cautious support, it had to be removed to ensure the support of more Republicans, in particular. (America’s allies, happily, are doing better. Britain has devised a scheme to provide visas to graduates of top universities. Australia and Canada, already home to lots of immigrants, are increasing immigration further.)

Whatever the limits to America’s openness, however, China’s growing isolation—both self-imposed and enforced by restrictions like America’s new rules on tech exports—is far more severe. After several years when its technological rise seemed unstoppable, the outlook suddenly seems much less clear. In the coming days Mr Xi will preside over China’s 20th Party Congress. Across the Pacific, America’s Congress will be debating how much money to devote to the new research initiatives at agencies like the NSF. You can be sure each will be on the other’s mind. ■



The midterms

## Heisman Shuffle

ATLANTA

**The races in the peach state suggest good candidates can triumph over partisan reflexes, at least in a midterm year**

FEW PEOPLE have weathered defeat as well as Stacey Abrams. In 2018 when she lost the governor's race of Georgia, previously a solidly Republican state, by a mere two percentage points, she rocketed to national prominence and became a progressive icon. Her claim that Brian Kemp, then the secretary of state in charge of elections, had robbed her of victory by aggressive voter suppression spurred a movement among Democrats. A grudge rematch with Mr Kemp in 2022 was all but preordained. For that reason, it is the closest watched of the 36 gubernatorial elections held this year. In the past four years, Ms Abrams has been feted and adored. The *Washington Post* ran a fawning profile of her accompanied by a photo in a superwoman cape. She openly courted being Joe Biden's running mate in 2020. Earlier this year, Star Trek promoted her to president of United Earth in a cameo appearance (also becaped).

There is one problem with Ms Abrams's irresistible rise, though. She might lose to Mr Kemp once again—by a larger margin

than four years ago. As of October 12th the prediction from FiveThirtyEight, an election-prognostication outfit, is that Ms Abrams will lose by six points and has only a 1-in-7 chance of victory. That might surprise those who recall Georgia turning blue only two years later (and one political eon ago). In 2020 the state narrowly gave its presidential vote to Mr Biden. Two Democrats won run-off elections for the Senate held on January 5th 2021—giving the presi-

dent's party unified control of Congress one day before supporters of Donald Trump stormed the Capitol.

A lot has changed since Ms Abrams's first run. The national environment is less auspicious for Democrats due to Mr Biden's unpopularity and discontent over inflation. The governor has a record of economic growth to run on and has been touting increased expenditures on schooling and policing. And Mr Kemp has been transformed, too, by refusing to overturn the election results in his state at Mr Trump's urging. Few Republicans have clashed so loudly with the former president and lived to tell the tale. Mr Kemp's easy trouncing of the Trumpian-avenger candidate in a primary election held in May has cemented his position as something of an independent force, rather than the arch-conservative character he played in 2018.

To Ms Abrams, this credit is excessive. "He simply didn't commit treason. We should not lionise someone for not being an arsonist. You're not supposed to burn the house down," she says. "My deep concern is that his failure to commit treason once has obfuscated his very intentional and long-standing voter suppression." Ms Abrams refused to concede her election loss in 2018. Some have drawn unflattering comparisons to Mr Trump's extreme actions in 2021, and the awkwardness has necessitated something of a clean-up job. "I've never disputed the outcome. But what

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► I've always questioned is the access," Ms Abrams says. In other interviews, however, Ms Abrams had said "I won", and described the contest as, among other things, "not a free or fair election", "rigged" and "stolen".

The voter-suppression debate has been continuously relitigated. Lawsuits filed by Ms Abrams and her affiliated organisations against Mr Kemp over the 2018 election have dragged on for years. On October 3rd—of this year—a federal judge appointed by Barack Obama decisively rejected the outstanding claims that Mr Kemp's management of voter rolls (labelled "purging") and "exact match" rule for signatures on absentee ballots had violated either Georgia law or the constitution. "Voter suppression was fake to begin with, at least in our case," says Cody Hall, a spokesman for Mr Kemp's campaign. And the charge "has now lost its potency because we had record turnout in 2020 and 2021. The media was sold a bill of goods." Almost every political observer in Georgia expects another record year for turnout, in spite of the passage of SB 202, a Republican election bill passed in 2021 over considerable Democratic outcry.

The problem this time may be more quotidian: not enough votes. Ms Abrams has faced troubling polls showing not only a sizeable lead for Mr Kemp, but unexpectedly low levels of support among African-American voters, who are the bedrock of the Democratic coalition. A recent poll conducted by the University of Georgia, showing her down by ten points, found that 81% of black voters were planning to support Ms Abrams, 8% were planning to vote for Mr Kemp and 10% were still undecided. "I am doing as well with black votes as I was in 2018," she says flatly.

This debate is at the core of Ms Abrams' theory of change. The formidable turnout machine that she built, which Republicans only belatedly appreciated the power of, has been credited with turning Georgia blue. Progressives often argue that victory can be achieved through attracting young Americans and non-white voters who respond to bold policy ideas and frequent engagement. As successful as Ms Abrams was, increased non-white turnout cannot fully explain the gradual Democratic tilt of the state. Official data suggest that the black share of the electorate was 27.6% in 2016—when Hillary Clinton lost by 5.2 points—and 27.3% in 2020 when Mr Biden won by just 0.24 points. Growing Democratic appeal in the suburbs also contributed. Look at the state's three counties outside Atlanta—Gwinnett, Cobb and DeKalb. Democrats captured 62% of major-party votes there in 2016, 65% in the contest for governor in 2018 and 67% in the Senate run-off in 2021.

Partisanship sets the basic floor of support for candidates, which they can try to exceed by clever campaign strategy and

policy pitches. A comparison with the other marquee race in the state, that for senator, makes this clearer. Raphael Warnock, the sitting Democrat, has a much rosier chance than Ms Abrams. There are two reasons for this. His share of the African-American vote, per the University of Georgia poll, is eight points higher, at 89%. And split-ticket voting, thought to be dying, remains a potent enough force. Sometimes this reflects a preference for incumbents. More often it reflects the strengths and weaknesses of individual candidates.

Herschel Walker, a former American football legend at the University of Georgia who won the Heisman Trophy for player of the year, has run the most disastrous campaign of the year. Aside from a shaky grasp of policy that borders on absurdism ("our good air decided to float over to China's bad air" is an apt summary of his understanding of pollution), Mr Walker has been beset by one scandal after another. The latest is an allegation that he paid for an abortion more than a decade ago, despite his stated opposition to abortion even in cases of rape and incest.

Mr Walker's denials have been rather feeble. His own son said shortly after the story was published that his father was "lying and making a mockery of us". The tirade continued: "You're not a 'family man' when you left us to bang a bunch of women, threatened to kill us, and had us move over 6 times in 6 months running from your violence," he wrote on Twitter.

As a result, the two races may result in an unexpected split decision. Charles Bullock, a political scientist, says that a sizeable share of Republicans—between 6% and 10%—are telling pollsters they will vote for Mr Kemp but not Mr Walker. But the party has shown no appetite for abandoning him, despite Republicans occasionally fretting over the decline of family values. "Herschel Walker's Republican support is not about supporting Herschel Walker. They're supporting partisanship. They're supporting the idea of anybody but a Democrat," says Leo Smith, a Republican consultant in Atlanta. That point was put even more finely by Dana Loesch, a right-wing radio host. "I don't care if Herschel Walker paid to abort endangered baby eagles. I want control of the Senate."

Polls put him in line for a close finish, even though the contrast with Mr Warnock, a reverend and gifted orator, is damning. If no candidate wins an absolute majority of the vote, the winner would be decided in a run-off election on December 6th. Given the tight Senate elections in other states, control of the chamber could once again depend on the outcome of a quirky run-off in Georgia. A state already deluged in political advertising—predicted already amount to \$575m—would then have to endure a few weeks more. ■

## Animal rights

# Sow confusing

NEW YORK

## It's bipeds v quadrupeds at scotus

**M**ISERABLE, LABORIOUS and short", is how one character describes the life of a pig in George Orwell's "Animal Farm". Nearly two-thirds of California's voters approved a ballot initiative, Proposition 12, in 2018 in an attempt to fix the miserable part. Yet America is supposed to be an integrated market, for pork and everything else. So what looks like an example of a state going its own way in fact requires the justices of the Supreme Court to weigh the "dormant" commerce clause, a constitutional wrinkle that is supposed to prevent states from indulging in protectionism, and whose origins stretch all the way back to a debate about how states might fund lighthouses in the 18th century.

On October 11th, the Supreme Court considered whether the California law unfairly burdens the rest of America and imposes "significant market dislocation and price impacts" beyond its borders. Proposition 12 requires more humane standards for confining veal calves, egg-laying hens and breeding pigs—the subject of *National Pork Producers v Ross*. Sows are typically held in tight quarters. Prop 12 gives Californian breeding pigs at least 24 square feet, enough room to stand up and turn around freely. It also bans the sale of uncooked pork from animals housed in cramped conditions no matter where they were raised: in California or out-of-state.

Californians aren't just fans of avocados and açai: they consume 13% of the pork ►



In the middle

► eaten in America. Yet more than 99% of America's pork comes from other states, with Iowa and North Carolina among the top producers. Industry groups gripe that Prop 12 "disrupts a national market" and dictates "how hogs are raised in...every pig-producing state, regardless of their local laws". Building larger pens and overcoming the "productivity loss" would cost farmers, the plaintiffs reckon, \$300m.

Timothy Bishop, the lawyer arguing against California's law, told the justices that the "territorial autonomy of sister states" is at stake. He said Prop 12 is an "extraterritorial regulation" and violates the "dormant" commerce clause—the Supreme Court's long-standing reading of Article I, section 8, clause 3 of the constitution that bars states from enacting regulations that impede interstate commerce.

Liberal and conservative justices alike probed the reach of Mr Bishop's position. New York bans the import of firewood that has not been treated with a pesticide, Justice Elena Kagan noted. Is that all right? (No, he said.) Could California require inhumanely raised pork to be labelled as such, Justice Ketanji Brown Jackson asked, even if it cannot ban its sale? (Yes.) Justice Amy Coney Barrett brought up emissions standards. All three teamed up to ask Edwin Kneedler, a Biden administration lawyer, arguing against California, about bans on the sale of horse meat.

Justices Samuel Alito and Neil Gorsuch seemed unhappy with the conclusion that America's "horizontal federalist system" precludes states from acting on voters' moral principles when choosing regulations. Isn't it all right for Californians, Justice Gorsuch asked, to decide they "don't wish to...be complicit, even indirectly, in livestock practices that they find abhorrent"? Many laws are based on moral considerations, Mr Kneedler replied, but America would become badly Balkanised if states could impose those principles on the national marketplace.

The reply set the stage for a series of tough questions for Michael Mongan, California's lawyer. Justice Alito noted the spectre of states banning the import of almonds grown using irrigation (as they are in drought-addled California). Justice Kagan worried that battling out "policy disputes" via interstate regulation would further polarise America. What if California required imports to be made by unionised workers, or Texas trafficked only in non-union-produced goods? "Do we want to live in a world where we're constantly at each other's throats", Justice Kagan asked, where "Texas is at war with California and California is at war with Texas?"

With the justices penned in by the unsavoury implications of ruling either for or against California, Justice Kagan asked about an off ramp. Ross reached the justices

before a trial could take place to investigate the validity of the pork producers' claims. Shouldn't a lower court undertake the task of "balancing these incommensurable things"—costs to out-of-state pig farmers and Californians' moral considerations?

In his rebuttal, Mr Bishop seemed to accept such a compromise. "I have a dozen pork farmers in the court today", he said, "who would testify at trial that they are being forced...to comply with Prop 12 in a way that they think kills pigs, that harms their workers" and complicates their ability to operate their farms. In June, justices made aggressive moves in several big cases. When it comes to Ross, they seem less keen to hog the limelight. ■

### Midterm maths

## Herd behaviour

WASHINGTON, DC

**A month from polling day, the Republicans are gaining in key states**

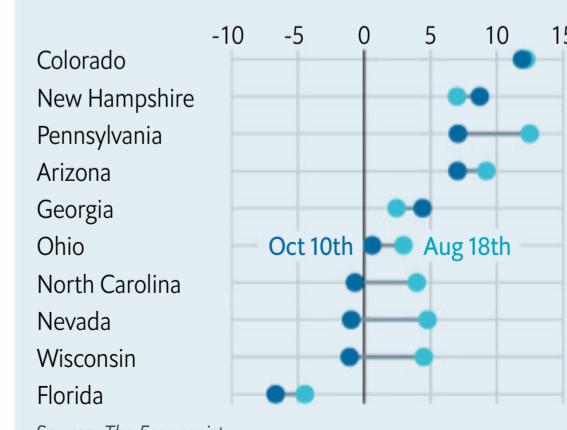
### MIDTERM MATHS



POLL WATCHERS can learn a lot from physicists. Take, for instance, the pendulum in a grandfather clock. It swings to and fro thanks to two mechanisms. The weights suspended from the head of the clock convert the force of the Earth's gravity into energy that drives the clock's gears. To ensure the weight does not plunge to the ground, turning all the gears at once and producing a clock that travels through time, a claw-like mechanism allows only one tooth of the gear to turn.

The pendulum—the second mechanism—is fixed to this claw and regulates the speed at which additional teeth are allowed to turn. Starting from a high point

**Oz-ilating**  
US Senate races, average Democratic vote margin in polls, percentage points, 2022



on the left, gravity pulls the pendulum down and inertia carries it to the right. The claw releases a tooth and allows the gear to move, producing an audible and grandfatherly "tick" from the clock. The pendulum will then naturally move down and to the left, allowing the gear to turn another tooth. The clock issues a "tock".

Opinion polls also work like this (sort of). That is due in part to random variation in individual polls, which can usually be attributed to differences in the demographic and political characteristics of the people whom a pollster interviews. But polls often revert towards the longer-term average over time. Look no further than the 2016 and 2020 elections, when Democratic leads in the summer gave way to quick surges in Republican support in autumn.

Thus a midsummer "tick" in the Democrats' favour has duly been answered by a Republican "tock". According to *The Economist*'s poll of polls for elections to the Senate, Republican candidates have gained ground in eight of the ten most competitive battleground states (see chart).

The Republican advance has been particularly striking in Nevada, where Catherine Cortez Masto, the incumbent Democratic senator, is defending her seat against Adam Laxalt, a Republican and the state's former attorney general. Something similar has happened in Pennsylvania, where John Fetterman, the state's Democratic lieutenant-governor, is facing Mehmet Oz, a former doctor and talk-show host. Our poll of polls, which adjusts surveys both for the historical bias of each pollster and for whether a poll was conducted by a partisan firm, finds that the Democrats' margin has also fallen by over five percentage points in Wisconsin.

Our polling averages currently show Democrats trailing Republicans by around one point each in Nevada, North Carolina and Wisconsin. In Ohio they are leading by almost one point. Democrats lead by four points in Georgia and by seven in both Pennsylvania and Arizona. That gives the Democrats a net gain of one Senate seat if the polls are 100% accurate (spoiler alert: they will not be). These numbers also come with a large health warning. One month before election day, Senate polls are on average out by six points compared with the actual results on the night.

But there is still time for Republicans to make inroads before November 8th, and polls in recent elections have been significantly biased towards Democrats. Republican candidates are in reach of every close seat, even Pennsylvania and Arizona, according to the range of errors in our historical averages of Senate polls. Though it would take a big polling miss, the recent gains the party has made in key states mean it would no longer be a shock for Republicans to win a Senate majority. ■

**Migration**

## Masses huddled

NEW YORK

### New York values are put to the test

**F**OR MONTHS Greg Abbott, Texas's Republican governor, and El Paso's Democratic mayor, have been shipping asylum seekers by bus to New York, a political scheme to share the burden of migrants with so-called sanctuary cities, which often refuse to work with federal immigration police. About 20,000 asylum seekers have arrived so far. Nearly 2,000 arrived by bus last weekend alone.

Well before those buses carrying migrants, including children and some women who gave birth days before, often without co-ordination or notice, New York was an immigration hub. Immigrants make up nearly 40% of the city's population and 44% of the labour force. But what's different about this moment, says Murad Awawdeh of the New York Immigration Coalition, is that in the past people had a family or community connection in New York. "They were able to crash with folks, their family, their friends."

New York's "right to shelter" law means that anyone without a roof over their heads is entitled to one through the city's homeless shelter system. This right is being tested by the new arrivals, so much so that Eric Adams, the mayor, has declared a state of emergency. More than 61,000 are in the system, including new asylum seekers and the existing homeless. Since early September five to six buses have arrived daily. At the current pace, the city could soon see 100,000 seeking shelter.

Asylum seekers cannot legally work until 180 days after their paperwork has been filed. Supporting them, therefore, "is burning through our city's budget," said Mr Adams. He expects to spend at least \$1bn by the end of the fiscal year helping migrants. So far the city has set up 42 hotels as emergency shelters. More than 5,500 children have been enrolled in local schools. The city is helping provide legal information and transit fares. Tents are being put up to temporarily house 500 people on Randall's Island. The city is also in talks with several cruise lines to lease a cruise ship.

Mr Adams, understandably, wants emergency federal financial relief. He also wants legislation that would allow migrants to work legally. He wants a strategy to slow the arrival of migrants at the border and co-ordination to house migrants all over the country. He has asked New Yorkers to host migrants in their homes. On October 13th the Biden administration an-

nounced a deal with Mexico whereby up to 24,000 Venezuelans would be accepted at airports but those crossing the border illegally would be returned to Mexico.

Without the help of organisations like the NYIC, Catholic Charities, non-profits, churches and ordinary New Yorkers volunteering, the city would be in even more of a mess. St Paul & St Andrew, a Methodist Church, is sheltering five recent arrivals. "It is virtually impossible from our standpoint not to absolutely fall in love with them, and try to help them," says Reverend Lea Matthews. The church arranged for a couple without proof they were married to get a marriage licence, so they could be sheltered together. They had travelled from Venezuela, through jungle, desert and across a river. Their 15-month-old grandchild was separated from them at the Southern border. Reverend Matthews and her team of volunteers managed to reunite the baby with the family. There are many less happy stories. ■

**Breast cancer**

## Nipped in the bud

WASHINGTON, DC

### Not all public-health news in America is doom and gloom

**O**CTOBER IS BREAST cancer awareness month, and thankfully it seems quite a few Americans are aware of it. Mortality from breast cancer has dropped by 43% over the past 30 years, according to a new report by the American Cancer Society (ACS). This is largely thanks to earlier detection and better treatments. All told, the improvement adds up to 460,000 lives saved over the past three decades.

**It's working**

Most public-health news from America is gloomy. About 100,000 people die each year from drug overdoses. Life expectancy, which used to creep steadily up year after year, has gone into reverse: America is unusual among rich countries in that life expectancy has fallen back to a level it was last at in the mid-1990s. Within that overall picture though, there have been improvements. Breast cancer joins lung cancer, the most prevalent cause of death from cancer, colorectal, and prostate cancer in becoming less lethal over the past three decades. Since deaths avoided tend to be rather neglected relative to deaths caused, it is worth considering what has gone right.

According to the Centres for Disease Control and Prevention, about 264,000 cases of breast cancer are diagnosed among American women each year, and about 42,000 women die. Men are susceptible too, though male breast cancer is very rare: each year about 2,400 men are diagnosed with breast cancer and 500 die. Early diagnosis is key to survival. Today someone diagnosed with breast cancer that has not spread to any other body part has a 99% chance of living for at least five more years. That compares with 29% for breast cancer that has spread throughout the body.

How has this improvement come about? Three-quarters of women with health insurance have regular mammograms, which result in earlier detection. Treatments have also become more targeted. Doctors are now able to divide breast cancer diagnoses into subtypes based on whether the cancer contains oestrogen and progesterone receptors, which means they are sensitive to hormones, and whether they have high levels of HER2 protein, which stimulates cell growth. These classifications allow for more specific, and therefore effective, treatment.

While mortality rates have decreased, the prevalence of breast cancer has risen in the past 40 years—and not just because more people are being screened. The increase is probably due to high obesity rates and declining fertility among women, says Rebecca Siegel, an author of the ACS report. Breast cancer and obesity are linked because fat cells synthesise oestrogen production in post-menopausal women, and higher oestrogen levels are associated with breast cancer. As for fertility, having children at a later age and not having children at all is associated with increased risk of breast cancer. "It's not fully understood why, but it's thought to be related to exposure to oestrogen," says Ms Siegel.

Still, the news is mostly good. As ever there are racial gaps in outcomes, and people without health insurance are much less likely to get a mammogram. But with the exception of Native Americans, all racial groups have seen mortality rates from breast cancer decline. ■

## California's economy

# A stimulating debate

WASHINGTON, DC

### Government payouts stoked inflation. Can more payouts blunt it?

**I**T SOUNDS like a bad joke. In 2020 and 2021 the American government sent out pandemic-relief payments to tens of millions of households, worth thousands of dollars per person. This largesse led to a surge in consumer spending, which in turn fed into the high inflation now racking the country. So California is trying to help its residents—by sending out inflation-relief payments to millions of households, worth up to a thousand dollars. If the first set of payments contributed to inflation, can the second set of payments somehow minimise it?

The short answer is simple: extra infusions of cash risk aggravating the very problem they are attempting to solve. Families in California who make less than \$150,000 annually started receiving one-off direct deposits of up to \$1,050 in their bank accounts on October 7th. The Middle Class Tax Refund, as it is officially called, is expected to reach up to 23m Californians, nearly 60% of the state's population. The government wants to make it easier for people to afford necessities such as petrol and groceries. The problem is that if everyone splurges on consumer goods at about the same time, they may drive prices up. Multiple studies have found, for example, that the intended savings from gas-tax cuts often end up being swallowed up by higher prices at the pump as demand increases and petrol stations charge more.

The longer answer is a bit more complicated. Scale matters. If every state were doing the same thing as California, the upward pressure on inflation would be substantial. If, however, it were just California, the effects would be less worrisome: as spending increases in California, goods from other states can flow there to meet the extra demand. This is closer to what is happening. Nearly 20 other states have given tax rebates or payments to residents, but most are providing less than California. And the Californian hand-out by itself will not move the national price needle: it adds up to \$9.5bn, or just 0.3% of state GDP.

Timing matters, too. Part of the reason that the federal government's stimulus payments during the pandemic fuelled rising prices is that the production of goods was so constrained at the time: companies responded to increased demand more by raising prices rather than by increasing output. A steady improvement in supply chains over the past year should make it

easier to absorb any sudden increases in demand. The upshot is that the Californian handouts will probably have a negligible impact on inflation, while providing some help to their recipients.

The more serious criticism is what the payment says about the budgeting judgment of Gavin Newsom, California's governor. The state announced in May that it had a record surplus of \$97.5bn, thanks to higher-than-expected tax revenues. California is handcuffed by its own laws about how it can deploy surpluses: rebates to taxpayers are one standard option. Yet the government could also have boosted spending on infrastructure, including housing, while initially adding more to the state's budget reserves—only prudent given the downshift in the economy. But politically that would have been rather dull. When Mr Newsom released his budget, his office published a list of ten things Californians needed to know about it. The first? "Chaching! You just received a deposit." ■

### Los Angeles

## Black and blue

LOS ANGELES

### A leaked tape prompts soul-searching about the city's racial politics

**I**T IS ONE thing to think that politicians probably behave differently behind closed doors. It is quite another to hear the crude strategy deployed by America's power brokers to get what they want. Sound from one such smoke-filled room was unearthed this week. A leaked recording revealed three Hispanic Los Angeles City Council members and a labour leader making racist and disparaging remarks about



Council of despair

African-Americans, Jews, Armenians and indigenous people as they discussed local redistricting efforts. Nury Martinez, who was City Council president at the time, was the ringleader. At one point she refers to the black son of a fellow council member as a "changuito", or little monkey.

The backlash has been swift. Ron Herrera has already resigned as president of the Los Angeles County Federation of Labour, which wields immense political power. Southern California's political elite want more heads to roll. Alex Padilla, the state's junior senator, Eric Garcetti, the mayor of Los Angeles and even President Joe Biden have called for the resignations of the three council members. Only one, Ms Martinez, had acquiesced by the time *The Economist* went to press (after trying, and failing, to placate Angelenos with a leave of absence). Protesters swarmed recent council meetings, shouting at Kevin de León and Gil Cedillo, the other two politicians on the tape, to quit.

The conversation between the four Democratic Latino leaders was taped in October of last year, as the city's redistricting commission was proposing new maps for the 15-member council. Their crude discussion of the lengths they would go to hold and expand power recalls the history of fraught racial politics, and racial gerrymandering, in Los Angeles. The tape also reveals how the city is changing. Nearly half of Angelenos are now Hispanic. Their growth has fed competition between black and Latino politicians to increase their representation on the council, and to boost the wealth of their districts. It's not just about our seats, Mr de León says on the tape, it's about Latino strength for the foreseeable future.

The recording may shock those who view Los Angeles as a bastion of progressivism. But it is telling that the tape may spell the end of the political careers of those involved. Republican politicians, on the other hand, have different taboos on racist speech. At a recent rally Tommy Tuberville, a Republican senator for Alabama, suggested that the descendants of slaves are all criminals. He was applauded.

There may be other consequences in LA. Karen Bass and Rick Caruso, who are battling to become the next mayor of Los Angeles, will now try to portray themselves as the candidate who can unite Los Angeles and rid City Hall of its foul stench. More broadly, the growth of the Latino population has turned Los Angeles into a majority-minority city, as in there are now more non-white Angelenos than white ones. America is set to reach that milestone in 2045. Perhaps Los Angeles's paroxysms can serve as an example of how not to handle it. In the meantime it is a reminder for Democrats of how race-based identity politics can divide the party's coalition. ■

## Lexington | Legitimate childishness

*Of course the Supreme Court has been politicised, but the fault does not lie with its critics*



SOMEONE SURE is getting on Sam Alito's nerves. Mr Alito, of the six-member conservative majority on the Supreme Court, recently huffed to the *Wall Street Journal* that while people are free ("it goes without saying", he said) to criticise the justices' reasoning, "saying or implying" the court is becoming illegitimate "crosses an important line".

It would be wrong to criticise Mr Alito for not specifying where that line lies. He is probably America's most famously reluctant specifier of lines, having scorned the Supreme Court's own efforts to do so in his withering decision, *Dobbs v. Jackson Women's Health Organisation*, that in June struck down the right to abortion as established almost 50 years ago by *Roe v Wade*. His predecessors who supported *Roe* never had "cogent" or "principled" arguments for the lines they drew between the rights of a pregnant woman and those of an unborn child, he wrote.

Good for Justice Alito for being consistent. Still, he puts everyone else in a pickle. How can anyone know when they might be crossing the line from permissible criticism to impermissible implication? A churlish person might venture that calling *Roe* "egregiously wrong," as Mr Alito did, might itself cross that line, implying as it does that the 15 jurists who decided *Roe* and upheld it against repeated challenges were either ideologues or morons.

That same troublemaker might point to Mr Alito's contemptuous dissent to the 2015 decision extending marriage rights to gay Americans. It would affect the court's "ability to uphold the rule of law", he wrote, and showed "that decades of attempts to restrain this court's abuse of its authority have failed". Legitimacy, anyone?

Mr Alito made his comment to the *Journal* as part of a public spat that has broken out as the justices begin their fall term. The person most getting under his skin appears to be Elena Kagan, one of three justices in the court's liberal minority. In recent appearances, Ms Kagan has suggested the court has risked its legitimacy when judges have "reflected one party's or one ideology's set of views", as she said at Salve Regina University on September 19th. Previously, at Northwestern University, she called respect for precedent "a doctrine of humility," adding, without naming anyone, that "individual judges shouldn't come in and just think that they know everything." Chief Justice John Roberts has voiced concern,

saying in September, "Simply because people disagree with an opinion is not a basis for questioning the legitimacy of the court".

It is all a bit passive-aggressive. It is also somewhat insulting to the intelligence of Americans who feel they are past the stage when the parents must spell out to each other the words they hope will not be understood. What the judges are talking about, when they talk about the court's legitimacy, is whether the court is acting like just another political branch of government. And everyone knows the answer: of course it is.

When Mitch McConnell, then Senate majority leader, refused for 294 days to grant even a hearing to President Barack Obama's last pick for the court, calculating that doing so might help elect a Republican who would choose someone else, he did not protect anyone's legitimacy. He advanced ideas of jurisprudence that, by happy coincidence, matched his political objectives. He got what he wanted—not just once, as it turned out, but three times, locking in the conservative majority. Can Americans really be expected to pretend that was not a political act, with a political outcome?

Mr McConnell's gambit has resulted in a court that, during a period when the Democrats control both the White House and Congress, has been able to make Republican policy the law of the land, from environmental regulation to gun control. This dissonance has not escaped public notice. At the end of September Gallup reported that a minority of 47% of Americans trusted the Supreme Court, the lowest level since it began tracking this attitude in 1972. Trust had dropped 20 percentage points in just two years; it is increasingly dividing along party lines.

Each party pillows its judicial nominees in high-minded claims about their legal philosophy. But anyone with common sense recognises that none of this is on the level. Mr McConnell has been particularly cynical and effective at the game, and his gambit has set a new baseline. In the future, it would be surprising if either party, while in the Senate majority, would confirm a justice chosen by a president of the other party. The present, dismal logic of American politics suggests they would be suckers to do so.

### Poor John Roberts

Republicans are right that, from the 1950s to the 1980s, the court often served liberal aims under Chief Justices Earl Warren and Warren Burger. But the politics of the era sustained trust in the institution. Warren and Burger were appointed by Republican presidents and confirmed with bipartisan majorities, as was the author of *Roe*, Harry Blackmun. Now, with the filibuster eliminated by Democrats for court appointees, they squeak through with a majority of the president's party. Rather than criticism that crosses some notional line, it is that context, compounded by the conservative majority's activism, that is eroding the court's reputation for standing outside politics.

Most matters the court takes up have modest political implications, or at least not sharply partisan ones, including cases it is considering on copyright law and pork production. But this court is picking hot-button cases it would be wise to avoid, and then upending state and federal policy and politics.

As Chief Justice Roberts wrote in his concurring opinion in *Dobbs*, the majority chose to go further than it needed to—further than the plaintiff had originally asked—in throwing out the precedent of *Roe*. He warned it was discarding a "fundamental principle of judicial restraint". You might expect conservatives to honour such principles. Until they do, they should spare the rest of us lectures about not questioning their Olympian detachment. ■



**The militarisation of Mexico**

## Guns and AMLO

MEXICO CITY

**President Andrés Manuel López Obrador risks making the army a political player**

DEMOCRACIES THAT give their armed forces too much power may become less democratic. Under President Andrés Manuel López Obrador, Mexico, which never had a military dictatorship, may be taking that risk. In September Congress voted to transfer control of the National Guard, created in 2019 to replace the federal police, from the security ministry to the defence ministry, which is led by a general. This month Congress's upper house agreed to extend from 2024 until 2028 the army's role in enforcing law and order.

Mr López Obrador, president since 2018, once argued that soldiers should return to their barracks. Now he has given them

more power than has any predecessor. He wagers that they will act more quickly than bureaucrats and be less corrupt. The army is popular; its ranks are drawn from the *pueblo* (ordinary people); many Mexicans applaud its role in fighting narcotics.

But the armed forces carry out their new tasks badly. Although there is little prospect that generals will seize political power, their growing influence is dangerous. Mr López Obrador, often known as AMLO, is

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empowering an institution that is difficult to control and has interests that may clash with those of the electorate.

The army's role has expanded most in fighting crime. In 2006 the then-president, Felipe Calderón, deployed the armed forces to fight drug gangs, supposedly as a temporary measure. They have been doing it to a greater degree under Mr López Obrador. In September nearly 200,000 soldiers, including National Guard members, of an active force of 240,000 were spread across the country. That is nearly four times the maximum average reached under previous presidents. The new laws, which will be challenged in courts as unconstitutional, could make permanent the militarisation of law enforcement. The eradication of the federal police force means that the civilian branches of government are "washing [their] hands of what is arguably a government's main role—to provide security to its citizens", says Luis Carlos Ugalde of Integralia, a consulting group.

As worrying is the army's new role in the economy, which brings it huge transfers of cash. Mr López Obrador has handed the armed forces some 70 civilian functions, according to Mexico United Against Crime, an NGO. They include running ports, building a tourist railway, helping to run social programmes and clearing sargassum—invasive algae—from beaches.

In 2006 the budgeted spending of the ministry of defence, which oversees the army and air force but not the navy, was the ninth-biggest among ministries. By 2021 that had risen to fifth-biggest. Mr López Obrador has given the armed forces ways to generate their own income, too. They will, for example, receive some proceeds from the train and airports they run, including a new air facility they built in Mexico City.

Some generals are encouraging this. Among documents obtained by Guacamaya, a group of hackers, was a proposal drawn up by the army's legal-affairs unit for the president offering two legislative paths by which it could take control of the National Guard (one of which was later used). The hack also revealed that the armed forces plan to run a commercial airline, mainly to unserved destinations. It would use the presidential jet that Mr López Obrador tried, and failed, to sell.

It makes sense for the army to fight gangs, which have military-grade weapons. "It's not realistic to expect the municipal police to fight organised crime," says Lilian Chapa Koloffon of the World Justice Project, a think-tank in Washington. But abolishing the federal police has drawn the defence ministry into dealing with lower-level crime, which is a mistake, she says.

Spending on the army's crime-fighting role diverts money from other security spending, for example on civilian police ➤

► forces and on forensic experts, and comes at the expense of other vital services. The government has cut the education budget as a share of GDP, even though children need to catch up on schooling they missed during the pandemic.

The army's growing wealth and influence strengthen the executive branch of government but could also weaken its civilian leaders, including the president. That poses a risk to Mexico's young democracy. The country held its first free elections in 2000, after 70 years of authoritarian rule by the Institutional Revolutionary

Party (in which Mr López Obrador began his career). The army, answerable to a defence minister who is a serving officer, can invoke national security to avoid scrutiny. It is unfit for many of the duties it has newly taken on, says Ms Chapa Koloffon.

Mexico has become more violent since 2006. Some crimes, like extortion, have rocketed. So have complaints that the army is committing human-rights abuses. Infrastructure projects have run late and cost much more than planned.

Some lawmakers are trying to temper the consequences of the army's growing

clout. The upper house has modified the bill that extends the army's term on the streets, restoring funding for state and municipal police forces that legislators had earlier cut, but the sums are likely to be small. It voted to give Congress oversight of the army's public-security work, but it will probably be weak. The law now has to return to the lower house for approval.

Mr López Obrador apparently has no fear of military muscle. But the president who once wanted an army in its barracks risks creating one that will demand a bigger say in the corridors of power. ■

## Bello Argentina in its labyrinth

*Can Sergio Massa steer the country to next year's election?*

**W**ALK DOWN Calle Lavalle or Calle Florida in the centre of Buenos Aires and every 20 metres someone will call out "cambio" (exchange), offering to buy dollars at a rate that is roughly double the official one. In supermarkets prices rise every month. Inflation this year is heading for 100%. As it has been several times in the past 50 years Argentina is once again lost in an economic labyrinth mainly of its own making. The distortions have reached danger point. "If this carries on, we'll see looting of supermarkets again," says a taxi driver.

At the root of the current instability is a weak and divided Peronist government. Alberto Fernández, the president, owes his job to the decision by Cristina Fernández de Kirchner (no relation), Peronism's most powerful figure, to pick him as the Peronist candidate and to run herself to be his vice-president. They inherited an economy that their conservative predecessor, Mauricio Macri, had tried, but failed, to fix. He reached a \$57bn agreement with the IMF to avert disaster. Mr Fernández's first finance minister, Martín Guzmán, an academic, expanded price and exchange controls, restructured foreign bonds and negotiated a new accord with the IMF.

The fund was more lenient than in the past. Even so, to make the economy viable the agreement requires Argentina to cut the fiscal deficit and the printing of money by the Central Bank to finance the government, and to shore up international reserves. Preferring inflation to austerity, Ms Fernández's allies in Congress voted against the accord, which was approved with the votes of moderate Peronists and the opposition. When Mr Guzmán tried to implement it, she forced him out in July. That prompted the peso in the street to plunge; demand for the

government's peso bonds dried up. With protests and strikes growing, some feared the government might fall.

The Fernándezes reluctantly turned to Sergio Massa, a third important figure in Peronism, who moved from presiding over the lower house of Congress to heading a beefed up economy ministry. He has brought some calm, albeit not much. His aims, he told Bello in his office in Buenos Aires, are to get inflation down both by cutting the fiscal deficit and by building confidence in the peso with a trade surplus and foreign reserves. "The IMF agreement is an anchor, not an objective," he says. "It's useful as a route map."

Mr Massa brought in reserves by the expedient of offering soya farmers a better exchange rate to repatriate their dollars. Even so, net reserves are only \$2bn, according to the IMF. To husband them as Argentine fans prepare to travel to Qatar for next month's football World Cup, he has introduced a tax on tourist spending abroad. He has reduced government outlays, drawn up a stricter budget and is working on cutting indiscriminate sub-

sides of utility bills and public transport. Inflation has helped that effort by cutting the real value of spending. The minister got a boost when the IMF on October 7th approved a disbursement of \$3.8bn (though the money will go back to it in debt repayment). The fund praised Mr Massa's efforts but warned that risks remain high.

The biggest of those dangers is political. Ms Fernández tweeted that the government should do more to moderate food prices; her son, Máximo, a congressman, sniped at the "soya dollar". Yet Ms Fernández must know that Mr Massa is the only thing standing between Argentina and chaos. The country faces a general election in a year, which the opposition is widely expected to win. Thoroughgoing reform of the economy and a return to sustained growth will have to wait for a stronger and more determined government. For the current one "the aim is to survive, because they don't govern," says Luis Tonelli, a political scientist who is close to the opposition. Facing legal charges for corruption (which she claims are political persecution), Ms Fernández has an interest in being re-elected as a senator to retain immunity from imprisonment.

Mr Massa is a rival as well as an ally. Aged 50, he is widely thought to have presidential ambitions. He harks back to the conservative strand in Peronism that governed in the 1990s under Carlos Menem but was then marginalised by Ms Fernández's leftist populism. Fail, and he will be simply a footnote in the government's wider failure. Do too well, and Ms Fernández may cut him down. But Mr Massa at least has a modest opportunity to slow the deterioration in Argentina's plight. Do so, and he will have made a name for himself for the future.





## Energy in Asia

# Transitional justice

SINGAPORE

### For Asia to cease relying on fossil fuels, others will have to pitch in

WHEN THE electricity cut out earlier this month in her flat in Dhaka, Sabina Yeasmin's first thought was for her 17-month-old daughter. Bangladesh's capital fills with dengue-carrying mosquitoes at this time of year. With no working fan or air conditioner, Ms Yeasmin could not put her toddler under the stifling mosquito net. A diesel shortage had put the backup generator out of commission. Even the price of candles had quadrupled. Ms Yeasmin could barely keep from crying.

The power cut that plunged her building into darkness on October 4th did the same to most of Bangladesh: four-fifths of the country's 165m people lost electricity for seven hours. Factories ground to a halt. Pumps in tenements ceased to work, depriving residents of water. The grid failure was an extreme symptom of an electricity shortage caused by geopolitics. Over the past decade, Bangladesh has added a lot of generation capacity to keep up with its growing economy, mostly by building natural-gas plants that run on imported fuel. Russia's invasion of Ukraine pushed up the

price of gas. Gulf gas producers have prioritised exports to Europe, which pays top dollar, over those to poor countries.

The problems faced by Bangladesh are a harbinger of things to come. Asian economies will be the world's fastest-growing in the coming decade. Their demand for energy will surge. At the same time, countries in the region are already among the worst affected by climate change. The cost of floods, droughts and heatwaves will only rise. Meanwhile the availability of fossil fuels is subject to political vagaries. Asia's future success and the well-being of its people, including the ability to keep the lights on, will depend on whether it can green its energy supply quickly enough.

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It is a formidable challenge. Energy demand for the ten members of the Association of South-East Asian Nations (ASEAN) is projected to increase by about a third of the EU's current total by 2050. India alone will probably need additional capacity equivalent to that of today's EU by 2040. Ideally, much of that extra demand will be met by renewables. Yet fossil fuels continue to dominate the energy mix across the region (see chart on next page). Their dominance is entrenched through subsidies or political favouritism. In India, Indonesia, Malaysia and the Philippines coal, the filthiest of fossil fuels, remains king. India, the world's third-biggest emitter after China and America, has set a zero-carbon target date of 2070, two decades later than large Western economies. Some countries have yet to make a commitment at all.

Breaking away from coal is a priority. Though existing coal plants will be needed to ensure the stability of grids across the region for years to come, the construction of new ones must slow. China, Japan and South Korea, which were funding 95% of such plants, have promised to stop financing them abroad, albeit with loopholes. New forms of financing should help retire old ones. India, Indonesia and Vietnam are lobbying to copy a model being tried in South Africa, where rich countries provide grants and cheap loans to shut coal generators. The Asian Development Bank wants to blend aid with private capital to refinance coal barons' debts. The idea is to al-

▶ low them to make their money ahead of schedule on the condition that they close their plants early, too.

As for new sources of energy, hopes are rising for “green” hydrogen—made from splitting water using renewable energy. Hydrogen is abundant, clean and energy-dense, but both the technology and the infrastructure are untested at scale. Plans are nevertheless ambitious. In the Pilbara region of Western Australia, a renewable-energy hub will, its boosters claim, cover 6,500 square kilometres (2,500 square miles) of desert and have capacity of 26GW a year, to be used to produce hydrogen and ammonia (a way to store hydrogen and make it portable) for export.

Given the uncertainties surrounding green hydrogen, for now solar energy and wind power will be the chief focus of Asia’s energy transition. Some dream big: one Australian company promises a A\$30bn (\$18.7bn) underwater power link sending electricity from solar panels in Australia’s Northern Territory to Singapore, using 12,600km (7,800 miles) of cables. If completed as promised, by 2029 it will supply one-sixth of the city-state’s electricity.

Most Asian renewable projects will be smaller in scale. Yet their cumulative impact could be significant. The Economist Intelligence Unit, a sister company of *The Economist*, forecasts that renewables will double their share in Asia’s electricity mix from 15% to 31% by 2031. India’s share will reach 21%, with 200GW of fresh, non-hydro renewable capacity. China is expected to add 700GW of such capacity. The head of China’s planning agency claims 450GW worth of wind projects will be built in the Gobi desert alone.

For the transition to work, nuclear will need to be a part of the mix, as it already is in China. Bangladesh, India and South Korea are all adding nuclear capacity. Asia’s large-scale manufacturing of green-energy products will help. Malaysia, Vietnam and South Korea are the world’s biggest makers of solar modules after China. Indonesia is

the biggest producer of nickel, a vital input for batteries. The country’s bid to modernise its nickel processing and to encourage battery-makers from South Korea and elsewhere to set up is a notable success. Tim Gould, chief economist at the International Energy Agency, predicts that nickel will earn more for Indonesia than coal ever did.

Yet not all projects will be commercially viable. Weaning Asia off carbon will require some \$26trn-37trn in investment between now and 2050, estimates the Asia Investor Group on Climate Change, a club

of business types. Grants and subsidies from rich countries will be needed to spur private investment. India’s prime minister, Narendra Modi, has named his price for agreeing to net zero: \$1trn in funding by 2030 alone. That is ten times the annual amount promised to all poor countries under the Paris agreement of 2015, little of which has so far been disbursed. When countries meet in Egypt next month at the UN’s annual climate summit, money will be at the heart of discussions. Asia’s low-carbon future hangs on the outcome. ■

### Pilgrims’ pleas

## What Indians pray for

BANDRA

As the country grows richer, its people dream bigger



**T**HE SUPPLICANT enters the Basilica of Our Lady of the Mount and walks to the sanctuary. On the floor, far below the feet of the golden-robed Madonna and the baby Jesus, he finds a row of blue plastic boxes. In one of them he carefully places a small piece of wax shaped to look like a pair of human lungs. Stepping back he bows his head, joins his hands and utters a silent prayer.

Every day hundreds of people like him climb to the top of the hill of Mount Mary in the leafy Mumbai suburb of Bandra to seek the Virgin’s favour. During the Feast of the Nativity, which is celebrated with a sprawling fair for eight days each September, up to 100,000 pilgrims visit daily. Whenever they come they find, just outside the church, stalls selling votive offerings whose waxy forms provide an insight into the desires of the people of India.

The most common items on display are houses: cute cottages with slanting roofs and gaping front doors. Babies, little boys and girls and nuclear families

are represented in abundance. There are ships, motorcycles, cars and planes. Trays overflow with arms, legs, hearts, heads, eyes, ears and other organs. “All body parts are available,” says Augustine Fernandes, who runs one stall.

The current, imposing Indo-gothic structure of the basilica dates from 1904, but Christians have worshipped at this spot since at least the 16th century. Though Catholic, the church is popular with supplicants of all faiths. In 1882 the “Gazetteer of the Bombay Presidency”, a colonial compendium, noted that Hindus, Muslims and Parsis made votive offerings here. A history of the church from 1964 observed that during the nativity feast pilgrims offered “the waxen images of parts of the human body—hand, ear or eye, according to the favour they want granted”.

As India’s economy has grown more sophisticated over the past decade, so have the pleas of pilgrims. Vendors of offerings adapted to keep up with changing tastes. Body parts and simple houses have been joined by more glamorous two-floor homes in bright colours, daubed with the words “dream villa”, “lovely home” or “bungalow”.

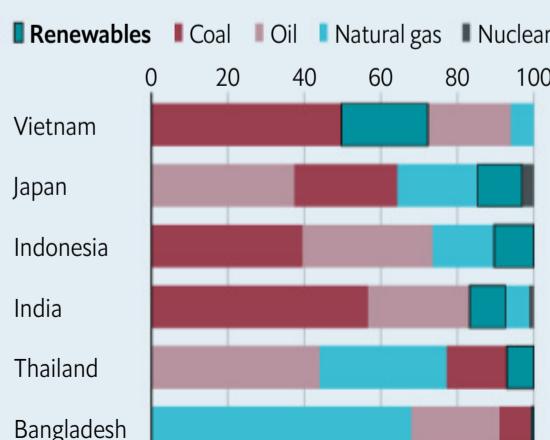
In addition, there are flat-roofed factories, hotels, schools, colleges, clinics, and even a “bar and restaurant”. There are blocky replicas of Indian currency. Some offerings are simply sheets of wax screen-printed with photos of visas to Western countries, or words like “business”, “career”, “success”, “cricketer” and “movie star”—but also “forgive”, “thank you” and “peace”. Prices start at 30 rupees (35 cents) for simpler shapes. The fanciest villas go for 200 rupees.

High-quality jobs may be scarce and real houses in Mumbai eye-wateringly expensive. But on Mount Mary, everyone can afford to dream.

### Fossilised

Energy consumption, by fuel

2021, % of total



## Repression in Bangladesh

# Reviled rival

### The government intensifies its persecution of Muhammad Yunus

WHEN HE BECAME the first Bangladeshi to win the Nobel peace prize in 2006, Muhammad Yunus's compatriots celebrated in the streets. The model of small, high-interest "microloans" to the poor that Mr Yunus pioneered in the 1980s had helped millions of people around the world lift themselves out of poverty. At home and abroad, the entrepreneur was a much-loved household name.

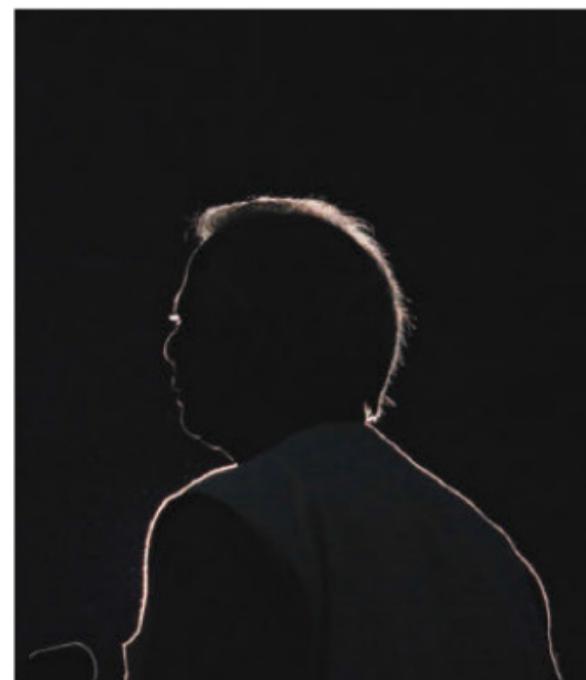
At home, at least, that has changed. In today's Bangladesh, Mr Yunus is less celebrated than hounded. This month he is due to be hauled before the country's anti-corruption commission to face questions about his business. Along with a growing list of his associates, he risks being barred from leaving the country.

The summons from the commission is the latest salvo in a decade-long campaign waged against Mr Yunus by Sheikh Hasina Wajed, Bangladesh's prime minister. Her government claims that the aim is to root out corruption. But the probe into Mr Yunus is testament to rising authoritarianism in Bangladesh, which is increasingly circumscribing the space for the civil society the country once sought to nurture.

Mr Yunus's fate hints at the changing status of social enterprises and non-governmental outfits in Bangladesh. Starting in the 1970s, successive governments keen to boost the country's development embraced the work of organisations such as Mr Yunus's Grameen Bank. But eventually they began to worry that such groups were amassing too much power of their own.

Sheikh Hasina began probing Mr Yunus's business more than a decade ago, when a Norwegian documentary alleged that he had diverted donations from Norway's aid agency in the 1990s (an investigation by the Norwegian government found no evidence to support the claims). The prime minister may have worried that Mr Yunus, who had briefly dabbled in politics in 2007 during a period of military rule which Sheikh Hasina spent in prison, might turn into a viable political opponent. She accused him of avoiding taxes, lambasted him as a "bloodsucker of the poor" and launched a probe into Grameen Bank, Mr Yunus's micro-lending business, as well as into his private finances.

As Sheikh Hasina tightened her grip on power, her suspicion of Mr Yunus deepened. In 2011 the government ousted Mr Yunus from Grameen on the basis that he



**Out of favour**

had passed the compulsory retirement age of 60 (he was 70 at the time). Three years later it took over the bank's board of directors entirely. In 2012 plans to build a bridge across Bangladesh's Padma river were temporarily derailed when the World Bank withdrew its \$1.2bn funding commitment, citing corruption by Bangladeshi officials. The prime minister later claimed that Mr Yunus, angry about his removal from Grameen, had lobbied America to persuade the World Bank to pull out of the project.

Sheikh Hasina doubled down on the claims earlier this year when the bridge, built with help from China, was at last opened: she told Bangladeshis that Mr Yunus should be "dipped in the river". The government said it would investigate why the World Bank withdrew from the project. (Mr Yunus denies any involvement.) In July it launched a separate probe into accusations that Mr Yunus embezzled millions from workers at Grameen Telecom, a not-for-profit firm. (Grameen Telecom and Mr Yunus deny the allegations.) The probe has since been widened to include a slew of other companies and organisations using the Grameen name, including several based abroad.

The timing of the recent probes appears to be motivated by Sheikh Hasina's worry about political competition ahead of an election next year. Since August the government has filed criminal charges against thousands of critics and members of the opposition, according to Human Rights Watch, a pressure group. Mr Yunus's international standing makes him a potent threat to the prime minister's power, reckons Asif Nazrul of Dhaka University: "If the international community looks for an alternative to this regime, Dr Yunus could be very important in that process—if he wants." Mr Yunus has shown no such inclination since his abortive foray into politics back in 2007. But Sheikh Hasina seems unwilling to take the risk. ■

## Thailand

# The madness after the massacre

### SINGAPORE

### A mass killing prompts the government to declare war on drugs

CURLED UP ASLEEP under a blanket in the corner of the nursery, a single toddler survived the horror. Nearly two dozen others did not. Panya Khamrab, a former police officer, hacked them to death with a machete on October 6th on his rampage through a child-care centre in Nong Bua Lam Phu in Thailand's north-east. He also killed a dozen adults, many of them minders trying to protect the children. Then he went home, where he shot and killed his wife and her son before taking his own life.

Since that horrible day Thailand, a country unaccustomed to such massacres, has been deep in thought about how to prevent another one. There has been much talk of restricting access to guns and improving the country's shoddy mental-health provision. But the background to the tragedy has prompted the government to home in on drugs.

Mr Khamrab had been dismissed from the police force in June for possession of *yaba* (crazy pill), a drug containing methamphetamine and caffeine which delivers a blast of energy. He had confessed to having been addicted since high school, and had appeared in court on drug charges just before the massacre. Though tests showed he did not use drugs in his final days, years of *yaba* use can leave addicts with permanent psychosis and paranoia.

In the days following the massacre, police around the country lined up for photo ops next to piles of confiscated drugs. On October 12th Prayuth Chan-ocha, the prime minister, announced a series of "urgent measures" to tackle Thailand's drugs problem. He instructed underlings to draw up a list of targets for a future crackdown by the end of the month. All government workers will face random drug testing. A minister crowed that all this was tantamount to a "war on drugs".

In theory, fighting drug addiction in Thailand is a sensible idea. The country is awash in *yaba*. Popular with partygoers in the 1990s, consumption moved to the working class as the cost of the drug dropped to a fraction of its former price, thanks to plentiful supplies from neighbouring Myanmar. Costing as little as 20 baht (\$0.50) per pill, it has replaced locally

**Correction:** Last week we described the Centre for Strategic and International Studies in Jakarta as an American think-tank. Though there is an outfit with that name headquartered in Washington, the one cited is unaffiliated with it. Sorry.

► grown opium as Thailand's most popular narcotic. Around three-quarters of rehab patients in the country are addicted to it.

Yet past experience does not bode well for the success of a new war against drugs. Though the recent liberalisation of cannabis laws has earned Bangkok the moniker of "Asia's Amsterdam", the country's policy on other drugs remains far from liberal. It retains the death penalty for traffickers. Thai people locked up on drug charges make up a third of all prisoners (for any crime) in South-East Asia. Many of those whom the government deems addicts are

carted off to rehabilitation centres run by the army that resemble boot camps more than clinics. A war on drugs launched by a previous government in 2003 under Pheu Thai, currently an opposition party, resulted in a wave of extrajudicial killings. Most of the 2,600 victims turned out to have no affiliation with the drug trade at all. Meanwhile, *yaba* remains ubiquitous.

Before the massacre, there were signs of improvement. Last year a new narcotics code shifted the task of designing treatment for addicts to the public-health ministry. Rehab was to be made voluntary. But

the interior ministry now says anyone caught with even a single *yaba* pill will be ordered to undergo at least a week of treatment. That is unlikely either to help addicts or to curb the spread of the drug.

As yet, the government's campaign looks likely to be haphazard and ineffective rather than lethal like the one in 2003. Yet the opposition is as enthusiastic about a new war on drugs as the general public. With elections due next year, the government has every incentive to appear tough. Thais must hope that the response to one tragedy does not produce another. ■

## Banyan Peripheral visions

*The shameful statelessness of South-East Asia's sea nomads*

ON THE FLOOR of a hut perched over the shallows off the island of Pulau Gaya the head of the household, Bilbayati, sits cross-legged, surrounded by a flock of grandchildren, fingering an official-looking piece of paper. The notice informs him of the recent death of his son, Aminrati, the family bread-winner, in a hospital on the other side of Sabah, the Malaysian state occupying the northern portion of Borneo. He had been taken ill with blood poisoning and died.

The death notice is the first time that Aminrati has assumed a documented identity, an irony not lost on Bilbayati (not his real name). Father and son hail from a set of indigenous groups who live on boats or in villages of stilt-houses connected by rickety walkways, spread along the coasts of Borneo, the Sulu archipelago in the southern Philippines, and the islands of eastern Indonesia.

The groups, who number perhaps 1m members, have historically made a living from fishing and diving for shells and sea cucumbers. They go by a welter of different names. The most common is Bajau, though this is an exonym; many refer to themselves as Sama. In English they are often called "sea nomads".

To scientists, Sama-Bajau are notable for their larger spleens full of oxygen-bearing blood, evolved for staying underwater for longer. To themselves, by far their most notable feature is their statelessness. Though they have plied the region's seas for centuries, they are not citizens of any adjacent country.

Their statelessness dates back to those countries' founding. Nation-statism relies on a well-documented citizenry within hard borders. Sama-Bajau transgress on both counts. Documentation is not essential for boat-dwellers in a damp environment—even today most

are illiterate. As for borders, the seascape which was their home did not recognise them. When newly decolonised states hammered their borders and their citizens in place, Sama-Bajau, lacking even informal land title ashore, were suspect. Worse, in officials' eyes, how could you vouch for these sea-wanderers' loyalty? They were denied citizenship.

For those living in Sabah today, the effects of statelessness are profound. Medical treatment in Malaysia is nearly free to citizens. But as a "foreigner", even though he was born in Sabah, Bilbayati now owes the hospital 4,000 ringgit (\$854) for his late son's admission. Bajau children are denied state schooling. On tiny Omadal island in north-east Sabah, Jefri Musa runs a stilt-house school for 34 Bajau kids, supported by an NGO, in the teeth of bureaucratic resistance. But even educated Sama-Bajau, he says, face discrimination when they look for work. Many work as porters or end up begging in quayside markets.

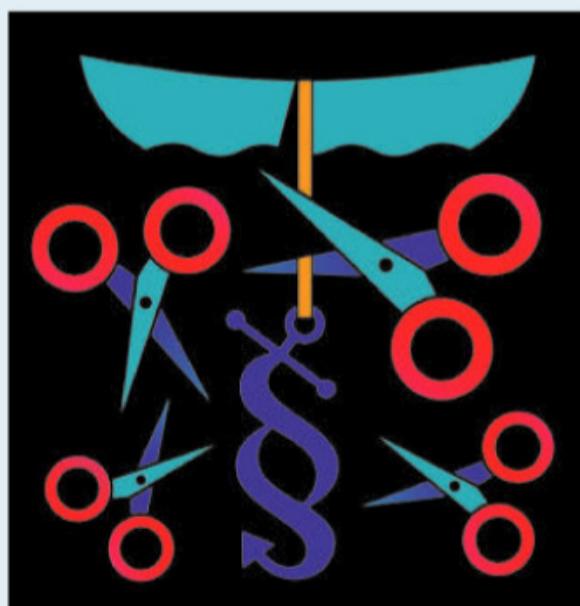
The stilt-villages lack even the most basic public services. The mildly tidal

waters under them, in which children constantly play, are an open sewer. Infections are common. Infant mortality is high. In Omadal Mr Musa's school has instituted a vaccination programme. Very occasionally, state doctors visit the settlements, accompanied by policemen. The doctors complain that the ignorant villagers simply vanish, uninterested in better health.

Yet their evasion is perfectly rational. Bitter experience teaches Sama-Bajau not to engage with the authorities unless strictly necessary. Unscrupulous officials prey upon their desire for legality, often demanding bribes for temporary permits and passes. Worse, Sama-Bajau face arbitrary incarceration, including in camps for illegal migrants. When police visited Omadal in search of a stolen boat, the father of one of Mr Musa's students instinctively fled. The police shot at him and threw him in jail, even though the boat was found elsewhere.

Sama-Bajau are kicked out of their traditional fishing grounds as marine parks are designated for tourism. After armed men from Sulu attacked eastern Sabah in 2013, claiming it was part of a historical Sulu sultanate, Malaysia imposed a curfew in Sabah waters, harming Bajau fishermen. Sanen Marshall, a political scientist, says his friends complain that the marine police often throw their fishing rods overboard.

Things are not about to get easier for the sea nomads. As contesting countries, China above all, press maritime and territorial claims in the South China Sea, frontiers are growing more militarised. That leaves the waters' original peoples washed up. To some, the Sama-Bajau's plight is a cost of preserving borders. In truth, their stateless condition in Malaysia is a national disgrace.





The party congress

## Showtime

The Communist Party's big event will highlight Xi Jinping's power



NO OTHER REGULAR political event in China involves the mobilisation of people and resources on the scale of a Communist Party congress. None other dominates the agenda of so many officials, for so long. Never mind that the country is being battered by pandemic-related lockdowns—red banners everywhere urge citizens to “joyously welcome” the gathering that will open on October 16th. As they do every five years when such events are held, the country’s eyes are turning to the capital, Beijing, for the party’s big reveal, the tightly choreographed culmination of months of secretive dealmaking.

Party congresses are closely watched because they involve a huge turnover of

the party’s senior leadership and provide clues to its long-term priorities in domestic and foreign affairs. This one will be striking. More than any other since the death of Mao Zedong in 1976, it will showcase the power and achievements of one man. In the build-up to this event, state media have been filled with adulation for the “people’s leader”, the “helmsman”, the “navigator” whose wisdom has steered China to within reach of a “great rejuvenation”. This torrent of praise is intended to hint that only Mr Xi can enable China to attain that goal, and therefore—despite a convention that party leaders serve a maximum of two five-year terms—he must re-

main the party’s boss.

In theory, the congress could boot him out. The most important duty of its nearly 2,300 delegates is to cast ballots for the selection of a new Central Committee, a body comprising about 370 high-ranking officials and military commanders as well as bosses of large state-owned enterprises and other grandes. The number of candidates is expected to exceed the number of seats by more than 8%, so theoretically Mr Xi could fail to make the grade.

At the 15th congress in 1997, Mr Xi—then the deputy party chief of the province of Fujian—only just squeaked into the Central Committee as a non-voting member. He had the lowest number of votes. He has been elected as a full member at every congress since, and needs to keep that position in order to remain in the Politburo.

In reality, there is no chance of humiliation this time. Last year the Central Committee pronounced that establishing Mr Xi as the leadership’s “core”, and his political ideas as a guiding ideology, reflected the party’s “deepest wishes”. The importance of upholding these “two establishes” has been drilled into delegates at pre-congress training sessions. On the day after the gathering the reshuffled Central Committee (more than half of its members will be new) will meet to “elect” a new Politburo ➤

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► and Party Military Commission—ie, rubber-stamp decisions already made. Mr Xi will undoubtedly be given new five-year terms as chiefs of both. At its annual session next year, probably in March, the national legislature will give Mr Xi another five years as state president, a title mostly used when dealing with foreigners.

The new Politburo, which currently has 25 members, is expected to include even more of his protégés. It is unlikely that new members of its Standing Committee, now comprising seven men, will include a younger politician who is clearly being groomed to take over from Mr Xi at the next congress in 2027. “For the moment he is concentrating on further consolidating his own power to ensure his lasting legacy,” writes Charles Parton in a report for the Council on Geostrategy, a think-tank in London. “Sharing the limelight would be distracting for all.”

Many observers now believe that Mr Xi aims to serve for at least two more terms. In 2032 he will turn 79, still younger than Mao was when he died (82) and Deng Xiaoping when he retired (85). Deng remained hugely influential for another several years, with no party titles. Someone of Mr Xi’s power—on a par with that of Deng and Mao—would be unlikely ever to step aside completely unless forced to by ill health or an extremely determined rival.

It may be a measure of the discipline Mr Xi has imposed on the party that little has leaked about the Politburo line-up. It remains a topic of wide-ranging speculation. Li Keqiang will give up his job as head of government at next year’s meeting of the legislature. By convention he is young enough, however, to retain his seat on the Politburo Standing Committee. He may become the legislature’s new chief.

Who replaces him will be closely watched. The clue will be in the Standing Committee’s new membership. One possibility is that Han Zheng, Mr Li’s most senior deputy, who is already a member, will take the job. He is 68, which would normally mean he has to retire at this congress, but it is not clear whether the unwritten age rules will apply this time (they will not for Mr Xi). If he leaves, Hu Chunhua, another of Mr Li’s deputies, who is 59, may be promoted to the committee and succeed Mr Li next year. There are other candidates, too, including Wang Yang, a committee member who, at 67, is just young enough. Mr Wang and Mr Hu are not longtime associates of Mr Xi, but neither is Mr Li. It may be that Mr Xi has sidelined the role of prime minister to such an extent that he does not see a pressing need to give the job to someone very close to him.

No one in the new Politburo will be a threat to Mr Xi. Anyone thinking of grumbling about his rule will be reminded, during the congress, of the dangers of doing

so. The party’s disciplinary body will deliver a report at the event. It will describe its work in recent years, which has involved both fighting corruption and ensuring loyalty to Mr Xi. The two tasks intertwine. The report is likely to mention the recent jailing of several security chiefs. They were sentenced for graft, but officials have described them as members of a “political clique” that threatened “party unity”.

### Here’s a thought

The congress will be peppered with signs of Mr Xi’s power and his determination to flaunt it. These may be evident in tweaks to the party’s charter that delegates will endorse. Details of these have not been revealed, but they may include the shortening of the umbrella term for his political thinking from the wordy “Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era” to the snappier “Xi Jinping Thought”. That would equate him with Mao.

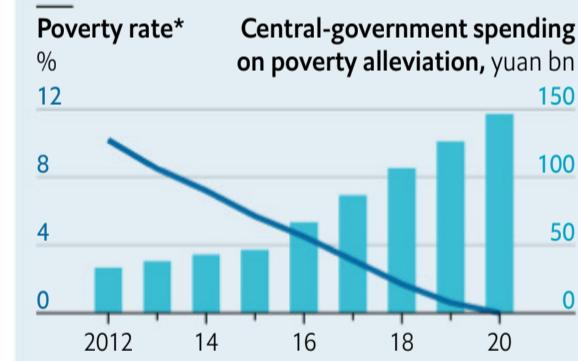
It will certainly be evident in Mr Xi’s report, which he will read aloud on the first day from a lectern in the Great Hall of the People. At the previous congress in 2017 this took more than three hours. (So much

for his demand, soon after taking power, that speeches be kept short.) The report will be filled with praise for the party’s achievements during the past decade—that is, under his rule. It will highlight the elimination of extreme poverty (defined as \$2.30 a day at 2011 prices), which the party said it achieved last year. But it will skate over problems, including sputtering economic growth, not least as a result of Mr Xi’s draconian “zero-covid policy”, as well as a stockmarket slump and a shortage of affordable housing in cities (see charts).

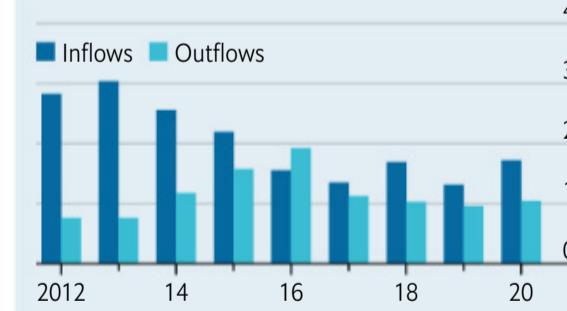
The aim of the speech will be to distract those who worry about such matters with plenty of feel-goodery. At the congress five years ago Mr Xi raised eyebrows in the West by talking of his country “moving closer to centre stage” in global affairs. This time he will emphasise how much this has happened, possibly with digs at what he and his officials often portray as Western disarray. The zero-covid policy will be declared a great victory (see next story). There will be stern words about Taiwan. Delegates will applaud as he explains the virtues of China’s political system. He will not mention himself, but it will be all about him. ■

### A decade under Xi

China



### Foreign direct investment, % of GDP



### CSI 300 stockmarket index, November 16th 2012=100





### The zero-covid policy

## Not going anywhere

BEIJING

### State inaction suggests harsh covid restrictions will last a while yet

**W**ILL THE Communist Party congress mark a turning-point in China's fight against covid-19? The week-long event, beginning on October 16th, will see Xi Jinping re-anointed as the party's leader. Some hope he will use the stage to signal an end to his "zero-covid policy", which relies on mass testing, big lockdowns and draconian restrictions to contain outbreaks. But in recent days the *People's Daily*, a party mouthpiece, has dimmed those hopes. "Fighting the epidemic is a test of the spirit," said one commentary in the paper. Another condemned "war-weariness and wishful thinking".

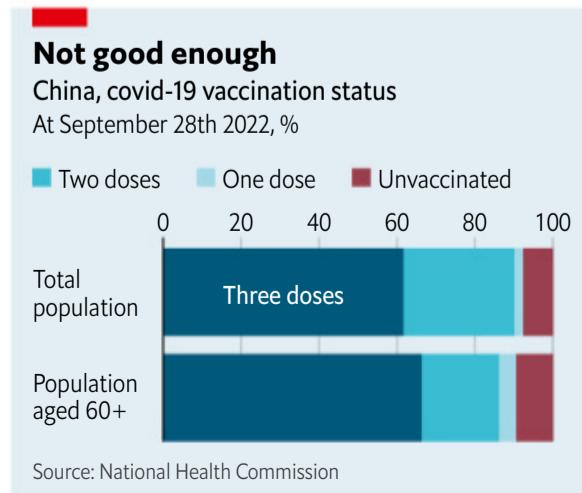
Much of the public has indeed grown weary of the zero-covid policy. Whereas China has experienced a much lower death toll from the virus compared with other big countries, its economy is buckling under the weight of virus-related restrictions. The IMF expects China's GDP to grow by just 3.2% this year, much slower than the government's target. Youth unemployment is close to 20%. China's commercial hub, Shanghai, suffered a two-month lockdown earlier this year—and may soon close again, amid a spike in cases. The region of Xinjiang has been largely sealed off since the summer owing to multiple outbreaks. An ever-increasing number of people have been caught up in the government's covid controls.

Will they ever end? Parsing the *People's Daily* is one way to gauge Mr Xi's intentions. Another is to look at the checklist of things China must do to exit the zero-covid policy without a big loss of life. So far Mr Xi

has approached these tasks with a revealing lack of urgency.

A new vaccination campaign would be an essential first step. Over 90% of the population has received two or more doses of one of China's vaccines. A recent push to vaccinate more old people has been somewhat successful. But, as of September, only two-thirds of those aged 60 and over had received three doses, the amount needed to greatly reduce the risk of severe illness and death (see chart). Meanwhile, protection from booster shots is fading. In September experts at the Chinese Centre for Disease Control and Prevention argued that the population would have to have a fourth dose of vaccine before the government loosened controls, otherwise the health system would be overwhelmed.

China is able to jab people at an impressive pace. At the height of the most recent vaccination drive, some 10m people a day were given shots. But China has 1.4bn peo-



ple, many of whom need more than one shot. Some 270m of them are elderly. Millions more have pre-existing conditions that make them vulnerable to the virus. Completing another round of vaccinations would probably take several months. No new campaign is in the offing.

Nor, for purely political reasons, has the government allowed the import of more effective Western mRNA vaccines. It also has not approved its own mRNA shot. It has, though, authorised an antiviral drug, Paxlovid, made by an American firm, Pfizer. In August Pfizer said it had teamed up with a Chinese firm that would manufacture the pills domestically. A home-grown antiviral drug, called Azvudine, was also approved for use on covid patients in July.

If Mr Xi were looking for a way out of the zero-covid policy, he would also need to strengthen China's health-care system. Ideally, this would mean increasing the number of intensive-care-unit (ICU) beds, to treat serious cases. On this measure (when calculated per person), China ranks far behind Western countries. But fixing that problem could take years. Other moves, such as building basic hospitals for relatively mild covid cases, could be done more quickly. China built two hospitals in two weeks in the city of Wuhan at the beginning of the pandemic.

Another sign of change would be a shift in propaganda about covid. The Chinese media are full of stories about death and devastation in the selfish, decadent West. Governments that have chosen to live with covid are portrayed as incompetent and cruel. The zero-covid policy, by contrast, is presented as enlightened and humane. Though many Chinese have grown disillusioned with the policy, plenty of others still support it. Many fear the disease—and the stigma attached to it. No one wants to be the reason their neighbours are sent into quarantine. Convincing people that, actually, covid poses little risk to them if they are healthy and vaccinated will take a whole new public-relations campaign.

Whenever that change happens, Mr Xi is likely to try to paint it as China's (and his) victory over the virus. But that will be difficult. Lifting the zero-covid policy will inevitably cause people to die. Huang Yanzhong of the Council on Foreign Relations, a think-tank in America, thinks that even a well-executed exit would result in 140,000 deaths, mostly among old people with pre-existing conditions.

Fear of so many deaths—and of the party being blamed for them—is a big reason why Mr Xi shows no signs of loosening up. Before China's last big political event, a parliamentary session in March, there was a similar hope that covid restrictions would be lifted. Instead, officials such as Mr Xi began repeating an old revolutionary slogan: "Persistence is victory!" ■

# Chaguan | The dark side of pop culture

*A hit TV series for Chinese teenagers peddles nationalist fantasies*



FOR CHINESE showbiz, October is a month for waving the national flag. With each passing autumn, especially in the ten years since President Xi Jinping came to power, audiences are offered ever more patriotic works. During the week-long public holidays around National Day, on October 1st, cinemas present historical war films or action movies with gleaming fighter planes and warships. Streaming services offer television dramas about selfless public servants, from pandemic-fighting medics to police squads hunting fugitives overseas.

For film-makers and producers of TV serials, cranking up their jingoistic fervour offers two ways to profit. First, it pleases Communist Party ideologues, who demand works filled with “positive energy” and that follow the “main melody”, a musical term borrowed by propaganda officials to describe political lines that creative types should adopt. Second, patriotic productions can generate box-office gold, especially now that Hollywood films find it hard to secure permits needed for a Chinese-cinema release.

For countries made nervous by Chinese nationalism, it makes sense to worry about works that play up China’s ability to project power and influence worldwide. This October offers a fresh example. China’s cinemas are having a rough 2022, thanks to pandemic lockdowns in scores of cities and a slowing national economy. Still, during this national-day season, ticket sales have been propped up by “Homecoming”, a film about fearless Chinese diplomats rescuing compatriots from an African crisis.

Yet it would be a mistake to focus too narrowly on tales of derring-do by servants of the Chinese state. For that risks missing another trend, one that involves the success of teenage dramas which portray the mainland as a cool, admired “big brother” to youngsters from many ethnic-Chinese backgrounds.

A case in point is a comedy-drama series, “North-Eastern Transfer Students”, currently streaming on iQiyi, a Netflix-like Chinese service. A parade of chauvinist clichés, its hero is Wang Hu. He is a muscle-bound, exam-flunking teenage tearaway from the north-eastern Chinese city of Shenyang. Quick-witted but lazy, Wang Hu is sent by his father to a school in the former Portuguese colony of Macau, across the Pearl River from Hong Kong. Fellow students include youngsters from Taiwan, Macau, Hong Kong and

the Cantonese-speaking south of China. One is a half-Chinese teenager from Thailand who insists that he is descended from a Tang-dynasty emperor.

Playing up stereotypes about bluff, crude but wise-cracking north-easterners, Wang Hu is shown scorning southern food. He complains when locals do not understand his Mandarin Chinese or, worse, speak Cantonese, though that language is the mother-tongue of 80m southern Chinese, including most Macau residents. His half-Chinese schoolmate from Thailand, Li Jiangang, is given a thick accent and a cringing, effeminate manner, and offers the strapping newcomer from Shenyang his puppy-like devotion. Wang Hu patronises his Thai friend over his claims of imperial Chinese blood, and recoils when shown a picture of the teenager’s sister in Thailand, who—it is explained—was his brother before transitioning. Yet by the end, Wang Hu has won over his peers and teachers alike, who hail him as an ideal of Chinese manhood. He is shown beating a Taiwanese judo champion in a fight, then teaching the boy to treat his father with more respect, in line with traditional values. Wang Hu nudges the school’s Cantonese-accented basketball captain to be kind to less-skilled classmates—after demonstrating his own unrivalled skills on the court.

A grey-haired literature teacher from Macau singles Wang Hu out for praise as a patriot. The teacher explains to the class, bitterly, that he had to study Portuguese as a colonial subject many decades earlier, despite being a “yellow-skinned, black-haired” son of China. The final episode ends with the school saluting the raising of the national flag, as tears run down the faces of pupils, Taiwanese and Thai included. “This is Chinese territory,” Wang Hu says approvingly to a teacher. “There are no foreigners in the class.” Though the show’s cast lacks a well-known star to draw viewers, it has been widely praised since its release in late September. iQiyi does not release viewing figures, but a hashtag aggregating posts about the show on the Weibo social-media platform has 110m views to date. The drama’s score on Douban, a popular ratings site, is an unusually high 7.7.

## Aspiring to be “big brother”

In real life, mainland China is regarded with wariness and even antipathy by many young Hong Kongers. Since the crushing of anti-government protests in 2019, they have chafed under national-security laws imposed directly by rulers in Beijing. In polling this year, when asked to choose between identifying as a Hong Konger and calling themselves Chinese, 2.2% of respondents aged 18-29 chose Chinese. In contrast one in five Hong Kong residents over 30 call themselves Chinese. Similar generation gaps may be seen among Taiwanese, whose self-ruled island has never been governed by the Communist Party but faces the threat of invasion should it ever seek formal independence.

A generation ago, candy-hued Taiwanese teenage dramas were a staple of pop culture for young Chinese. Now, however, many of the island’s dramas are too edgy for mainland outlets. The mood has darkened in other ways, too. To prosper in China, Taiwanese actors must declare their loyalty to the People’s Republic and its rulers in Beijing, or face the wrath of online Chinese nationalists. None of this reality intrudes on “North-Eastern Transfer Students”. As a result, this teenage fantasy of pan-Chinese unity is as dangerous as any war film. Taiwanese distrust of the mainland should inspire caution among Chinese who imagine that the island would be easy to govern after an invasion. Wang Hu’s antics obscure that truth. Their October success is cause for dismay. ■

ECONOMIST  
IMPACT

# The importance of health for all—not just health care for all

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Good health is not evenly distributed. Mapping those disparities is a complex business, and tackling them is a defining measure of human progress. There's much to do.

The only way of creating inclusive health—where outcomes pull free of social, economic or geographic determinants—is to identify the barriers that prevent individuals and communities from enjoying good physical, mental and social health.

That is why Economist Impact, supported by Haleon and working with a range of research partners including University College London, have created the Health Inclusivity Index.

The Index takes in 37 indicators to rank 40 countries. It scores how highly a nation values public health, policy commitments, barriers to accessing services, community engagement and personal agency.

Visit [impact.economist.com/projects/health-inclusivity-index](https://impact.economist.com/projects/health-inclusivity-index) to see the rankings in full and read our white paper for a closer look at how we arrived at the results. As you explore our findings, we want to hear from you. This is a long-term, inclusive project and your feedback is more than encouraged—it's essential.



### Nigeria's election

## A new hope

ABUJA AND KANO

**Peter Obi, a man who carries his own suitcases, is well ahead in the polls. Could an outsider really be Nigeria's next president?**

“THIS IS A case of Goliath and David,” says Peter Obi, a long-shot candidate who has unexpectedly taken the lead in the race to become president of Africa’s most populous country. “The big people are there, but allow this small person to do it. And I know I can do it.”

As public campaigning was about to begin in late September, Nigeria was rocked by the release of three polls showing Mr Obi well ahead of the two candidates for the main parties that have misruled Nigeria since the restoration of its democracy in 1999. In two of the polls Mr Obi has a lead of more than 15 percentage points over Bola Tinubu of the incumbent All Progressives Congress (APC) and Atiku Abubakar of the People’s Democratic Party (PDP), the main opposition. What makes this even more extraordinary is that Mr Obi is standing for the Labour Party, whose candidate at the previous presidential election in 2019 won just 5,074 votes out of 28m cast.

Mr Obi’s sudden ascent represents a rare chance for Nigeria. The country ought to be rich: it has huge reserves of oil, gas and other minerals, plenty of fertile land

and a young population of go-getters. Yet Nigerians are poorer today than they were ten years ago and 40% of them survive on less than \$1.90 a day.

Nigeria is poor because of rotten politics and bad governance. Its politicians have long stirred up ethnic and religious divisions by promising to direct state resources to members of their own group. Once in power they have pursued contorted economic policies such as a fixed exchange rate and massive fuel subsidies. Some policies seem to make sense only as a way of allowing cronies to siphon off cash.

Neither of the two main candidates in the presidential election scheduled for February offers much hope for change. Mr Abubakar, a former customs official turned

tycoon, was accused alongside his wife in 2010 by a US Senate committee report of being linked to the transfer of \$40m in “suspect funds” to America. (He denies wrongdoing.) Mr Tinubu, an ex-governor of Lagos state, had his assets frozen in the 1990s by the American government, which said it had probable cause to believe the money was linked to drugs. Mr Tinubu, who has also denied wrongdoing, reached a settlement with the Americans whereby he agreed to forfeit \$460,000.

There are, of course, no guarantees that Mr Obi would break the kleptocracy that is throttling Nigeria: the country’s political system has a habit of corrupting even those who start out with the best of intentions. But if he were to sustain his lead until the election in February, he would be the first politician in decades to show that a new sort of politics is possible in Nigeria. If he is able to keep energising young, urban voters across the country’s main divisions of religion, geography and ethnicity, he may well redraw Nigeria’s electoral map. And by making this election about competence, character and perhaps even ideas, Mr Obi promises to upset the old electoral calculus, which was based on horse-trading to form majorities between politicians who gathered votes mainly among their coreligionists or ethnic groups.

Mr Obi seems an unlikely revolutionary. He is rich, like many of Nigeria’s political elite. (Unlike many other wealthy Nigerian politicians, Mr Obi seems to have made his money before taking office.) He is ➤

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► also no political outsider, having served two terms as governor of Anambra state until 2014. He then stood as Mr Abubakar's vice-presidential candidate in 2019.

Here the similarities end. As an energetic 61-year-old, Mr Obi stands in sharp contrast to the 75-year-old Mr Abubakar and to Mr Tinubu, who though only 70 was recently forced to respond to widespread rumours of ill health by posting a video on Twitter of himself pedalling an exercise bicycle. "Many have said I have died," he posted. "Others claim I have withdrawn from the presidential campaign. Well... Nope." Mr Obi has a vigorous social-media operation with a vast, passionate following, and is strikingly open to interviews.

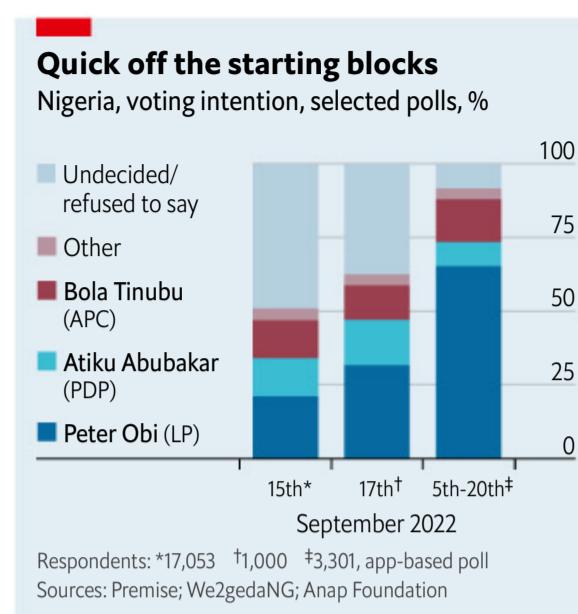
His surging popularity is due, above all, to perceptions of his character. In a country cursed by politicians of extraordinary ego and entourage, his supporters marvel that as governor Mr Obi queued at airports holding his own luggage. He also slashed the size of his motorcade when he found that 13 of the cars were empty, he says. This not only plays well with young voters, but also annoys his rivals. Kashim Shettima, Mr Tinubu's running-mate, grumbles that Mr Obi "tends to glamorise poverty" by claiming to own only one watch.

Frugality is relative in Nigerian politics. *The Economist* interviewed Mr Obi in his suite in the plushest hotel in Abuja, the capital. (It is also one of the most secure.) Mr Obi was, however, free of the hordes of hangers-on who typically surround Nigerian bigwigs. His running-mate, Yusuf Datti Baba-Ahmed, is also far from poor.

### Matters of trust

When asked what distinguishes him most from the other two major candidates Mr Obi replies: "Who can people trust?" He promises to deliver and not to steal. Yet he too has faced some questions over his financial affairs. The Pandora Papers, a large set of leaks to the press of records from financial companies, revealed that Mr Obi owned an undeclared offshore company in the British Virgin Islands, a tax haven. He also reportedly failed to declare all his assets or immediately relinquish control of all his companies, as required by the law, upon becoming governor. Mr Obi claimed at the time that he did not know he had to declare assets held jointly with his family and that he did relinquish control of the company in question, but that an error meant it was not enacted for 14 months.

To try to show that the money in those companies was earned before he entered politics, Mr Obi pulls out stacks of letters from his bank in London showing the extent of his lines of business credit in the 1990s. In any case, he argues, his rivals are very rich, too. "What is their source of wealth?" he asks. Context matters. "Relative to the field...he is a saint, more or less,"



says Ebenezer Obadare of the Council on Foreign Relations, a think-tank in New York. Though that does not necessarily make him "clean", he adds.

Mr Obi also wants to run on competence. He emphasises that he left a fiscal surplus to his successor as governor—a rarity. Anambra's score on the Human Development Index, a measure of income, education and life expectancy, was falling when Mr Obi entered office in 2006. It bottomed out by 2008, with Anambra ranked eighth among Nigeria's states. By the time he left office in 2014, Anambra had leapt to third place, trailing only Abuja and Lagos, Nigeria's commercial capital. Between 2006 and 2012, Onitsha, the biggest city in the state, was in the top 50 of 750 cities worldwide for the rate of private-sector job growth, according to the World Bank.

Mr Obi is disappointingly less keen to emphasise his proposed policies as president. Still, improving security is his "number one priority". It ought to be. Over the past eight years under President Muhammadu Buhari, jihadists have terrorised Nigeria's north-east. Violence in the south-east, often attributed to Igbo separatists, has surged, as has crime. Last year some 3,400 people were kidnapped across Nigeria, many of them for ransom, according to Jose Luengo-Cabrera of the UN.

To restore order Mr Obi promises to expand the security forces and equip them better. He proposes giving states and local governments the power to have their own police officers, rather than rely solely on federal forces. He is willing to talk to armed groups with political demands, such as the Indigenous People of Biafra, a separatist group in his own south-eastern region.

When it comes to the economy, his instincts appear liberal. "There is a lot of government involved where the private sector should be," he says. Nigeria's petrol subsidies will eat up more than federal spending on health, education and welfare combined. Mr Obi promises to get rid of these handouts. Yet the Labour Party has close ties with unions, many of which have re-

peatedly opposed subsidy reform. "I'm not going to make promises I'm not going to fulfil," he insists. When it comes to the currency Mr Obi's liberalism wears thin. He would not let the naira float freely, though he says he would allow the official rate to move closer to the black-market one. He at least wants to give the central bank more independence after this was eroded under Mr Buhari. He also promises to ease trade restrictions and support the African Continental Free Trade Area.

Frugality also shapes his attitude to debt. "We want to borrow strictly for investment, if need be—if at all!" he says, criticising Nigeria's rising debts to China. Yet thrift alone is unlikely to solve Nigeria's many problems. Federal-government spending is just 6% of GDP. Even with more efficient spending, there will not be enough cash to tackle the country's enormous infrastructure needs. Increasing Nigeria's paltry tax take is crucial, but goes largely unmentioned by Mr Obi.

### March of the Obidients

Can Mr Obi pull it off? His supporters think so. "I am an Obi-dient man," laughs Kingsley Onwe, a trader selling tomato paste at a street market outside Abuja. Mr Onwe is not advertising general deference to authority. "Obi-dients" is the nickname for Mr Obi's supporters.

His rivals are, however, dismissive. "We're not bothered about him," says Dino Melaye, Mr Abubakar's campaign spokesman. The vituperative attack that the former senator launches suggests otherwise. In his telling, Mr Obi is a "deceptive character" who has a "plethora of allegations against him". He adds that Mr Obi "knows himself that he cannot win it but he sees it as an avenue to make money." Should your correspondent want to talk more about this topic, Mr Melaye (who enjoys posing with his collection of Ferraris and Lamborghinis) leaves his business card: a metallic-gold one that looks like a credit card.

Even if the polls are accurate—the large share of undecided voters suggests the outcome is still in flux—Mr Obi will have to clear several hurdles on the path to becoming president. The first relates to the rules. To avoid a run-off, the winning candidate must not only have the most votes, but also win more than 25% in each of at least two-thirds of the country's 36 states (plus the capital). Doing so, admits Mr Baba-Ahmed, may be challenging, particularly in ten northern states that tend to swing for northern and Muslim candidates. (Mr Obi is a Christian from the south.)

Mr Shettima, the ruling party's vice-presidential candidate, is also dismissive of Mr Obi's chances in the north. A former senator and the previous governor of Borno state, he suggests asking northerners about Mr Obi, saying they will think "he is ►

► either a musician or a footballer".

In fact, many northerners your correspondent spoke to knew who Mr Obi was, despite his lack of local muscle. On the streets of Kano, the biggest city in the north, enormous billboards of Mr Tinubu and Mr Abubakar loom large and Mr Obi's image is all but absent. At his Kano headquarters a broken billboard was leaning against a fence, and no one but a toothy guard was present. Yet some polls show him running second in the north.

Even so, Kano illustrates a second risk for Mr Obi's campaign. The Labour Party he represents will not have candidates on dozens of ballots for seats in the Senate or for 130 seats in the House of Representatives. This means it will have to persuade voters to break with habit and cast their votes "skirt and blouse": backing one party for president and another for the other races. Moreover, the party has few members, no state governors and just one senator. Usually governors and senators help funnel cash (both legitimately donated and less so) to campaigns and rustle up the tens of thousands of party lackeys who go out to persuade, bully or bribe people to vote for their candidate.

Mr Melaye of the PDP explains with disarming frankness why these structures matter. "In every catchment area you have people who are the owners of the voters," he says. Mr Baba-Ahmed puts a brave face on the Labour Party's weakness, saying that it will allow him and Mr Obi to govern cleanly because they will not be beholden to bigwigs. Even so, they have to win first.

In a bid to do so, Mr Obi is trying to tackle vote-buying head on. "I tell people every day, the money people are sharing is just stolen money, it is not their money," he says. "That's why people are dying in hospitals. That's why there are no roads." This election will be a test of whether the old way of doing politics has been superseded by one based on individual choice and direct appeals to the public.

The third risk to Mr Obi's campaign is outright rigging. Mr Obi himself plays down such fears. Recent reforms to the vote-counting process should make ballot-stuffing harder this time. Yet Mr Baba-Ahmed is "not confident" the vote will be free and fair. Some activists share these concerns. Ayisha Osori of the Open Society Foundations, an NGO, thinks the ruling APC will try to depress turnout in areas where Mr Obi is strong. Doing so could spark conflict. "If they decide to humiliate [Obi] and have a blatantly rigged, violent election, I'm really worried about what people will do," she says. Mr Obi himself brushes off the idea that his supporters might react angrily to a defeat. He is simply focused on winning. "I'm saying I'm better, I'm saying I can do it better," he insists. "Trust me." Right now at least, many do. ■

## Digital taxes in Africa

# Tempting—but not so easy

KAMPALA

**It is easier to tax mobile money than multinationals' profits**

THE DIGITAL economy is bringing Africans together. The same cannot be said for attempts to tax it. Levies on mobile and internet services have sparked street protests in Uganda, cabinet squabbles in Nigeria and a parliamentary brawl in Ghana. In August Congolese officials even confiscated the passports of telecoms executives to try to make them cough up.

African governments are willing to take unpopular measures because they need to fill a hole in their coffers. In the worst months of the pandemic their tax take fell by an average of 15%, even as spending rose. They have long struggled to collect income taxes, relying instead on taxes on goods and services for about half of their revenues. Now they see untapped potential in new sectors which barely existed 20 years ago, including social media, e-commerce, mobile internet and mobile money.

One priority of governments everywhere is to ensure that non-resident businesses pay their share: if the likes of Netflix and Amazon have customers in Africa, they should be taxed there too. A global tax deal was agreed to by 130 countries last year with the aim of forcing multinational companies to pay more tax in the places where they make their sales, irrespective of where they register their assets.

But many African countries worry it is too complex and would be difficult to implement in countries with low administrative capacity, says Thulani Shongwe of the



More taxes, less mobile money

African Tax Administration Forum, a network of tax officials. The revenue gained may barely be worth the effort. The biggest sceptics are Kenya and Nigeria, which have imposed their own taxes on digital services—exactly the kind of unilateral measures that a global deal is designed to avoid. African countries have proposed that a tax convention be developed at the UN, where they hope to have more of a say.

Another focus is how to tax telecoms firms, which are big players in often uncompetitive markets. "There is a high likelihood that sector is undertaxed, even if they say they're not," says Adrienne Lees of the International Centre for Tax and Development, a research institution based in Britain. Rather than go after corporate profits, which can be massaged by accountants, many governments have taken the simpler step of taxing individual transactions. Ghana's e-levy, in force since May, imposes a 1.5% tax on most electronic money transfers, such as those that citizens zap through their phones. Cameroon brought in a similar charge in January. Nigeria is considering a 5% levy on calls, messages and mobile internet.

Even small taxes can lead to big changes in behaviour. In Uganda the total value of mobile-money transactions dropped by a quarter when the state imposed a 1% tax on them in 2018, taking 18 months to recover. One effect was that wealthier users switched to traditional banking services. Some poorer ones turned to cash. Opponents of new taxes argue that they drive activity back into the shadows. Juliet Anammah of Jumia, a pan-African e-commerce firm launched in Nigeria, points out that many governments are trying to encourage traceable transactions at the same time as they are trying to tax them.

These levies are new and very visible, and taxpayers are pushing back. Last month the Tanzanian government scrapped levies on some types of electronic transactions after a public outcry, including a legal challenge from activist lawyers. In Malawi the government gave up its plans for a mobile-money tax in 2019 after business and civil-society groups criticised the idea. This kind of messy bargaining could eventually strengthen the contract between citizens and states.

An obvious worry is that these processes could be short-circuited if autocratic governments use internet taxes to stifle dissent. In 2018 Uganda slapped a daily levy of 200 shillings (\$0.05) on social-media use. The number of Twitter users dropped by 13% as a result, according to a study by Levi Boxell of Stanford University and Zachary Steinert-Threlkeld of University of California Los Angeles. But there was a twist: the number of tweets about protests and rallies increased. Like death, taxes are certain. Their effects are not. ■



Iran

## All the mullahs' bullets

**Protests continue, despite lethal repression**

EVERY EVENING at 10pm Mahvash, a university student, opens the window of her fifth-floor flat and starts yelling. Neighbours take up her refrain of "Women, Life, Freedom!". Soon her chants against Iran's theocracy echo from block to block above the riot police below—and across Tehran, the capital. Some protesters wear masks to avoid identification. Many switch off the lights. Almost all the voices are women's. "Blood that is spilled unfairly will boil until the end of time," runs an old Persian saying, now back in fashion.

Almost a month after protests erupted at the death of Mahsa Amini, a 22-year-old woman detained by the morality police for showing too much hair, Iran's ayatollahs are still struggling to keep order. Unrest has spread across the country, prompting strikes in some bazaars and oil installations. State news bulletins that had ignored the protests now denounce them as foreign plots. And in an effort to regain full control the ayatollahs have reinforced the police with units of ideological paramilitaries known as the *Basij*. The loyalty of the army, which has stayed on the sidelines, has yet to be tested.

When the protests began on September 16th, the regime pulled back its morality squads and let the police take over. Some clubbed unveiled female heads. As more headscarves came off, they resorted first to tasers and then water cannon, tear gas and sometimes air rifles. But that only brought out men to defend the women. Some prot-

esters dragged policemen from their ranks and kicked them. In several towns the police fled under a hail of stones.

With the interior ministry's forces humiliated, the ayatollahs have increasingly turned to the *Basij*. Unlike the police, they answer to the Islamic Revolutionary Guard Corps (IRGC), the ayatollahs' praetorian guard. Some are plain-clothed. Others wear black or battle dress and patrol on motorbikes. Many carry pistols and, increasingly often, machineguns. The IRGC is also using its intelligence agencies to raid homes of suspected activists, seize their phones and make arrests. It has circulated text messages urging informers to report dissident activity.

Fear has punctured the protesters' initial euphoria. In the first days of protest, many security people wore masks to hide their identities. Now the protesters do. The *Basijis* have smashed and closed cafés where activists used to congregate. Revolutionary courts run by clerics pass summary sentences. Mohsen Amiryousefi, the head of the cinema directors' association, was jailed for two years after signing a petition that appealed for three members to be freed. So full are the prisons that warehouses have been requisitioned as detention centres. Passers-by report hearing screams from them. Many activists in Tehran admit to being paralysed by fear. Some have fled to the mountains.

But though large gatherings have subsided, protests continue. After weeks without leaders, groups with names like Youth of Tehran Neighbourhoods have emerged, announcing the timing of protests. Schools and college campuses remain hives of dissent. Students waving head-scarves chanted against Ebrahim Raisi, Iran's ruthless president, when he visited Tehran's al-Zahra university on October 8th. Schoolgirls in Tehran chased away visiting officials. Anti-regime graffiti adorn the side streets. The average age of the protesters, according to an IRGC commander, is 15. A human-rights group in Norway reckons that 23 of the 200-plus protesters so far killed were children.

Provincial cities that were quiet in previous bouts of unrest have joined in. Witnesses have described battle scenes in areas where unrest has been most intense: in Ms Amini's Kurdish homeland in the west and in Sistan and Baluchistan in the east. Videos taken in Sanandaj, a Kurdish town, showed gaping holes in houses that could have been made by machineguns.

But if this series of revolts is to grow into a full-scale revolution, new ingredients will have to be poured into the cauldron. Most businessmen remain cautious. "No one wants another Syria," says one, referring to an uprising that became a civil war. Many employers say they face mounting pressure from their staff to tweet sup-

port for the protesters. Tehran's two main bazaars, instrumental in the revolution that overthrew the shah in 1979, have both staged intermittent strikes in the past week. On October 10th oil workers demonstrated in Abadan and Asaluyeh, two southern towns that are crucial to Iran's oil and gas production. Officials played it down as a dispute over pay, but the workers chanted "Death to the dictator".

After weeks of studious silence, some senior clerics are breaking ranks and urging their supreme leader, Ayatollah Ali Khamenei, to heed the voices of the people. So far, the main institutions of the Islamic state, underpinned by the IRGC and the *Basij*, have stood firm. But if the students keep going, if businessmen start to wobble and if cracks were to appear in the army, the revolt could enter a new phase. ■

Palestine

## Slouching towards Damascus

JERUSALEM

**Hamas ponders whether to cosy up to Syria's brutal regime**

AS SYRIA'S BLOODSTAINED regime seeks to return to the Arab fold after a decade of civil war that isolated it from most of its counterparts in the region, Hamas, the Palestinians' Islamist movement, is arguing bitterly with itself. One faction wants to re-engage with President Bashar al-Assad and re-establish Hamas's former main external base in Damascus, Syria's capital. The other faction, mindful of Mr Assad's brutal suppression of Hamas's local allies during the civil war, wants to keep on steering clear of his regime. This reflects Hamas's perennial attitude towards Israel. Should it stick to its long-standing official aim of expunging the Jewish state from the region, or explore some form of coexistence, perhaps under a truce of negotiable length?

Hamas left Syria in 2012, closing its Damascus office in protest against Mr Assad's massacres of its fellow Sunni Muslims, particularly members of the Muslim Brotherhood, with which Hamas is closely aligned. The idea of reopening Hamas's office and re-establishing formal ties has caused uproar in the movement.

Two of its bosses, Yahya Sinwar, who was elected to lead the government of the Gaza Strip, and Ismail Haniyeh, who heads Hamas's politburo, have backed the impending visit of a high-level Hamas delegation to Damascus. But its former political leader, Khaled Meshal, who is trying to rebuild ties with the main Sunni Arab countries, is against it.

Such discussions are usually conducted ►

► in secret but have burst into the open. On September 16th Nawaf Takruri, a member of Hamas's founding generation, used social media to attack any move towards a regime that "continues to practise all forms of crime and murder against the Syrian and Palestinian peoples".

Hamas's position is shaky. Within the Palestinian territories it still vies for primacy with the secular Fatah movement, which runs the West Bank under Israel's say-so from its administrative headquarters in Ramallah, close to Jerusalem. Since bloodily wresting control of Gaza from Fatah in 2007 after winning an election two years earlier, Hamas has been isolated within its fief under a blockade imposed by both Israel and Egypt. So it has been vital for Hamas to have a headquarters outside.

Few Arab countries are willing to host it. Hamas is banned in the West as a terrorist organisation. Its ideological roots in the Muslim Brotherhood, which helped inspire the revolutions that swept across the region over a decade ago, damn it in the eyes of most of the regimes of the Gulf and north Africa. To appease Egypt's regime, Hamas agreed to renounce its allegiance to the Brotherhood, but it has struggled to regain support elsewhere in the Arab world.

Since leaving Damascus, the group's leaders have drifted mainly between Turkey and Qatar. But Turkey is mending fences with Israel, Qatar with its anti-Islamist Gulf neighbours. So Damascus may be a safer haven again. Mr Sinwar stays mostly in Gaza, with occasional sorties to Cairo. Messrs Haniyeh and Meshal are often in Qatar, sometimes in Lebanon. Before the civil war Syria allowed a degree of freedom for proclaimed "resistance" groups like Hamas and provided a hub where both radical Sunni and Shia movements got military and financial aid, often from Iran.

Moving away from Syria meant that Hamas depended less on Iran, which remained Mr Assad's chief backer until Russia came to his rescue in 2015. A senior Sunni cleric who died last month, Yusuf al-Qaradawi, an Egyptian Islamist based in Qatar, published a *fatwa* telling Sunni Muslims to fight a holy war against Mr Assad and his Iranian-backed fighters in Syria. But as Mr Assad emerged victorious from the war, some Hamas leaders have been seeking a rapprochement with him.

Although Hamas on paper still seeks to win back all of Israel by arms, its followers are wary of embarking on another *intifada*, or uprising. Some Hamas leaders have floated the possibility of a *hudna*, or long-term truce with Israel, in return for lifting the blockade of Gaza. This is at the heart of the tension within Hamas over its attitude to Syria and Iran. Can it operate effectively within a region that is increasingly coming to terms with Israel, while it sticks to its radical Islamist roots? ■

Gas, gas everywhere

## Nor any drop to burn

DUBAI

The Middle East has an ocean of natural gas that cannot reach consumers

IT IS RARE for the Israeli government to agree with Hezbollah, the Lebanese Shia militia and political party. But in effect it did on October 11th, after months of American-led talks. As *The Economist* was published, a deal with Lebanon was awaiting review in Israel's parliament.

This is not peace in our time: although the deal demarcates Israel's maritime border with Lebanon it will not end the long state of war between them. But it is striking, and timely for the West, because it may unlock new gas resources that Europe desperately needs to replace supplies from Russia that have been disrupted since its invasion of Ukraine.

Nine of the 20 countries with the largest proven gas reserves are in the wider region. Qatar, the world's biggest exporter of liquefied natural gas (LNG), plans to increase its production by 43% by 2026. Israel and Lebanon hope their maritime deal will mean new discoveries in the once-disputed waters. Hours after it was clinched, bigwigs from Total-Energies, a French giant, met Lebanese officials. Earlier this month Energean, a British firm, started running tests at Israel's Karish field near the border.

Yet a mix of geopolitics and poor governance makes it hard to exploit those resources. Simply getting the stuff to market can be tricky. There is little capacity to transport it from the eastern Mediterranean to Europe. A pipeline has been mooted for years. It could take a short route north to Turkey and link up with existing conduits to the European Union. But to do so it would have to cross Cypriot territory, which is politically fraught. Or it could stretch all the way to Greece, and perhaps onwards to Italy. But

that would require the world's longest undersea pipeline and take the better part of a decade to finish.

For now, that leaves liquefaction. Egypt has two LNG plants on its Mediterranean coast. Israel and Lebanon have none; Egypt has been importing gas from Israel in order to re-export it. Even running at full tilt its LNG plants can supply only 2% of Europe's total demand (and 6% of what it used to import from Russia). Expanding capacity will take years.

Other countries are struggling to boost production. Algeria, Europe's third-largest gas supplier, will enjoy record revenue this year. Sonatrach, the state-owned oil-and-gas giant, expects to earn \$50bn from energy exports, up from \$35bn last year. The windfall comes from higher prices, not higher production. Sonatrach has signed some big deals with Eni, an Italian oil major, to boost capacity. But many of its big projects will not come online before 2024.

Iraqi oil wells produce lots of natural gas but lack the infrastructure to process it. Around half is flared. In 2020 the country burned almost 18bn cubic metres of natural gas, equivalent to about 5% of Europe's annual consumption. Researchers at Columbia University estimate that flared gas in north Africa alone could replace 15% of Europe's imports from Russia—if it can be captured.

Perhaps the biggest challenge to exports, though, is soaring domestic demand for gas (see chart). In Egypt, for example, it has risen by 35% since 2015. A fast-growing population—which hit 104m in September and adds 1m people every seven months—needs ever more electricity from gas-fired plants. The government has also urged motorists to switch fuels: many of Cairo's ubiquitous white taxis now run on compressed natural gas rather than petrol.

Here, too, governments are belatedly taking action. Algeria is installing new combined-cycle gas-power stations, which can produce about 50% more electricity from the same amount of fuel. The national regulator reckons they will account for 55% of installed capacity by 2028, up from 23% in 2018.

Egypt, meanwhile, is urging businesses to cut consumption to free up gas for export. Such measures have rankled some Egyptians, who grumble about being told to turn off their lights so that Europeans can turn up the heat.

### Switch it on

Natural-gas consumption, cubic metres, bn



**SPECIAL  
REPORT:**

*The world China wants*

→ October 15th 2022

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# A world divided



# “Granular” or “detailed”: which is better?

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## A new order

**China wants to change, or break, a world order set by others. It may yet succeed, says David Rennie**

FOR MOST of human history, great powers and strong men have been free to inflict horrors on the weak with impunity. For almost eight decades, however, all but a few rogue states have aspired, or paid lip service, to a different world order.

This order was founded in revulsion at the industrialised, racially justified savagery of the second world war. Guided by the ambition “Never Again”, the winners, led by America, drafted conventions that defined unpardonable crimes against humanity, and sought to impose costs on those committing them. Recalling the economic disasters and human miseries that paved the way to world war, the framers of this order built the UN and other international institutions to promote co-operation and development.

Some arguments were left unresolved after 1945. For decades tensions between national sovereignty and the protection of individuals lurked in the founding documents of this new order, from the UN Charter to the Universal Declaration of Human Rights. For years, access was also unequal. Too many people languished, powerlessly, under totalitarian regimes or in colonial empires.

Yet this system was an advance on anything before. Although hobbled by politics, the UN and other international bodies follow agreed rules when they monitor ceasefires and register refugees, feed the hungry or fight pandemics. Largely in response to pressure from liberal democracies, more help from multilateral bodies—whether World Bank loans or missions by UN peacekeepers—now comes with conditions attached. Recipient governments are pushed into higher environmental standards or to protect the rights of vulnerable minorities.

This order has been tested since 1945. The most alarming chal-

lenges often involved large powers defying international law. Russia offered a shameless example in February, when it used its veto power as one of five permanent members of the UN Security Council to block condemnation of its invasion of Ukraine.

This special report will examine China’s challenge to the post-war order. It is more subtle than Russia’s brazen defiance, yet more disruptive. Under Xi Jinping, whose supreme leadership will be extended this month for a third term by the 20th Party Congress, China is working to reshape the world order from within. When its efforts meet resistance, it pushes for vaguer rules whose enforcement becomes a question of political bargaining. All too often, it seeks to revive old, discredited ways of running the world that put states first, at the expense of individual freedoms.

Some Chinese points sound reasonable. Mr Xi’s China opposes a “cold-war mentality” and those who divide the world into ideological blocs. It says developing countries have a right to focus on feeding, housing and giving jobs to people, rather than fussing about multi-party elections. Its officials liken Western powers to missionaries, bossily imposing their own values, a trait they call particularly alien to Asia, a continent that respects diversity.

Cleverly, Mr Xi casts his country as a defender of the status quo. He pledges support for “true multilateralism” guided by the UN Charter. In 2017 he assured tycoons in Davos that he was a champion of free trade. But observers should not be lulled. Chinese leaders want to preserve elements of the current order that helped their country rise, such as world trade rules that fostered their export champions and encouraged inflows of foreign capital and technology. Principles that do not suit China are undermined. Mr ➤

► Xi's calls for a "Global Security Initiative" or "A Community of Shared Future for Mankind" are coded complaints. Some are an attack on alliances, above all America's defence pacts in Europe and Asia. A "shared future" is another way of saying "development first", ie, rejecting any order guided by shared, universal values.

When China says it opposes interference in the internal affairs of countries, this is not rhetoric. In 2017 it joined Russia in wielding its UN veto to shield Syria from sanctions for using chemical weapons against its own people. China does not gain directly when Syrian children are gassed with chlorine. But it has an interest in blocking UN sanctions for any atrocities, in case similar tools are used against it. China also seeks to redefine terms so that they no longer mean much. In this way, Chinese officials claim that their country is a superior form of democracy, respects human rights and operates a market economy.

Under Vladimir Putin, Russia is often backed in UN votes by a mere handful of thuggish clients, such as Belarus or Venezuela. In contrast China hates to be isolated, deploying diplomats to lobby and twist arms to build support. Scores of countries now join resolutions praising Chinese rule in Xinjiang, a western region where, in the name of fighting Islamic extremism, China has demolished mosques, jailed poets and textbook editors and sent a million Uyghurs to re-education camps. Diplomatic success may make China seem less of a wrecker than Russia, but it is more divisive.

Defenders of Chinese ambition argue that communist leaders have a right to reshape global rules written decades ago, when they were not in the room. This is a straw-man argument. It is of course natural for a big country to want to see its views reflected in global governance. The point is that anyone who sees value in today's world order has a right to fear what China has in mind.

Other analysts question how disruptive China will be. They talk of a slowing economy making it harder for China to recruit supporters, and note that China has never spelt out a complete, alternative order. That is complacent. China does not need to replace every current rule to change the world.

China calls the very notion of universal values a Western imposition. In 2021 Wang Yi, the foreign minister, criticised the Biden administration for saying that the international rules-based order was under attack. This was "power politics", Mr Wang retorted: a bid to "replace commonly accepted international laws and norms with the house rules of a few countries".

Nor does Mr Xi accept that the second world war created a mandate to draw up a liberal order. A China/EU summit in April was clarifying. The European Council president, Charles Michel, explained why Europe's dark past, notably the Holocaust, obliged its leaders to call out rights abuses, from China to Ukraine. According to a readout shared with EU governments, Mr Xi retorted that the Chinese have even stronger memories of suffering at the hands of colonial powers. He cited treaties forcing China to open markets and cede territory in the 19th and early 20th centuries, and racist bylaws banning Chinese people and dogs from parks in European-run enclaves. Mr Xi recalled the massacre of civilians at Nanjing by Japanese invaders in 1937. Such aggression left the Chinese with strong feelings about human rights, he said, and about foreigners who employ double standards to criticise other countries.

Many developing countries see nothing magic about the year 1945, and have limited nostalgia for a time when the West dominated rulemaking. China is ready to offer them alternatives. Seven decades ago, at founding meetings of the UN, Soviet-bloc delegates sought an order that deferred to states and promoted collective rather than individual rights, opposing everything from free speech to the concept of seeking political asylum. In the late 1940s communist countries were outvoted. China now seeks to reopen those old arguments about how to balance sovereignty with individual freedoms. This time, the liberal order is on the defensive. ■

**Sovereignty first**

## For China, less is more

**China seeks a world order that defers to states and their rulers**

THE TIME has come, says Xi Jinping, for China to lead the "re-form of global governance" and "move closer to the centre stage." Defenders of the prevailing order are braced for a contest over whose norms will dominate the 21st century. Some wonder if China's goal is to replace existing rules with its own. They risk missing a Chinese plan that is already under way, to make the existing order do less, full stop.

Talk to well-connected scholars in Beijing and Shanghai about the world order, and they will complain about Western meddling. They accuse America and its allies of imposing an obsession with human rights on an order whose original, modest mission was to help states coexist and trade peacefully. China claims to be a defender of the status quo and calls America its disrupter. But behind this apparently simple complaint lies a vast ambition. China's aim is to roll back decades of efforts to ensure that the actions of governments, international bodies and private firms are guided by core principles that the West calls "universal values".

China's ambitions are at their most concrete in the UN, where it is one of five permanent, veto-wielding members of the Security Council (the P5, in diplomatic jargon, comprising America, Britain, China, France and Russia). To buttress their case that Western interventions are a disastrous break with past tradition, Chinese scholars point to Westerners who see interest-based realpolitik as the route to a stable order. Chinese leaders praise Henry Kissinger, a former American secretary of state who calls for governments to seek "equilibrium", often by accepting the "legitimacy of sometimes opposing values". That find parallels in Chinese calls for "mutual respect" and "non-interference".

Chinese officials express scorn for interventions by America and its allies in Iraq, Afghanistan and Libya. They are especially hostile to claims that these reflect a "responsibility to protect". That doctrine commits states to act when they detect genocide, war crimes, ethnic cleansing or crimes against humanity. China, along with other UN members, signed up to this in 2005. But Chinese scholars point out that there is no consensus among the P5 about how to define a humanitarian emergency that triggers the responsibility to protect, nor about how to organise an intervention. They claim that this makes it an "empty principle". Not unrelatedly, terms such as genocide or crimes against humanity sound alarms in Beijing. Several Western governments and parliaments have used them to describe systematic discrimination against Uyghurs and other Muslims in Xinjiang, from the use of re-education camps to coercive campaigns to lower Uyghur birth rates.

China has no interest in a French proposal, endorsed by 106 UN members, under which P5 members would jointly pledge not to use vetoes in a crisis involving mass atrocities. Nor have Chinese officials backed the Biden administration's call for P5 vetoes to be reserved for "rare, extraordinary situations". In late September, during a war-haunted UN General Assembly, France held an urgent debate in the Security Council on Russia's use of its veto to

A Chinese plan  
that is already  
under way is  
simply to make  
the existing order  
do less, full stop

► achieve “impunity” after invading Ukraine. China was not supportive. Though China claims to be neutral over Ukraine, and has abstained in most UN votes condemning Russia’s aggression, Chinese officials have promoted Russian views that the war was provoked by America and the NATO military alliance.

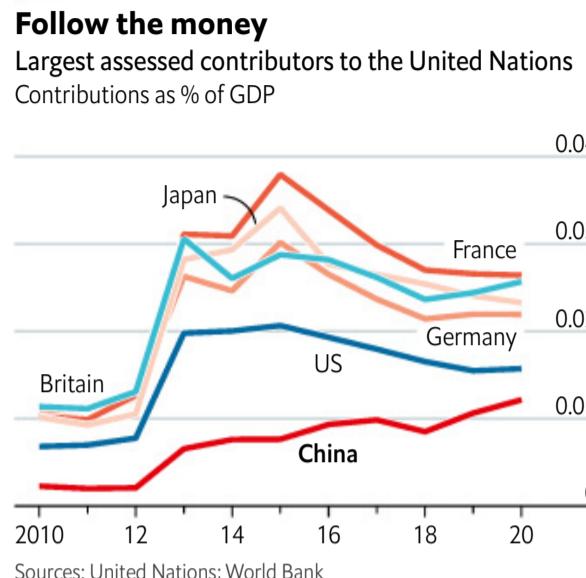
China’s goal, say diplomats in Beijing, is to see Western unity crumble and sanctions fail to make Mr Putin pay a price for his war of aggression. That is because China might itself face sanctions if it ever launched an attack on Taiwan, envoys suggest. As ever, China’s main concern is China. Long before it began blaming NATO’s expansion for Europe’s ills, it denounced America’s defence alliances in Asia as an unwelcome intrusion. In 2014 Mr Xi bluntly declared: “It is for the people of Asia to run the affairs of Asia.”

China’s wariness about values extends beyond war and peace. It informs its views of everything from UN peacekeeping to development aid. In the telling of Chinese officials, a handful of arrogant Western democracies, including former colonial powers with blood on their hands, have hijacked the international order to promote their values as the only form of good government. This argument requires ignoring decades of grassroots campaigns in the developing world, involving anti-corruption lawyers, environmental groups, feminists and other activists. Yet with many liberal democracies turning inward and losing interest in emerging regions, Chinese leaders sense an opportunity to create a stripped-down, interest-based world order.

Jia Qingguo, a former dean of international studies at Peking University, who sits on the standing committee of a national advisory body, traces Western activism to the end of the cold war. A crucial moment came when NATO countries intervened in Kosovo in 1999, he says, despite failing to secure a UN mandate. Then came the American-led invasion of Iraq. In the interests of peace, China wants a return to an order based on national sovereignty, he argues. That means a “world order that respects China’s core national interests, especially China’s right to national reunification, and also China’s right to run its own internal business.” Unfortunately, perhaps to distract from domestic divisions, “the US government chooses to highlight the ideological aspects of the world order,” Mr Jia says.

He praises “the wisdom of the founding fathers of the UN” in giving the P5 veto rights, to prevent great powers from walking away and acting alone, as happened to the League of Nations. He concedes that today’s divided P5 may struggle to authorise interventions. “If they cannot agree, then we can wait.” That is the reality of current international politics, he goes on. “And often, no action is better than action, as in the case of the US invasion of Iraq.”

Chinese diplomats demand deference to the P5. In a recent debate China’s UN ambassador, Zhang Jun, called the Security Council “the most authoritative and legiti-



mate body of the multilateral security system”. Those same diplomats are increasingly willing to borrow Soviet arguments from the cold war. Mr Zhang chided countries that erect their “own security fence” at the doorstep of others, forgetting that security is “indivisible”. In the cold war, such phrases were code for grumbling about NATO enlargement and American missile defences that might undermine the Soviet Union’s deterrence. When Russians talk of “indivisible security”, they mean that great powers need a veto over neighbours’ security arrangements.

Such language has become a staple of Chinese rhetoric this year, as officials struggle to explain how China’s supposed reverence for territorial integrity accords with its failure to condemn Russia’s invasion of Ukraine. They try to square the circle by blaming America.

Western countries have pushed reforms to UN peacekeeping, to emphasise the protection of civilians after tragic failures in Srebrenica and Rwanda. China is proud of contributing more troops to UN peacekeeping missions than other P5 members. But it has normative ambitions, too, reports Richard Gowan, UN director for the International Crisis Group, a think-tank. In Security Council debates China questions why human-rights monitoring should be part of blue helmets’ mandates. “The Chinese line is that peacekeepers are there to support the host state,” says Mr Gowan.

In the field of development, China counsels deference to rulers. In a UN debate on Africa in August, Mr Zhang urged the world to trust African governments and direct most assistance through them. “There should be no political conditions attached to aid” or endless fault-finding about African democracy, the ambassador declared, before startling diplomats by suggesting that UN arms



► embargoes imposed on troubled nations including Sudan and Somalia were hampering the emergence of strong security forces.

Not long ago, many development professionals were worried that a torrent of Chinese loans, offered with no strings attached, was the main threat to "conditionality": jargon for efforts to link aid projects to good governance or high environmental and labour standards. Fears centred on the Belt and Road Initiative (BRI) launched by Mr Xi in 2013, through which China lent hundreds of billions of dollars for roads, railways, dams and other infrastructure across the developing world. Now China's economy is slowing, meaning that cash is in shorter supply. And some projects

have gone awry, leading to anti-Chinese protests from locals.

China has duly changed tack. In a speech to the UN General Assembly in 2021, Mr Xi unveiled a new "Global Development Initiative" (GDI), aligning China with the UN's Sustainable Development Goals. Explaining the GDI's launch, an international official ventures that the BRI amounted to China doing projects it wanted to do anyway, then "expecting everybody to show up in Beijing and say, 'Thank you'". That did not generate as much legitimacy as China hoped, he observes.

Although details of the GDI remain vague, it promotes long-standing Chinese arguments about letting each country find its ►

## Soft-power play

*To show that it can follow global rules, China built its own multilateral institution*

DUTY TO COUNTRY cut short Jin Liqun's hoped-for career as a scholar of Western literature. Soon after China joined the World Bank in 1980, Mr Jin—who when toiling on a collective farm taught himself English with the help of the BBC—was recruited from academia and sent to Washington, DC. He was among the first Chinese at the World Bank and the IMF, twin pillars of an economic order designed by America and its allies after the second world war. After years in international institutions, he went home to be China's vice-minister of finance.

Today, Mr Jin is in his seventh year as founding president of the Asian Infrastructure Investment Bank (AIIB), a multilateral bank hosted by China. He still uses literature to explain his country's world view to outsiders. In an essay on economic governance, he quotes "The Leopard", a study of Sicilian aristocratic decline, and its advice: "If we want things to stay as they are, things will have to change."

The AIIB is a contradictory success story. It was launched in 2015 as China's gift to the world. Officials talked of binding China, with its genius for building roads and railways and its hunger for food and natural resources, to resource-rich Eurasian neighbours that need infrastructure to access new markets. "China welcomes all countries to ride on its development," said Xi Jinping at the bank's inauguration. In another bonus, when the Obama administration asked allies to shun the AIIB, it failed as Britain, Germany and several other Western countries promptly signed up as members.

The AIIB has since followed international, not Chinese norms, for all the geopolitical dramas surrounding its birth. China's vote share gives it a veto, and Mr Jin hopes that his successor will be Chinese. But the bank conducts environmental and social-impact assessments

that Chinese state-owned lenders skip, and also works with other multinational banks on climate-friendly infrastructure and other worthy projects. Revealingly, it is a boutique bank by Chinese standards, investing \$36.43bn in 190 projects to date. In comparison, between 2013 and 2018, a single state-owned lender, the China Development Bank, poured \$190bn into more than 600 projects linked to the Belt and Road Initiative.

The AIIB's sleek Beijing headquarters—complete with a cavernous atrium, the national flags of 105 members at its entrance and a video-linked "board chamber" worthy of a Bond film—is a Babel of different nationalities. It "may be a victim of its own success," that looks "an awful lot like a mini-World Bank, including a lot of World Bank staffers," comments one international official. To mangle the wisdom of "The Leopard", in order to show China can be trusted with change to the multilateral order, its first global institution resembles more of the same.

Mr Jin, an urbane, professorial sort, says many American friends ask why his bank exists, when China could simply

have increased funding to established institutions. To reflect the distinctive development experiences of Asia and China, is his answer. That starts with practical differences: faraway lenders were slow to grasp how soon infrastructure projects would pay off in booming Asia, for instance.

Hints of paternalism can be heard. He mentions relatively low education levels in Asia, and the risks of delaying good projects if local non-governmental groups—which have a right to speak out, he adds—are "hijacked by a very small group of people who put their very narrow interests above the community's interests." China believes a market economy can coexist with a "strong, robust state". Then again, he sees Western governments regulating economies more assertively to tackle the "excessive power of capital".

Most of all, China wants outsiders to admire its development and the political system that has overseen it. If China is "a bit allergic to universal values", he says, the problem is not the notion of all countries agreeing to basic principles. It is that some Western countries apply a "special connotation" to universal values and such terms as democracy, so as to criticise China and other developing countries. This makes China "very uncomfortable", he says.

The AIIB's boss calls it "quite normal" for China to want to fill senior posts in global institutions. Asked what China will do with such clout, he talks of giving it and formerly colonised Asian countries a voice. Then he describes an ambition that may explain the AIIB's founding more than any other: for China to be accepted on its own terms. "What is important? It's not simply representation. It's recognition...Are you appreciated? That's key."



► own development path: shorthand for not judging dictatorships. China has pressed scores of countries to sign up as “Friends of the GDI”. The BRI was a brand name used to stitch lots of bilateral deals together, says a long-time development official. The GDI is China “playing the multilateral game, speaking the language, shaping the narrative and redefining universally accepted concepts.”

Heeding the majority is a favourite theme. After 141 governments condemned the invasion of Ukraine at the UN General Assembly, China’s diplomats warned Western envoys against overconfidence. Look at the countries that backed Russia or abstained, they advised: they represent more than half the world’s population. Diplomats accuse China of bribing and bullying countries to vote the right way. A European recalls a developing country’s ambassador to the UN calling China a “1,000lb gorilla on my back”.

China has built a growing coalition of countries opposed to Western sanctions, adds Mr Gowan. China’s narrative is that humanitarian disasters in Syria or Venezuela are caused by sanctions, rather than by their rulers. Should China’s clout at the UN continue to grow, multilateral sanctions will become rarer.

### The perils of co-operation

For international agencies, co-operating with China is risky. Michelle Bachelet did not seek a second term as UN High Commissioner for Human Rights after her participation in a stage-managed visit to Xinjiang in May delighted China but appalled Western governments and rights groups. Minutes before leaving office, she released a damning report on Xinjiang by her staff, saying that China may have committed crimes against humanity there. China responded by suspending co-operation with her agency.

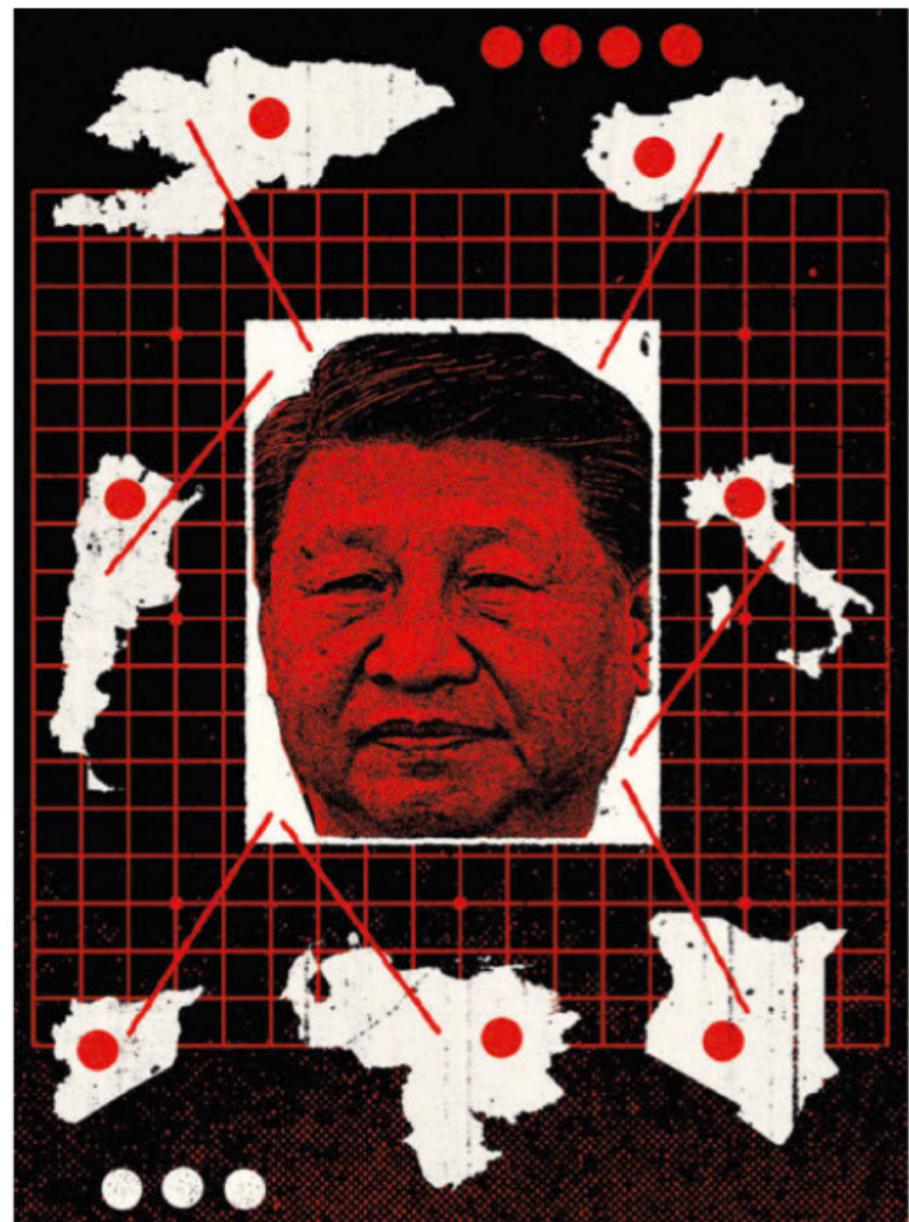
The World Health Organisation’s reluctance to challenge China over the pandemic has done lingering harm to its credibility. Despite WHO pleas, China withheld data about early human cases and wild-animal trading needed to understand the first outbreak in Wuhan, and so prevent future pandemics. Instead, Chinese officials promoted conspiracy theories that the virus came from an American military laboratory.

China often talks of being the second-largest donor to UN funds. When looking at “assessed contributions”, akin to a basic fee for membership, China is second-largest in nominal terms. But as a percentage of GDP, China’s contributions are about half as generous as those of Britain, France and Russia, a forthcoming Lowy Institute paper finds. China makes other, selective donations through trust funds that give it sway over specific projects.

In fields such as food security, where China is focused on buying up grain reserves for its own people, it all but ignores multilateral efforts. As of late September, in the midst of a global food crisis, China had given \$10.8m to the World Food Programme in 2022, against \$5bn from America.

One more battle of numbers interests China: its campaign to fill more UN positions. Western diplomats concede that China has a right to seek senior posts. What alarms them is how some Chinese appointees use their offices. Many governments privately accuse the Chinese head of the UN Food and Agriculture Organisation, Qu Dongyu, of downplaying the impact on food security of Russia’s invasion of Ukraine, a huge grain producer. They presume the aim was to spare China’s ally, Mr Putin, from criticism.

China is reportedly keen to fund hundreds of two-year postings for young Chinese officials, through the UN’s Junior Professional Officer Programme. That is reasonable. America funds 120 such posts at any one time and China is underrepresented at the UN, compared with its size. Still, a big influx of Chinese officials quietly worries insiders. They admit that many UN programmes reflect a liberal ethos, paying more attention to the rights of women, children and minorities than they did decades ago. If “true multilateralism” wins the day, that would stop. ■



### Bilateral relations

## A stronger actor

**China is exerting greater power across Asia—and beyond**

“I HAVE NEVER heard the Chinese say that they want to overthrow the international order,” observes a senior Western official who has spent hours with the country’s leaders. “On the other hand, they are putting their pieces all over the board.” The question of the age, he ventures, is whether China will play by rules that other powers can accept.

Chinese leaders have made welcome commitments to tackle global challenges, from climate change to biodiversity, the official says. Often, though, they offer a minimum of concrete assistance, and always on their own terms. It is impressive to watch how China applies many levers of statecraft and economic power as it patiently piles up economic and political capital, he concludes. To what precise end is unknown.

The Biden administration says China wants a sphere of influence in Asia, at least, and perhaps to become the world’s leading power. A sobering book widely read in policy circles, “The Long Game—China’s Grand Strategy to Displace American Order”, was written by Rush Doshi before his appointment as China director at the National Security Council. It draws on Communist Party texts ►

► and speeches to argue that America has been seen as China's "main adversary" since three events: anti-government protests in Tiananmen Square in June 1989, America's crushing victory in the Gulf war in early 1991 and the Soviet collapse at the end of that year. Mr Doshi describes China working for decades to blunt American power, even as it sought Western capital and know-how. As China's strength grew, it extended its writ in its neighbourhood, then as far afield as Latin America and the Arctic. More recently, the book suggests, Donald Trump's election and the West's initially bungling response to covid-19 left Chinese leaders convinced that "great changes unseen in a century" were at hand, creating chances to reshape the world.

Some hear echoes of history. A European diplomat asserts that Mr Xi is guided by a *tianxia guan*: an ancient world view with China at the centre, and the influence of Chinese civilisation radiating out to all compass points. In this telling, Mr Xi's "great rejuvenation" of China reflects the tributary system that saw Asian kingdoms and tribal states pay obeisance to Chinese emperors in return for trading rights and other benefits.

Wu Xinbo, dean of the Institute of International Studies and head of American studies at Fudan University, cautions against overly literal lessons from history. "The tributary system was a Sinocentric, hierarchical structure. In today's world it would be very difficult to revive," he says. Rather, he sees China as guided by another ancient principle, *he er bu tong*, or a quest for harmonious relations with countries that do not share the same culture. China wants to offer countries mutually beneficial trade, investments and exchanges. In return they must not challenge China's core interests, such as its stance on Taiwan or its one-party political system. That differs from America's missionary zeal to convert others to its own values, suggests Mr Wu.

China is not a fomenter of revolutions: gone are the days of sponsoring Maoist insurgencies. Foreign governments need not distribute volumes of Xi Jinping Thought to secure loans from Beijing. It is true that since 2007 China has lent \$62bn to Venezuela, home to the loudest anti-American regime in Latin America, much of which it may never see back. Chinese surveillance technology has helped autocrats from Ecuador to Ethiopia to track and harass political opponents. But China is capable of keeping business and ideology apart. Chinese investment flows into Argentina, including a satellite-tracking base in Patagonia controlled by the People's Liberation Army (PLA), did not slow after 2015 when the left-wing Kirchner political dynasty was defeated by Mauricio Macri, a pro-business conservative.

Still, it does not take a revolutionary power to disrupt the existing order. The party talks of a global struggle for "discourse power". That makes foreign admirers useful.

The Communist Party's International Department has maintained links with foreign political parties since the 1950s, inviting young high-flyers to China for study tours, to build influence and spot future leaders. In the 1990s and 2000s the department talked of learning from other countries. In the Xi era its tone is more boosterish, with teams promoting the legitimacy of China's political model. In June a first cohort of 120 young cadres from six ruling parties in southern Africa attended a "leadership school" in Tanzania, opened with \$40m in Chinese funding.

China's overseas propaganda has expanded. Across the world, local reporters have been hired by such outlets as China Global Television News, or offered Chinese

### China has a genius for finding partners who are also in search of an alternative to the status quo

training. Chinese media distribute content free via partnership deals from Tanzania to Italy to the Philippines. In the Central Asian republic of Kyrgyzstan, the Chinese embassy oversees and funds effusive local media coverage of life across the border in Xinjiang, according to a report by the OSCE Academy in Bishkek.

Ignoring the independence of parliaments and media outlets in the free world, Chinese diplomats tirelessly lodge protests with foreign governments about par-

liamentary resolutions or newspaper editorials that challenge the Communist Party's line on Xinjiang, Hong Kong or Taiwan. China's embassies are accused of working with Chinese student groups at foreign universities to police what academics say in their own classrooms. Unfairly, this casts a pall of suspicion on all Chinese students. But each complaint raises the costs of criticising China. That is the whole point.

A common Western complaint is of "debt-trap diplomacy", the allegation that China lures poor countries into taking on unpayable debts. The evidence for deliberate entrapment is scant, though a loss-making Sri Lankan port, Hambantota, has passed into Chinese hands. Although China is self-interested to the point of ruthlessness, "they like to get paid back," says an international official. China prefers to extend the terms of loans rather than write them off, often securing promises to give Chinese lenders a priority claim to revenues (as well as clauses to keep loan terms secret). The international official sees a link with Mr Xi's hostility at home to "welfarism", meaning income-support policies that could undermine people's work ethic. Chinese delegates talk about debt "like 1950s neoclassical economists in Germany", the official reports, worrying about moral hazard if countries have loans written off too easily.

### Bilateral deals, global consequences

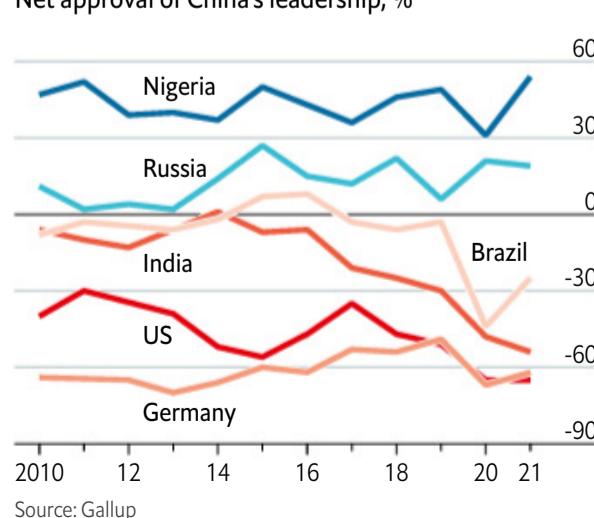
Hubris explains wild Chinese lending to high-risk places in the past, says another international official. China thought it understood risk better than others, he says: "They're losing their shirt in the process." As China recalibrates, some see a chance that it will find self-interest in following international rules more often, because those offer more legitimacy and political cover than murky deals with local elites. China has begun working with the IMF, the G20 and the Paris Club of creditors to help some low-income countries restructure crippling debts, among them Zambia. It has also recently struck a restructuring deal with Ecuador.

China's bilateral influence-building is disruptive to the world order in two main ways. First, China has a genius for spotting countries unhappy with the international status quo, and looking for an alternative. Such balancing does not always undermine norms: when Central Asian countries consider a Chinese-built cargo railway to offset dependence on Russia, they are swapping one autocracy for another. But in other cases, Chinese support is a lifeline for leaders accused of defying the rule of law or worse, from Viktor Orban in Hungary to Bashar al-Assad in Syria.

When Western powers neglect countries that boast a strategic location, China takes note. In April senior American officials paid a rare visit to the Solomon Islands, 2,000km from Australia in the

### Divided views

Net approval of China's leadership, %



► South Pacific, following leaks of a draft security pact with China allowing the government to ask for Chinese troops and police to help maintain order. The Americans were too late: the prime minister, Manasseh Sogavare, signed the Chinese pact before they arrived. In August the islands announced a \$66m Chinese loan to pay for Huawei, the Chinese telecoms giant, to build mobile-phone towers. In September Mr Sogavare defied public appeals from Australia, previously its closest partner, and delayed elections for a year, saying they clashed with a sports tournament.

Both China and the Sogavare government deny that one outcome may be a PLA base on the islands. Zhou Bo of Tsinghua University's Centre for International Security and Strategy suggests that if the Solomon Islands asked faraway China for help, Australia must have fallen short. "These small countries are not stupid. They just want to make a balance, too, because China's strength is growing," says Mr Zhou, a former PLA senior colonel.

Perhaps no leader has more need of a Chinese lifeline than Russia's Vladimir Putin. A European diplomat reports that, after their initial surprise over Russia's invasion of Ukraine, Chinese leaders "decided that the war is a fantastic opportunity". If Russia achieves even some of its war aims, or merely survives crushing international sanctions, that is a defeat for the West, which suits China. Meanwhile, an isolated Russia is selling China cheap oil and gas, and taking payment for some of it in non-convertible Chinese yuan. A truly desperate Russia might stop selling advanced arms to India and Vietnam, both rivals of China's, and forget its previous disquiet about China playing a larger role in the Arctic.

China's approach to bilateral relations undercuts established norms in a second way. To the dismay of Western governments, China demands concessions as its price for co-operating on global issues from pandemics to disarmament, shrugging off appeals to its conscience as a great power. China suspended talks with America on climate change and people-smuggling after the Speaker of the House of Representatives, Nancy Pelosi, visited Taiwan.

Even when China's self-interest is in play, its officials are reluctant to come to the negotiating table if they think the balance of power lies with America or another foreign rival. Zhao Tong, an expert on Chinese nuclear strategy and arms control at the Carnegie Endowment for International Peace, a global research institute, summarises China's bleak understanding of international negotiations: "When you are the weaker party, you cannot get a fair deal." He notes that China is resisting calls from America and allies to discuss rules of warfare for new weapons not covered by existing treaties, such as anti-satellite systems or autonomous lethal weapons. As it happens, China agrees that such arms, if misused, pose grave risks. But so long as America enjoys a lead in advanced weaponry, China fears rule-making as a plot to stop it catching up.

Leading Western countries let China rack up some wins by default. The pandemic provides many examples. Chinese leaders boast of "providing" almost 3.8bn doses of covid vaccines to the world. Most went to middle-income countries with diplomatic or commercial ties to China. Dozens of Chinese embassies lobbied recipient countries to hold airport arrival ceremonies for crates of Sinopharm and Sinovac jabs. Some were attended by heads of state, who thanked China as news cameras whirred. What Chinese leaders do not mention is that 96% of those doses were sold, and only 148m of them donated. In contrast, America has donated and shipped 623m covid vaccines to date—and its mRNA shots are more effective than China's jabs.

Yet China can fairly claim to have delivered doses early on in the pandemic, when the rich world was still guilty of "the selfish mass hoarding of vaccines", in the words of Wang Yi, the Chinese foreign minister. China denies having plans to overturn the world order. But every time an established power falters, it carefully places another piece on the board. ■

### The deglobalisation danger

## A cause for concern

### Why America and Europe fret about China turning inwards

**A**MONG POLITICAL and business leaders in America, China and the EU, the consensus is that globalisation is in danger of going into reverse, and that a big driver is China's rise. However, those same blocs—the three largest economies on Earth—disagree profoundly about whether this is China's fault. America's secretary of state, Antony Blinken, says China has arguably benefited more than any other country from an open international order, but is now bent on reshaping it. The Biden administration charges China with pursuing "asymmetric decoupling", as it seeks to dominate key technologies from electric-car batteries to quantum computing. Mr Blinken sees a selfish plan to make "China less dependent on the world and the world more dependent on China".

Europeans are also anxious. In July, after Valdis Dombrovskis, the European Commission's executive vice-president, held talks with Liu He, then China's chief economic envoy and a deputy prime minister, an EU statement deplored China's use of economic coercion to punish countries that displease it, as is happening to Lithuania after it was deemed too friendly towards Taiwan. The EU gave warning that a "growing politicisation" of China's business environment is leading European companies to reconsider existing operations and planned investments.

As it happens, Chinese officials acknowledge that their country has prospered mightily from four decades of openness to foreign capital, technology and expert talent. But, they retort, if China now focuses on technological self-reliance and secure domestic supply chains, that is in self-defence. They point to tariffs and export bans imposed by the Trump administration and largely left in place by its successor. They grumble about EU mechanisms to screen Chinese investments, and fume about Western governments that have barred Huawei and other Chinese firms from building 5G telecoms networks.

If this spiral is not reversed, the destabilising consequences will extend beyond arcane trade laws. China says it is now the largest trade partner of more than 120 of the world's countries. Multinational corporations grew dependent on China's industrial clusters as the most reliable, predictable, efficient places to make everything from smartphones to antibiotic precursors. Yet there was nothing inevitable about communist-led China becoming a pillar of globalisation. Such a balancing act has rarely been tried. At the height of the cold war, America and the Soviet Union were ideological adversaries but barely traded with each other. For all America's alarm over Japan's industrial and commercial rise from the 1970s to the 1990s, the country was a military ally, not a strategic rival.

For a long time, Western leaders predicted that growing Chinese prosperity would lead to ideological convergence with the rich world, as a rising middle class demanded accountable government and individual rights. China's accession to the World Trade Organisation (WTO) in 2001 was taken as a sign of an irreversible commitment to openness, and that boost to confidence triggered a generation-long boom in foreign investment. Seeing China ►

**China says it is now the largest trade partner of more than 120 of the world's countries**

► as an indispensable engine of growth and profits, foreign business bosses were some of China's loudest advocates in Western capitals, even if they grumbled privately about China being more willing to obey the letter of WTO commitments than their spirit. By this, they meant that, for all China's warm words about openness, foreign firms still faced pressure to transfer technologies as the price of gaining market access, and then competition from subsidised state-owned rivals.

Tu Xinquan, dean of the China Institute for WTO Studies at the University of International Business and Economics (UIBE) in Beijing, explains how his country reacts to the charge that, since joining the WTO, it has flouted that body's market-oriented spirit. "At least according to international law, rules are rules and spirits are spirits, they are different," he says. "The US is always claiming that it is supporting a rules-based system. So let's look at the rules. Don't talk about spirits to us."

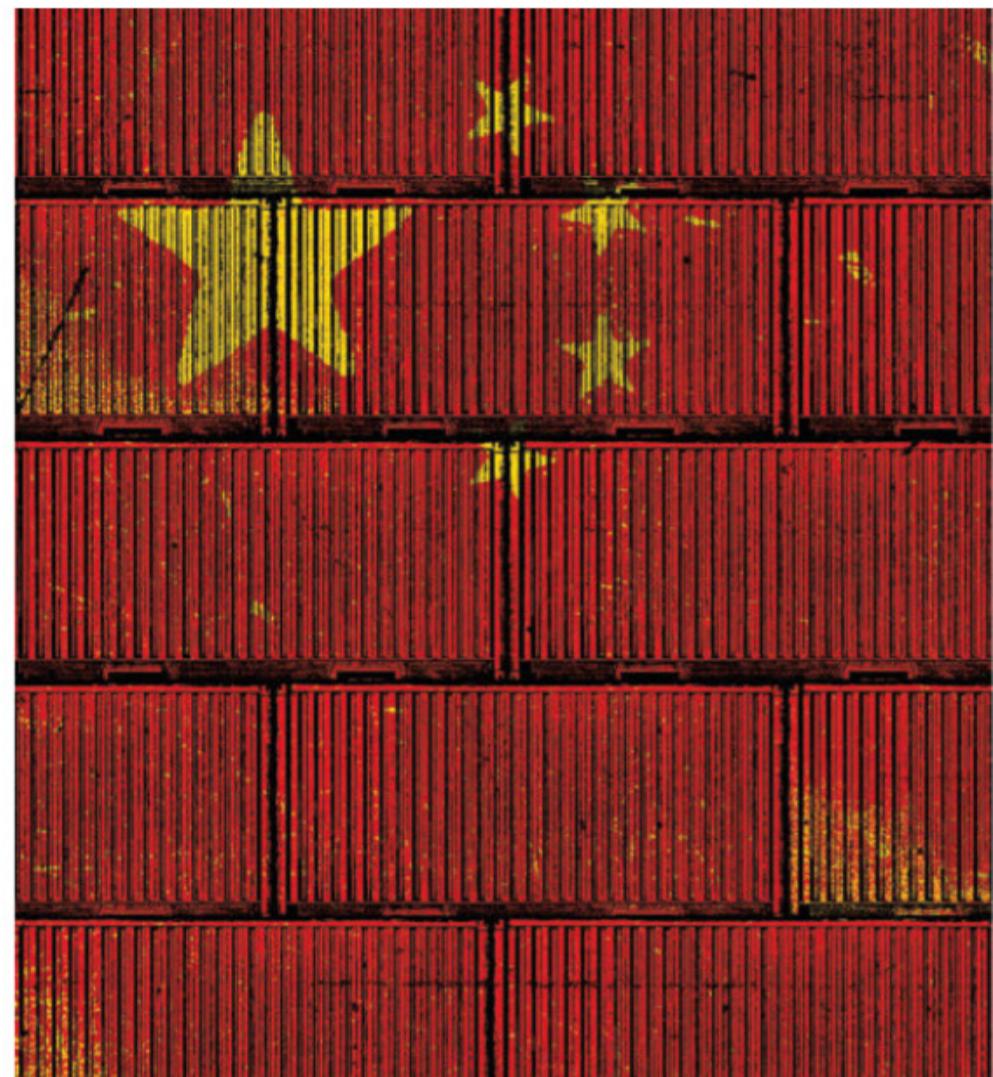
President Xi Jinping says economic globalisation is under attack and protectionism on the rise, and pledges that China will stay open. But he also calls for a "dual circulation" strategy dominated by the domestic economy, with foreign trade as a useful adjunct. He does not hide his desire for more control of the economy, praising state-owned enterprises (SOEs) as "an important strength and pillar of the party in governing and rejuvenating the country". In the face of Western export bans and investment curbs, Mr Xi calls for China to master "chokepoint" technologies. Relying on foreign countries for vital inputs is like "building our house on top of someone else's walls," he suggests. Even a beautiful structure "won't remain standing during a storm".

Justin Yifu Lin is dean of the Institute of New Structural Economics at Peking University. His forceful defences of China's development model have earned him a hero's following among Chinese technocrats. A Chicago-trained former chief economist at the World Bank, Mr Lin returned to China in 2012. He rejects Western criticism of Chinese state capitalism as both ignorant and hypocritical. He argues that, as long as China is catching up with America and other advanced economies, productivity growth is best secured by buying or licensing foreign technology, then upgrading from one promising industry to the next. Because it is for the state to support new industries with education and infrastructure, the inevitable work of picking new growth sectors falls to government. That is industrial policy, he concedes, but so is the basic research that underpins much rich-world innovation.

Mr Lin takes a dim view of American scolding. He credits China with realising that Western leaders talk about free trade and small government, as if channelling Thomas Jefferson, then turn around and practise the interventionist policies of Alexander Hamilton. After unmasking this secret of Western success, China wants to share it with other developing countries that have been "indoctrinated with limited government," he says. For good measure, the professor questions how selfless America and other Western powers really were when they drafted rules for global trade and finance after 1945. Rich economies advocated free trade in industries where they enjoyed a competitive advantage, at least before the rise of China and other Asian tigers, he says. But they always shielded politically sensitive sectors like agriculture.

In his telling, China grew despite this Western rigging of the game, following WTO rules "quite well". Even today China "if possible would like to see the system continue". Alas, America and other rich countries now fear they are losing out, and want to "change the rules to maintain their dominance".

China has not lost all hope in rules. In 2021 it applied to join an 11-nation trade pact suffused with free-market principles, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). That startled outside observers, because members must agree to limit subsidies for large SOEs, permit most

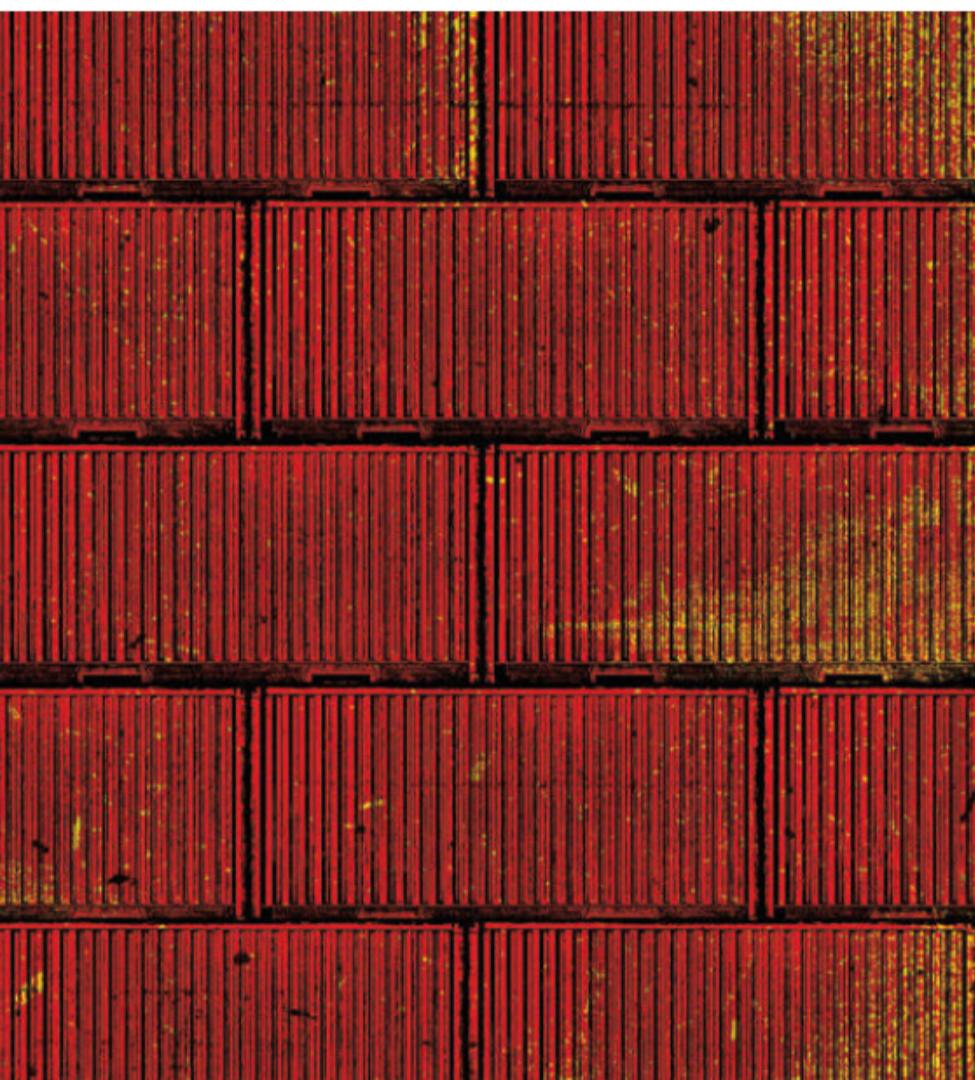


cross-border flows of data and outlaw forced labour. It is no coincidence if China finds such conditions onerous. The pact is the orphaned offspring of an earlier agreement, the TPP, crafted by the Bush and Obama administrations to advance free trade in the Asia-Pacific and hedge against Chinese influence. In a stroke of luck for Beijing, Donald Trump abandoned the TPP on his first full day in office. With globalisation now under fire in Congress from both Republicans and Democrats, the Biden administration has not even tried to rebuild a domestic coalition to join the CPTPP.

China is not endorsing free-market norms. With Mr Xi stressing political control and national security, economic reformers no longer dare to call for a smaller state, merely a more efficient one. Their modest pitch is that joining pacts such as the CPTPP will increase foreign trade and impose useful market disciplines without undermining the party's authority over the economy.

### Liking rules if they like us

Wang Huiyao runs the Centre for China and Globalisation, a think-tank that champions CPTPP entry. He is close to the Chinese officials who negotiated WTO accession a generation ago. China's economy has grown many times over since then, notes Mr Wang, who is something of a go-between for technocratic government ministries, Chinese entrepreneurs and foreign embassies in Beijing. "China is probably the largest beneficiary of the system of globalisation designed by the US and Western countries," he acknowledges. Still, after 77 years the rules could do with an "upgrade". He would like to see China invited to help build "Globalisation 2.0". Asked to name rules that hurt China, Mr Wang says trade pacts typically frown on subsidies for SOEs. The rules reflect the legacy of Reagan- and Thatcher-era privatisations, he says, even though China's state-run infrastructure puts America's crumbling, private-sector utilities to shame. Perhaps, he suggests, pragmatism might lead to a compromise whereby China ends subsi-



► dies for SOEs operating in competitive markets abroad, in return for more tolerance for those supplying public services domestically. Mr Wang imagines other possible bargains pairing greater Chinese confidence with Western humility. Perhaps a self-assured China might loosen controls on cross-border data flows and grant more access to foreign internet firms, he suggests—as long as WTO digital standards ensure that companies like Huawei cannot be excluded from Western markets just for being Chinese.

The think-tank boss notes that China dislikes pressure from foreign trade partners to allow independent trade unions. Chinese officials recall how such organisations challenged communist regimes in Europe, he says. He concedes that China's "government-assisted" trade unions reflect official positions, but maintains that they promote workers' interests, such as higher minimum wages. Indeed, multinational firms are fans of China's model of managed industrial relations, he enthuses, "because workers here are the most productive, the most effective and there are no strikes." Activists might retort that large strikes are unknown because independent labour movements are crushed and their leaders jailed. Technocrats in Beijing hope that foreigners will focus on overall interests. "People are economically driven animals," suggests Mr Wang. "If the economic benefits are large enough, they'll overcome some values and ideological differences."

Joerg Wuttke, president of the EU Chamber of Commerce in China, notes tensions created by the state's double role as a regulator and business owner. Security laws oblige multinational firms to give the authorities access to sensitive data being transferred overseas, for instance. Some foreigners wonder if that information may be shared with Chinese state-owned competitors. If foreign firms respond by moving valuable research outside China, that is decoupling as a defence mechanism, says Mr Wuttke.

China's government wants to be better represented in international bodies that set industrial and technical standards, deter-

mining everything from how the internet works to the steel used in railway tracks. This is understandable: China is an increasingly innovative place. Still, the country's standard-setting ambitions alarm many foreign businesses and governments.

Rather than eliminating barriers to trade, many Chinese standard-setting campaigns increase the risks of decoupling. In the West, standards are a form of private-sector self-regulation. In China, the state is the guide. Sometimes Chinese firms seek to export their country's domestic standards, via projects linked to the Belt and Road Initiative. Chinese-standard railways or natural-gas fields have been built everywhere from Nepal to Turkmenistan, making those markets harder for foreigners to enter. At other times, China's government encourages its firms to set international standards for all countries. Increasingly, such efforts trigger ideological confrontations. Western governments and NGOs have pushed back when Chinese firms promote technical standards that risk embedding authoritarian norms. This is not a theoretical risk. Leaked government contracts show Chinese tech giants building facial-recognition systems that flag Uyghurs or other ethnic groups. In 2019 Chinese firms and officials tried and failed to promote "New IP", a proposal that would have allowed greater state control of the internet. Tellingly, they launched the plan at one of the standard-setting bodies dominated by governments, the International Telecommunications Union.

Beyond rows about values, Western governments and business lobbies accuse China of using standards as sneaky barriers to trade. American analysts call for lawsuits at the WTO to force China to explain why some domestic standards diverge from global norms. Chinese experts retort that America has a nerve, noting that the Trump administration paralysed WTO arbitration by blocking the appointment of judges, an "America First" gambit that the Biden administration has only partly reversed.

Especially since the financial crisis, which Chinese officials call a moment of awakening about the West's incompetence, China has grumbled about the "hegemony" of the dollar, as foreign countries endure the consequences of American monetary policy. China cheered in 2016 when the yuan was included in a currency basket used by the IMF as a global reserve asset. China promotes international trade in the yuan. However, such moves face "brutal limits", says an international official, as long as China maintains exchange and capital controls. As of mid-2022, the yuan's share of global payments by value was just over 2%.

#### **Yuan seen nothin' yet**

To China, the mighty dollar threatens its national security. American administrations have become keen on denying adversaries access to the American financial system, a potent sanction. In 2012 pressure from America and the EU led to Iranian banks losing their access to SWIFT, an interbank messaging network that underpins most international payments. Soon afterwards the People's Bank of China began developing the Cross-Border Interbank Payment System (CIPS), a network that could one day replace SWIFT for Chinese financial institutions. China is working on a digital yuan that could further reduce its vulnerability to sanctions.

For now, evidence of wholesale decoupling is hard to find. China's dominance as the largest producer of manufactured goods grew between 2019 and 2021. Yet trouble looms. The most lucrative business sectors are often politically sensitive. Many high-value technologies, from cloud computing to internet-enabled medical devices, make no sense in the absence of deep trust between sellers and buyers. National security concerns are intruding: because autonomous cars bristle with sensors and cameras, China has banned Teslas from many government and military sites.

Increasingly, world-views collide. Western governments believe they have a duty to protect consumers from buying the pro-

► ducts of forced labour in Xinjiang, a region China runs with an iron fist. So they pass laws they see as defensive: America's Uyghur Forced Labour Prevention Act and a forthcoming EU Corporate Sustainability Reporting Directive. By contrast, China sees an attack on its sovereignty, so obstructs access to Xinjiang for outside auditors, who could exonerate some supply chains.

Deglobalisation is a danger, says Mr Tu of UIBE. But it may not lead to two cleanly divided blocs. It seems to him possible that multinationals and a hybrid economic model could coexist within Chinese borders, subject to a tangle of national, regional and global trade rules. Nor does he think a decisive powershift towards China would lead to more clarity. "If China leads globalisation, it will not make another set of rules like the US did after the second world war," he suggests. A messy, fragmented trade order might be brutal for small, open economies. But if rulers in Beijing thought it would give them leverage and security, they might take it. ■

## Taiwan

# Few painless options left

### China's chilling plans for governing Taiwan

WHEN EXPLAINING why they must control the island of Taiwan, China's communist rulers tell a story of past shame and future vindication. "The Taiwan question arose as a result of weakness and chaos in our nation, and it will be resolved as national rejuvenation becomes a reality," declares a State Council white paper on Taiwan policy that was issued in August.

As party bosses tell it, recovering Taiwan will erase 19th-century humiliations, when a decaying Chinese empire lost tracts of territory to foreign powers. It will heal scars left by Japan's occupation of the island from 1895 to 1945. Above all, it will mark a final victory in the civil war left unfinished since 1949, when Chiang Kai-shek, leader of the defeated, American-backed Nationalist regime, led millions of troops and refugees into exile on Taiwan. Though this is not said aloud, if Xi Jinping as boss of the People's Republic ever leads a victory parade through Taiwan's capital, Taipei, it will mark his ascension into China's pantheon of immortal rulers, alongside Mao Zedong and the great unifying emperors.

For all that focus on China's resurgence, the conquest of Taiwan would be a civil conflict with world-altering consequences. That is because Chinese victory would involve defeat for America, Taiwan's superpower protector. For seven decades America has deterred an invasion of Taiwan by the mainland, even though since 1979 no formal defence treaty has obliged it to come to the island's aid. Instead, American presidents have offered ambiguous commitments to Taiwan, to keep all sides from provocations (though President Biden has said American troops would intervene after an "unprecedented attack", which is not very ambiguous).

The humbling of America would reshape the security order that has kept peace in the Asia-Pacific for the past half-century. In a worst case, Taiwan's fall would follow armed conflict between Chi-

na and America, potentially dragging in neighbours like Japan, as Chinese missiles pounded American air bases on Japanese soil. In China's preferred scenarios Taiwanese elites would cut a deal or have given in before America even had time to send in the Seventh Fleet. Either way, China's aim is to push American armed forces out of the "first island chain", as naval planners call the China-encircling arc that runs through Japan, Taiwan and the Philippines.

America's humiliations would not end with the island's submission. In recent times China's plans for securing Taiwan have become grimmer and more explicit. Chinese leaders have drawn a bleak lesson from anti-government protests in Hong Kong in 2019, namely that to secure a territory exposed to years of Western freedoms, half-measures will not do. They stand ready to crush Taiwan's thriving, raucous multiparty democracy and "re-educate" the island's 23m people. In such a scenario, if Western leaders merely wring their hands, senior Asia-Pacific diplomats are clear about what would follow: countries across the region would start to accommodate China in once-unthinkable ways.

China has another goal: to ensure that America is blamed for the turmoil of a Taiwan crisis. The 170km-wide Taiwan Strait is the main route for container ships from China, Japan, South Korea and Taiwan to the world. A single Taiwanese company, TSMC, makes over 80% of the world's most advanced semiconductors. China has been polishing anti-American talking points. A Western diplomat reports that around Asia, Chinese envoys call America a provocateur that once accepted Taiwan's status as a part of China, but now encourages its separatist fantasies. China is succeeding, the diplomat says. In a crisis, many Asian neighbours would blame America and its ally Japan for stirring tensions.

A second diplomat adds that China does not need to win every argument: sowing confusion will do. He suggests that China's influence networks, and its willingness to use economic coercion, have divided Asia's political, business and media elites. As a result, many governments would struggle to craft coherent responses to a Chinese attack on Taiwan.

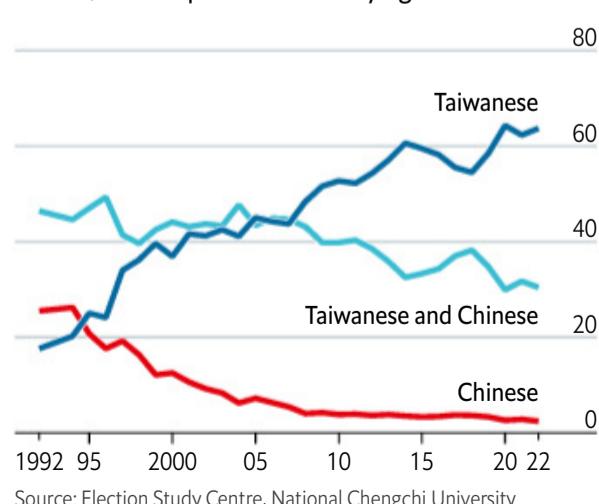
In foreign capitals, discussions of China's ambitions for Taiwan often turn on the military balance of power—assuming, in effect, that once the People's Liberation Army (PLA) thinks it can prevail, China will strike. A senior Western official calls tensions over Taiwan "more and more dangerous" as every new warship rolls out of Chinese dockyards, suggesting: "It is almost a question of physics: when enough force builds up, it explodes." In Washington, there is talk of intelligence that the PLA has been told to be in a position to take Taiwan by 2027 (when Mr Xi will probably be ending a third five-year term as party chief).

Chinese debates about the urgency of resolving the Taiwan question typically examine all options facing their leaders, whether political, economic or military. Full-scale war is called a bad outcome. An anti-secession law passed in 2005 states that China's rulers must not let Taiwan drift away until it becomes irrecoverable. Hawks call for early military action. But as long as other scenarios look possible, some mainland experts argue that time is on China's side.

The bad news is that Chinese scholars sound increasingly convinced that island politics are reducing the mainland's options. A generation ago, Chinese leaders worked to bind Taiwanese business elites with commercial ties. They dangled offers of trade and tourism as they urged islanders to shun pro-independence parties. In this endeavour China's natural partner was ►

### Hearts and minds

Taiwan, % of respondents identifying as:



► the nationalist Kuomintang (KMT) party, once led by Chiang Kai-shek. Though old foes, the KMT and Communist Party agreed, at least in theory, that Taiwan is part of China—though even the KMT stopped short of welcoming mainland promises of autonomy, under a “one country, two systems” model.

In contrast, China refuses to talk to the pro-independence Democratic Progressive Party now in power, treating its leader, President Tsai Ing-wen, as a dangerous radical, though in truth she is a moderate and pragmatic former trade lawyer. Alas for China, even the KMT now sounds more sceptical of mainland promises. The KMT has little choice. Taiwanese voters watched as China trampled Hong Kong’s version of one country, two systems after months of anti-government protests in 2019. They saw China impose a new national security law on the territory and stage local elections open only to vetted patriots, before jailing opposition politicians, journalists and professors. Hong Kong’s woes left a mark. In polls by the National Chengchi University, only 6.4% of Taiwanese say they want to move towards rule by Beijing, either now or in the future. That is down from 18.2% two decades ago.

In 1993 and 2000, State Council white papers included pledges that PLA troops and mainland administrators would not be stationed on a Chinese-run Taiwan. Those guarantees are missing from the latest white paper. Instead, it suggests that those Taiwanese “who support the reunification of the country and the rejuvenation of the nation” may help run the island. The echoes of “patriots governing Hong Kong” are loud.

### Hard line gets harder

China’s formal stance on Taiwan may be hardened at the 20th Party Congress. China’s ambassador to France, Lu Shaye, declared in August that Taiwan’s population had been indoctrinated, intoxicated and “desinicised” by pro-independence politicians on the island, and needed “re-education”. Adding his own note of chauvinism, China’s foreign minister, Wang Yi, said that Ms Tsai was an “unworthy descendant” who had betrayed her ancestors.

There is no reason to think that Chinese officials are bluffing about crushing Taiwan’s freedoms. True, many Western governments would impose sanctions. But Chinese scholars are bullish that their country is too big to punish for long. Well-connected analysts tell diplomats in Beijing that Russia has yet to be broken by sanctions imposed after the invasion of Ukraine. They murmur: you have already lost Russia, can you afford to lose China, too?

Some fatalistic Western officials agree, noting that China has not paid a lasting price for repression in Hong Kong. A few wonder, privately, whether Taiwan should be pressed to take the best deal it can get, to avoid war and accommodate China’s rise with the minimum of disruption. Such foreign-policy realists are surely underestimating how brutal a Chinese takeover would be, and the collapse in Western credibility that would follow.

Hong Kong was only ever a partial democracy, even as British rule ended in 1997, and never independent. In contrast Taiwan’s people have freely chosen their president and parliament for a generation: a rebuke to those who call democracy unsuited to polities with Chinese roots. When asked about their identity, 63.7% of islanders call themselves Taiwanese, up from 17.6% in 1992.

China’s people are not being prepared for international opprobrium, should the world see Taiwanese politicians jailed and fleeing into exile, or watch student protesters being tear gassed, or worse. Instead, they are told that controlling the island will give China “greater international influence and appeal”. In a speech celebrating China’s tighter grip on Hong Kong, Mr Xi talked of “the universal rule that a government must be in the hands of patriots”.

Such boasts reflect a dangerous contempt for Taiwanese freedoms. Chinese officials call foreign praise for the island’s democracy a mere “smokescreen”. In reality, democratisation has trans-

**In polls only 6.4% of Taiwanese say they want to be ruled by Beijing now or in the future**

formed the Taiwan question. China is correct that Americans once sounded happy to sell out Taiwan. Years after President Richard Nixon shook the world by visiting Maoist China in 1972, declassified transcripts showed the American leader and his then national security adviser, Henry Kissinger, privately hinting to their Chinese hosts that Taiwan’s fate was for China to decide, though public communiqüs were more ambiguous.

In the 1970s, as America moved to recognise the People’s Republic and abandon the fiction that Chiang Kai-shek’s regime was the rightful government of all China, the main political constraint in Washington was the wrath of anti-communists in Congress. But Chiang, a stubborn old despot, weakened his case with calls for America to invade or bomb China, and by using martial law to crush dissent. A White House tape from 1971 records Mr Kissinger pondering the abandonment of Chiang, telling Nixon: “We have to be cold about it.”

Were Taiwan still a military dictatorship full of political prisoners, it would be a niche cause in Washington, for all today’s hawkishness on China. As it is, bipartisan support for Taiwan is at its strongest in years. Chinese officials cast the recent visit to Taiwan by the Speaker of the House of Representatives, Nancy Pelosi, as part of a plot to contain China, and the PLA staged war games that resembled a rehearsal for a blockade of the island. In fact, Taiwan represents something simpler and more potent in today’s Washington: a faraway beacon of liberty, besieged by a bully.

War over Taiwan would be a catastrophe. But China’s obsession with control is eliminating many painless routes to peace. For over 70 years Taiwan’s fate has been integral to the Asian security order. The liberal political order is at stake, too. ■

### An uncertain future

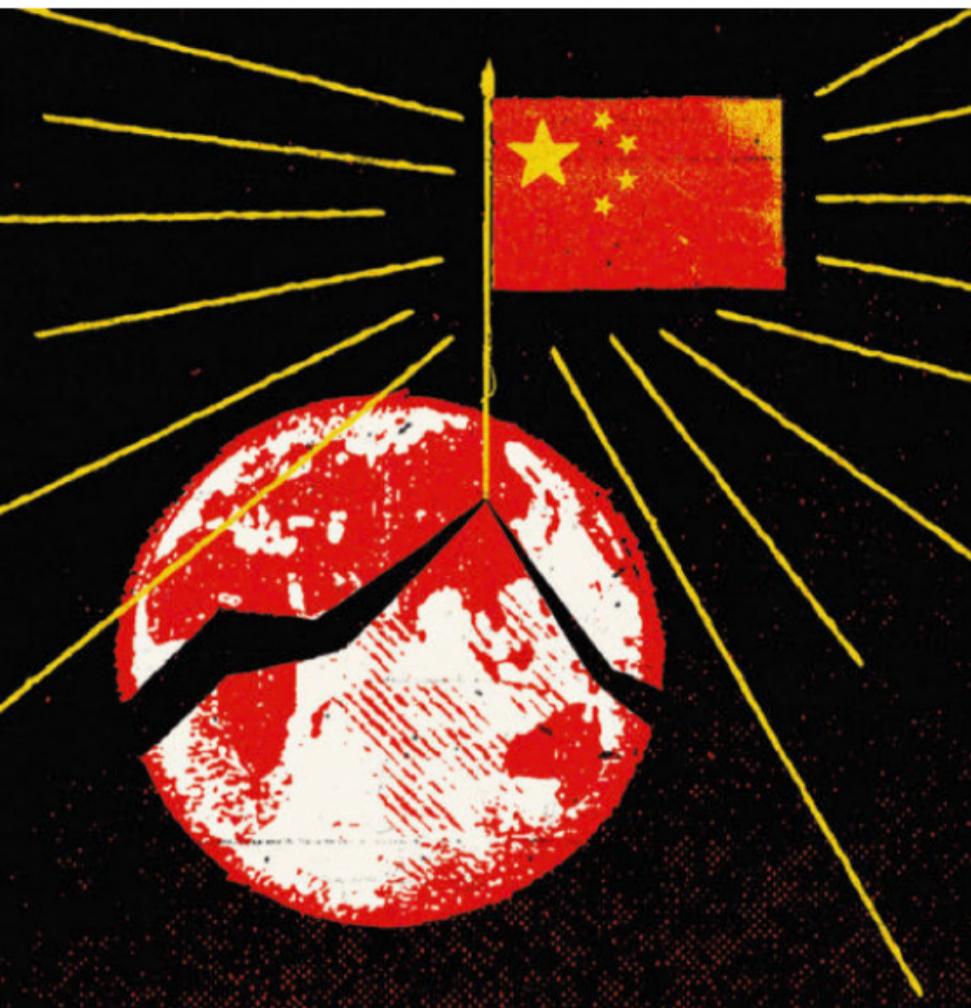
## Hard choices loom

For liberal democracies in the West, the price of avoiding a clash with China is rising

**T**O CHINA’S RULERS, and many ordinary citizens, their country has never been so admirable. Hundreds of millions have escaped extreme poverty. Its trains run on time, and fast, along 40,000km of high-speed rail. Though costly, “zero covid” has, given the weakness of China’s health-care system, probably saved millions of lives. Provoking China—with its growing nuclear arsenal and a third aircraft-carrier—has never been so perilous.

Yet China faces ever-louder criticism from liberal democracies. Its leaders see no innocent explanation for surging Western suspicion. After all, their political system has not changed. The Communist Party declares certain goals as in China’s collective interest—order, national security and economic development among them—and chooses how to achieve them. The party pays no heed to dissenting individuals or unhappy minorities, any more than a helmsman (a title increasingly bestowed on Xi Jinping) debates with passengers the safest course through a storm.

China’s elites detect a plot to keep them down. America cannot handle a China that is “so different, so strong and rising so fast,” suggests Zhou Bo, a retired senior PLA colonel at the Centre for International Security and Strategy of Tsinghua University. “The nat- ►



► ural response is a kind of panic, followed by overreaction."

Chinese leaders are frustrated, says Zhu Feng of Nanjing University. They see Western powers as "blind to China's great achievements" and "viciously" bent on stigmatising their country as authoritarian. That mood is shared by many educated Chinese who once admired the West, he adds. Once, the unipolar era dominated by America after the cold war seemed to some Chinese a benign hegemony. That now looks "delusional," he says.

A European diplomat in Beijing makes a provocative comparison. He is dismayed to hear Chinese officials complain that "whatever China does, the West will never accept it". That language is "the same as we heard from Japan in the 1920s and 1930s. There is this atmosphere of xenophobic resentment."

Chinese officials are more willing to spell out the ways in which the current world order is intolerably unfair. Their complaints fall into two broad schools, one that is essentially confrontational, and a second which at least sounds more constructive. The confrontational school starts from the belief that winners make the rules. Its organising principle is that the West was for too long a rulemaking hegemon, and now stands exposed as sanctimonious and hypocritical. This school would welcome a "might is right" order, as long as China holds the whip hand.

This demand is disruptive for many, including Asian neighbours that must put economic interests above qualms about Chinese bullying. It is harder still for liberal democracies. Addressing French ambassadors in September, Emmanuel Macron called it "problematic" that China-US rivalry so dominates geopolitics, because it "incites" China to dismiss universal values as a tool of American power. For France, a defender of Enlightenment values which aims to keep some distance from America, China's attacks on the West are clarifying. Choices must be made.

The second school seeks a form of bargain with the West. It wants China and the democratic world to focus on common interests while avoiding quarrels about values. Foreigners have a right to opinions about Xinjiang, says Jia Qingguo of Peking University.

Some policies are "harsh and tough", he concedes, though he claims they have ended years of terrorist violence. "But instead of taking a balanced view on this, the us and Western countries imposed sanctions." American gun violence is "intolerable", and Afghanistan suffered terribly under 20 years of American occupation, he says. But China does not think it has a right to impose sanctions on America. Mr Jia suggests that if China becomes a superpower, on some issues it will converge with the West. He cites China's "split identity" over climate change. He sees his country defending its right to develop like the "poor and backward country" that it used to be, while worrying about global emissions like a developed nation.

He does not expect China to follow the Soviet Union down a path of autarky and confrontation with the West. Unlike the USSR, he explains, China is fully integrated into the world economy. He worries about those who take a darker view. "Domestically, we have people who exaggerate the external threat, and argue that China has to be self-sufficient in everything." Externally, he sees "hostile forces from the West, especially from the us, trying to decouple with China." Alas, he says, the hardliners on each side tend to boost one another.

Da Wei, director of Tsinghua University's Centre for International Security and Strategy, does not accept that China and America are doomed to a "black and white" struggle between democracy and authoritarianism. "China does not have a clear and completely different vision. China has some dissatisfaction, some unhappiness in its interactions with neighbouring countries and the us," he says. He worries about anger that he hears from Chinese officials and the public, and about oversimplified Western views, but still sees chances to avoid a spiral of confrontation.

The confrontational school is too chauvinist to have universal appeal. The contrast between this China-first world-view and the post-war order is instructive. For decades after 1945, American leadership involved magnanimity and idealism as well as self-interest. Importantly, openness to immigration meant outsiders could join Team USA, making American swagger more bearable.

Mr Xi's China is an ethno-nationalist project, and increasingly inward-looking. As for magnanimity, consider a dinner Angela Merkel hosted for Mr Xi in Berlin in 2014. Germany's chancellor observed to her guest, pointedly, that her country was obliged by its history to be generous to smaller neighbours, recalls an adviser. Mr Xi replied that China's history teaches a different lesson, remembers the adviser: that when China was "a nice guy" neighbours and enemies took advantage, so it must never give ground.

A dilemma looms. Even seemingly measured, constructive Chinese complaints about the rules-based order are disruptive. In this scenario, coexistence with China would involve governments coldly weighing their national interests, like so many 19th-century statesmen, while stifling concerns about individual rights. But if a core of liberal democracies resists that bargain and defends universal rights, then China's ambitions will divide the world. ■

**ACKNOWLEDGMENTS** A list of acknowledgments and sources is included in the online version of this special report

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## Russian intelligence

# Not-so-special services

### The war in Ukraine has battered the reputation of Russian spies

**V**IKTOR MULLER FERREIRA was a young Brazilian with impressive credentials and a big break. Fresh from the Johns Hopkins School of Advanced International Studies in Washington, DC, an incubator of talent for America's national-security elite, he had secured an internship at the International Criminal Court in The Hague. But when he landed in Amsterdam in April, he was quickly deported to Brazil. Mr Ferreira was, in fact, Sergey Vladimirovich Cherkasov, an intelligence officer working for the GRU, Russia's military-intelligence service.

Mr Cherkasov was a so-called illegal, of the sort depicted in the popular television series "The Americans"—an officer dispatched abroad under an elaborate foreign identity, often for life. In a four-page document obtained by Dutch intelligence, an aide-memoire of sorts, his cover story was laid out in painstaking detail, down to childhood crushes and favoured restaurants. Mr Cherkasov is now languishing in a Brazilian prison, sentenced to 15 years.

When the Soviet KGB was dissolved in

1991, it reappeared as the FSB, a domestic-security service, and the SVR, a foreign-intelligence agency. The GRU has endured in one form or another since 1918. These "special services" bask in the fearsome reputation of their tsarist and Soviet forebears. But they emerge from the war in Ukraine with that reputation, and their networks, in tatters. The explosion which damaged the Kerch bridge on October 8th was only the latest security foul-up; Ukrainian operatives are also suspected of having orchestrated a car-bombing in Moscow in August which killed the daughter of a prominent Russian ultra-nationalist ideologue, according to the *New York Times*.

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Intelligence failure lies at the heart of the war. The FSB, the lead agency for protecting Russian secrets and spying in Ukraine, bungled both tasks in spectacular fashion. It failed to stop America from obtaining, and then publicising, Russian war plans for Ukraine—the most dramatic deployment of intelligence since America's exposure of Soviet missiles on Cuba in 1962. Worse still, it was the FSB's own conspicuous preparations for war—including plans to kill dissidents and install a puppet government—that helped convince American and British officials that the Russian military build-up was not a bluff.

Vladimir Putin's decision to go to war in the first place also owed much to the FSB's bungling. The agency's Fifth Service, responsible for ex-Soviet countries, expanded its Ukraine team dramatically in July 2021, according to a report by the Royal United Services Institute, a think-tank in London. Yet its officers largely spoke to those Ukrainians who were sympathetic to Russia and exaggerated the scale of their agent networks in the country, giving the Kremlin the false impression that the Ukrainian government would quickly collapse.

Confirmation bias was only part of the problem. Intelligence agencies reflect the societies they come from. At their best, Russian spies can be top-notch. "We've consistently been surprised by the cleverness and relentlessness of some of the things that they do," says John Sipher, who ➤

► served as the CIA's station chief in Moscow and later ran its Russia operations. "They have really, really smart people."

But that talent co-exists with venality and dysfunction. Intelligence is embellished as it rises up the chain, with bad news stripped out before it reaches the Kremlin. A Western official describes how, in one GRU unit, officers are thought to have skimmed off 30% of the salaries of the agents they recruited. That figure rose to 50% as the officers gradually had to spend more time padding out reports with information culled from the internet.

The great strength of Russian intelligence is its sheer scale. Yet only a fraction of its personnel do useful spywork. It was FSB officers who poisoned Alexei Navalny, an opposition leader, with Novichok, a nerve agent, in 2020. Nothing encapsulates the dual ethos of repression and larceny better than the fact that the FSB's most sought-after position is the chief of the Fourth Service, a division responsible for "economic security". Its officers are placed in key companies, giving them ample opportunity to enrich themselves.

Infighting within the agencies, and with other government departments, is rife. "The FSB is like the Game of Thrones," says Maxim (not his real name), a former FSB counterintelligence officer. "You have different clans inside with different political and financial interests."

The SVR, a descendant of the First Chief Directorate, the KGB's foreign-intelligence arm, considers itself a cut above its sister services. But the war has left it battered. Western countries have expelled over 400 suspected Russian intelligence officers since the spring, eliminating nearly half of those operating under diplomatic cover in Europe. Those remaining face heightened scrutiny by local security services.

A recent report by SUPO, Finland's intelligence service, notes that Russian intelligence officers there have mostly been "severed" from their networks. It warns that Russian spies are resorting to alternative means. One is cyber-espionage. Another is the recruitment of foreigners within Russia. A third, which SUPO does not mention, is to lean more heavily on illegals like Mr Cherkasov. But that comes at a cost. The pressure on illegals is driving them to take greater risks than usual, according to European intelligence officials.

In March, for instance, Poland arrested Pablo González, a Spanish-Russian journalist also known as Pavel Rubtsov, on suspicion of working for the GRU. A Ukrainian source says he was attempting to enter Ukraine to access a cyber unit in one of the country's intelligence agencies (Mr Rubtsov denies the charges). Mr Cherkasov might have targeted the ICC because it had opened an investigation into war crimes in Ukraine. Their exposure will be keenly felt.

Illegals are hugely expensive to train and deploy. The SVR is thought to have 50 to 100 deployed illegals, and the GRU only between ten and 20, according to sources familiar with those programmes.

In many ways, Russian spies face the same professional challenges as their Western counterparts. It is becoming increasingly difficult to cross borders under multiple names, given the ubiquity of biometric controls, or build a digital backstory that stands up to scrutiny. Paying and communicating with agents is another challenge. But whereas Western spies have learnt how to blend into the noise, Russian ones have been slow to adapt. Illegals still use the dated technique of appropriating the identity of a dead baby (familiar to readers of "The Day of the Jackal", a novel published in 1971.) Sloppiness abounds. Data leaked from a Russian food-delivery service in March exposed the names of FSB and GRU officers having food sent to their respective headquarters.

That would not matter so much if Russian intelligence were not under intense scrutiny. Ever since the GRU's attempted assassination of Sergei Skripal, a former officer, in Salisbury, an English city, in 2018, Western allies have shared increasing amounts of intelligence on Russian spooks. Though it was Dutch intelligence that exposed Mr Ferreira, the operation was a joint endeavour that relied on America, Ireland and others.

There has been little accountability for all this bungling. Western officials say they cannot confirm rumours that Sergei Beseda, the head of the FSB's Fifth Service, was arrested in Russia in March. There are no proven job losses at senior level. That reflects the privileged status of the *siloviki* (securocrats) in the Russian state. Mr Putin does not trust his spies—he is said to be bypassing Alexander Bortnikov, the FSB's chief, and talking to department heads—but it would be unwise to pick a fight with them just as his regime is experiencing an upswell of popular discontent over the drafting of hundreds of thousands of young Russian men to fight in Ukraine. On October 8th Mr Putin even placed the FSB in charge of security for the Kerch bridge.

The result is likely to be more of the same bungling and sleaze. "You have a deep tradition of intelligence professionalism," says Sir John Sawers, a former chief of MI6, "and like a gangrene on top of it is this growing corruption." Maxim, the former FSB officer, agrees. "Back in the 1990s and 2000s there was a KGB touch to it. We stayed under the radar," he says. The breaking point for him was when new graduates of the FSB academy were spotted driving a luxury Mercedes around Moscow. "They need to substitute this money world with something bigger. I'm not sure how they are going to do it." ■

## Ukraine's air war

# Missiles and bridges

ODESSA AND KYIV

## Russia's vengeful barrage falls flat

EVERY BRIDGE stands for something. The 19km (12 mile)-long Kerch Bridge was meant to cement Vladimir Putin's seizure of Crimea from Ukraine in 2014 by joining the peninsula to Russia. On October 8th a massive explosion blew out one of its carriageways and crippled one of its railtracks. Most analysts pinned the bombing on Ukraine's special forces. The attack will hamper Russian military logistics in occupied Ukraine. But it also struck at a central myth of Mr Putin's imperial regime: his claim to have made Crimea Russian.

Kyiv's Glass Bridge is symbolic, too. Built under Vitali Klitschko, the mayor and a former boxing champion, the elegant pedestrian and cycling bridge represents Kyiv's future as a walkable, liveable, cosmopolitan European city. It stands for Ukraine's turn towards the EU. On October 10th and 11th Mr Putin unleashed a furious



October 12th 2022

- Assessed as Russian-controlled
  - Assessed Russian advances\*
  - Claimed as Russian-controlled
  - Claimed Ukrainian counter-attacks
- \*Russia operated in or attacked, but does not control  
Sources: Institute for the Study of War; AEI's Critical Threats Project

► response to the Kerch bridge attack, launching more than 100 missiles at civilian targets. One was the Glass Bridge.

Across Ukraine, at least 26 people were killed and over 100 injured. In Kyiv a missile hit a playground; in Lviv missiles knocked out part of the city's power grid. In Russia hardline social-media channels, which had been calling for bloodier strikes on civilian infrastructure, applauded. "We've given them a profound beating," crowed Vladimir Soloviev, a Kremlin TV propagandist. But the military effects of the Russian strikes were negligible. Ukraine's cities quickly had the power back on. Its air-defence forces said they shot down an impressive 43 of the 84 missiles Russia launched on October 10th, and 20 of 28 the next day.

Russia is attacking Ukraine with long-range cruise missiles such as the Kalibr and Kh-101, which can skim at low altitudes to avoid radar. It is also using the much bigger and faster Iskander ballistic missile and possibly the Kinzhal hypersonic cruise missile. Until now, Ukraine has relied mainly on Soviet-era air-defence systems such as the Buk and the S-300, and its supplies of those missiles are gradually being exhausted.

But Russia's latest strikes have led Western countries to speed up deliveries of modern anti-missile systems, which Ukraine has requested for months. On October 12th Germany said it had completed delivery to Ukraine of the first battery of its new IRIS-T system. It diverted production meant for its own forces to the Ukrainians.

Each IRIS-T battery has three lorry-mounted launchers, carrying eight missiles per launcher with ranges of 40km, controlled by a separate command vehicle up to 20km away. The system's sensitive radar will help detect low-flying, stealthy missiles such as the Kalibr, according to Denys Smazhnyi, the chief of training for Ukraine's anti-aircraft missile forces.

Most importantly, the IRIS-T's command vehicle integrates radar data from ground stations and aircraft, so that a battery can engage targets even if it cannot yet see them. The Buk and S-300 can only hit objects tracked by their own radar. And whereas those systems track and destroy targets one by one, an IRIS-T battery can launch and track all 24 of its missiles simultaneously, making it much harder to overwhelm with numbers. A second advanced system on its way is the Norwegian NASAMS. It uses a standard NATO missile, the AMRAAM, which will make it easy to resupply. Ukrainian forces have already been trained to operate it.

Ukraine has been lobbying Washington since the spring to be equipped with the best American air-defence missile, the Patriot. But "for now, we can only dream of getting this technology," says a spokesman

for Ukraine's Air Force command. Each Patriot battery costs upwards of \$1bn, and requires at least 70 soldiers with months of training to operate. And America does not have any to spare at the moment, notes Tom Karako of the Centre for Strategic and International Studies, a think-tank in Washington, DC: "These are the wages of de-emphasising air and cruise-missile defence for the past decade-plus."

None of the new systems will help against the ballistic Iskander. It is too big, fast and manoeuvrable for them to handle. For now in Ukraine, according to Mr Smazhnyi, "the best protection against ballistic missiles is concrete." Yet more help is coming for the rest. On October 12th representatives of NATO's 30 members met in Brussels to discuss further aid. The Netherlands pledged to send Ukraine \$14.5m worth of air-defence missiles.

Russia's own missile supplies may be running low, and while blasting off dozens of them may please domestic warmongers, it has little effect on Ukraine apart from strengthening resolve. "I am absolutely confident that we will win," said Mykola, a software designer who was sightseeing on October 12th at Kyiv's Glass Bridge. Authorities have closed it out of caution, but it seemed to be little damaged, apart from a few missing glass panels and a dark smudge. Mr Putin's missiles missed. ■

#### French nuclear energy

## Out of order

PARIS

**Electricity generation faces a woefully slow return to normal**

WHEN EDF, the French energy giant, warned in May that nuclear-electricity production this year would be lower than previously forecast because half its reactors were out of action, the timing could not have been worse. Thanks to its nuclear industry, France is usually Europe's biggest net exporter of electricity. The closures turned the country into a net power importer for the first time, just as the continent faced an energy crunch. When in September EDF then announced that even by 2024 output would still be well below normal levels, the problem became a national embarrassment.

France's current nuclear troubles are partly due to routine maintenance of the country's 56 reactors, half of which are about 40 years old. Each ageing reactor needs periodically to be shut down, on a rotating basis, for inspection. During the pandemic, scheduled maintenance was interrupted by lockdowns. The real crunch,



**Powerless**

though, came after corrosion issues were detected in late 2021 at one pressurised-water reactor. By this September no fewer than 25 reactors were out of action: ten for routine maintenance, the rest for corrosion analysis or repairs.

The awkward truth, however, is that France's nuclear woes are also of its own making. Historically the French have been proud of the semi-independence afforded by their nuclear fleet, which generates 69% of the country's electricity. However, after the nuclear accident in Fukushima in 2011, coupled with lobbying from French anti-nuclear groups and greens, nuclear power went out of fashion. In 2012 François Hollande, a Socialist, campaigned successfully for the presidency on a pledge to reduce the share of nuclear in the country's mix to 50%. He wrote this into law in 2015. He also promised to close the two reactors at Fessenheim, the country's oldest, even though the only new reactor under construction at the time, at Flamanville, had yet to be finished (and still hasn't been).

It was not until this February that President Emmanuel Macron, Mr Hollande's successor, swung firmly behind nuclear as part of his plans for a lower-carbon economy. Unveiling an energy strategy based on the revival of nuclear and expansion of renewables, Mr Macron announced that France would build six new-generation reactors, and possibly another eight by 2050. This marked renewed confidence in a demoralised sector. But the new reactors will take many years to come on line.

Industry bosses and politicians blame each other. In August Jean-Bernard Lévy, EDF's outgoing boss, blamed France's decision over the past decade to start closing down reactors for the industry's difficulty in recruiting and training the nuclear specialists it needs. Mr Macron dismissed the

► charge as “false and irresponsible”. Either way, “decisions were not made, or taken too late,” says Cécile Maisonneuve, an energy specialist at the French Institute of International Relations, “and this has now put Europe in serious difficulty.”

In the long run France can revive its industry. EDF has notably kept expertise going in Britain, where it is building reactors at Hinkley Point, with plans for another pair at Sizewell. In the short run, though, France faces a winter of “heightened tension”, according to RTE, the electricity-grid authority. EDF has promised that all the reactors that are currently closed will be up and running by February. The government, which is fully nationalising the energy firm, will not tolerate slippage. Even by late February, however, RTE’s central forecast is that nuclear capacity will be about a fifth below its level in February 2021. Which suggests difficulties next year, for France and Europe, not just this one. ■

### Russia and Turkey

## Business as usual

ISTANBUL

### Vladimir Putin and Recep Tayyip Erdogan need each other

**I**T WAS A lonely birthday for Vladimir Putin. Few important world leaders bothered to call or post greeting cards, though the president of Belarus did send him a tractor. But at least one man did not disappoint. On October 7th Turkey’s president, Recep Tayyip Erdogan, who continues to refer to Mr Putin as a “dear friend”, congratulated him on turning 70. Mr Putin for his part thanked the Turkish leader for his attempts to mediate between Russia and Ukraine. The pair were due to meet in Kazakhstan on October 13th, only two days after a murderous Russian drone and missile barrage in Ukraine.

The war was expected to test the relationship between Turkey, a NATO member, and Russia, the biggest threat to the alliance. But in fact it has emerged stronger. For years Turkey had been Russia’s most trusted partner inside NATO. Now the war has further increased its importance. For Russia, considered a pariah in much of the West, Turkey has become a safe harbour, the only country in Europe to welcome Russian business, and Russia’s dictator, with open arms. For Turkey Russia has become a more valuable trading partner and a source of cash. Mr Putin needs Turkey’s help to salvage what is left of his legitimacy on the world stage. Mr Erdogan, who faces elections next year, may need Russia’s help to hold on to power.

Mr Erdogan’s government has done its share to help Ukraine over the course of the war. Turkey has sold the country armed drones, invoked an international treaty to prevent Russia from reinforcing its Black Sea fleet, and condemned Russia’s annexation of four Ukrainian provinces. Turkey is also helping Ukraine build four modern Ada-class corvettes, the first of which was launched earlier this month. Under a deal brokered by Turkey this summer, Ukraine, whose ports had been under a Russian naval blockade, resumed grain exports by sea.

But Turkey remains close to Russia. Their leaders meet and speak on the phone regularly. The bonhomie between them has endured wars in Syria, the Caucasus and Libya, where Turkey and Russia have managed to co-operate despite backing opposing sides. The dynamic has continued in Ukraine. These days, Mr Erdogan sounds more eager to chastise Western governments for “provoking” Russia than to condemn its atrocities in Ukraine. “Europe is reaping what it sowed,” he remarked last month, after Russia cut off gas supplies to Europe in response to new sanctions. Mr Erdogan “has started to sound like Putin’s lawyer,” says Hakan Aksay, a veteran Turkish Russia-watcher.

Turkey not only opposes Western sanctions against Russia; it has found ways to benefit from them. Trade between the two countries has already topped \$50bn this year, a new record, up from \$34.7bn in the whole of 2021. Nearly 20 flights from Moscow alight in Istanbul every day, packed with tourists and men escaping mobilisation. At least some of the Russians are planning to stay. More than 8,000 have bought houses in Turkey since the start of the year, topping the list of foreign buyers for the first time on record. In August alone, Russians reportedly set up 128 new

companies in Turkey.

Russia has also provided Turkey’s banking system with a booster shot. Over the summer Rosatom, a Russian firm, wired about \$5bn to Turkey to finance a nuclear power plant it is building on the country’s Mediterranean coast. But the rush of Russians and roubles has attracted American scrutiny. This summer an American Treasury official signalled that Russia was attempting to use Turkey to dodge Western sanctions, and warned Turkish companies against doing business with sanctioned Russians. Turkish banks responded by suspending the use of Russia’s Mir payment system.

With his country’s economy ravaged by inflation, which reached 83% in September, Mr Erdogan faces tough odds ahead of elections next year. He has courted, but largely failed to secure, economic support from the likes of Saudi Arabia and the UAE. He now seems to be looking for favours from Russia. Turkey recently asked Russia to postpone at least some of its gas debts until 2024. But Mr Erdogan sounds upbeat. European leaders are anxious about getting through the winter without Russian gas, he said on October 10th. “I told them we have no such concerns.”

Turkey’s policy toward Russia would not change dramatically were Mr Erdogan to lose power; none of Turkey’s political parties wants confrontation. But Mr Putin knows he will not be able to recreate the relationship he forged with Mr Erdogan over two decades. “He knows his weaknesses and his way of doing politics,” says Mitat Celikpala, an academic at Kadir Has University in Istanbul. Whether with cheap gas, another injection of cash or a green light for a new Turkish offensive against Kurdish insurgents in Syria, Mr Putin may decide to lend his friend a hand. ■



Best friends forever

# Charlemagne | Small steps

*Exhausted by years of squabbling, might Britain and Europe be on the verge of getting along?*



**I**N A PARALLEL universe, Britain and the European Union would be gearing up to celebrate the 50th anniversary of its accession to the club in January 1973. Envoys from the EU's still-28 countries would be steeling themselves for parties at His Majesty's Brussels embassy flowing with English wines, one of the unspoken hazards of the local diplomatic circuit. The prime minister might have dropped by the European Parliament and tried a few *bon mots* of mangled French. London tabloids would no doubt have used the occasion to rustle up outrage over an alleged Eurocrat plot to rebrand Cumberland sausages as *Britische Frankfurter*. Amid all the jollity, a row would have broken out over money.

In the real world nobody is expecting the anniversary to be noted, thanks to the Leave campaign's victory in the Brexit referendum of June 2016. The relationship between Britain and the EU has offered little to celebrate since. At once overconfident and underprepared going into divorce talks, Brexiteers had assumed they could somehow hoodwink the EU into granting Britain the benefits of membership while jettisoning the costs. But the Europeans fretted that a thriving big rival on its doorstep would provide unwelcome inspiration to others still in the club. Far from the EU being conquered through division it stayed united and gave Britain a rough ride. The upshot has been six years of more or less continuous feuding.

Whisper it, for now, but the mood has improved markedly in recent weeks. On October 6th Liz Truss, Britain's new prime minister, attended the inaugural meeting of the European Political Community, a new gabfest bringing together the continent's leaders both in and beyond the EU. It was a rare opportunity since Brexit for a prime minister to chat to all her neighbours in one room. Britain used the occasion to join sensible European initiatives on military transport and energy. In the same week James Cleverly, the foreign secretary, told attendees of the Conservative Party conference—once a high temple of Euroscepticism—that talk of friction with the EU was merely the result of “lazy headlines”. Emmanuel Macron, France's president and convener of the summit, spoke of EU-British relations being at the “beginning of the day after”.

To those battle-hardened by years of squabbling, that may sound a touch optimistic. For the business of disentangling Brit-

ain from the EU is still not complete. The most notable sticking point is Northern Ireland. The province forms part of the United Kingdom. But it must also remain in effect part of the EU single market alongside Ireland, with which it shares an island, because reinstating a border between the two would hobble the local economy and revive sectarian tensions between those in Northern Ireland keen to remain part of the UK and those who seek to join the Republic. In order to clinch a broader trade deal with the EU in 2020, Britain agreed to a “protocol” that treats Northern Ireland as being part of the EU. It has tried to wriggle out of it ever since.

“The mood music between Britain and Europe is much improved, but we are a long way from a deal [on the protocol],” says Charles Grant of the Centre for European Reform, a think-tank in London. Still, progress looks possible. Steve Baker, a Brexit ultra now serving in Ms Truss's government as a junior minister for Northern Ireland, apologised for his behaviour during Brexit talks. Leo Varadkar, a former and soon-to-be-again Irish prime minister, said the protocol as it was designed was perhaps “a little too strict” and that ways might be found to make it more palatable for Britain. A working group of British and European Commission officials poring over the details had been suspended in February; it has now quietly reconvened. Ways are being devised to resolve supposedly intractable issues, such as whether an EU court would have a say in any disputes relating to the protocol.

The EU resents having to renegotiate a deal that Britain has already agreed to. But it seems willing to put the imbroglio down to the purposeful inattention of Boris Johnson, the then-prime minister who signed the protocol for the sake of political expediency. Ms Truss became his foreign secretary, and has known how to rile Europe when needed. Still, her appointment has given the opportunity for a reset in relations with the continent. Mr Macron in particular came to distrust Mr Johnson deeply, in part thanks to the AUKUS deal between Britain, America and Australia that kiboshed a big French submarine contract. Even broad agreement in London and EU capitals on the need to help Ukraine had not led to much of a rapprochement between the EU and Britain.

## Peace of paper

Europe is now willing to be magnanimous towards Britain because its original fears of what Brexit might wreak have dissipated. Not even the most extreme populists in Italy or Poland talk of leaving the EU: Brexit is less a blueprint than a cautionary tale. Nor has Britain morphed into “Singapore-on-Thames”, a dynamic powerhouse exposing just how stodgy and rule-bound the EU has become. In fact early attempts at deregulation and tax cuts have resulted in a market meltdown. (That the proponents of the doomed economic course are among the most ardent Brexiteers has not gone unnoticed in Europe.) The IMF used to proffer advice on the euro zone; now it is concerned about Britain. There are only so many fronts on which Ms Truss can fight at once. The last thing she needs is to pick a battle with Brussels.

Where does that leave long-term relations between Britain and the EU? Nobody these days is talking of all-encompassing deals that would once again meld the two together. But some smaller worries might find a way of getting ironed out. Perhaps a deal facilitating farming exports might be agreed upon, or a way found to make it easier for students to move between the EU and Britain. That isn't much, but it is a start. For years, the more Britain and Europe talked, the more they riled each other up. If that indeed has changed, it will be something to celebrate. ■



### The gilt market

## Playing with fire

### The government is yet to deal with a mess of its own making

**B**RITAIN'S PRIME MINISTER came to office promising to fight "Treasury orthodoxy" and the department's "abacus economics". Yet barely a month later, financial markets are teaching Liz Truss and her government a lesson about the importance of sums adding up. Ever since September 23rd, when Kwasi Kwarteng, the chancellor of the exchequer, announced the biggest tax cuts in half a century with no hint of how he would pay for them, the markets have been in varying states of turmoil.

The pound cratered at once, hitting a record intraday low of \$1.035 three days later. It has since recovered to around \$1.10, and more or less stabilised. But the turbulence that hit Britain's government bonds, or gilts, has proved both more persistent and more ominous. By September 27th the cost of new ten-year government borrowing had soared to 4.5%, and that of 30-year debt to 5% (see chart 1 on the next page). Prices, which move inversely to yields, had fallen sharply. Those of longer-maturity debt had plummeted by 26%.

Amid the havoc, including reports of fire sales of gilts, on September 28th the Bank of England stepped in. It promised to buy up to £5bn-worth (\$5.5bn) of long-dated gilts daily until October 14th, prompting the 30-year yield to fall by a full percentage point. It has since raised that pledge to £10bn and expanded it to include inflation-linked gilts. Yet as that intervention nears its end, cracks are reappearing. Traders' nerves are jangling and yields are marching upwards again, threatening mortgage-borrowers, businesses and the government with still higher interest rates.

### The Bailey blunder

That is partly because the bank's own touch no longer looks so sure. On October 11th Andrew Bailey, the bank's governor, sent the pound tumbling by declaring that the purchase programme would not be extended. Yet overnight, reports emerged of officials briefing the opposite. Gilt yields climbed again the next day, with the 30-year yield briefly breaching 5%.

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Mr Bailey's clumsiness was unfortunate. But the underlying questions facing both ministers and investors remain unchanged. For the government: how will it pay for its plans? In recent days it has been prodded into action, or the promise of it. Mr Kwarteng has twice brought forward the publication of a plan for taming the burgeoning national debt, now due on October 31st. The Office for Budget Responsibility (OBR), an official watchdog whose forecasting services the chancellor at first spurned, will publish its projections at the same time. A plan to bring in an outsider to run the Treasury has been axed. Instead James Bowler, who spent 20 years there before overseeing the trade department, has been appointed.

The question for investors comes in two parts. The first is whether the market disorder that preceded the bank's intervention will return once it ends. The pledge to buy bonds came after some "liability-driven investment" (LDI) funds were forced into selling gilts at any price in order to raise cash. Such funds hedge their liabilities with interest-rate derivatives, the value of which rises and falls with gilt prices. Normally this frees capital that can be invested in equities and private assets. But when gilt prices fall sharply, as they did after Mr Kwarteng's tax-cutting speech, the derivatives' value plunges too, prompting the funds' counterparties to demand cash as security. The funds must sell assets—in-

cluding gilts—to raise it, forcing prices down further.

In such a vicious circle, buyers have little incentive to step in, expecting further falls in gilt prices. The result is a downward spiral in prices and an upward one in yields. In the past fortnight the bank, by acting as a buyer of last resort, has broken that cycle, without having to buy very much (in the first ten days, it spent £8.8bn out of a potential £60bn).

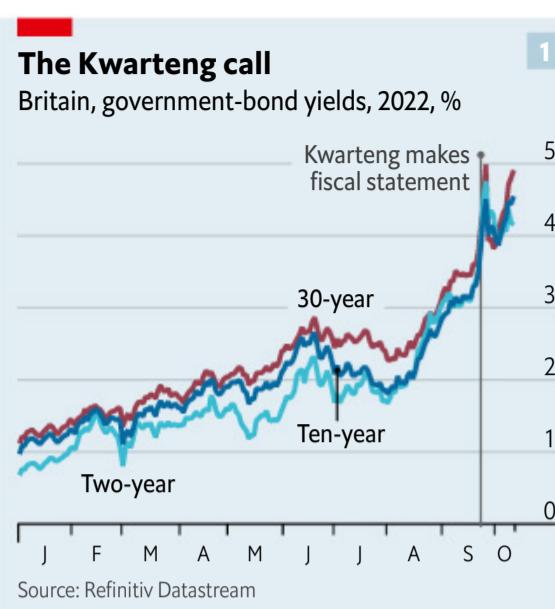
The worry is that chaotic selling will resume once the bank's buying ends. Moyeen Islam of Barclays, a bank, notes that volumes in the overnight deposit market increased by nearly 50% in the days after the bank's intervention, suggesting LDI funds have reduced risk by starting to rebuild their cash buffers. Pension funds have said they need more time to unwind the derivative positions that sparked the fire sale. Few in the market expect the bank to sit on its hands if widespread disorder returns.

The second question for investors is whether gilts have become riskier over the longer term, demanding the compensation of a permanently higher yield. There seems little doubt that they have. On October 5th Fitch, a rating agency, downgraded Britain's credit outlook to "negative", citing high budget deficits and government debt, increased policy uncertainty and the risk of prolonged inflationary pressures.

Meanwhile, the government's promise to shield households and businesses from higher energy costs for two years means that in the near term gilt issuance will be volatile and linked to the gas price, notes George Cole of Goldman Sachs, a bank. And unlike American Treasuries, which offer investors a safe haven in turbulent markets, gilts are not essential to a bondholder's portfolio. "For a global investor, there has been no strong reason to bias towards UK government bonds for a long time, and clearly that's gotten worse," says Vivek Paul of BlackRock, an asset manager.

Underlying the market's gyrations is scepticism that the government has a credible plan to keep its finances in good order. To be sure, some things may improve its position. For example, extra inflation drags more taxpayers into higher tax brackets, raising revenue by stealth. It also cuts the real value of departmental budgets set a year ago in cash terms.

The trouble is that the factors going the other way tend to dominate. The economic outlook is weakening. Citi, another bank, forecasts that growth over the five fiscal years to 2026-27 will be less than half what the OBR forecast in March. And higher interest rates from the Bank of England as well as higher gilt yields will push up debt-interest spending. Citi and the Institute for Fiscal Studies (IFS), a think-tank, project that by 2026-27 debt interest spending will be £66bn, £18bn more than expected in

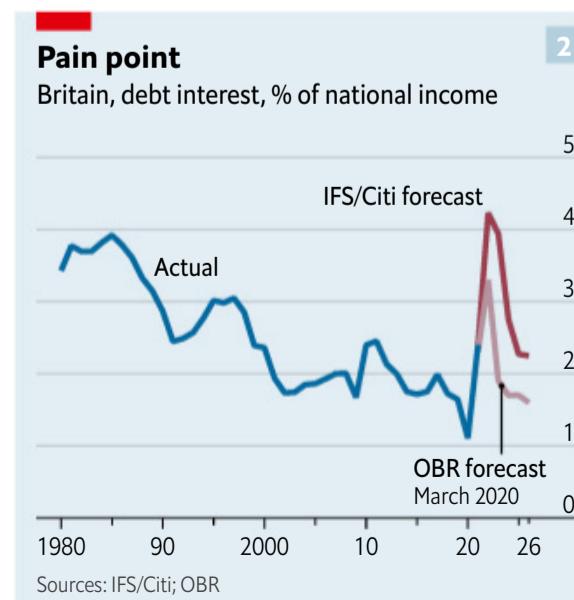


March. As a share of GDP it will exceed the peak of the early 1980s, before receding to roughly where it was in 2011-12, after the financial crisis (see chart 2).

Without further policy changes, over the next few years the IFS and Citi expect the ratio of debt to GDP to rise from around 84% in 2021-22 to 97% in 2026-27. That would breach the government's current fiscal rules, which say it should fall by 2025-26. As they expect the balance of borrowing, excluding investment, to slide from a surplus of 1.3% of GDP to a deficit of 1.1%, another rule would be broken.

### We're waiting, Mr Kwarteng

Assuming the OBR draws similar conclusions, the government has four options: weaken its fiscal rules; raise taxes; cut spending; or gun for higher growth. None is straightforward. With the fiscal rules, there are limits to the amount of fudging Mr Kwarteng will be able to get away with, under the watchful eye of investors and given his own promises. He has said debt as a proportion of GDP will fall over the "medium term". That could mean five years, rather than three under the existing rules. But even then, he would need to make savings. The IFS calculates that if he picks 2026-27 as the year when the ratio should fall, he will have to find spending



cuts or tax increases of £62bn.

Ms Truss made tax cuts a central pillar of her campaign to become prime minister. Still, postponing rather than scrapping an increase in corporation tax would help with the arithmetic. So would conditioning income-tax cuts on the government meeting its growth target of 2.5%. But either would be an admission of defeat. Although officials are reportedly exploring the idea, "reversing the budget undermines her fatally," says a former minister.

As for spending, Ms Truss surprisingly promised on October 12th that there would be no cuts—though Downing Street later said "difficult decisions" must be made. Cuts offer no easy escape. Trimming public-sector investment by, say, £14bn to just 2% of GDP would be odd for a government supposedly bent on growth. Upgrading working-age benefits with earnings rather than inflation would save £13bn, says the IFS. Finding the rest of the £62bn by slashing £35bn from public services, while preserving health and defence as the government says it will, means cutting the rest by 15%. After a decade of spending restraint, such deep cuts would go beyond fat-trimming to hack away at bone. And with the Tories trailing Labour by around 25 points in the polls, its MPs are in no mood to load pain onto their constituents.

Faster growth would shrink the size of the hole to fill—and here the government had grand plans, intending to announce a series of supply-side reforms. But rather than a torrent of substantive policies, so far it has only leaked out such ideas as abolishing limits on the ratio of staff to children in nurseries or requiring fewer cheaper houses in new developments. The political feasibility of bold schemes seems to be diminishing by the minute. On October 11th Mel Stride, the Tory chair of the Treasury select committee, warned Mr Kwarteng that he needed cross-party support for any such measures before his statement on October 31st, as "any failure to do so will unsettle the markets."

It is still unclear whether Mr Kwarteng has accepted what a pickle he is in. On October 11th he bragged that the IMF had said Britain's growth was "going up". Having forecast growth of just 0.3% next year, the fund did say that his fiscal package would increase growth "somewhat above the forecast in the near term"—but added that it would cloud the inflation outlook. Its medium-term forecast is 1.5%, a percentage point below the government's target.

The government, then, has no good options, and the markets will be watching. "The issue is that a financially credible plan would be very difficult politically, and a politically credible plan would be very difficult financially," says BlackRock's Mr Paul. Whether Ms Truss likes it or not, abacus economics is here to stay. ■

# Bagehot | The great thaw in the union

*Labour's surge and the Tories' troubles could refresh the United Kingdom*



OUTSIDERS WATCHING Britain in recent years have toyed with a gloomy calculation. Which would survive longer: the ancient Conservative and Unionist Party, or the even older United Kingdom that it governs? The Tories love the union, but the shocks of their 12 years in office—the Scottish independence referendum in 2014, the Brexit referendum in 2016 and Boris Johnson's scandal-prone premiership—stirred nationalist sentiments. It was an unforgiving dynamic: the more Conservative dominance in England seemed assured, the more likely it seemed Britain would fracture. The party or the country: something had to give.

It has. The Tories' popularity has crumbled. Polls point to a landslide majority for Labour if an election were held tomorrow. A new era in Britain's territorial politics is opening up, and the union has a reprieve and a chance of renewal.

The fissures are deep and wide. Half of Scotland's voters would choose independence. The margin between those supporting divorce and the union in Wales has gradually narrowed. Sinn Féin, whose driving purpose is Irish reunification, has topped the polls in both Northern Ireland and the Republic. Mr Johnson's response to a rising separatist tide was a doctrine of muscular unionism, which asserted Westminster's supremacy over the devolved parliaments created in the 1990s, waved the Union Flag and flexed the Treasury's muscles. Above all, a second Scottish independence referendum would be resisted (this week the Supreme Court in London heard arguments on whether the Scottish government can hold another, advisory referendum on the issue).

The outcome was not collapse but stalemate. The union, which ought to be a living, evolving thing, has become frozen and brittle. But with Labour's surge, the ice is shifting.

In Scotland the referendum of 2014 polarised Labour's historic electorate. The Scottish National Party (SNP) told working-class nationalists that only independence could rid them of Tory rule; Tories told working-class unionists that only they could halt another referendum. As the constitution dominated elections, voters sought the strongest bulwark against their opponents. Labour's weakness begat weakness. Now on the rise nationally, Labour hopes that this spiral is moving into reverse, with the party emerging both as the most plausible defender of the union in

Scotland and the fastest way to rid Scotland of Tory governments. "The view on the doorstep is, 'I'm for independence, but let's just get rid of these bastards,'" says one hopeful figure.

This complicates the SNP's strategy. At her party's conference in Aberdeen this week, Nicola Sturgeon, Scotland's first minister, turned her guns on Labour's leader, Sir Keir Starmer, whose mild manners and social-democratic credentials make him a trickier target than a Tory. If Sir Keir can win a majority, he too will be able to resist demands for a second referendum. There are signs the SNP is settling in for a long game, and pivoting from confrontation with Westminster to a show of co-operation—part of a gradualist tradition of enlarging Scotland's powers, decade by decade, as a stepping-stone to separation.

Powerless in Scotland, Labour has been irrelevant in Northern Ireland. Sir Tony Blair helped forge the Good Friday Agreement in 1998, which stemmed decades of bloodshed. But under Jeremy Corbyn, Sir Keir's predecessor, who supported Irish Republicanism much as Bangkok taxi-drivers support Manchester United—enthusiastically, but from afar—it had nothing to offer.

A shift is detectable there, too. Republicans would overwhelmingly prefer to see Sir Keir in Downing Street. Their disdain for the Tories is centuries deep, and they are closer economically. Yet he is explicitly pro-union, declaring he would campaign for Northern Ireland to vote to stay British were a referendum ever held. A senior figure in the Democratic Unionist Party (the biggest unionist group) says that the party believes a Labour government would boost the union, since the closer EU deal Sir Keir hopes to strike would remove many of the Irish Sea checks created by Mr Johnson's reviled Brexit deal.

Sir Keir will soon receive a blueprint for a new United Kingdom he commissioned from Gordon Brown, a former prime minister. It will reflect a view in Labour that just piling more powers onto devolved administrations will not heal an unhappy union. The bigger problem is England. It is far larger than its peers, it is governed from Westminster, most of its people voted for Brexit, and a rising share consider themselves more English than British and would be quite happy if Ms Sturgeon got her divorce. Mr Brown's remedy is more muscular English devolution, empowering mayors and cities, and a new architecture to force the nations to work together on equal terms—a sort of European Council for Britain.

## I'm afraid there is no money

Labour MPs are giddy, savouring stratospheric polling figures last seen in the mid-1990s. But for the union, the clock cannot be turned back to the carefree optimism of that time. One reason is money. The compromises of devolution were greased with cash. In the 2000s, when relations were good, identifiable spending per person (which includes things like welfare, but excludes items such as defence) in Scotland, Wales and Northern Ireland grew by 3.7% per year in real terms. In the lean and fractious 2010s it shrank by 0.3% per year. Sir Keir has warned his party that if it wins, there will be little money to chuck around.

The other is identity. If Labour is lucky, it may shave off enough support for Scottish independence to box the SNP in. But Scots' views on the constitution have become remarkably robust and impervious to external shocks, notes Robert Johns of the University of Essex. The risk for a Labour government is becoming marooned: offering sensible but technocratic ideas that fail to satisfy new, powerful identities. The union will outlive this Conservative government. But so will the scars of the past decade. ■



## Cocaine

# The war on drugs don't work

BOGOTÁ, FLOR DE UCAYALI, LA PAZ AND NEW YORK

In Latin America and Europe, politicians are beginning to talk about decriminalising cocaine

COCOA IS UBIQUITOUS in remote rural parts of Colombia. Farmers plant the hardy, high-altitude bush, harvest its foliage and sell it in bulk to the small local laboratories that have made the country into the world's biggest producer of cocaine. The pickers, known as *raspachines*, are mostly poor migrants from Venezuela or elsewhere in Colombia. Their hands are often shredded and bloodied by their labour, which involves ripping the leaves off the stalk. But it pays more than cultivating most legal crops. And even being on the bottom rung of the drug business confers a certain glamour. "I'm the *raspachin*," trills the singer on a jaunty hit from 2015 by Los Bacanes del Sur, a popular folk band. "And I get all the women."

There is no shortage of people willing to plant and harvest coca; and there is no shortage of cocaine. According to the United Nations Office on Drugs and Crime (UNODC), global production hit a record 1,982 tonnes in 2020. That number is up by 11% on the year before, and nearly double

the amount produced in 2014 (see chart 1 on next page). When Richard Nixon, then America's president, launched his "war on drugs" in 1971, the flow of cocaine into America was a trickle. Despite billions of dollars spent every year on arrests, asset seizures and destroying coca bushes, it has become a flood. About 2% of Americans—roughly 6m people—are thought to use the stuff. New shipping routes are bringing the drug to consumers in Africa, Asia and Europe (see map on next page).

Plenty of Latin American presidents have said the war is not working—though as Jonathan Caulkins, a drug expert at Carnegie Mellon University, points out, they tend to do so only once they have safely left office. Now some of those in power are beginning to speak up, too. In an interview with *The Economist*, Gustavo Petro, Colombia's new president, talked of leniency for repentant gang members, decriminalising coca-leaf production and creating places where Colombians could consume cocaine in a supervised environment. Felipe Tas-

cón, a member of Mr Petro's campaign team who had been tipped for a role as his drug "tsar", has flirted with the possibility of outright legalisation, and has talked of collaborating with other Andean countries which produce the drug.

One of those countries is Peru, the world's second-biggest cocaine producer. Its president, Pedro Castillo, has appointed Ricardo Soberón, a longtime critic of coca-eradication schemes, to head Peru's anti-drug agency. "After working with coca farmers for 30 years, I know that what they most want is to be treated as citizens," says Mr Soberón. "They've always been treated as narco terrorists, or narco farmers."

The realities of international politics will limit Mr Petro's room for manoeuvre. But such public scepticism from a serving head of state marks a big change in the discussion around drugs.

## When you're in a hole, stop digging

Mr Petro and Mr Soberón are right to say that the war on cocaine has failed. The main reason is the vast profits to be made from the drug, which is cheap to produce but expensive to buy. According to Jeremy McDermott of InSight Crime, a website that analyses organised crime, Mexican gangs can buy a kilo of cocaine for between \$8,000 and \$12,000 in Colombia. He estimates that kilo is worth \$20,000 in the United States, \$35,000 in Europe, \$50,000 in China and \$100,000 in Australia. Gangs ➤

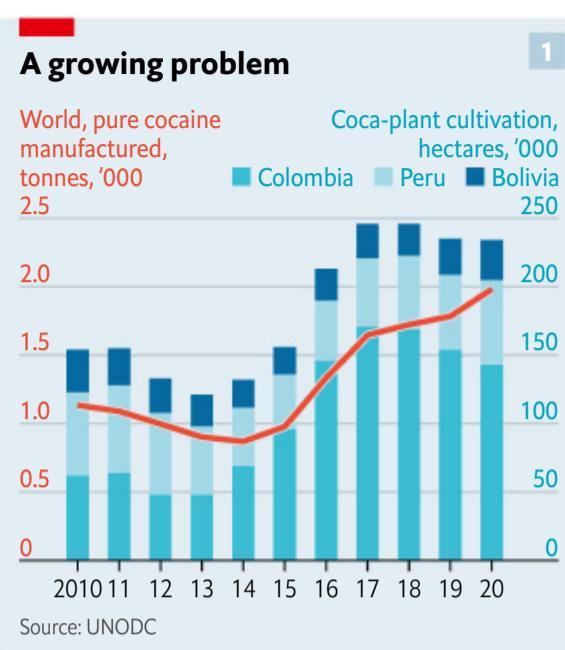
► can boost profits even more by cutting coke with cheaper drugs. These days much of the cocaine that is shipped north to the United States comes mixed with fentanyl, a powerful and addictive opioid painkiller. The UNODC reckons that toxic combination is the main reason why cocaine-related deaths in America have risen fivefold since 2010 (see chart 2 on next page).

Huge profits give gangs both the incentive and the resources to adapt to whatever law enforcement can throw at them. In Colombia, decades of eradication attempts beginning in the early years of this century led, at first, to a fall in production. But it has since roared back, as plantations have moved into more remote and lawless places. At the same time, gangs have been boosting the productivity of their crops.

The UNODC reckons that the amount of land dedicated to coca cultivation fell by 9% in Colombia in 2020 compared with the year before. But estimated production of cocaine rose by 8% to 1,228 tonnes, thanks to higher-yielding plants and more efficient processes in the labs that turn leaves into coca paste and then cocaine powder. Indeed, the gangs have achieved efficiency gains that would make a management consultant envious. The UNODC calculates that the amount of cocaine obtained from one hectare of coca-bush cultivation rose by a whopping 18% in a single year, from 6.7kg in 2019 to 7.9kg in 2020.

All this means that, although gangs have diversified their businesses over the past few decades—into areas such as human trafficking, illegal gold mining, extortion and producing other drugs such as fentanyl—cocaine remains a core part of their business. Peter Reuter, a criminologist at the University of Maryland (who has contributed to *The Economist* in the past) reckons that coke still provides most of the revenues for gangs in Mexico.

Gangs fight viciously to control the cocaine trade. That helps make Latin America



one of the most violent regions on Earth. With less than a tenth of the world's population, Latin America is the scene of roughly a third of murders.

In places the gangs are so rich, powerful and well-armed that they outgun the forces of law and order. This has long been the case in remote parts of Colombia and in areas near the Mexican border with the United States. On September 2nd eight police officers were killed in the south of Colombia by unknown assailants. Even Uruguay, Paraguay and Ecuador, countries that have in the past been free of much gang violence, have seen lurid murders in their prisons in the past few years.

Innocent bystanders are often terrorised. In Flor de Ucayali, in Peru, 76 indigenous families live around a clearing of forest near the edge of the Utuquinia river. For years their land has been encroached upon by illegal coca plantations. Last year the police inspected some of the coca fields and destroyed a few maceration ponds, in which harvested coca leaves are soaked with water, lime and kerosene as part of the cocaine-production process.

According to Saul Martinez, a local lead-

er, the coca planting has not stopped, and the state's intervention has merely left residents more exposed to violence. Villagers have been sent gory videos of dismembered corpses; and last year two men turned up and threatened to kill a young woman. "We have a few rifles, once used for hunting, but they have guns used in war," says Mr Martinez.

Sometimes the gangs infiltrate the state, and public servants abuse their power to protect or assist the drugs trade. A Colombian report has suggested that, during the country's decades-long struggle against the FARC, a left-wing guerrilla group, "some groups in the army, the police, air force, navy and DAS [a security agency] enriched themselves from narcotics trafficking." Earlier this year Juan Orlando Hernández, a former president of Honduras, was extradited to New York to face charges (which he denies) of conspiring to import cocaine into the United States. His critics accuse him of turning the country into a "narco-state". Tony Hernández, his brother, was given a life sentence for drug trafficking in the United States last year. "The cocaine trade essentially built the criminal infrastructure of Latin America," says Mr McDermott.

### Going straight

As cocaine spreads around the world (see chart 3 on next page), that criminal infrastructure travels with it. Guinea-Bissau has become an important route for South American cocaine bound for Europe. An attempted coup earlier this year, in which gunmen attacked the presidential palace, was blamed on drug gangs. Much European cocaine is imported through Rotterdam in the Netherlands. Dutch journalists and lawyers investigating the cocaine trade have been murdered. Earlier this year police discovered a sound-proofed torture chamber built into a shipping crate. The head of a Dutch police union has warned, hyperbolically, that the country is at risk of becoming a "narco-state".

It is this violence and corruption that advocates of decriminalisation hope to stem. That may seem like a pipe-dream. In most countries, cocaine is, alongside heroin, one of the most tightly controlled drugs. Yet there are exceptions which Mr Petro and like-minded politicians could build upon. Coca leaf has long been legal in Peru and Bolivia, so long as it is not used to make cocaine. Andean farmers have for centuries chewed its leaves as a mild stimulant (the effects are closer to caffeine than doing a line of cocaine). Coca-leaf tea is used to relieve altitude sickness.

Peru has therefore long permitted the growing of 22,000 hectares of coca by around 34,000 farmers who are registered with the government. They sell their crop to the only authorised buyer, Enaco, a

### Merry-go-round

Main cocaine trafficking routes, 2016-20



Source: UNODC

► state-owned firm. It is a similar story in Bolivia. In 2012 the country's government, then headed by Evo Morales, withdrew from the Single Convention on Narcotic Drugs, a treaty from 1961 which aims to harmonise its signatories' drug policies. Bolivia rejoined a year later with a carve-out allowing the decriminalisation of coca-leaf chewing. The idea was to give legal protection to a small domestic market supplying coca-related products, such as drinks and toothpaste.

The star product is coca liquor. In La Paz, the capital of Bolivia, sits the distillery for El Viejo Roble, which has been making liquors from coca leaf for years. Adrian, the manager, extols the supposed health benefits of coca so enthusiastically that the orange-tinted goggles on his forehead keep falling over the round glasses that give him the air of a Bolivian John Lennon. "Look at the teeth of old *campesinos* (peasants)," he says. "They're green, but they're perfect." His firm makes around 500 bottles a month. Drinking the stuff provides a mild buzz. The government buys bottles to give to foreign diplomats.

Bolivia's trade unions are in charge of how much coca is grown. Encouragingly, violence in Bolivia is low, and seems to have fallen further since this model of "community control" came into force. According to Joaquin Chacin, a Bolivian coca researcher at the Universidad Mayor de San Simón in Cochabamba, between 2004 and 2021 there were 15 deaths from coca-related conflicts. Between 1982 and 2003 there were 120.

But creating a legal coca-leaf market is not without its problems. For a start, having legal coca growers does not seem to put off the illegal ones. After a change of government in Bolivia in 2019, the area under coca cultivation rose by 15% in 2020, to just under 30,000 hectares, of which only 22,000 were legal.

It is a similar tale in Peru, where the area under cultivation rose by 30% in 2021 to just under 81,000 hectares. Once again, that is far in excess of the government-



mandated limit. And the state-sponsored system is leaky. The official registry of farms has not been significantly updated since it was first created in 1979, making it hard to keep track of what is being grown where. Enaco also tends to offer low prices. The amount of coca leaf it has managed to buy has halved in the past 20 years. At least some of the missing coca is diverted into the illegal cocaine trade, where the prices offered are much higher. Mr Soberón, for his part, wants to abolish Enaco's monopoly, and allow other buyers that might offer something closer to the market rate.

Ivan Muralanda, a liberal Colombian senator, has floated a more radical idea. In 2020 he introduced a bill to the Senate that proposes that Colombia buy up all the coca produced in the country at market prices. Mr Muralanda reckons that would cost around 2.6trn pesos (\$560m), less than the 4trn pesos spent on eradication each year. More controversially, the bill—which passed its first reading before being shelved in the run-up to the presidential election this year—would also legalise cocaine for domestic use. Few Colombians indulge, at least at the moment. Mr Muralanda estimates that around 260,000 use the drug. Under his proposal, it would become available for over-18s who pass a medical exam. Steve Rolles, of Transform, a British drug advocacy group, thinks that even such a small-scale experiment could "open up the debate."

However, there is not much about tackling illegal groups in the bill, admits Lorenzo Uribe, a researcher who helped draft it. And legalisation would probably come with serious drawbacks. In a paper in 2016 Dr Caulkins, the Carnegie Mellon professor, examined what might happen were cocaine to be legalised in Latin America. He concluded that, although it might generate a legal cocaine market worth "somewhere between hundreds of millions and low single-digit billions per year," the price would be that the country in question would become an "international pariah". Dr Caul-

kins reckons America and others would impose sanctions in retaliation.

Nor would it stop international crime. Legalising cocaine in places where consumption is low would do little to dent the profits over which the gangs fight, which mostly come from countries where consumption is high. And weak law enforcement could allow gangs to dominate newly legal markets just as they have dominated illegal ones. Several American states have legalised cannabis in the past few years. But Vanda Felbab-Brown of the Brookings Institution, an American think-tank, points out that Mexican gangs have started to move into those legalised markets too.

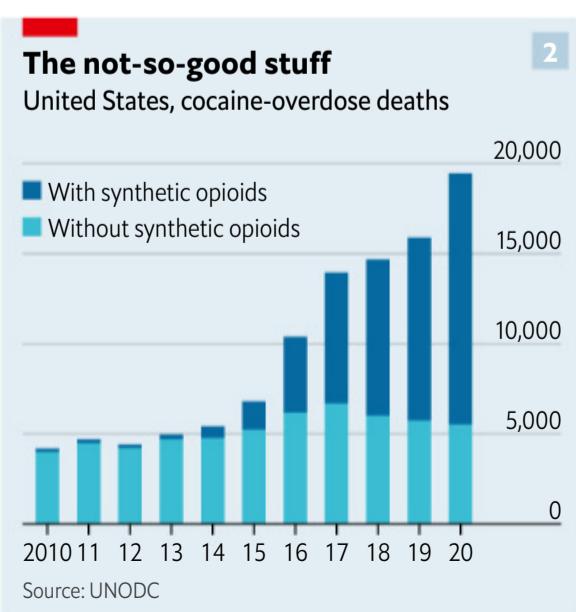
And legalisation in a Latin American country could even, perversely, end up increasing violence in the region. Another paper, also published in 2016, this time by Daniel Mejia, an economist at the University of the Andes, and his colleagues found a link between coca eradication policies in Colombia and increased violence in parts of Mexico where several drug gangs compete against one another. If cocaine were to become harder for Mexican gangs to get their hands on—because the government was buying up all of the crops, as in Senator Muralanda's bill—the extra competition could lead to even more bloodshed.

### A problem of demand

"The problem is in consumption, not production," says Mr Petro. His view is that "the competitive society...the ideology of the last few decades...is the one that generates addiction. And it is what generates widespread drug use." Mr Petro's explanation is dubious. But his diagnosis is surely correct. So long as cocaine remains illegal in the rich countries that consume it, then legalising it in the poorer places that produce it will have only a small effect.

Full-on decriminalisation, let alone legalisation, is not about to happen in the West. But attitudes have shifted notably in the past few years. In 2020 the state of Oregon decriminalised the possession of all drugs, cocaine included. Portugal has had a similar policy since 2001. On October 7th Femke Halsema, Amsterdam's mayor, told a meeting of European justice ministers that she thought that the war on drugs had failed, and that cocaine should be decriminalised. If decriminalisation happens in Latin America, it could put more momentum behind such ideas.

And even America's government is not as hostile as it once was. At a meeting with Mr Petro on October 3rd Antony Blinken, America's secretary of state, said diplomatically that President Joe Biden's administration supported the Colombian president's more "holistic approach" to tackling drugs. Coming from the country that began the drug war five decades ago, that feels like a significant concession. ■



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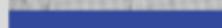
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## Peak profit?

### The decades-long rise in corporate earnings no longer looks inexorable

FEDEX NEARLY failed to get its wheels off the ground. Months after it first began delivering packages overnight in 1973, the first oil shock buffeted the global economy and the young logistics firm looked destined to crumble. Now, as the Organisation of the Petroleum Exporting Countries once again sent shock waves through the already wobbly world economy with an announcement on October 5th of a sharp cut in output, fuel prices are just one of the firm's worries. Weak package volumes and persistently high costs caused FedEx to withdraw next year's profit guidance in September, knocking more than a fifth, or \$1bn, off its market value.

FedEx has long been regarded as a bellwether for the broader economy. In a sign that this reputation is well-earned, corporate titans everywhere are now warning of profit hits as Wall Street gears up for America's earnings season, which began this week. On October 6th Shell, a British oil supermajor, said it expected margins in its refining and chemicals businesses to

plummet. The next day Samsung, a South Korean electronics giant, cautioned that its operating profits will decline for the first time in three years.

Many icons of America Inc are making similar noises. Ford has blamed its expected profit squeeze on, among other things, shortages of parts for its cars. Nike is struggling to clear its bursting inventory of unsold sportswear. Even America's tech behemoths, which are freezing hiring as advertisers tighten digital-marketing budgets and inflation-weary consumers put off

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buying a new smartphone, are no longer looking invulnerable. The odd set of upbeat results, such as PepsiCo's on October 12th, only highlight how unfuzzy the broader picture looks.

All told, forecasts for third-quarter profits for the S&P 500 index of big American firms have so far been revised down by 6.8% since June. That is more than twice as big as the average revision in the past decade. Expectations for next year are bound to fall. Some of the pain is down to the strong greenback, which makes foreign revenues, accounting for almost a third of the S&P 500's total, worth less in dollars. A bigger reason is the economic slowdown. If this turns into a recession, as seems likely, bottom lines will almost certainly suffer more, which they tend to whenever GDP contracts. Since the second world war earnings per share fell by an average of 13% around recessions, calculates Goldman Sachs, a bank.

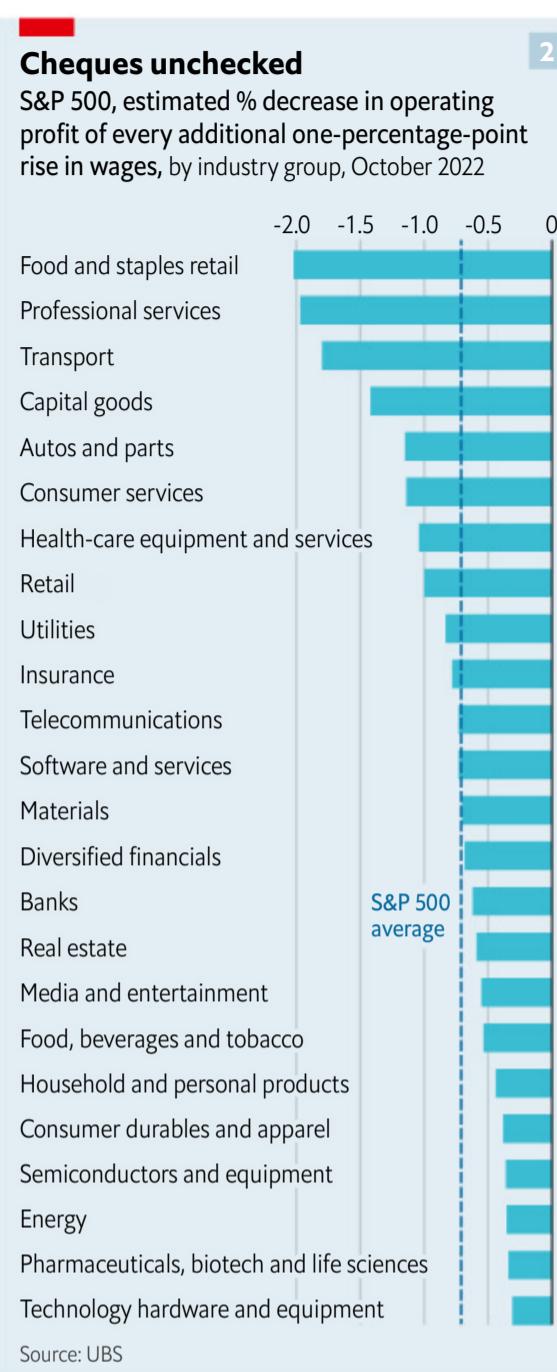
In the past few decades such cyclical dips have mostly been short-lived episodes in a long bull-run for corporate profits. Powerful structural forces have been propelling earnings to one record after another, relative to GDP (see chart 1). In the last quarter they were at an all-time high. Some of these long-lived profit motors are winding down. Globalisation, which allowed companies to cut costs and become more efficient, is stalling amid geopolitical tensions. Global trade will grow by only 1%

next year, the World Trade Organisation forecast on October 5th. Two days later America tightened its restrictions on the export of technology to China even further (see subsequent article). At the same time, relentless consolidation, which has made many industries more concentrated and lucrative, may have run its course: trust-busters are no longer as relaxed as they had been about oligopolies, which anyway have accrued so much market power that it is difficult to see it rising further.

More worrying for CEOs, other important engines of corporate profits—rock-bottom interest rates, low taxes and stagnant wages—may be going into reverse. After years of receiving a small share of companies' takings, lenders, governments and labour are demanding more.

Historically low rates of interest and tax have contributed one-third of the S&P 500's profit growth (excluding financial firms) in the past two decades, according to a study by Michael Smolyansky of the Federal Reserve. Both are now rising. Higher interest rates will make it costlier for companies to service their debts, which will eat into the bottom line. To begin with, this will affect those companies—typically riskier ones—that borrowed at a floating rate. Although floating-rate debt accounts for just 11% of S&P 500 companies' total borrowing, a slug of the remaining 89% will also need to be refinanced sooner or later—almost certainly at much higher cost. That includes \$1tn-plus of investment-grade bonds issued in 2020.

Just as financiers become more demanding, so too is the taxman. As appetite for deficit-funded tax cuts wanes, another Tax Cuts and Jobs Act, which was signed into law by Donald Trump in 2017 and slashed the statutory corporate rate from 35% to 21%, looks unlikely. The Inflation Reduction Act (IRA), passed recently under Mr Trump's Democratic successor, Joe Biden, includes a 15% minimum corporate-tax rate on profits of businesses with more than \$1bn in pre-tax income. In addition, earlier this year interest-expense deduc-



tions became less lenient. Goldman Sachs reckons that the new rules will reduce overall S&P 500 earnings by a modest 1% in 2023, with technology and health-care sectors hit hardest. Still, strained public finances make it likely that taxes will rise in the medium term. Adding insult to injury, the IRA introduces a 1% tax on share buy-backs, indicating a political appetite to squeeze companies with nothing better to do with their profits than fork them over to shareholders.

Employees, too, are tired of being squeezed. Since the 1970s the share of GDP going to workers has declined across the rich world, even as that going to companies in the form of profits has risen. This so-called labour share spiked during the pandemic, when many companies continued to pay workers even as GDP plummeted. It came down but earlier this year remained the highest it had been since the early 2000s. Labour accounts for 40% of costs at big American firms. The actual contribution of wages to costs is far higher: after all, suppliers have to pay their own workers, too, and pass some of those costs up the value chain. Official figures for September, released on October 7th, suggest

that the red-hot job market is not cooling fast enough and wages are still going up. Since pay increases are sticky, they can remain a significant drag on margins. According to UBS, a bank, labour-intensive sectors such as retail could see operating profits decline by 2% for every additional one-percentage point rise in wages (see chart 2).

American chief executives are less squeamish than their European counterparts about countering the combination of rising labour costs and weakening demand with lay-offs. Some are already trimming payrolls. On October 6th it was reported that General Electric was planning to sack 20% of staff at its American wind-turbine business. Intel, a chipmaker, is also rumoured to be cutting thousands of jobs.

Yet businesses may find it harder than in the past to wield the axe. The balance of power between labour and capital is shifting. A new rule proposed by the Department of Labour on October 11th would make it harder for firms to classify their workers as contractors rather than employees, raising costs. Union membership, which spent the second half of the 20th century in decline, is enjoying a small but significant revival. A Gallup poll puts public support for organised labour at its highest level since 1965.

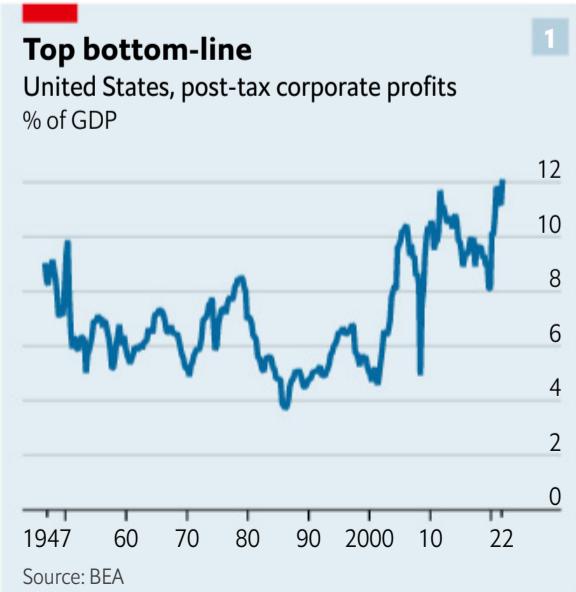
Many businesses are already feeling the heat. A walkout of 90,000 railroad workers was narrowly averted in September after unions threatened to bring railways to a standstill, which could have done \$2bn-worth of damage per day to the economy. Younger workers are discovering a taste for organising—even wage rises this summer have not stopped Starbucks baristas from joining union efforts in growing numbers. CEOs may not be able to keep them, the lenders and the government out of the profit pool for much longer. ■

## The American consumer

### Elastic brands

American consumers are becoming more price-sensitive again

ASKED ABOUT the state of the economy, Americans are surprisingly gloomy. More than half say they are experiencing financial hardship; more than a third say they are having difficulty paying for regular household expenses. Yet, even as surveys suggest that Americans are tightening their belts amid persistently high inflation, data show that they continue to spend at a healthy clip. Last month the Bureau of Economic Analysis reported that consumer spending is growing by 1.8% ▶





► year on year after adjusting for inflation—not far from its historic average. A report by the Bank of America Institute, a think-tank, finds that consumer payments are growing at double digits, a sign that the American shopper “is still spending”.

This resilience can be explained in part by mattress-loads of savings. Americans accumulated more than \$2trn in excess savings during the pandemic, when the federal government doled out unemployment benefits and stimulus cheques even as households cut back on travel, entertainment and eating out. Although some of this has been spent, households are still sitting on a \$1.4trn cushion, reckons Ian Shepherdson of Pantheon Macroeconomics, a consultancy. The labour market is healthy, too. Unemployment has fallen to 3.5%, the lowest it has been in 50 years. In August there were 10.1m job openings, or 1.7 vacancies for every jobless person.

But another less-appreciated reason why spending has been so steady in the face of soaring inflation is a shift in consumers' sensitivity to prices, or “price elasticity of demand”. This concept, seldom mentioned outside economics textbooks, has been a hot topic of debate among investors and company executives in the past year (see chart 1). The term has found its way to the earnings calls of consumer-goods giants such as PepsiCo, whose bosses talked of favourable “demand-elasticity trends” while presenting the food-and-drinks giant's unexpectedly bubbly quarterly results on October 12th.

The available data appear to back them up. Figures compiled by IRI, a market-research firm, suggest that consumers are indeed significantly less price sensitive now than they were before the pandemic. Using scanner data on prices and sales recorded with each purchase of thousands of items across more than 125,000 supermarkets, chemists, dollar stores and big-box retailers, IRI estimates that price elasticities have fallen for 22 out of 25 product categories since February 2020, and remained flat for the other three (see chart 2). All told, IRI

reckons that consumers were roughly 20% less price sensitive in the 52-week period ending September 4th than they had been in the year before the pandemic.

Why the shift? Experts offer three possible reasons. First, as panic-buying led to empty supermarket shelves in the early months of the pandemic, consumers adjusted their shopping routines and tried brands they weren't used to, says Brett Gordon, a marketing professor at Northwestern University. With more time at home, people also became more comfortable splurging on pricier food and household items. Last, consumers cut the time they spent shopping—by roughly 9% between 2019 and 2021 according to government statistics. The way they use that has changed, too. “A lot of people maybe spent more time shopping for things to outfit their homes, but less time worrying about everyday consumer products,” says Alexander MacKay of Harvard Business School.

There are some signs that consumers are starting to pull back. Walmart, a retailing behemoth, says that its shoppers are switching from pricey deli meats to hot dogs, and from gallons (3.8 litres) of milk to half-gallons. Best Buy, an electronics retailer, says its customers are increasingly opting for private-label TVs over name-brand sets. Such shifts in consumer behaviour are most pronounced among lower-income households. TJX, a discount department store, says that, for the first time in years, outlets in higher-income areas are growing faster than those in lower-income ones. “Middle-income and high-in-

come consumers are continuing to spend,” explains Krishnakumar Davey of IRI, but “low-income stores and low-income consumers are pulling back a little bit.”

This will be on the minds of investors as America's listed companies report their quarterly earnings in the coming weeks. Those hoping for clear answers may be disappointed. Although packaged-goods firms agree that shoppers will start to balk at higher prices, there is far less consensus about when exactly this will happen. As James Quincey, boss of Coca-Cola, told investors earlier this year, “I expect elasticity to increase at some point in the future. Will that be next quarter? Or will that be next year? I can't give you the answer to that.” ■

## Deutsche Bahn

# Derailed

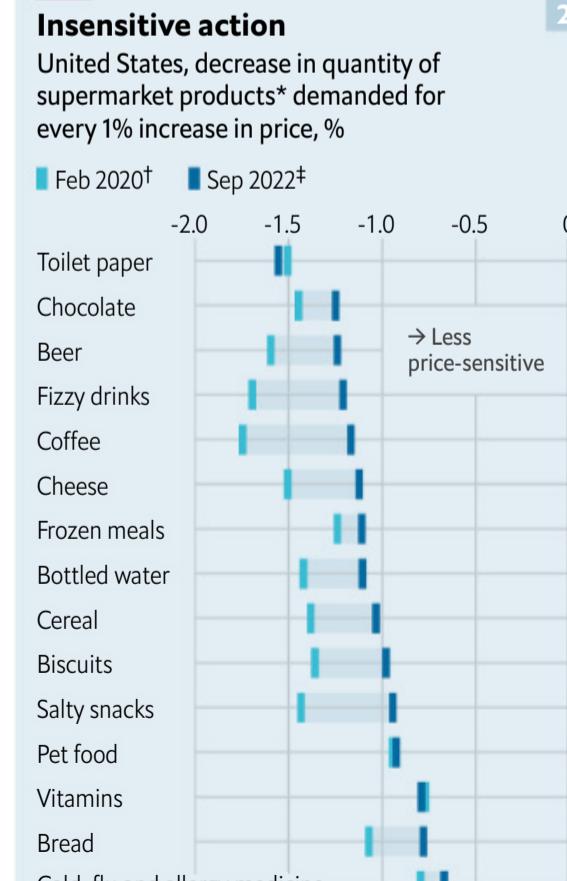
BERLIN

**Sabotage is the latest problem to hit Europe's biggest railway**

WEEKS AFTER explosions caused leaks from Nord Stream 1 and Nord Stream 2, two undersea gas pipelines linking Russia and Germany, another act of suspected sabotage rocked Europe's biggest economy. On October 8th Deutsche Bahn (DB), the state-owned rail giant, said it needed to suspend all services in northern Germany for around three hours. Damage to cables indispensable for rail traffic had led to a breakdown of its wireless communication system. The incident left thousands of passengers stranded on a Saturday morning.

On October 10th Germany's federal prosecutor announced an investigation into the pipeline leaks, adding to Danish and Swedish probes. The German police are looking into what happened to DB. Many think Russia was behind both acts of subterfuge. The Kremlin certainly has a motive: it hopes to scare Germans into reducing their support for Ukraine, which has scored victories against Russian invaders in recent weeks. It also has the means: the DB attack displayed a level of sophistication that other possible culprits, like left-wing anarchists, are incapable of.

Whoever was behind it, sabotage is the last thing DB needs. Once considered a paragon of punctuality and efficiency, in recent times it has mainly made headlines because of delays, missed connections and crowded compartments. In June and July fewer than 60% of its long-distance trains were on time, far shy of the firm's stated goal of at least 80%. Decades of neglect and underinvestment have pushed Germany's rail network to the limit of its capacity, explains Christian Böttger of the University



Source: IRI

► of Applied Sciences in Berlin. It has failed to adapt to long-term changes, such as people moving to cities and increased freight traffic from ports. In February DB at last pledged to invest nearly €14bn (\$13.6bn) in train stations, bridges and rails, only to receive another blow in June, when Michael Odenwald, chairman of its supervisory board, resigned after Volker Wissing, the newish transport minister, said he would meddle in management.

The sprawling group employs more than 330,000 and has more than 500 subsidiaries in 130 countries. Half its sales

stem from businesses unrelated to German rail. It owns Arriva, a British transport firm, Schenker, a logistics group, and even a cable-car firm. Years of poor management have created huge overheads and sapped productivity. Mr Böttger calculates that DB Cargo, the loss-making freight arm, is transporting around a third less freight than it did a year ago, with the same number of employees. Red tape, cumbersome new rules on things like health and safety, and powerful unions are exacerbating DB's problems. Last month the German train drivers' union organised three rounds of

strikes that caused travel chaos for a week.

Deutsche Bahn says it has 4,300 security personnel who work with 5,500 police officers to keep its assets safe. The latest attack shows that even those numbers cannot guarantee comprehensive surveillance of 34,000km of railway tracks. Roderich Kiesewetter, a foreign-policy expert in the opposition Christian Democratic Union, proposes the creation of a civilian reserve force to defend Germany's critical infrastructure, including DB's network. That may help fend off DB's external foes. It won't help deal with those from within. ■

## Bartleby Working under the weather

*It is becoming harder to take off a sick day*

**I**F YOU HAVE a high temperature or are recovering from heart surgery, it is difficult to use machine tools. And if you are having a nervous breakdown, machine tools are best avoided. Sick days are the remedy. They are meant to prevent people from hurting themselves, their co-workers, customers or passers-by on the job. Working from home has flipped this logic on its head. If you can work from the kitchen table, today's hybrid workers increasingly conclude, then why not from bed—so long as the brain is on and the Zoom camera off?

The work-from-home revolution has raised the bar for what counts as being sick. At the height of the pandemic people worked from home even with nasty symptoms such as fever, shortness of breath or nausea. Many still do. Nicholas Bloom of Stanford University has been tracking work-from-home habits since before the corona-crisis popularised them. In a recent working paper he presents the results of a randomised controlled trial at a large Chinese multinational company, where sick days fell by 12% for employees working from home two days a week relative to those coming in full time.

Your columnist, a guest Bartleby, can sympathise. In the past, while convalescing, she had no qualms about wrapping herself in a blanket with a hot toddy, toast and some tissues. When she got covid-19 early this summer, by contrast, she kept going with her phone and laptop sunk in the duvet. Her managers strongly urged that her work should be passed on to a colleague. For her, this was unthinkable, at least until she almost passed out.

To be in bed not doing anything connotes not only physical discomfort but also cognitive impairment. Salaried

workers, who are often evaluated on the basis of their input rather than output, find it hard to say they are off the game for a few days now that they don't need to worry about spreading germs in the office. For high-achievers, putting in the hours is not a chore but a way of life. Unplanned breaks are antithetical to the pervasive anxiety to perform. As recession looms and puts future job security into question, showing yourself to be useful becomes even more important. Hybrid-work etiquette is fluid and many companies have yet to update their sick-leave rules for the new era.

Though all this is understandable, it is also troubling. Tapping away at a laptop and smartphone from the discomfort of a sick person's bedroom is not as dangerous as driving a forklift. It nevertheless carries risks—both for the ill-disposed individual and their employer. And it isn't just covid, whose common symptoms include brain fog. Any bug brings fatigue.

Being even mildly sick can impair brain function as much as high altitude, whose effect can feel like a bad hangover.



It is difficult to exercise proper judgment if one cannot focus on the task at hand. It is why people with lower oxygen concentration sometimes remove protective clothes atop Mount Everest; some freeze to death. Firing off emails while feeling dizzy and depleted will put the body under further stress and also risk being incoherent. Soldiering on may make the employee both sicker and less productive for longer. Digital presenteeism, for that is what such persisting amounts to, is in no one's interest.

Resisting it is therefore important. You don't need to have had a blood transfusion or liver transplant to feel that you have earned a bit of time off. Sleeping soundly can restore body and spirit. Staring at the ceiling gives you time to take stock of your harried life. Do not worry about being judged to be shirking. True laziness cannot be disguised—if someone is malingering, chances are that their bosses already know.

In the world of flexible working, managers can lead by example, taking the occasional day off when suffering from a cold. Why not use it as an opportunity to delegate tasks? This tends to build trust in a team and helps appraise subordinates' strengths and weaknesses.

The dust will eventually settle on work habits in the hybrid era. When it comes to illness, they will hopefully settle somewhere close to where they were in pre-covid days. Being sick is part of the human condition. It is not going away. Nor should sick days. Bartleby remembers lying on the sofa recovering from a stomach bug in New York 17 years ago, undisturbed by colleagues and untroubled by thoughts of work. The next time she is ailing, she will not be on Slack. Instead, she will listen to her managers and sign off.



**Tech geopolitics**

# No more Mr Nice Guy

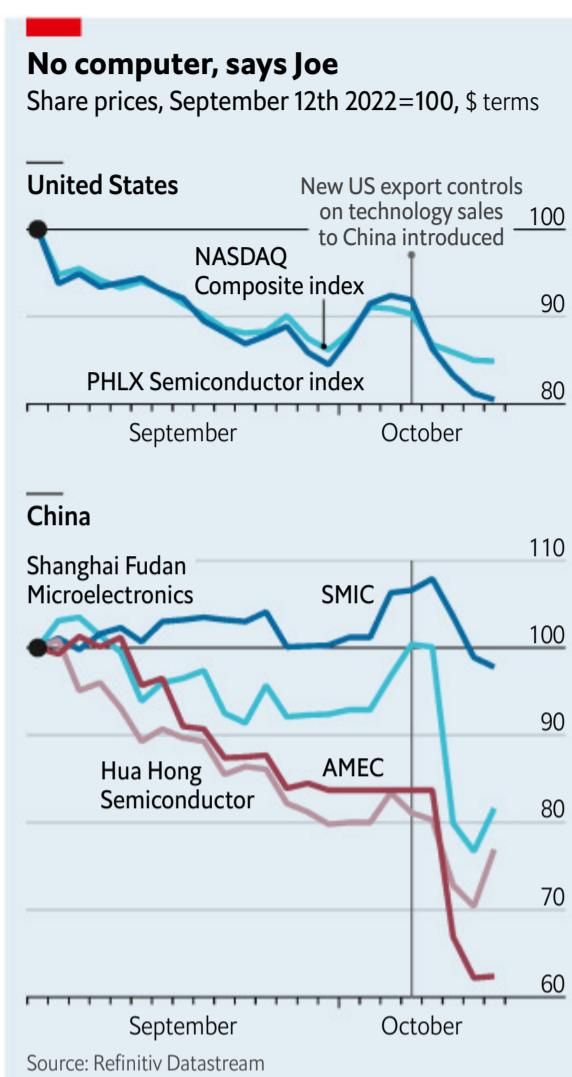
**America curbs Chinese access to advanced computing. For real this time**

**V**ISIONS OF A technologically ascendent China keep American strategists up at night. They see the contours of a surveillance state implementing the will of President Xi Jinping by algorithmic edict at home and projecting computing power abroad. To erase those contours for good, on October 7th President Joe Biden's administration announced the most sweeping set of export controls in decades. The new rules cut off people and firms in China from many advanced technologies of American origin, and from products made using these. The list includes chips used for artificial intelligence (AI), software to design advanced chips and the machine tools to manufacture them. Selling such things to China is now barred without explicit permission from America's government. Rulebreakers risk being cut off from American tech themselves.

The share prices of affected Chinese firms have sunk (see chart). China's biggest producer of memory chips, the state-owned YMTC, has 60 days to allow American officials to inspect its operations for compliance. American companies that sell advanced semiconductor technology to China have also been hit, even as they reel from a deep cyclical slump in demand for their wares. This week it emerged that Intel, America's chipmaking champion with Chinese sales of \$21bn last year, is about to axe thousands of jobs.

America has previously used similar rules to kneecap Huawei, China's telecoms-gear giant. Jake Sullivan, Mr Biden's national security adviser, boasted recently that export controls have forced Russia to "use chips from dishwashers in its military equipment", which will "over time degrade [its] battlefield capabilities". In the case of China, America's goal is likewise no longer just to stay ahead of its rival in the tech race but to "put the high-end Chinese chip-design industry out of business", says Greg Allen, a former defence-department official who has studied the new rules.

Whether America gets its way depends on several factors. There are "real questions" about the rules' legality, says Peter Lichtenbaum of Covington & Burling, a law firm in Washington. He expects someone to test the restrictions in court. Donald Trump's administration was successfully sued over an executive order banning TikTok. Even legal export controls are leaky. Plugging the leaks requires more resources



for the enforcers at the Commerce Department. "Their to-do list has exploded," says Mr Allen. "Their budget has not."

And China imports \$400bn-worth of chips a year, more than any other country. Though private companies and allied countries might be happy to go along with the Americans now, the amount of money being left on the table by not selling to Chinese customers may start to rattle. ■

**Carmaking**

## Plugging away

**Chinese marques are at last making inroads into Western markets**

**T**HE FAILURE of the first serious attempt by China's carmakers to conquer European markets, around 15 years ago, was self-inflicted. Their cars were terrible. The shabby quality of Brilliance's "BS" range (no joke) was matched with looks that scarcely merited the word "design". Since then the Chinese car industry has become the world's biggest and its products have improved immeasurably. It churns out more electric vehicles (EVs) than any other country, and many are anything but BS. It is also an EV-battery superpower.

EV-friendly Europe is again in China's sights. Norway, where generous tax breaks

mean that four out of five cars sold are fully electric, has served as a bridgehead. Now Chinese firms are launching a wider assault on the continent. In Berlin on October 7th Nio, a Tesla wannabe, showed off three new models. At the Paris motor show, which opens on October 17th, BYD and Great Wall Motors (GWM) will give more details of their plans for Europe.

Rich subsidies have created a vast home market for Chinese EVs, encouraging established firms and startups alike. BYD's plug-in cars (some are hybrids rather than full EVs) now outsell Teslas worldwide. Subsidies contingent on local production have deterred imports, obliging firms such as Tesla to set up in China, strengthening domestic supply chains. A ban on foreign battery-makers has made China their predominant manufacturer. And cheap money supplied by central and local government has given Chinese firms access to buckets of capital.

Scale at home has helped Chinese firms keep costs low. Their cheaper EVs are now filling the European market ill-served by Western carmakers, which have focused on higher-end rides. Chinese brands already accounted for nearly one in 20 EVs sold in western Europe in the first eight months of 2022, according to Schmidt Automotive, a consultancy. Around half of those sales, some 22,000 cars in 14 countries, were budget EVs from MG, a division of SAIC, a Chinese state-owned giant. GWM will soon aim at the same segment with its "Funky Cat" EV, from its Ora marque.

The Chinese are trying to establish trusted brands, not always from scratch. Geely has owned Sweden's Volvo since 2010 and an affiliated investment vehicle owns 10% of Mercedes-Benz. Last month Geely bought 8% of Aston Martin, a struggling British sports-car firm. Its experience of making cars to European standards may be why its Polestar EVs, part of Volvo until 2017, sell nearly as well in Europe as MGs do. The U5 from Aiways, a five-year-old startup, was a finalist this year in the prestigious European Car of the Year contest. BYD's recent deal with Sixt, a German car-rental firm, to supply it with 100,000 EVs by 2028 may help to familiarise motorists with its cars, including a small, cheap SUV.

Competition will be tougher in the more lucrative premium segment, observes Matthias Schmidt of Schmidt Automotive. BYD's larger models cost about as much as similar Western cars. Fancier Chinese brands such as Nio, XPeng and GWM's Wey may have missed their chance as Germany's premium carmakers belatedly roll out more upmarket EVs. And if they do too well, one industry boss notes, their European rivals can always plead for more protection. As anti-Chinese sentiment grows in the West, politicians are in the mood to grant it. ■

# Schumpeter | Everything app. Or nothingburger

*Will an Elon Musk-owned Twitter end up as one of history's "deals from hell"?*



UNLIKE TOLSTOY's description of families, mergers and acquisitions that end happily do so for a variety of reasons. It's the unhappy ones that are alike. This is particularly true of M&A deals done at the top of the business cycle, when hubris runs amok, lofty valuations make acquirers sloppy with their money and the most radical ideas are made to sound plausible. In this category sits Elon Musk's shotgun wedding to Twitter, once again in the offing after a judge gave both sides until October 28th to consummate it. Mr Musk's latest attempt to justify it is to describe it as a step towards a Chinese-style "everything app". It is just as likely to go down in history as a top-of-the-market "deal from hell".

The annals of business have colourful examples of such Stygian mishaps. Sony's ill-fated acquisition of Columbia Pictures in 1989 occurred when Japan's bosses thought they were invincible, the bubble economy made any price appear worth paying, and dreams of the convergence of hardware (consumer gadgets) and software (entertainment) were in the air. AOL's merger with Time Warner, an even bigger mess, was first announced in 2000 at the apogee of dotcom frothiness. The bosses of both companies, one an internet upstart, the other a fading media giant, fantasised about creating a colossus of the internet age. They torched nearly \$200bn of value in a matter of months. In 2007 Royal Bank of Scotland (RBS), an acquisitive financial institution, led a consortium to buy ABN AMRO, a sprawling Dutch banking group. It was the biggest banking takeover in history—yet done with little due diligence or oversight of gung-ho executives, even as the world was on the brink of the great recession. It occurred shortly before RBS's spectacular demise and a bail-out from the British taxpayer.

Mr Musk's approach to Twitter is different from these in one important respect. He is acting in a personal capacity as the world's richest man. He has no known plans to integrate the social-media platform with Tesla and SpaceX, his electric-vehicle and rocket firms. Mercifully.

Yet the stock phrases that sum up such debacles—wrong target, wrong time, wrong price tag—already seem applicable to his pursuit of Twitter, and may explain why he has spent so long trying to wriggle out of the deal. If the two sides do not reach an agreement later this month, the judge says she will haul them back to the Del-

aware Court of Chancery and decide their fate for them. Whatever the outcome, Robert Bruner, a professor of business at the University of Virginia who in 2005 wrote a book called "Deals from Hell" to explain M&A fiascos, says Mr Musk's Twitter saga already bears many subtler hallmarks of the genre.

In Mr Bruner's diagnosis, the first hints of hell come from hubris. The self-styled "Technoking" has every reason for self-belief. Tesla is the world's most valuable carmaker. SpaceX is literally rocket science in action. Yet for executives like him it's a fine line from that to overconfidence. Sony's Morita Akio crossed it. So did AOL's Steve Case and RBS's Fred Goodwin. In Mr Musk's case, excessive faith in his ability to turn Twitter around is exacerbated by a saviour complex: his main goal, he said when he announced the deal in April, was furthering the cause of free speech. That appears to have blinded him to the need for due diligence. Moreover, like other exalted leaders, he is surrounded by yes-men. Billionaires compete to throw money at him. No chairman of any board appears to put a restraining hand on his shoulder. For now his reputation for walking on water continues to sustain him. But if he has overplayed his hand, history will not let him off lightly. Just ask Messrs Case and Goodwin (Morita passed away in 1999).

The corollary of hubris is sloppy financing, another attribute of top-of-the-market megaflops. This is particularly true at the tail end of bull markets, such as the one that recently vanished in a puff of smoke. Not only was Mr Musk so unconcerned about overpayment that he based his \$54.20-a-share offer for Twitter on an overused cannabis joke. Big banks jostled to back one of the world's largest-ever buy-outs, even though by then cracks had started to appear in the market for leveraged loans.

As with many M&A deals, deteriorating markets can turn a flawed acquisition into a disaster. That possibility must haunt Mr Musk. The digital-advertising business on which Twitter depends has crumbled. Tesla's own shares, the source of most of his wealth, have lost a third of their value since he made the bid (don't cry for him, he is still worth \$220bn). The deal financing includes \$13bn of high-risk debt and spreads on this kind of instrument have soared. Whether Mr Musk reaches a deal with Twitter or the judge forces the sale to go ahead, the repercussions are likely to be troubling. Either banks are stuck with hard-to-sell debt and suffer hefty losses or, in the unlikely event they abandon the deal, a superhero of 21st-century capitalism faces a \$44bn day of reckoning.

## The X-factor

Finally there is strategy. In Mr Bruner's analysis, the worst M&A deals are done when the target is in an industry far beyond the acquirer's "domain knowledge". That is surely true of Mr Musk and Twitter. It may explain why he has started to offer hints of a grander strategic vision. He has raised the prospect of reducing Twitter's reliance on advertising, and instead incorporating it into an "everything app", known as X, with online payments that hark back to the days when he helped found PayPal. It is a tantalising idea. The model is WeChat, Tencent's superapp in China. Others, like Meta, have tried it with mixed results.

If it works, it would provide yet further testimony to Mr Musk's ineffable genius. But it also has a hellish side. It could pit the world's most powerful businessman against tech regulators. It could stir up trouble geopolitically (imagine a reinstated Donald Trump weighing in, as Mr Musk has done, on Russia and Ukraine). And as a result it could anger China, thwarting Tesla's prospects there. Another deal for the history books, no doubt. ■



#### Middle-income countries

## Defying gravity

WASHINGTON, DC

#### The global view is grim, investors are tense—and emerging markets look resilient

THE SCRIPT is familiar. A Federal Reserve bent on taming inflation mercilessly raises rates. The dollar soars, global financial conditions tighten and the world economy falls into a broad slowdown. But this time, there is a twist. Where writers would normally pencil in an emerging-markets crisis, there is instead an eerie calm.

For decades, fast-growing middle-income countries have been a source of financial trouble. In the early 1980s, the Fed's crusade against double-digit inflation sparked a Latin American debt crisis; in the 2010s, the normalisation of policy after the global financial crisis rattled the "fragile five" (Brazil, India, Indonesia, South Africa and Turkey). Much the same might have been expected during present tightening, which is the most intense since the early 1980s. In forecasts published on October 11th, the IMF again marked down its projections for global growth, and warned that economies accounting for a third of global GDP are heading for downturns. The world's very poorest countries are on the ropes. More than a billion people live in economies now facing severe distress.

And yet most big, middle-income countries are weathering the storm. The IMF reckons that emerging economies will substantially outgrow rich ones this year and next, despite a slowdown in China and a contraction in Russia. While the euro, pound and yen are tumbling against the dollar, the Indian rupee and Indonesian rupiah have managed a more graceful decline, and the currencies of Brazil and Mexico have risen (see chart 1 on next page). Emergency central-bank intervention is unfolding in London rather than Brasília.

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The resilience of the emerging world is in part a story of maturation. Since the crises of the 1980s and 1990s, local financial markets have grown deeper and banks better managed. Policymaking has improved. Officials have learned the hazards of careless budgeting and large current-account deficits. Central banks are more independent, and have adopted the inflation-targeting approaches used in the rich world.

This sophistication and care has demonstrated its value over the past two years. Many middle-income central banks began raising rates well in advance of rich countries. This prevented rising inflation from slipping out of control, and also stopped destabilising currency declines. Take Brazil, which experienced hyperinflation as recently as the early 1990s, but has worked in recent decades to establish the credibility and independence of its central bank. When inflation leapt and the real wobbled early last year, the central bank responded with aggressive rate rises, amounting to a cumulative increase of almost 12 percentage points. Inflation has fallen from a peak of 12% in April to below 8%; the currency has been among the world's best performing. Meanwhile, in the rich world, central banks that have fallen behind the Fed's tightening schedule, like the European Central Bank and the Bank of Japan, have experienced vertiginous currency depreciations, and have yet to see inflation peak.

Emerging-market foreign-exchange regimes have also improved. These economies once relied on exchange-rate pegs to ↗

► contain inflation and secure cheaper credit. But the years of crisis encouraged a move in the direction of floating-rate regimes, in which markets get more of a say over a currency's value. Now most governments only occasionally intervene to lean against undesirably fast or big moves.

Many have paired this with deeper foreign-exchange reserves. During good times they purchased assets denominated in reserve currencies, like dollars. This slows the pace of their currencies' appreciation and builds a pile of safe assets. In 1998 global foreign-exchange reserves amounted to 5% of world GDP. By 2020, that figure had risen to 15%, representing a staggering \$13trn. Although Chinese reserves of more than \$3trn account for a large chunk, other emerging-market governments have built up formidable piles. India's totals over \$500bn, for instance, and Brazil's is worth more than \$300bn.

These reserves can be deployed to slow a currency's depreciation when investor risk appetite drops. This year India has sold \$40bn-worth to keep the rupee's decline modest and orderly. Yet reserves are most valuable in the thick of a crisis, when they can be used to pay for critical imports and meet hard-currency debt repayments. Crucially, they help to reassure foreign investors that obligations will be honoured.

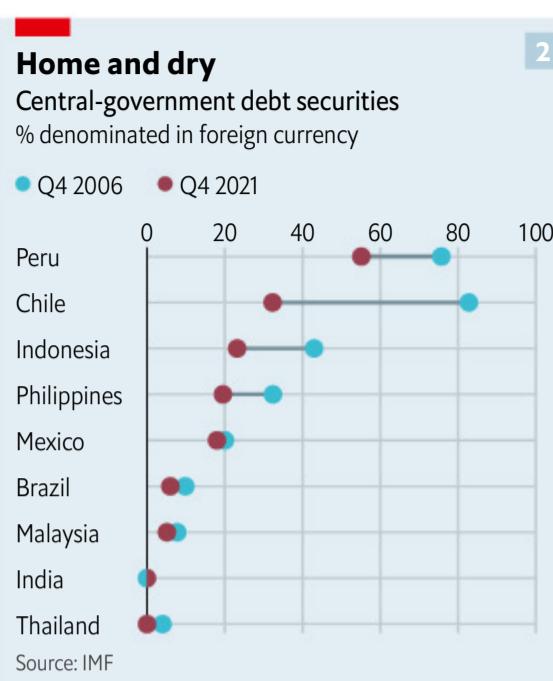
And emerging economies have addressed their greatest weakness: an inability to borrow in their own currency. Governments once had no choice but to accept loans denominated in other currencies. This vulnerability—referred to as “original sin”—could turn a drop in investor sentiment into a financial catastrophe. Because a fall in the local currency increased the burden of foreign-currency debt, economic weakness or nervy markets could set in motion a cycle of capital flight, increased pressure to devalue and lost confidence in the creditworthiness of the government, which often ended in chaotic default.

But after the global financial crisis,

## Escaping a pounding

Currencies against the \$

Dec 31st 2021-Oct 12th 2022, % change



bond yields in the rich world tumbled, pushing investors to look for returns elsewhere. This hunt, combined with improved economic management in emerging markets, allowed officials to shift borrowing to local-currency bonds (see chart 2). In the mid-2000s, some 46% of Indonesian public debt and 83% of Chilean debt was owed in a foreign currency. By 2021

those figures had fallen to 23% and 32%.

The safety purchased by these innovations is impressive. But in a forbidding economic climate, emerging markets cannot afford a victory lap. Although governments have borrowed more in their own currencies, many companies have not—and if global woes force large firms to seek bail-outs their foreign obligations could become their governments' foreign obligations. If worsening financial conditions prompt a flight to safety, a Fed focused squarely on high American inflation may not ride to the world's rescue with a torrent of emergency lending, as in March 2020.

Stability can also lead to greater risk-taking. The healthier financial position of emerging markets has allowed some to take on debt that would once have seemed too high even for rich countries. India's debt has risen to 84% of GDP; Brazil's stands at 88%. In the early 2000s, American and European eminences convinced themselves—to their subsequent sorrow—that financial crises were something that only afflicted poorer countries. Looking back at recent history, the right conclusion to draw is not that emerging markets are safe. It is that nowhere is. ■

## Restraining Xi Jinping

# The reform club

HONG KONG

After China's party congress, is there any hope of better policymaking?

WHEN CHINA'S communist party reveals the 25 members of its new Politburo later this month, investors will be watching closely. The line-up should offer clues about who will take charge of the country's economic policymaking. But how useful is this exercise? Suppose investors did discover the names on China's next economic team sheet. What could they reliably infer about China's policies and performance from its personnel?

Looking back can illustrate the pitfalls of looking forward. Over the past ten years Xi Jinping, China's president, has given big economic roles to a number of respected reformers. The list includes Liu He, the president's closest economic adviser; Lou Jiwei, his first finance minister; and Zhou Xiaochuan, who stayed on as governor of the central bank until 2018, exceeding the normal retirement age. “Each of the three has reformist views, extensive technical and administrative experience, and a proven willingness to invest effort and political capital in the reform drive,” as Barry Naughton of the University of California, San Diego pointed out in 2013.

These three were not without company. For the past five years the Politburo's powerful seven-member Standing Committee has included Wang Yang, known for his market-friendly policies in Guangdong, China's most liberal province. In 2018 Guo Shuqing, once memorably described as “a reform tornado”, was put in charge of a new financial super-regulator. And in the same year, Mr Zhou was replaced by a trusted deputy, Yi Gang, whom Mr Naughton once called “extremely well qualified, highly intelligent, and with a strong commitment to market-opening reforms”.

If a crystal ball had revealed all of these personnel decisions to investors ten years ago, they would have applauded. It would have been easy to conclude that Mr Xi was truly committed to economic reform and was lining up a formidable-looking team to carry it out.

But that obvious conclusion would have been wrong. China's economic policies over the past ten years have disappointed legions of once-hopeful observers. These include Mr Naughton. In a recent article, he pointed out that Mr Xi's reform ef-



► forts in the early years of his time in charge were inconsistent and often unsuccessful. And since the summer of 2021, China's leader has adopted "clumsy and inappropriate instruments" to pursue "vague and sometimes contradictory" goals. These include a ham-fisted crackdown on China's successful technology firms and the promotion of "common prosperity" by brow-beating billionaires.

What explains this paradox of reformers without reform? One answer is that China's conspicuous failures, not least its ponzi-like property market and damaging "zero-covid" approach, have obscured other areas of progress. The economy is greener than it was. Interest rates and the exchange rate are more flexible. It has become easier for entrepreneurs to start a business and for foreign investors to move their money into China (even as it has become harder for residents to get their money out). China has replaced a clumsy turnover tax with a value-added tax. It has allowed local governments to issue more bonds, diminishing their need to raise money off the books. And the country has successfully cut poverty and broadened its safety net.

#### A hard-luck story

The reformers have also been unfortunate. In Mr Xi's second term, they have had to contend with a trade war against America and the forever war against the covid-19 pandemic. Mr Liu, who led China's protracted trade negotiations with the Trump administration, was stretched thin. America's willingness to deny China access to vital technological imports also changed Mr Xi's economic priorities. He and his team could hardly be blamed for elevating self-reliance as a goal alongside openness.

Even some of the reformers' successes have had unwelcome side-effects. China's deleveraging campaign in 2016 is one example. It succeeded in stopping runaway credit growth: the combined debt of Chi-

na's government, households and non-financial companies grew little, relative to the size of the country's GDP, in 2017 and 2018. But by cracking down on shadow banking, China's reformers made it harder for many private companies to obtain credit. It is perhaps unfortunate that such an impressive cohort of reformers came to power at a time when macroeconomic stabilisation was a more urgent task than microeconomic liberalisation.

Some reforms have also backfired. China's restrictive limits on borrowing by property developers caused the housing slump, which in turn exacerbated some of the financial risks the limits were designed to prevent. An earlier attempt in 2015 to let the currency float more freely precipitated destabilising capital outflows. These reforms, as well as being clumsily executed, were also poorly sequenced. China eased capital controls before relaxing its grip on the yuan, contrary to economic orthodoxy. And by cracking down on the property market, it has deprived local governments of much-needed income from land sales, without having created an alternative source of revenue, such as a real-estate tax.

In some cases, the sequence of reform was dictated by politics. Introducing a nationwide property tax would be deeply unpopular. Hence it has been repeatedly delayed. Similarly the pacing of China's currency reform was influenced by a largely symbolic goal: getting the yuan accepted by the IMF as a "freely usable" international currency, fit to be included in the organisation's special-drawing-rights basket. Reformers sometimes feel compelled to seize a window of political opportunity, even if the timing is not economically ideal.

These compromises illustrate the deeper reason for the reformers' failure. Their initiatives have always been subordinate to Mr Xi's broader political aims. When economic development was the party's overriding task, the goals of the party matched the goals of economic reformers.

But under Mr Xi, the party is pursuing another vision of national greatness, in which economic efficiency is one goal among many. Mr Xi wants the economy to be less susceptible to American pressure and more susceptible to party control. It needs to be harder and redder, not merely bigger and better. He wants qualified, intelligent, experienced cadres to implement this vision, not their own.

After ten years of Mr Xi, "I don't think many people harbour the illusion that he's going to unleash a wave of productivity-enhancing economic reforms with drive and vigour," says Andrew Batson of Gavekal Dragonomics, a consultancy in Beijing. But some nevertheless hope for a restoration of "pragmatism", he says. They believe Mr Xi's economic team can smooth his rougher edges and ensure orderliness in his policymaking. Their job is to stop him "dashing around on campaigns to promote this and crack down on that".

No one needs a crystal ball to know that after the party congress this month, Xi Jinping will be the first name on the economic team sheet. From the policymakers that join him, investors expect not reform but restraint. ■

#### War economics

## Crime, then punishment

#### Russia springs out of recession

**T**Hese days Russians do not have much to boast about, so they take what they can get. Social-media trolls are posting videos, intended for European audiences, showing gas stoves left on full blast. What might cost hundreds of euros in Berlin comes to a few roubles in Moscow. The taunting is childish, but it hints at a deeper truth: the economic war between Russia and the West is at a delicate moment. While Europe teeters on the brink of recession, Russia is emerging from one.

Western sanctions, launched in response to Vladimir Putin's invasion of Ukraine, have wounded Russia's long-term prospects. Blocking the world's ninth-largest economy from accessing foreign tech and expertise has cut its growth potential by as much as half, forecasts suggest. Output of oil and gas, the lifeblood of Russia's economy, is about 3% lower than before the invasion and may fall further once European embargoes come into effect at the turn of the year. In the first six months of the war between 250,000 and 500,000 Russians fled the country, reckons Liam Peach of Capital Economics, a consultancy. ►

► Lots were highly educated and well paid.

Mr Putin's recent decision to launch a partial mobilisation has dealt a further economic blow. It provoked a small bank run as people again worried about the future of the country. By our estimates Russians pulled out \$14bn-worth of rouble deposits in September, about a third as much as in February. Another 300,000 or so Russians have probably fled. A further reduction in the labour force is worsening shortages, and thus compounding inflation. Headline inflation is sharply down from its peak, but price pressure in the labour-intensive services sector is worsening.

Despite these problems, the recession has probably now come to an end. Many doubt official GDP data, but it is possible to get a sense of activity from a range of sources. Goldman Sachs, a bank, produces a "current-activity indicator", which follows how economies are doing month to month. The data suggest Russian activity is livelier than in other big European countries (see chart). A spending measure produced by Sberbank, another bank, wobbled following the mobilisation decree but has since edged up. Output in the car industry, which a few months ago had practically fallen to zero, has also bounced back, suggesting producers have obtained supplies from outside the West. In dollar terms Russia's monthly goods imports now almost certainly exceed last year's average.

In its recent forecasts, the IMF upgraded Russia's prospects for 2022. In April it thought that Russian GDP would fall by 8.5%. It now expects a decline of 3.4%. This is nothing to gloat about, but it is manageable. Indeed, the data suggest Russia will be able to maintain its military spending. In September the government put out a draft budget for 2023-25. According to Elena Ribakova of the Institute of International Finance, an industry group, it implies large increases in war-related spending in the coming years, particularly on internal "security". Having avoided economic collapse, Mr Putin expects to double down, both abroad and at home. ■

### A hot winter

Current-activity indicator\*  
% change on previous month, annualised



### Inflation

## The drag from lags

WASHINGTON, DC

**Rates are rising at unprecedented speed. How long until they bite?**

**I**F YOU WANT to impress central bankers, inject "long and variable lags" into a conversation and heave a heavy sigh. The phrase, coined by Milton Friedman, a Nobel-prizewinning economist, is sophisticated shorthand for the delayed and uncertain effects of monetary policy.

Raising rates, as most central banks are now doing, should lead to slower growth and lower inflation. But it can take time for the full impact to be felt. Hence Friedman's idea of a long lag. The variability, meanwhile, refers to the lack of a predictable interval between raise and result.

Lags present an acute challenge at the moment. Tightening in the past few decades has been gradual, helping to mitigate uncertainty. This time central banks are furiously ratcheting up rates. The Federal Reserve is on course to raise them from a floor of 0% to 4% by the end of this year, its steepest tightening in four decades. Economists including Ben Bernanke, a former chairman of the Fed and a new Nobel laureate, estimate lags between monetary policy and inflation can last as long as two years.

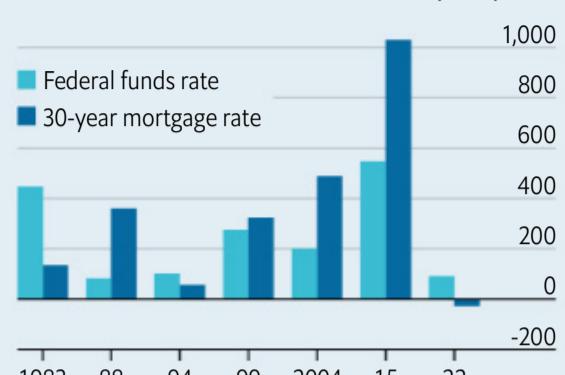
The result is that America may be digesting the jumbo rate rises of the past few months well into 2024, by which time the economic picture will look different. This is one reason why some economists are calling for central banks to switch to smaller rate rises, if any. They want policymakers to survey the impact thus far in order to avoid needlessly adding to future pain.

Yet the mere existence of lags cannot be an argument for inaction. They are a known unknown. Their precise duration may be uncertain but the fact that there will be a delay is well understood. Any decent model contains assumptions about this. Fed officials expect to shift from raising to cutting rates in 2024 and 2025. But they also expect inflation to continue to recede in both those years—an indication of how lags are baked into their forecasts.

Moreover, an increase in central-bank transparency may be compressing lags. In America mortgage rates had increased by a full percentage point even before the Fed had raised short-term rates. This has not happened in previous cycles, and represents the fastest pricing-in of expectations in at least four decades (see chart). As a result, the housing market has had at least half a year to respond to higher mortgage rates. Sure enough, home sales, prices and new construction have all started to fall. In

### First rate

United States, number of days after first Federal Reserve rate rise for rates to increase by 1%-point



Sources: Federal Reserve; Federal Reserve Bank of St Louis; Freddie Mac; *The Economist*

a way, the Fed is lagging the market: its rate increases are, in part, ratifying expectations that are already influencing activity.

None of this is to minimise the risk from lags. Friedman believed they all but doomed counter-cyclical interventions. He viewed such attempts as "disturbances with a peculiarly high potential for mischief". Central bankers are more confident. But persistent inflation does underscore Friedman's point about the challenges of getting policy right, whether tightening or easing. Today's woes stem, in part, from aggressive stimulus in 2020 and 2021.

The mischief, in other words, can cut both ways. Doves worry that excessive tightening will lead to a bad recession. Hawks fear that a premature halt will lead to continued bad inflation. Both worry the Fed will get its timing wrong again, just in diametrically opposite directions. ■

### Financial failure

## Academic success

**The economics Nobel prize goes to work on bank runs**

**W**HEN THE global financial crisis struck 15 years ago, economists were forced to respond to criticism that they had, for decades, ignored the banking system. With its choices for this year's Nobel prize, Sweden's Royal Academy of Sciences honoured three economists who had, in fact, spent the previous decades examining bank instability. Research by Ben Bernanke, chair of the Federal Reserve during the crisis (and an academic before that), Douglas Diamond of the University of Chicago and Philip Dybvig of Washington University in St Louis was largely vindicated by the failure of the banks in 2008.

The three laureates' central insight was that banks are not the neutral intermediar-

ries between savers and borrowers that other economic models had assumed. Instead, they offer vital services to the wider economy: gathering information on borrowers, providing a liquid means of saving and deciding to whom to extend credit. From this insight flows an important conclusion: because banks are crucial to the economy, they are also dangerous.

Mr Bernanke is best known as a central banker. But it was his work at Stanford University that the committee cited. They mentioned an article on economic history published in 1983 that looked at the causes of the Depression. Unlike previous accounts, Mr Bernanke's emphasised the role of the banking system, arguing that a self-sustaining cycle of bank runs caused the plunge in economic activity in the 1930s, rather than just being a consequence of it.

In this account, Mr Bernanke focused on the role played by banks in providing credit. The uncertainties inherent to lending and borrowing mean that such decisions require "information-gathering services". When banks failed in the 1930s, new entrants could not easily replace them. Unlike a grocer, a new bank cannot simply move into its predecessor's premises and set up shop. Knowledge about borrowers is hard won. This meant that farmers, small firms and households all found credit more difficult to obtain during the Depression, ensuring a vicious downturn.

A similar insight lies at the heart of the Diamond-Dybvig model of bank runs, developed in 1983 by Mr Bernanke's two fellow laureates. Without banks, the authors pointed out, ordinary savers would be forced to invest directly in capital projects with long-term payouts. These projects would then need to be cancelled whenever savers faced an unforeseen cost that meant they needed to dip into their savings.

Banks allow savers to pool their money, and for these pooled savings to finance long-term investments. Crucially, savers may withdraw their cash at will (which is known as liquidity). In exchange, banks take a slice of profits. The process is called "maturity transformation" as it involves the transformation of an asset with a short maturity, such as a bank deposit, into a longer one, such as a business loan.

The provision of this service makes banks vulnerable. If lots of savers try to withdraw money at the same time, perhaps because of a rumour that a bank will be unable to satisfy its creditors, the bank will be forced to terminate its long-term investments and sell assets at deep discounts. Such losses could cause the bank to collapse, as happened in 2008 when a downturn in the American housing market spiralled into a system-wide banking crisis.

There is an escape from this problem, however, which Messrs Diamond and Dybvig demonstrated by employing game the-

ory. It is rational for depositors to run on a bank so long as they believe others will. But such a course of action becomes fruitless if they believe others will remain at home. A system of insuring deposits, such as the one instituted by the American government in 1933 or by a central bank acting as a "lender of last resort", can prevent runs from happening in the first place.

This insight was not entirely novel. Walter Bagehot, a former editor of *The Economist*, suggested in 1873 that central banks could avoid financial panics by acting as a lender of last resort. Likewise, "It's A Wonderful Life", a film released in 1946 and mentioned in the Nobel's citation materials, demonstrated both the mechanics of a bank run and the importance of confidence. The hero soothes depositors with calming rhetoric and a capital injection from his honeymoon savings.

The "fundamental impact" of the laureates' work, in the committee's words, was to offer mathematically consistent models of this informal knowledge. Their contribution, perhaps, was not to discover something new about the world, but to communicate something that had been all too easily forgotten by other economists. ■

## Startups

# Pop dollar

AMSTERDAM

## Fintech firms prepare for a bloodbath

THE ANNUAL Sibos conference is the Da-vos of the payments industry. The latest opus in Amsterdam, attended by 10,000 delegates from October 10th to 13th, seemed stuck between the future and the past. Sessions on the metaverse and the digital euro drew crowds. But so did a barber stall and arcade games lit by 1980s-style neon lights. Next to an exhibitor displaying a "net-zero" countdown to 2050, measured in milliseconds, financial plumbers mulled decade-old issues, from clunky trade finance to costly cross-border payments. Virtual-reality headsets and, later, vodka cocktails made heads a little heavier, even as they lightened the mood.

That there was a whiff of escapism was no surprise, for the here-and-now of fintech is bleak. Spooked by rising interest rates, investors have tightened their pursestrings. As a result, fintech funding has collapsed (see chart). The average deal has fallen from \$32m in 2021 to \$20m in 2022. Between July and September a mere six firms graduated to unicorn status, achieving a valuation of \$1bn or more, compared with 48 in the same period last year. Exits

have also stalled. There were 27 public listings in the last quarter of 2021, compared with two in the one just passed.

The speed of the slump has caught many in the industry by surprise. A year ago fintech founders were like "kids in a candy store", says Jeff Tijssen of Bain, a consultancy. Plentiful venture-capital funding allowed them to launch into foreign markets, make bold acquisitions and hire the best staff. Future revenue was richly valued, and startups chased growth at all costs. Now "a dollar of revenue" is worth considerably less, says Michael Treskow of Eight Roads, a venture-capital firm, and not all revenue is "equal". As investors demand a path to profitability, founders' wings are being clipped. Employees, meanwhile, are heading elsewhere. Whizz kids previously up for a gamble are slinking off to consultancies and banks. Many need a new job anyway: fintechs have sacked 7,300 staff since April.

The shift started in the public markets, where the ten largest fintechs have lost \$850bn in value in the past year. As the route to initial-public offerings became more difficult, the biggest private firms began to be affected. Some cash-strapped giants, including Klarna, a buy-now-pay-later lender, have seen their valuations slashed by more than 80% in "down" funding rounds. Those still closing "up rounds", including Acorns, an investing app, are often doing so on tough terms, guaranteeing that new backers will double their money even in the "worst-case" forecasts.

All of this is common to other tech sectors. But fintechs look especially vulnerable, because many are directly exposed to the risk of recession. Lenders that used cheap funding to provide online mortgages and buy-now-pay-later loans face soaring costs and rising defaults. Neobanks that rely on transaction fees are being starved of revenues. Businesses that banked on the boom in retail investing, from crypto exchanges to online brokers, are suffering as trading volumes collapse. Those catering to small firms may well go ►

## Nothing ventured

Global fintech funding



▶ under with their wobbly clients.

Thus many startups will struggle to make it through winter. But those that provide essential services to digitising firms should keep attracting venture-capital funds, many of which have money lying unspent. In America alone their collective “dry powder” hit \$290bn in the last quarter, twice the average from 2016 to 2020. With consumer spending set to crash in Europe, American startups are valued at a premium, says Lily Shaw of Omers Ventures, the venture-capital arm of a Canadian pension fund. Beyond this geographic trend, three

types of fintech firms look best equipped to attract venture-capital dosh.

First are companies that reduce inefficiencies, from the management of company expenses to the reconciliation of business payments, and thus ought to help companies cut back in more difficult times. Next are firms that create new revenue lines for their clients, such as enabling a travel agent to sell their customers insurance. The final group includes financial plumbers, from firms providing data or ones dabbling in crypto to those that help banks comply with sanctions.

Only a few fortunate upstarts—such as GoCardless, which facilitates recurring bank-to-bank payments, and Clearbank, which provides cloud-based payments software—tick all three boxes. They run the infrastructure that moves money around at a time when the dominant “rails” remain costly (think of those 3% credit-card fees) and old-fashioned firms want to build their digital storefront—the logic that underpinned the fintech boom. For this lucky group, the Dutch waffles and daiquiris in Amsterdam were perhaps deserved after all. ■

## Buttonwood The importance of maggots

*Credit-default swaps are back in the headlines. That is not entirely bad news*

VULTURES, RATS and maggots are often the focus of disgust, less because of anything for which they can be blamed, and more because of the conditions with which they are associated. Death, disease and squalor carry a stigma that is hard to shake. Something similar is true of credit-default swaps, financial instruments that make headlines during market turmoil and economic misery.

When charts of credit-default swap prices begin to crop up in financial research it is invariably a bad sign. Russia's invasion of Ukraine prompted a burst of activity, with conditions in both Kyiv and Moscow triggering swaps and thus interest in the instruments. More recently, prices for European banks have jumped. The cost of a five-year credit-default swap for Credit Suisse bonds has surged to twice the level reached in the market mayhem at the start of covid-19.

But like the scavenging bird hovering above a weary desert beast, the swaps have an important role to play. They insure the buyer against the default of a bond, or an index of bonds. As with other index products, the inclusion of a range of swaps creates more liquidity. The instruments can protect portfolios and counterparties from volatility and be used to speculate on individual firms' health and broader market conditions.

The role swaps played in the financial crisis did not help their reputation. Their market more than quadrupled in size from 2005 to 2007. Institutions that had written huge volumes of swaps, including AIG, an insurer, were hit with bills they had thought would not all come at once. An inquiry into the crisis's causes judged that over-the-counter derivatives, particularly credit-default swaps, were a significant contributor. In 2009 Charlie Munger, the venerable

second-in-command of Berkshire Hathaway, an investment firm, endorsed a ban. The EU prohibited one way of using swaps. As recently as 2018 the Vatican said credit-default swaps were “less acceptable from the perspective of ethics respectful of the truth and the common good”.

Yet the market today is unrecognisable from the one 15 years ago. Back then it was roughly the same size as the market for foreign-exchange swaps. Today it is not even a tenth as big. Some 60% of the outstanding market now relates to credit-default-swap indices rather than a particular company's bond. This compares with 43% at the market's peak. Trading in index products is much more liquid.

Things are safer in other ways, too. The standardisation of credit-default-swap coupons has made it easier for the assets to be traded through clearing houses. More than half of single-firm credit-default swaps and two-thirds of index ones are now cleared, compared with 6% and 16% in mid-2010 (when data collection began). This reduces counterparty risk, where investors fear that a dealer of deriv-

atives might collapse and fail to honour their obligations. This danger loomed large during the financial crisis.

Trading is now operating as the architects of the system would have hoped. As inflation has surged and interest rates have climbed, market activity has surged, with interest in protection against defaults rising. The trading volume of index credit-default swaps is up by 68% in the year to date, compared with the same period last year. With over two months to go, this year is already the strongest on record for trading volumes since data collection began in 2013.

A paper by Robert Czech of the Bank of England suggests that credit-default-swap contracts make the underlying corporate bonds more liquid, too, particularly at a time of rating downgrades, when liquidity can otherwise dry up. Research by Martin Oehmke of the London School of Economics and Adam Zawadowski of the Central European University comes to a similar conclusion. They find that credit-default-swap markets provide an alternative venue for speculation and hedging activity to the underlying corporate bond market. This enhances overall liquidity.

There will almost certainly be jitters as more use is made of credit-default swaps. Payouts can lead to protracted legal proceedings. The recent payout on swaps against Russian sovereign debt was surprisingly straightforward given the trickiness caused by sanctions. Holders received 44 cents on the dollar after a special auction to determine the contracts' value. Yet the significant changes to the market since the financial crisis appear to be bearing fruit. As markets get choppy, credit-default swaps are likely to play a positive role. Pay no attention to the Vatican.



# Free exchange | Solarpunked

*Energy shocks can embed fossil fuels even deeper in the economy*



THE NOW-DISMANTLED *dth-nul-energihus* in suburban Copenhagen offers a vision of a future that never came to pass. Built during the oil shock of 1973 by the Technical University of Denmark, this squat, white building—consisting of two living spaces divided by a glass atrium and topped with a spine of solar panels—was one of the first attempts to create a zero-energy home.

The *nul-energihus* did not quite make it to “zero-energy” but its vital statistics were nevertheless impressive. It only needed 2,300 kilowatt-hours of energy a year, roughly the same as six modern fridges. Its copious insulation and solar-heating system kept it warm even in frigid Danish winters. When a family moved in, things deteriorated a bit, notes Marc Ó Riain, an architecture professor at Munster Technological University. Hair clogged up the filtration system, which recycled heat from wastewater, and occupants had an unfortunate habit of leaving windows open.

Yet these were problems that could have been overcome. The house was not all that far from being ready for prime time. In the years since, scientists have shown that well-targeted research-and-development spending can rapidly push up quality and bring down costs (see, for example, recent improvements in electric cars and solar panels). So why did a solarpunk future of clean-energy abundance fail to arrive in the 1970s? And as the world faces another energy shock, what lessons can be learnt from its failure?

Economists believe that technological progress is the ultimate driving force of growth. The key question is what determines this progress’s direction. In 1932 John Hicks, an economist, started the debate about “directed technical change” when he theorised in his book “The Theory of Wages” that raising the price of a certain factor of production—labour, in his example—would spur innovation to bring down its cost. In the century prior to his book’s publication, wages had risen steadily, which meant there was an incentive for employers to invest in labour-saving technologies rather than capital-saving ones. Following this logic, a spike in fossil-fuel prices should help to accelerate decarbonisation.

Such green growth is not inevitable, however. Daron Acemoglu of the Massachusetts Institute of Technology has pointed out that research spending can be directed either to clean substitutes (such as solar power) or complements to dirty tech (such as more

efficient engines). For a firm, the choice of where to direct money depends on the sometimes competing forces of price and market size. An oil shock, which raises the price of the fuel, makes green technologies such as solar power more attractive. But the extremely widespread use of hydrocarbons may make investments in fossil-fuel efficiency, known as grey technologies, more profitable.

That was pretty much what happened in the 1970s. Although some money was spent on projects like the Danish zero-energy house and in the embryonic renewables market, much more went on grey technologies. Research by Valerie Ramey of the University of California, San Diego, and Daniel Vine of the Federal Reserve finds that the main way historical oil shocks have affected the American economy is by encouraging consumers to buy more fuel-efficient vehicles. The economy of a typical American car improved from 13 miles a gallon in 1975 to 20 miles a gallon in 1980.

Rather than pocketing the savings offered by more fuel-efficient cars, Americans instead bought even bigger ones and in greater numbers. Thus the long-term impact of the oil shock was not to kill the country’s car culture—it was to wedge the combustion engine even deeper into American life. By the mid-1980s oil consumption was higher than a decade before, even though many of the country’s power plants had switched to natural gas.

Environmental economists call this phenomenon—where fuel-saving measures perversely raise demand—the “rebound effect”. Something similar happened in Danish housing. Better insulation improved its energy efficiency; as a result, houses grew larger and their owners more used to higher temperatures. It became common, for example, to wear t-shirts indoors during winter. According to official statistics, total housing energy consumption has been unchanged for the past three decades.

Mr Acemoglu argues there is “path dependency” in technological progress. Energy efficiency can make it harder for other technologies to compete. A well-insulated house with a state-of-the-art gas boiler uses less fuel. But that makes the upfront investment of an electric heat pump less appealing. If Europe’s industry successfully maintains output this winter while using less gas it may, in the future, have less incentive to switch to green methods.

Differences from previous energy shocks offer some room for optimism. Economic modellers point to the “elasticity of substitution” as the critical measure for whether expensive fossil fuels accelerate the adoption of green or grey technologies. Encouragingly, this elasticity has increased since the 1970s. Today a rise in price should encourage more switching away from fossil fuels than in the past, thanks to the wider availability and lower cost of green alternatives.

## Green thumbs

Moreover, carbon prices place government thumbs on the scale. The cost of a permit in the EU’s cap-and-trade scheme is only expected to rise in the future, as the cap on the quantity of emissions falls, meaning firms have an incentive to get ahead of the curve. With luck, this will limit the rebound effect in the years ahead. But America is going down a different road. Subsidising clean technologies rather than taxing dirty ones—the strategy adopted by President Joe Biden’s recent Inflation Reduction Act—does not do nearly as much to displace fossil fuels. A family may buy a subsidised battery-powered vehicle, for instance, but only to complement a fossil-fuel one, which they can continue to drive without penalty. Policy design matters if a zero-carbon world is to become more than just another future that never happened. ■



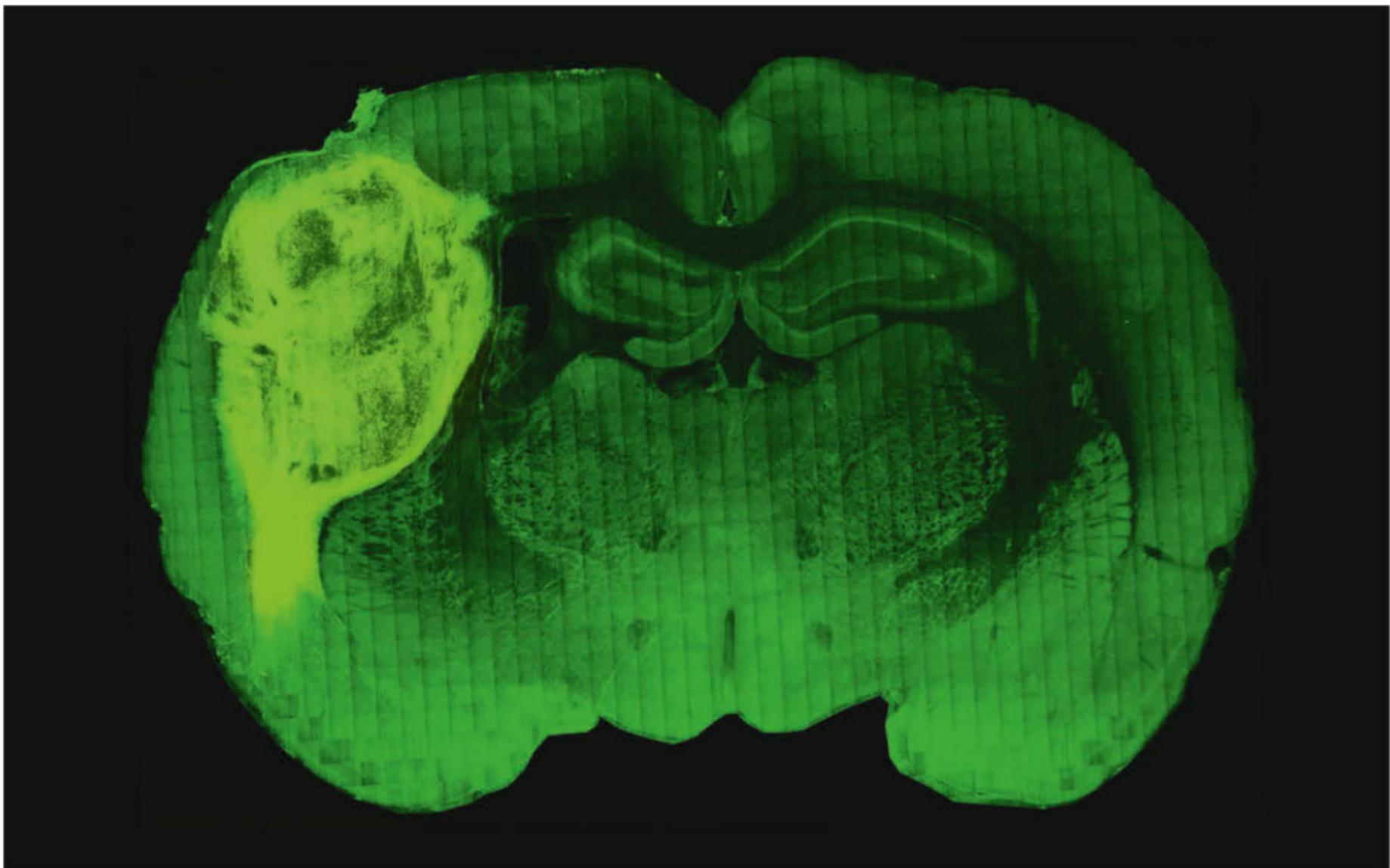
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## Modelling the brain

# Fiat lux

PALO ALTO

**Human cortical organoids have been wired up to sense and affect the outside world—by putting them into the brains of rats**

SIMPLIFY, SIMPLIFY. Henry David Thoreau's maxim is one which scientists generally take to heart when investigating complex natural phenomena. And there is no known natural phenomenon more complex than the human brain. Since 2011, therefore, Sergiu Pasca of Stanford University, who studies it, has been doing just that. His simplified models are structures called cortical organoids. They are spheres a few millimetres across, composed of specially grown human nerve cells, which act as simulacra of brain tissue.

Now, however, he is ready for a bit more complexity. As he and his colleagues report this week in *Nature*, they are wiring their organoids into rats' brains (see picture above). And not only that. They have also found that their implanted organoids can perceive the outside world in a limited way, by tapping into a rat's senses, and can affect that world by controlling the animal's behaviour. On a more practical note, when grown from cells taken from patients

with a particular genetic illness, implanted cortical organoids can yield information on the cellular abnormalities underlying that illness in a way which conventional approaches have not been able to.

### Playing the organoid

Organoids (which can be grown to mimic many organs besides the brain) are derived from what are known as induced pluripotent stem cells. These are created by applying four particular gene-regulating transcription-factor proteins to ordinary body cells, generally taken from the dermis of the skin. Further factors then encourage

pluripotent cell lines to specialise and generate particular tissue types—such as cerebral-cortex cells—which, if handled correctly, can be grown into organoids.

The rats involved were between three and seven days old when implanted. The site of the implant was a part of the brain called the somatosensory cortex, which monitors the sense of touch. To make sure the implants were not rejected as the foreign tissue they were, the rats had had their immune systems partially disabled.

A young rat's brain is still a work in progress, with new connections between its nerve cells forming all the time. Dr Pasca and his colleagues therefore hoped that the cells in their implants would join the party, by connecting with their murine neighbours. Monitoring suggested that they did. Magnetic-resonance imaging of the rats showed that 70% of the implants had lodged successfully in the animals' somatosensory cortices and were growing and thriving. Once an animal was mature, such an implant occupied about a third of the brain-hemisphere it was lodged in.

On top of this, experiments with defanged rabies viruses, which can cross the synaptic junctions between nerve cells, showed that human and rat cells had, indeed, connected up. And the insertion into the grafts of tiny electrodes, capable of recording signals from a single nerve cell, demonstrated that the cells themselves ➤

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were working normally.

Having established all this, the next step was to find out whether the connections between human and rat cells were live. One reason why Dr Pasca picked the somatosensory cortex as the site of the implant was to be able to do just this, for it offered the possibility of activating the transplanted cells by stimulating an animal's sense of touch—specifically, by blowing air on its whiskers.

To find out how his implanted cells would respond to this, Dr Pasca smuggled into some of the implants the gene for a protein that flashed when they were active. This flagged up human-derived, as opposed to rat-derived cells, so that these could be monitored by electrode. And, on a gratifying number of occasions, the cells under study did indeed respond electrically when the whiskers were displaced.

Emboldened by this result, Dr Pasca then asked whether the implanted human cells could direct a rat's behaviour. To do this, he appealed to optogenetics, a method which permits a cell's activity to be manipulated by light.

Dr Pasca's particular technique, invented in 2005 by Karl Deisseroth, one of his colleagues at Stanford and a co-author of the paper, also uses a smuggled-in protein. In this case, though, it is light-sensitive rather than light-generating.

#### Channels of communication

Channelrhodopsin-2 comes originally from an alga called *Chlamydomonas*. It floats in a cell's membrane and, when illuminated by a particular frequency of blue light, changes shape in a way that permits the passage through that membrane of positively charged ions—including sodium and potassium, the two ions that are the basis of the action potentials by means of which nerve cells talk to each other.

Dr Pasca combined his manipulation of the implants' cells with an experimental technique called operant conditioning. This rewards a particular action performed in response to a particular stimulus, and thus trains an animal to react to that stimulus with that action. In the case of the implanted rats, the reward was a drink of water if they responded to blue light shone at the implant through a skull-penetrating optical fibre by licking the spout that delivered the reward. (As a control, the experimenters used red light of a frequency undetectable by channelrhodopsin-2.)

Those rats hosting channelrhodopsin-2-bearing organoids learned to respond appropriately to blue light within 15 days. Controls hosting unmodified organoids did not. Since the light signals controlling this behaviour were received by the transplanted organoids, those organoids were, in effect, directing and controlling the rats' behaviour.

All of which is of great scientific interest. But the underlying purpose of this sort of work is medical—and Dr Pasca did not neglect that side of things, either.

Timothy syndrome is a rare and dangerous condition which causes a form of autism. It also results in seizures, anatomical abnormalities such as fused fingers and toes, and life-threatening cardiac arrhythmia. It is the consequence of a mutation in a calcium-ion-channel gene.

Ion-specific channels, of which calcium channels are a subclass, belong to a dif-

ferent group of transmembrane proteins from the channelrhodopsins, but the fundamentals are the same. Both types move ions around in ways that affect a cell's signalling. In the case of Timothy syndrome, the channels' signals affect a range of developmental pathways. Dr Pasca and his team therefore grew and implanted into rats, cortical organoids derived from the skin cells of three people with Timothy syndrome, and followed the progress of the nerve cells involved.

Nerve cells grown as cultures in a lab-►

#### Biological neural networks

## Brain games

#### Nerve cells in a dish can learn to play Pong

**S**OMETHING NEW is on the menu of neuroscience. It is called "DishBrain". This is not a recently discovered regional delicacy, but rather a network of nerve cells, grown on a computer chip, which is capable of interacting with the outside world via that chip. As a proof of principle, Brett Kagan, chief scientific officer of Cortical Labs, a small firm in Melbourne, Australia, and his collaborators, have taught the cells to play Pong, an early video game that resembles an electronic form of table tennis.

DishBrain is smaller than a human being's little-finger nail and contains fewer nerve cells than a bee. Those cells are grown from pluripotent stem cells, which are, in turn, derived from ordinary body cells, and can differentiate into more or less any sort of tissue. Dr Kagan experimented with cells from both mice and humans.

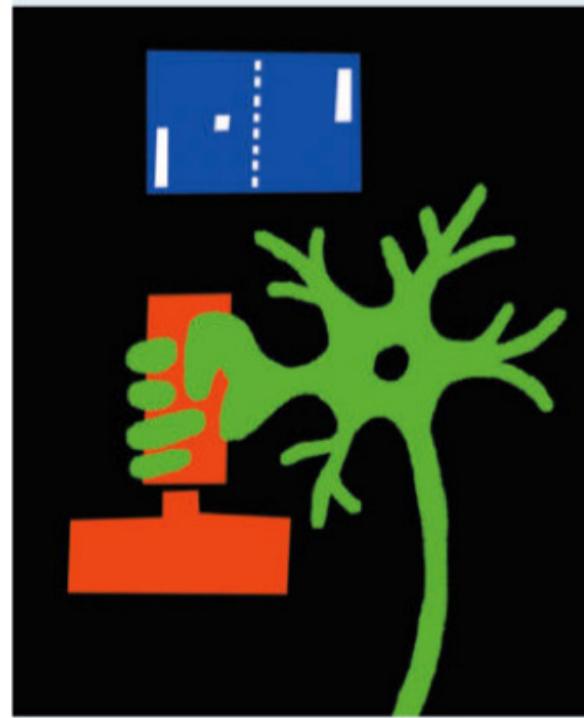
Growing the network on the chip was only part of the story, though. Getting it to perceive and interact with the world

was, as he describes in a paper in *Neuron*, quite another. The chip had predefined "sensory" (input) and "motor" (output) regions. In the sensory region, eight electrodes gave the cells tiny zaps that communicated the positions of the paddle (there was only one; the network was playing against a "wall") and the ball with respect to one another. The neurons' firings in the motor region determined the movement of the paddle.

By randomly zapping the sensory neurons for four seconds every time the network missed the ball, the software running the chip wiped out the pattern that led to the loss. Conversely, winning plays, which did not lead to random zapping, were retained.

The result was that the nerve cells first learned the rules of Pong, and then learned to play it better. For both species' cells the average rally time increased noticeably over the course of 20 minutes—though gratifyingly for humanity's *amour propre*, the human cells slightly, but consistently, outperformed those from mice.

Natural neural networks (the brains of human beings) and artificial ones (software models of how people once thought networks of nerve cells behave) have long been able to play Pong. Yet both have limitations. It is technically difficult, and often ethically impossible, to study in detail how brains work (though this is changing, see adjacent story). And, neuroscience having moved on, it is now known that artificial neural networks are fundamentally different from their biological counterparts. Dr Kagan hopes, therefore, that the benefits of DishBrain will go beyond Pong, by giving researchers a better understanding of how nerve cells learn—and therefore opening a new avenue for biologically inspired information processing.



oratory remain far smaller and less developed than they would be in a real brain. In particular, cells cultured in this way from people with Timothy syndrome are physically indistinguishable from those cultured from healthy individuals. That is not true of the implanted cells. They were six times as large as their cultured kin—more or less the size they would be in nature. And those derived from people with Timothy syndrome were clearly distinctive.

In particular, the mutation had caused them to develop twice as many dendrites (the thin fibres of cytoplasm through which, via synaptic connections with other cells, a nerve cell receives incoming signals) as were seen in implants grown from people without the condition, and the dendrites in question had a higher density of the spines at which synapses form. They were, however, on average, shorter than the control cells' dendrites' length.

Those differences, which suggest the cells involved are receiving too much information from too many other cells, would have a huge effect on their behaviour. That miscommunication is presumably the underlying explanation for Timothy syndrome's symptoms. Any part of the body where this mutated calcium channel is active is likely to go wrong.

#### The book of Timothy

Whether this result points the way to anything clinically useful remains to be seen. But it does offer hope that using organoids in this way could illuminate the mechanisms of this and other neurological diseases, to the eventual benefit of patients. Dr Pasca and his colleagues are now doing similar work on organoids derived from the cells of people with several such illnesses, and in a couple of cases are using them to test possible drugs. They are also implanting "assembloids"—neurological constructs composed of more than one organoid, each of which brings a different set of tissues to the party.

As to the ethics of all this, Dr Pasca and his team are acutely aware of the questions raised by their work. Besides having had it approved by Stanford's usual procedures, they have also specifically involved several bioethicists, including Hank Greely, a doyen of the field. Dr Pasca points out that the implants are tiny (adding 2m-3m nerve cells to the 31m native to the rat itself). A human brain is reckoned to have about 86bn of them. And a rat's short life does not give the full developmental pathway of a human nerve cell time to play out. The chances that any ethically worrying manifestations of humanity could emerge, given these constraints, seem negligible. Implants into larger, longer-lived animals, such as monkeys, might be a different matter. But that is a path down which he has no plans to tread. ■

#### Malaria

## Slumbering swarms

### A mystery about malarial mosquitoes' dry-season survival is solved

THE MOSQUITOES that transmit malaria in Africa have short and merry lives. Six or seven weeks is as much as their adults can manage. To maintain their populations they must lay eggs in water, in which their larvae then grow and pupate.

This means such mozzies fly all year round in wet places, but in those that experience pronounced dry seasons, they vanish. In theory, malarial mosquitoes should die out entirely during dry spells that go on for months, for their eggs are insufficiently drought-resistant to last that long. Nevertheless, days after rains return, so too do the mosquitoes.

This state of affairs, known as the "dry-season malaria paradox", has confused mosquito researchers for decades. Some entomologists propose that these early insects are long-distance migrants from places where standing water remains for them to breed in. But a report in *Nature Ecology and Evolution* by Roy Faiman of the National Institutes of Health, in Maryland, and Alpha Yaro at the Malaria Research and Training Centre, in Mali, suggests they are actually locals that have endured the dry season by aestivating—the hot-weather equivalent of hibernating.

As with hibernation, aestivation means an animal enters a state of torpor, devoting its energies merely to surviving tough conditions rather than being up, about, and, well, animated. Entomologists sceptical of the migration theory have speculated that mosquitoes use this trick to survive in



And now add a sprinkle of deuterium

places with prolonged dry seasons—for example the Sahel, a band of semi-desert that stretches across Africa just south of the Sahara, traversing Mali as it does so. But evidence has been elusive. This is not because of a lack of interest in tracking mosquitoes through the seasons. Quite the contrary. Their role as carriers of one of the world's most deadly diseases means there is a lot of curiosity about the matter. What has been lacking is a suitable tool to investigate.

Mosquitoes are tiny. Following them any distance by eye is impossible, and, unlike larger animals, they cannot be fitted with radio collars or similar tracking devices. Instead, Dr Faiman and Dr Yaro borrowed an idea from ornithology. If you want to be able to find out in the future whether you have seen a particular bird before, one way is to mark it with a ring. You cannot literally ring a mosquito, of course, any more than you can collar it. But the two researchers came up with an alternative marker: deuterium.

Deuterium is a heavy but non-radioactive isotope of hydrogen. (It has a neutron in its nucleus as well as the hydrogen-defining singleton proton.) Like ordinary hydrogen, deuterium can react with oxygen to yield water, known in this case as "heavy" water. Natural water does contain a small proportion of the heavy variety, but water enriched with the stuff is distinctive and detectable.

During the final weeks of the wet season (which lasts from May to October), Dr Faiman and Dr Yaro therefore poured heavy water at intervals into 27 mosquito breeding sites in two Malian villages. They made sure, in particular, that they topped up each site every time it rained, to stop the heavy water getting too diluted. They also checked that mosquitoes from these sites were, indeed, deuterium rich, and that those from comparable control sites were not. Sampled at random in the villages, a third of the insects were, by the end of the procedure, deuterium-positive.

Then they waited.

At the end of the wet season, the breeding sites duly dried up.

They waited some more.

In May, the rains returned, and so did the mosquitoes. And, lo, a fifth of them were full of deuterium. They had, in other words, been aestivating.

The next step is therefore to find out just where the insects were holing up while the rains were gone. If these shelters can be identified, they can be attacked. Alternatively, special efforts might be made to ambush the aestivators as they wake up, by extensive insecticide-spraying campaigns at the beginning of the rainy season. Either or both of these could put a significant dent in local mosquito populations—which would, in turn, make malaria less of a problem. ■

## Diets, past and present

## Ham fisted

### People are doing the palaeo diet wrong

**H**ERMAN PONTZER is eating a muffin. Over Zoom it looks delicious. A warm, brown, undulous exterior gives way to fluffy but squidgy, pale innards. It is a perfect example of all that modern capitalism has to offer in ways of processing food to sate primeval appetites.

Dr Pontzer is a professor of evolutionary anthropology and global health. He is an expert on what human beings consumed tens of thousands of years ago when they were hunter-gatherers. He knows they would never have eaten such things. But he knows, too, that there are many myths about what people did eat before agriculture was invented. And at a meeting at the Royal Society in London later this month he will explain that their diet was far more diverse than advocates of "palaeo" eating imagine.

For a long time, it was thought that humanity's stone-age ancestors majored on meat and eschewed carbs. Yet modern



**Yummy!**

hunter-gatherers have an exceptionally diverse diet, often containing a lot of plants. Dr Pontzer has worked closely with the Hadza, a group of them in Tanzania. He has access to four decades-worth of detailed dietary data about them. The amount of meat they eat depends on what sort of year it is (and varies from month to month over the course of a year). But overall, the ratio of animals to plants is about 50:50.

Another bias in assessing true palaeo

diets is the archaeological record. Stone tools and bones that indicate carnivory persist. Evidence of plant eating is more fragile. But, says Dr Pontzer, you can find it. For example, in the "nooks and crannies" of teeth at fossil sites it is possible to discover starchy grains, along with plaque. This suggests early humans ate plenty of starch-rich plants.

The best piece of evidence about the ancestral human diet, however, is the human body. Human teeth, for example, look neither like carnivores' teeth nor herbivores' teeth, but, instead, like omnivores' teeth. Not only that, says Dr Pontzer, but their highly acidic (and so pathogen-destroying) stomachs resemble those of scavengers such as hyenas and buzzards.

If that is so, perhaps there is no optimal human diet, and all the official guidance about what proportions of meat, vegetables, grains and dairy constitute one matters less than people think. Dr Pontzer certainly believes so. But this does not quite answer the question of why hunter-gatherers are generally thin while a growing fraction of other people are fat?

A crucial insight came in 2019, when Kevin Hall and his team at the National Institutes of Health, in America, showed in a four-week trial that people on a diet of processed food (of which muffins are an example) eat 500 calories more per day than those on an unprocessed diet. If evolutionarily novel, highly processed foods are what ails modern humans then what do hunter-gatherers' diets have to say about what a real palaeo diet should include?

Here the news is less good. It is not *haute cuisine*. One Hadza staple is a tuber called the ekwa, a sort of "woody carrot". To make this edible, you have to peel off the rind, roast the rest, and then chew it to extract its nutritional value, before spitting out the fibrous residue.

Dr Pontzer, who has spent time living and eating with the Hadza, describes the ekwa as "really bland". He has also eaten boiled warthog, which he says is "OK" but is also tasteless. Berries are entirely unlike the plump, watery, sugary things found in supermarkets. Rather, they are dry, with many seeds inside. Most alarming, though, was week-old zebra.

When the Hadza kill a zebra there is too much to eat in one sitting. Once delicacies like testicles and other organs have been consumed, the rest is sliced and hung in the open. It is cooked by being thrown into a fire, but certainly not cooked through. "It tastes like ashes and it is bubblegum pink on the inside," Dr Pontzer says.

The only foods he would actually recommend are the local honey and the fruit of the baobab tree. Baobab fruit has a crusty dry interior that is a bit like expanded polystyrene, but tangy. Not quite a chocolate-chip muffin, though. ■



### The Double Asteroid Redirection Test

**I**t worked! The Double Asteroid Redirection Test (DART) exceeded its minimum specification twentyfivefold. This picture, taken by the Southern Astrophysical Research telescope, in Chile, shows the plume of debris ejected when that probe, which weighed 600kg, hit Dimorphos, the asteroidal moonlet of a somewhat larger asteroid, Didymos, on September 26th. The hope was to change the time it took for Dimorphos to orbit, to demonstrate how something similar might be done to the trajectory of a space rock threatening Earth. The mission would have been deemed successful if the moonlet's orbit had changed by as little as 73 seconds. In fact, observations by telescopes on Earth, announced on October 11th, show that it changed by just over half an hour, from 11 hours 55 minutes to 11 hours 23 minutes, probably assisted by Dimorphos's recoil from the plume's release. The idea that an actual threat from space might thus be pushed away, is vindicated.



## Chinese history

# Dashed hopes and bad omens

Might China have followed a more reformist path? Two historians disagree

**Never Turn Back.** By Julian Gewirtz.  
Belknap Press; 432 pages; \$32.95 and £26.95  
**China After Mao.** By Frank Dikötter.  
Bloomsbury; 416 pages; \$30 and £16.99

AS CHINA'S COMMUNIST PARTY convenes its 20th congress on October 16th—an event all but certain to result in another five-year term for Xi Jinping, the country's most dictatorial leader since Mao Zedong—it is worth pondering what might have been. The 13th congress, held in 1987, offered a glimpse. As it ended, your reviewer was in a throng of journalists astonished to be given a chance to pepper the party's general secretary, Zhao Ziyang (pictured), with any questions they liked.

Elsewhere such an event might seem humdrum. Not in China. Mao had only been dead for just over a decade. Many features of the highly secretive and repressive political system he installed had remained in place. China's "reform and opening" had been under way for even less time. In cities, most people still worked directly or indirectly for the state. The surge of private

enterprise that has transformed China into an economic giant was still years away.

In "Never Turn Back", Julian Gewirtz—a historian who finished the book before taking up a job as China director in America's National Security Council—describes the 13th congress as plausibly the "single moment that can best represent China's elite politics in the 1980s". Zhao's unscripted press conference was part of a bid by some officials to reform China not just economically, but politically too. Zhao, as Mr Gewirtz observes, was "making a point". Political reform had been a theme of the congress and he was "putting those principles into action while the ink was still wet

on the announcements". For China, a general secretary talking off-the-cuff to journalists, including Western ones, was a bold experiment. It has not been repeated.

Reaching this point had been a struggle for Zhao. The 13th congress was the culmination of a dramatic year in Chinese politics, starting with pro-democracy demonstrations by students at the end of 1986. Those were followed by the toppling of a reformist general secretary, Hu Yaobang, by hardliners, and a campaign against "bourgeois liberalisation" that took aim at free-thinking intellectuals. Zhao was Hu's successor, but barely more trusted by conservatives, who battled with reformers throughout the 1980s for the ear of Deng Xiaoping, the paramount leader.

The 13th congress was by no means the death knell of the leadership's conservative wing, however. When pro-democracy unrest broke out again in 1989, this time nationwide, the hardliners returned with a vengeance. A decade of what Mr Gewirtz calls "extraordinary open-ended debate" ended when Deng sent the army into Tiananmen Square to crush the protests.

The author calls this a "forbidden history" because, he says, the party has created a "myth" around it—that China progressed smoothly from Deng's rise to power in 1978 to new heights of wealth and modernisation, the clampdown in 1989 marking only a harsh interruption before reforms picked up again in 1992. He says the party has fostered this over-simplified view by suppressing sources and cultivating a narra-

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tive that erases key figures (such as Zhao) and covers up debates. He is right, though there is no shortage of alternative sources in Western accounts of the period. Mr Gewirtz's is a richly researched addition to this literature, enhanced by access to internal Chinese documents and interviews with former officials and intellectuals active at the time.

Another scholar of contemporary China, Frank Dikötter of the University of Hong Kong, also draws on official records that have not been widely available to look afresh at the history of the reform and opening period. His book, "China After Mao", highlights two sources: roughly 600 documents that he managed to access in Chinese city and provincial archives; and the diaries of Li Rui, an ardent reformist who served as Mao's personal secretary and as a senior official under Deng (with nine years behind bars in between). Those are held by Stanford University.

Mr Dikötter is damning of Zhao and his ilk. He notes Zhao's speech at the 13th congress, in which the general secretary said China would never copy the separation of powers and the multi-party system of the West. He quotes a remark by Zhao to Erich Honecker, then East Germany's leader, that once living standards had been raised, "we can gradually reduce the scope for liberalisation further and further". Mr Dikötter suggests that even in the economic realm, talk of reform may be misleading. "What we have witnessed so far is merely tinkering with a planned economy."

#### Indivisible power

By contrast, Mr Gewirtz thinks Zhao, among others, had an "ambitious longer-term vision", involving "greater public participation, accountability and debate" than had occurred in other socialist countries. He provides a fascinating glimpse of highly secretive research overseen by Zhao's chief aide, Bao Tong, into political reform. Zhao did push back, he reveals, against Mr Bao's suggestion that the separation of powers "could not simply be rejected". Such a heresy would be grounds for dismissal (or worse) for a Chinese official today. Yet Mr Bao remained Zhao's right-hand man until the two fell from grace during the Tiananmen upheaval, Mr Bao ending up in prison for seven years and Zhao under house arrest for the rest of his life.

The two authors view the 1980s through different lenses. Mr Gewirtz sees a country that "imagined and experimented with many possible 'China models'". Mr Dikötter sees a party fixated on only one: keeping itself in power and market forces in check—a goal which, as he sets out in a wealth of detail, has remained consistent ever since. Mr Gewirtz muses on the idea that the great debates of the 1980s may one day be revived: "It is possible to imagine

China once again experimenting with meaningful political reforms, increasing the independence of the judiciary and the media." Mr Dikötter's view is bleaker, of a country "desperately pumping water and plugging holes to keep the vessel afloat".

Mr Dikötter is right to be pessimistic. A clear lesson of the 1980s is that when the leadership feels threatened, it is ready to use extreme violence. The harshness of Mr Xi's rule is in part a response to what he often describes as the danger of a Soviet-style collapse, caused by ideological laxity, corruption, divisions within the party and attempts by the West to foment unrest.

Amid rapid change of all kinds, it is unlikely that party leaders will again feel confident enough to loosen political controls.

But these authors seem to agree that China's progress has been more haphazard than outsiders might infer. During the 1980s, Mr Gewirtz reflects, the economic system "was being designed piece by piece, often reacting to events". Mr Dikötter says there has been "no 'grand plan', no 'secret strategy', but, rather, a great many unpredictable events, unforeseen consequences and abrupt changes of course as well as interminable struggles for power behind the scenes." ■

#### Semiconductors

## Chips off the old bloc

#### The world's chip industry is critical but worryingly fragile

**Chip War.** By Chris Miller. Scribner; 464 pages; \$30. Simon & Schuster; £20

**S**EMICONDUCTORS ARE the cornerstone of the modern economy. Everything from emails to guided missiles relies on them. Yet parts of the supply chain, particularly for cutting-edge chips, depend on choke-points dominated by a small number of firms. For decades few people worried much about this—until covid-19 and rising tensions between China and America highlighted the sector's fragility. In "Chip War", his elegant new book, Chris Miller of Tufts University shows how economic, geopolitical and technological forces shaped this essential industry.

In 1947 a group of researchers at Bell Labs, a subsidiary of AT&T, a telecoms

giant, invented the transistor, a switch that controls electric current and is a building block of modern electronics. Within a decade researchers were placing several transistors on a slab of silicon to make an "integrated circuit", or chip. A thriving industry grew up around California, outsourcing low-value tasks, such as assembly, to Asia where labour was cheaper.

Innovation came quickly. In 1965 Gordon Moore, who later co-founded Intel, America's chipmaking giant, correctly predicted that by shrinking transistors, engineers would be able to double the number that fit on a chip every two years or so—and that this enhancement would, in turn, double a chip's performance.

As the market grew, so did interest from America's rivals. First, the Soviet Union tried and failed to replicate Silicon Valley. Later, Japanese firms such as Toshiba and Fujitsu managed to take a share of some chip markets. But the strategic danger comes from China, which today spends more on importing chips than it does on oil. Xi Jinping, the president, has ordered China's tech titans to reduce its dependence on foreign chips; state funds dole out tens of billions a year to that end. Rather than matching America's know-how, however, a big priority is to emulate Taiwan, which produces 90% of the world's premium logic chips, which process data.

Taiwan's chip dominance can be traced to Morris Chang, founder of the Taiwanese Semiconductor Manufacturing Company (TSMC), who gave Mr Miller a rare interview. Mr Chang was born in China and grew up in Hong Kong. After an education in America he joined Texas Instruments, then a big chipmaker. He was obsessed



A chip over your shoulder

► with eking out efficiencies in the chip-manufacturing process. Passed over for the top job, in 1985 Mr Chang became involved in Taiwan's bid to gain a foothold in the semiconductor industry.

He duly put into practice a long-held idea for a firm that made chips designed by customers. At that point, virtually all large chipmakers designed and manufactured their silicon in-house. But as chips shrank, the cost of the factories that made them (or "fabs") grew: today building an advanced fab costs \$20bn. At the same time, the economics of the business favoured scale. The more chips a firm produces, the higher the yield—ie, the share of them that actually work. Thus, reasoned Mr Chang, only outfits that manufactured huge amounts of chips would be cost-competitive. With lavish support from Taiwan's government, TSMC was born.

At first, TSMC's technology lagged behind its American counterparts'. But, thanks to scale and Mr Chang's leadership, it soon caught up and overtook. Most American firms stopped making cutting-edge chips and relied on TSMC instead. Its success reshaped the industry, allowing fab-less design companies to flourish, without the financial burden of building pricey new factories every few years. Today TSMC is the biggest chipmaker in the world by market value.

It is also one of the choke-points in the chip supply chain. The result of super-specialisation and high costs, these are huge vulnerabilities in the global economy. Only TSMC and Samsung, a South Korean tech giant, know how to make the world's most advanced chips. Most of their fabs are uncomfortably close to either China or North Korea. But the bottlenecks can also favour the West, because many are controlled by America or its allies. For instance, TSMC does not build chips for firms on America's blacklist, such as Huawei. Such obstacles have both slowed China's chip industry and redoubled its determination to become more self-sufficient.

America and Europe are pursuing greater self-sufficiency themselves. Thanks to the generous subsidies in America's recent CHIPS Act, Samsung and TSMC have agreed to build new fabs in Arizona and Texas respectively (albeit not the whizziest type). However, Mr Miller does not expect this to reduce American dependence on Taiwan and South Korea. Both Samsung and TSMC still concentrate their investment at home.

The author argues that R&D incentives may in the long run prove the most important part of the CHIPS Act: one lesson of history is that leaps in chip technology are often boosted by government research grants. That bodes well for the future of this critical and complex industry. For those seeking to understand it better, "Chip War" is a fine place to start. ■

### World in a dish

## The weight of the world

**A candid new biography explores Anthony Bourdain's success and struggles**

BY THE TIME Anthony Bourdain hanged himself in a French hotel room on June 8th 2018, he was the envy of food-obsessed travellers the world over. Twenty years earlier he had been a competent but unknown chef with frustrated literary ambitions and a louche, drug-filled past. Then "Kitchen Confidential", his book of 2000, became a surprise bestseller, and launched a series of increasingly ambitious television shows built around a simple concept: "I travel around the world, eat a lot of shit and basically do whatever the fuck I want."

It turned out that a lot of people liked watching him do just that: between 2002 and his death he made hundreds of episodes. Off-screen, he had two failed marriages, a rocky relationship with Asia Argento, an Italian actor, and a punishing schedule that kept him on the road for most of the year. As "Down and Out in Paradise", Charles Leerhsen's gritty, well-researched new biography makes clear, Bourdain carried with him an array of compulsions, addictions and insecurities. Mr Leerhsen tries to explain why a man with legions of adoring fans and the best job in the world would end his life and why, years later, so many people still care about him.

Bourdain left no note, making Mr Leerhsen's first task speculative. He was drinking heavily, taking steroids and human-growth hormone and, on some level, deeply unhappy. "I hate my fans," he texted his second wife a few months before he died. "I hate being famous. I hate my job. I am lonely and living in constant uncertainty." But after a shoot on the last

night of his life he went to a beer garden in Germany, where "he lit up like the Tony I once knew", a companion said. "Everything was normal." The only person who knew what was going through Bourdain's mind that night was Bourdain himself.

But biographers and friends alike have looked for clues. Certainly, he put himself under tremendous pressure. He worked far more than he needed to. Before his screen and literary careers took off, he was distinguished more by his organisational skills than his culinary imagination. He could oversee a kitchen cooking hundreds of meals per shift, but did not devise new techniques or recipes. He never lost this driven, line-cook's mentality.

His TV shows, which began as a sort of lark ("scary and amateurish", an early colleague called his approach), had become an enterprise. And he had become what he had once mocked: a television personality. He did it on his terms, with a sort of punk-rock soulfulness—curious, intrepid and warm, yet also a little shy and diffident. But he was still a brand. As Mr Leerhsen explains, "authenticity, in the sense of being the real thing and not a pretender, was [a] lifelong preoccupation" for Bourdain. The pretence involved in the brand-building may ultimately have been intolerable.

It made him rich and famous—but tragedy, as Oscar Wilde knew, can sometimes stem from getting everything you want, rather than from failing to. "What do you do?", Bourdain asked his viewers, near the end of a show shot in Sardinia, "when all of your dreams come true?" ■



In pursuit of Bob Dylan

## The wheel's still in spin

**Folk Music: A Bob Dylan Biography in Seven Songs.** By Greil Marcus. Yale University Press; 288 pages; \$27.50 and £20

QUESTIONS OF AUTHENTICITY dogged him from the start. The young man calling himself Bob Dylan appeared in Greenwich Village in 1961, seemingly "out of nowhere", and quickly rose to prominence in New York's folk-music scene. After "Blowin' in the Wind" made him a national star in 1963, journalists did some digging.

They discovered that the 22-year-old singer who seemed to touch the deepest chords of American history—the mournful accents of black slaves and hardscrabble Okie farmers, the rhythms of cowboy minstrels—was just a middle-class kid from Hibbing, Minnesota. He was a college dropout and, riskily for someone purporting to represent a strand of authentic Americana, a Jew. The subtext of a profile in *Newsweek*, according to his girlfriend of the time, Suze Rotolo, was that the artist "whose 'finger was on the pulse of a generation' was a fake".

In "Folk Music", Greil Marcus doesn't so much refute the accusation as reclaim it as a virtue. "The engine of his songs is empathy," he writes in the introduction; "the desire and the ability to enter other lives." Or, as Mr Dylan himself put it: "I can see myself in others." From this perspective he is not an impostor but a medium, giving voice to the voiceless and articulating the inchoate yearnings of an age. The Jewish kid from Minnesota—born Robert Zimmerman—merges into one role after another, evolving in response to tremors in the zeitgeist that he seems to sense earlier and more intensely than others. Aptly, "I'm Not There", a biopic of 2007, used six actors (including Cate Blanchett) to capture his quicksilver character.

"Blowin' in the Wind", the anthem that transformed a little-known folk singer into the conscience of a nation, is exhibit A for Mr Marcus's theory of empathy. Its melody came from "No More Auction Block", a song originating with African-American soldiers in the civil war. The lyrics captured the earnest striving of the civil-rights movement: "How many roads must a man walk down,/Before you call him a man?" At the same time they undercut this hope for progress: "The answer is blowin' in the wind." It was both urgent and timeless.

Mr Marcus is at his best in exploring this rootedness. The seven works his book

is built around—the most recent is "Murder Most Foul", released in 2020—all offer opportunities for extended riffs on assorted aspects of American life. He delights in flitting back and forth in time, disrupting any sense of chronology and threatening to bury the music beneath the weight of its antecedents. In this telling, each track contains multitudes (indeed, one of Mr Dylan's numbers, not featured here, is called "I Contain Multitudes"). "He wrote songs", Mr Marcus says, "that as he put them out into the world wrapped their arms around history and then walked into it."

In the end, though, America's rich cultural history is the real subject of "Folk Music"; the details of Mr Dylan's life become incidental, even distracting. Mr Marcus justifies his approach by quoting the bard himself. "I just don't advertise my life," Mr Dylan (now 81) said in 2001. "I write songs, I play on stage, and I make records. That's it. The rest is not anybody's business." The result is a book filled with genuine insights but somehow unmoored. As the author tramps along half-forgotten byways listening for ghostly echoes, the distinctive personality of the artist remains obscure.

Which is a pity. For all Mr Dylan's elusiveness, he is hardly self-effacing; his music distils his nuanced personality. Delivering pyrotechnic lyrics in gravelly tones, combining idealism with world-weary cynicism, the kid from Minnesota turned out to be a true American original. ■

### Journalism in Mexico

## Murdering the messenger

**In the Mouth of the Wolf.** By Katherine Corcoran. Bloomsbury; 336 pages; \$28

AFTER ONLY nine months, 2022 is already the deadliest year on record for journalists in Mexico. At least 13 have been killed. That is around a quarter of the worldwide total and on a par with Ukraine. Yet though the toll is higher than usual, the peril is tragically familiar. Mexico has often been more dangerous for journalists than active war zones, despite being—on paper at least—a democracy at peace.

Katherine Corcoran, a former bureau chief in Mexico City for the Associated Press, explains this horror by focusing on one murder, that of Regina Martínez in 2012. The victim, a writer for investigative outlets who lived and worked in Veracruz, a state on the country's east coast, was found beaten and strangled to death in her bathroom. Few observers believe the



Truth to power

prosecutors' conclusion that her killing was a crime of passion (for which the supposed perpetrator is behind bars). Ms Corcoran's powerful new book, "In the Mouth of the Wolf", is the product of her years-long search for the truth.

Understanding Mexico's history is essential for grasping the predicament of its journalists. For over seven decades until 2000, the country was ruled by the Institutional Revolutionary Party, known as the PRI, its Spanish acronym. PRI rule was horribly corrupt and horribly repressive; people were massacred when that was deemed necessary. The press was seen as a tool of the party. Editors were frequently paid to print government drivel, or to hold back damning stories. Chronically underpaid then as they remain now, some reporters were susceptible to inducements.

Especially after power began to alternate between parties in 2000, journalists grew more independent and assertive, and the state less brutal. But the process of improvement is ongoing. Meanwhile reporting has been threatened by the rise of criminal gangs whose activities include extortion and kidnapping as well as drug-trafficking. A twisty nexus between the criminals and state forces has developed in many places, based on fear, common aims or money. Politicians, drug gangs or both together sometimes do away with inconvenient voices; local reporters are among the most vulnerable. (After Martínez's death, many of her protégés left Veracruz or even Mexico. Some gave up on journalism.)

Ms Corcoran's digging suggests such a state-criminal combination may have been responsible for Martínez's murder, and that she was killed because of her work, not a love spat. Though unable to tie up all the loose ends—typical in a country where most crimes are never reported and vanishingly few are punished—the author deftly shows the farcical nature of the prosecution case. When Martínez died, Ve- ➤

► racruz was particularly dangerous for journalists. Javier Duarte, its crooked governor, tolerated little dissent. During his six-year term 17 journalists were killed in that state alone. (After fleeing Mexico in 2016 he was caught and extradited and is now in jail for corruption.) Martínez had been investigating mass graves where state authorities may have been dumping bodies.

As that assignment suggests, the plight of journalists is not unique in Mexico, where over 100,000 people are listed as disappeared. Take the infamous case of 43 student teachers who vanished in 2014,

which scandalised even violence-weary Mexicans. Recent inquiries into that atrocity suggest a complex interplay between a drug cartel, the army and municipal police. Since Martínez's death, many more missing people have been found in mass graves of the sort she examined.

In this way, Ms Corcoran's book lays bare more than the travails of Mexico's investigative journalists. The corruption and criminal networks that she details are responsible for many injustices inflicted on the wider population. The bad news is that in some ways the situation is worsening. ■

Gangs are getting bolder, their entanglement with politics deeper. During last year's mid-term elections, 90 politicians were killed, probably by criminals who didn't like them. Many gangs now field their own candidates in local contests.

The good news is that independent and investigative media outlets are proliferating (as are local organisations that track mass graves and the disappeared). Still, as Ms Corcoran's book notes—and this year's death toll confirms—being a good journalist in Mexico demands sacrifice, sometimes the ultimate one. ■

## Back Story The talking cure

*After an anti-Semitism scandal, the Royal Court Theatre stages a lesson in trust*

**I**N THE 1960s, when censors still over-saw the British stage, the police were regular visitors to the Royal Court Theatre. Scandalously, it flouted bans on "Saved", a play in which a baby is stoned to death, and "Early Morning", which makes Queen Victoria a lesbian. These and other fabled controversies arose from the theatre's radical ambitions. The one that struck it last autumn, by contrast, was inadvertent and shameful. Yet it has led to important lessons in prejudice, and, just as urgently, in dialogue.

"Rare Earth Mettle", which opened in November, featured a megalomaniac tycoon whose name, before an outcry, was to be Hershel Fink. The character wasn't Jewish, but the name clearly was. For Jews, the context sharpened the sting of this old, defamatory link to rapacious wealth. Despite its swish location in London, the Royal Court is closely associated with the British left—which from 2015 to 2020, when Jeremy Corbyn led the Labour Party, itself became closely associated with anti-Semitism. Some class warriors who saw capitalism as a conspiracy defaulted to a belief in a Jewish one. Convinced of their moral virtue, some could not see the bigotry in their views on money and power.

The Royal Court apologised for its "unconscious bias". After it emerged that insiders' concerns about the name had been disregarded, it apologised again. An inquiry was conducted; staff were given training. But the story didn't end there.

Vicky Featherstone, the artistic director, says she and Tracy-Ann Oberman, an actor and vocal opponent of anti-Semitism, had already discussed doing a play about its rise on the left. The scandal sped up their plan. The result, on now, is "Jews. In Their Own Words."

As Ms Featherstone says, no holds are

barred. First comes a zany creation scene, the creation being Hershel Fink. Why is he there? "Because you were going to be a corrupt, manipulative billionaire," booms the voice of God. "And they gave you a Jewish name." Fink tries to interject. "You mean," says the voice, why would an "enlightened, progressive institution deploy such an obvious, and old, stereotype?"

The text is by Jonathan Freedland, an eminent left-leaning Jewish journalist, who was persuaded that the theatre was "all in". It weaves together interviews with a dozen British Jews, including Ms Oberman, politicians, writers, a social worker and a painter-decorator (played here by Jewish actors). It mentions another furore at the Royal Court, over "Seven Jewish Children", put on in 2009. But it opens out to examine left-wing prejudice at large, the lineage of anti-Semitic calumnies such as the blood libel, and the way they seeped into the ether. Mr Freedland says he aimed to show the gulf between "the Jews" of poisonous lore and real Jews, who live with the effects of the fantasies.

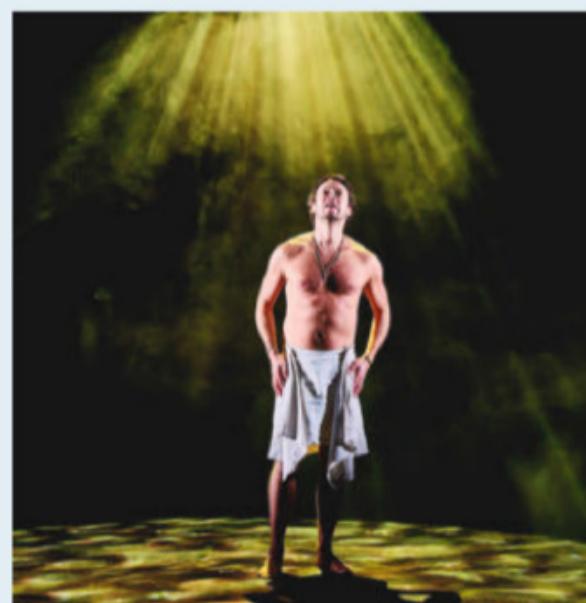
It is also mordantly funny. The de-

orator says his colleagues "don't understand why I'm not a lawyer...Actually, my mother doesn't understand why I'm not a lawyer." Some of the humour is the bleak kind to be found in absurd conspiracy-mongering. In a chorus-line number written by Mr Freedland that channels Mel Brooks, the caustic refrain is: "It was the Jews that did it."

Little things are connected to big things; that is part of the message. An affront at the house theatre of the British left drew on age-old slurs that have contributed to awful suffering and, yes, even to the Holocaust, which looms at the edge of these stories and lives. Not everyone wants to hear that warning. Ms Featherstone says the theatre is receiving the sort of anti-Semitic abuse and trolling that some of the characters describe ("It's been a big learning curve"). But the play makes another, hopeful point too.

When rows about bias or prejudice flare up at cultural institutions, as these days they often do, the response can be limited and defensive—some bureaucratic breast-beating, a change in repertoire or cast to fit in neglected voices and talent. The kind of searching critique on show at the Royal Court, not least of its own failings, is unusual.

It relies on humane attitudes that have come to seem rare: a presumption of goodwill, or to put it another way, trust—from the theatre, Mr Freedland, the interviewees, actors and audience—plus a faith that, if their errors are explained, people can choose to do better. Absorbing myths from the world around you "doesn't make you a bad person", says a forgiving figure on stage. On the evening after Rosh Hashanah, the Jewish New Year, the Royal Court served the audience honey cake, a traditional symbol of hope for a sweet collective future.



## Economic data

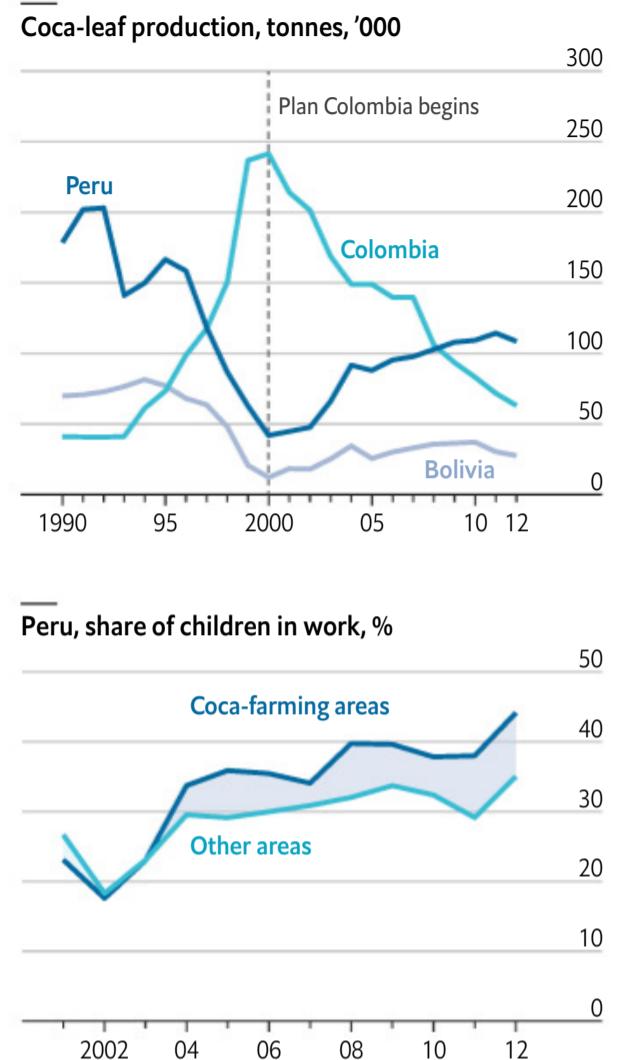
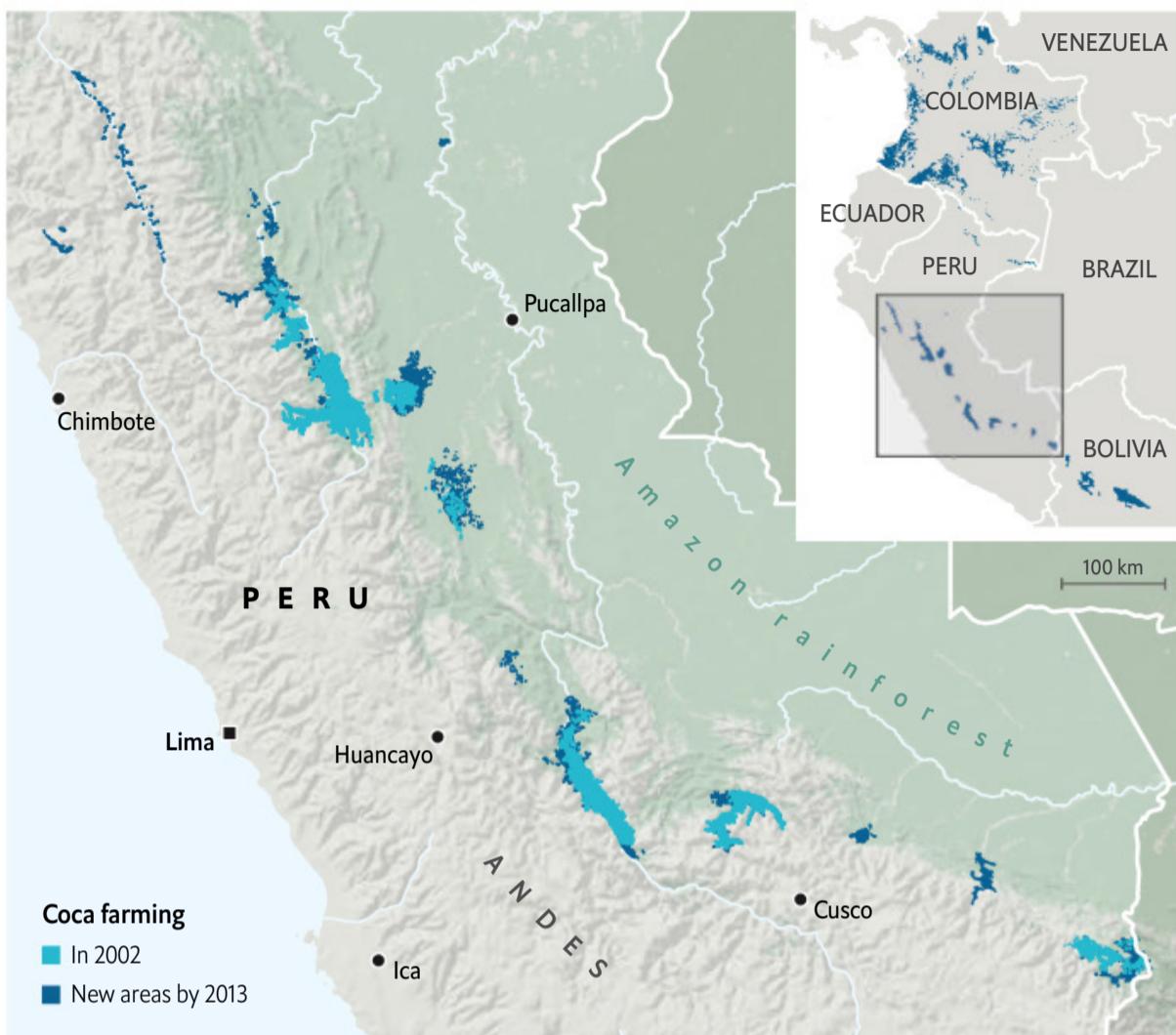
	Gross domestic product			Consumer prices		Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units	
	% change on year ago latest	quarter*	2022†	% change on year ago latest	2022†	%		% of GDP, 2022†		% of GDP, 2022†		10-yr gov't bonds latest,%	change on year ago, bp	per \$ Oct 12th	% change on year ago
United States	1.8	Q2	-0.6	1.5	8.3 Aug	7.9	3.5 Sep	-3.7	-3.9	3.9	232	-			
China	0.4	Q2	-10.0	3.3	2.5 Aug	2.1	5.3 Aug‡§	2.0	-7.1	2.5 §§	-28.0	7.16	-9.8		
Japan	1.6	Q2	3.5	1.8	3.0 Aug	2.1	2.5 Aug	1.8	-6.1	nil	-8.0	147	-22.6		
Britain	4.4	Q2	0.9	4.4	9.9 Aug	8.4	3.5 Jul††	-6.2	-6.9	4.7	350	0.90	-17.8		
Canada	4.6	Q2	3.3	3.2	7.0 Aug	7.0	5.2 Sep	1.2	-3.6	3.4	180	1.38	-9.4		
Euro area	4.1	Q2	3.1	2.9	10.0 Sep	8.3	6.6 Aug	1.4	-4.4	2.3	241	1.03	-15.5		
Austria	6.0	Q2	11.5	4.6	10.5 Sep	8.9	5.2 Aug	-0.5	-4.7	3.0	291	1.03	-15.5		
Belgium	3.3	Q2	0.8	2.2	11.3 Sep	9.6	5.8 Aug	-1.3	-5.1	3.1	289	1.03	-15.5		
France	4.2	Q2	2.2	2.4	5.6 Sep	6.2	7.3 Aug	-1.9	-6.1	2.9	272	1.03	-15.5		
Germany	1.7	Q2	0.6	1.4	10.0 Sep	8.3	3.0 Aug	3.9	-4.4	2.3	241	1.03	-15.5		
Greece	7.8	Q2	5.0	5.0	12.0 Sep	9.5	12.2 Aug	-6.6	-5.3	5.0	405	1.03	-15.5		
Italy	5.0	Q2	4.4	3.3	8.9 Sep	7.8	7.8 Aug	-0.8	-5.9	4.8	386	1.03	-15.5		
Netherlands	5.1	Q2	10.6	4.5	14.5 Sep	13.1	3.8 Aug	7.7	-2.2	2.6	262	1.03	-15.5		
Spain	6.8	Q2	6.0	4.2	9.0 Sep	9.2	12.4 Aug	0.4	-5.4	3.3	287	1.03	-15.5		
Czech Republic	3.6	Q2	1.8	2.2	18.0 Sep	16.7	2.5 Aug‡	-3.8	-5.7	5.8	342	25.3	-13.2		
Denmark	3.5	Q2	3.5	2.1	10.0 Sep	8.2	2.7 Aug	8.3	0.8	2.8	257	7.67	-16.0		
Norway	3.9	Q2	2.9	2.2	6.9 Sep	6.2	3.1 Jul‡‡	17.3	11.3	1.4	76.0	10.8	-20.6		
Poland	4.9	Q2	-8.1	3.5	17.2 Sep	14.4	4.8 Sep§	-3.7	-3.7	8.2	561	4.99	-20.6		
Russia	-4.1	Q2	na	-4.4	13.7 Sep	14.0	3.8 Aug§	12.9	-3.1	10.3	267	64.8	11.0		
Sweden	4.1	Q2	3.6	2.2	9.8 Aug	7.3	6.6 Aug§	3.0	-0.2	2.3	194	11.3	-22.5		
Switzerland	2.4	Q2	1.1	2.2	3.3 Sep	3.4	2.1 Sep	7.0	-1.1	1.5	152	1.00	-7.0		
Turkey	7.6	Q2	8.5	5.0	83.5 Sep	72.8	9.8 Aug§	-5.7	-3.8	12.4	-603	18.6	-51.4		
Australia	3.6	Q2	3.6	3.2	6.1 Q2	6.0	3.5 Aug	1.9	-2.6	4.0	223	1.59	-14.5		
Hong Kong	-1.3	Q2	4.1	0.4	1.9 Aug	2.0	4.1 Aug‡‡	4.1	-6.8	3.8	241	7.85	-0.9		
India	13.5	Q2	9.5	6.9	7.4 Sep	7.0	6.4 Sep	-1.5	-6.6	7.4	111	82.3	-8.3		
Indonesia	5.4	Q2	na	5.0	6.0 Sep	4.9	5.8 Q1§	1.2	-3.9	7.3	99.0	15,358	-7.4		
Malaysia	8.9	Q2	na	6.0	4.7 Aug	3.4	3.7 Aug§	1.9	-6.1	4.5	83.0	4.68	-10.9		
Pakistan	6.2	2022**	na	6.2	23.2 Sep	20.7	6.3 2021	-5.1	-7.6	12.8 †††	218	217	-21.4		
Philippines	7.4	Q2	-0.4	6.7	6.9 Sep	4.9	5.2 Q3§	-3.8	-7.7	7.1	213	59.0	-13.8		
Singapore	4.4	Q2	-1.0	3.5	7.5 Aug	5.7	2.1 Q2	18.9	-1.0	3.5	180	1.44	-5.6		
South Korea	3.0	Q2	3.0	2.6	5.6 Sep	5.1	2.1 Aug§	1.8	-3.3	4.1	167	1,425	-15.9		
Taiwan	3.0	Q2	-7.0	2.9	2.8 Sep	3.0	3.7 Aug	14.1	-2.0	1.8	129	31.9	-11.6		
Thailand	2.5	Q2	2.7	2.8	6.4 Sep	6.0	1.2 Aug§	-0.6	-5.0	3.1	128	38.1	-12.2		
Argentina	6.9	Q2	4.2	4.6	78.5 Aug	70.8	6.9 Q2§	-0.6	-4.5	na	na	151	-34.4		
Brazil	3.2	Q2	5.0	2.6	7.2 Sep	9.6	8.9 Aug‡‡	-0.4	-6.2	11.9	96.0	5.30	4.5		
Chile	5.4	Q2	nil	2.0	13.7 Sep	11.5	7.9 Aug‡‡	-7.1	-1.7	6.8	19.0	937	-11.7		
Colombia	12.6	Q2	6.0	6.6	11.4 Sep	9.8	10.6 Aug§	-5.1	-4.7	13.5	606	4,612	-18.9		
Mexico	2.0	Q2	3.7	2.2	8.7 Sep	8.0	3.3 Aug	-1.0	-2.4	9.8	232	20.0	3.8		
Peru	3.3	Q2	2.3	2.6	8.5 Sep	7.7	7.7 Aug§	-3.5	-2.1	8.7	254	3.98	2.5		
Egypt	3.2	Q2	na	6.2	15.1 Sep	12.5	7.2 Q2§	-4.9	-6.5	na	na	19.7	-20.1		
Israel	4.8	Q2	6.8	5.7	4.6 Aug	4.5	3.4 Aug	3.5	0.5	3.3	215	3.57	-9.5		
Saudi Arabia	3.2	2021	na	9.1	3.0 Aug	2.5	5.8 Q2	14.0	9.0	na	na	3.76	-0.3		
South Africa	0.2	Q2	-2.9	1.9	7.9 Aug	6.9	33.9 Q2§	-1.3	-6.2	10.8	126	18.3	-18.2		

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

## Markets

In local currency	Index	% change on:			index	% change on:			Dec 31st 2021	Basis points	latest	Dec 31st	2021	% change on month	year	
		Oct 12th	one week	Dec 31st 2021		Oct 12th	one week	Dec 31st 2021								
United States S&P 500	3,577.0	-5.5	-24.9		42,007.1	1.0	-5.8									
United States NAScomp	10,417.1	-6.6	-33.4		3,083.2	-2.2	-1.3									
China Shanghai Comp	3,025.5	nil	-16.9		2,202.5	-0.6	-26.0									
China Shenzhen Comp	1,929.5	0.9	-23.7		13,081.2	-5.2	-28.2									
Japan Nikkei 225	26,396.8	-2.7	-8.3		1,560.8	-1.2	-5.8									
Japan Topix	1,869.0	-2.3	-6.2		136,396.4	-7.0	63.3									
Britain FTSE 100	6,826.2	-3.2	-7.6		114,827.1	-2.0	9.5									
Canada S&P TSX	18,206.3	-5.3	-14.2		45,679.8	-0.4	-14.3									
Euro area EURO STOXX 50	3,331.5	-3.4	-22.5		9,800.6	-2.1	-17.7									
France CAC 40	5,818.5	-2.8	-18.7		1,898.4	1.1	-8.4									
Germany DAX*	12,172.3	-2.8	-23.4		11,551.3	-1.9	1.9									
Italy FTSE/MIB	20,466.8	-4.2	-25.2		64,528.2	-1.7	-12.5									
Netherlands AEX	631.2	-5.0														

→ As Colombia clamped down on the drug trade, child labour surged in Peru's coca-growing regions



Sources: "Making a narco: childhood exposure to illegal labour markets and criminal life paths," by M.M. Sviatschi, July 2022, *Econometrica*; UN

## The youngest victims

### A shift in coca production pushed Peruvian children towards crime

MANY COSTS of the illegal drug trade are easy to see. Body counts mount every year from overdoses by consumers and violence among traffickers and dealers. The full damage that the business inflicts, however, is far broader. A recent paper by Maria Micaela Sviatschi of Princeton University shows that demand for coca leaves, from which cocaine is produced, pushed a generation of children in Peru out of school and into lives of crime.

In the late 1990s Colombia, then the world's leading coca producer (as it is again today), launched a campaign against drug gangs. Bolstered by Plan Colombia, a package of military and financial aid from the United States, the effort included spraying crop-killing chemicals in coca-growing areas. As a result, the country's coca output fell for a while. With less supply and no change in demand, prices rose.

Farmers in neighbouring Peru, in valleys where the Andes meet the Amazon basin, took notice. The more profitable coca became relative to other crops, the more

coca they sought to grow. Unlike coffee or cacao, however, most of the coca leaves were destined for illegal use. The solution farming families appear to have found was to delegate the labour to children too young to be prosecuted.

To measure this effect, Ms Sviatschi linked agricultural and ecological data with household surveys and drug prices. She found that in 1997-2003, as coca prices surged, the child-labour rate in coca-growing areas rose by 30% and the share of children set to begin secondary school who dropped out increased by 26%. These rates did not rise as much in other parts of Peru.

The consequences have been depressingly durable. Ms Sviatschi found that in

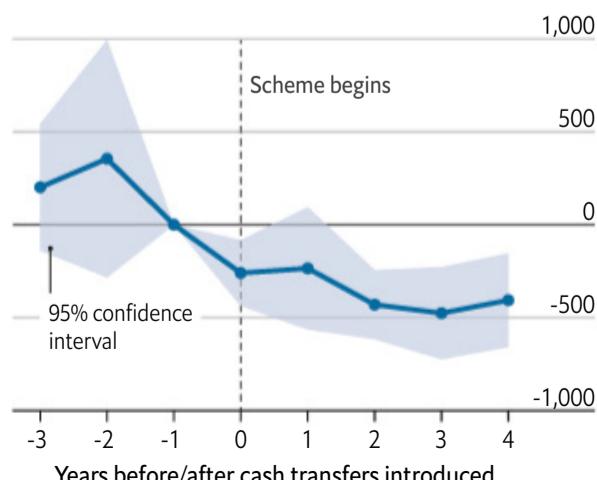
regions where the price of coca doubled, the share of children then aged 11-14 who went on to be imprisoned for murder between the ages of 18 and 30 rose by 30%. There was no similar increase among children of the same age who grew up in different regions, or among those in the same areas who were born earlier or later. There was also no increase in the affected children's chances of committing other crimes distinct from the drug trade, such as theft or sexual assault. The most likely explanation for this pattern is that children who grow coca acquire valuable industry-specific knowledge, such as how to turn it into cocaine or where to find buyers, that in turn leads them to stay in the business.

Ms Sviatschi did find one promising remedy. In theory, if parents had their kids grow coca because it was the only way to make ends meet, they might keep their children in school if given economic alternatives. And during the relevant time period, some districts in coca-growing zones ran a cash-transfer scheme that gave families \$30 a month—a 20% increase in income, on average—if their children met certain criteria, such as attending 85% of classes in school. Other regions did not.

Sure enough, in areas that offered this incentive, coca production fell by 34% once it was introduced. Given the high cost and low impact of other anti-drug policies, such schemes look like a bargain. ■

### Peruvian districts, average tonnes of coca produced

Relative to year before cash transfers introduced in 2011-14





## From coal to gold

**Loretta Lynn, country-music star, died on October 4th, aged 90**

**L**ORDY, THAT little girl could sing. When she sat on the porch swing of that cabin in Butcher Holler ("Hollow" on the map, if there was a map), and rocked her baby brothers and sisters asleep, she'd sing loud enough to bust their eardrums. But it was such a clear, bright sound that the man who ran the still on the opposite slope would come out to sit and listen while the moonshine was running off. He once asked her to sing a bit louder, just for him.

Eventually Loretta Lynn's voice spread far beyond those Kentucky pine hills and hollers, to radio stations, to Nashville and the stage-cum-shrine of the Grand Ole Opry, to the whole nation and across the seas. In 1972 the Country Music Association named her Entertainer of the Year, and she was the Academy of Country Music's Artist of the Decade for the 1970s. Through the 1960s and 1970s she produced three albums more or less every year. She became the most-successful-ever female country-music star, with 16 No. 1s in America's country-music chart and 45m albums sold worldwide. Well into her 70s, she was still touring. You were liable to hear that voice anywhere, perky, true-toned and as twangy as the day she was born.

For her, popularity came as a surprise. As her signature song declared (as well as her backing group, the Coal Miners, and the gold miner painted on her tour bus), she was only a coal miner's daughter. Daddy worked all night in the Van Lear mine, crawling through a three-foot-high seam that left his knees cut and sore. By day he hoed corn. And money, or scrip, was still scarce. They lived on pinto beans and bacon, and the cracks in the cabin walls were patched over with pictures of film stars from glossy magazines (including Loretta Young, hence her name). The children shared shoes until they got bunions. She went to a one-room school, and nothing she did there suggested that she would ever move away.

She also didn't think she was any big deal. As far as looks went, she had fine blue eyes and good cheekbones from her part-Chero-

kee mother, but buck teeth, which she hated. She wore long gowns with high necks and long sleeves, hair hanging to her shoulders. Musically, she played simple acoustic guitar and wanted to sing like Kitty Wells, the top female country singer of her teenage years. As for lyrics, she just scratched a phrase on any scrap of paper, hotel bill or whatever, and then hummed it to herself until she got a song. The themes were mostly the usual, two people falling in love, one party cheating or both, someone left hurting or both. Because that was life, wasn't it? That was the truth.

But it wasn't a truth heard often from the woman's point of view. Most country women she knew—and no doubt city women, too—were trapped indoors with housework and babies, domestic drudgery day after day, as in "One's on the Way":

...here in Topeka the screen door's a bangin'  
The coffee's boiling over and the wash needs a hangin'  
One wants a cookie and one wants a changin'  
And one's on the way

She sang for every woman then, not least herself. Around 90% of the lines came out of her marriage to Oliver "Doolittle" Lynn, a union that lasted decades of hard fighting and hard loving. She met him at a pie social (he being the boy who bought her awful pie), married him at 15, and by 19 had four babies, in the end six. He was a good bit older and had travelled, as she never had. So she went from Daddy to Doolittle, always with a man telling her what to do—this time, one who beat her and sold bootleg whiskey on the side. She in turn could be mean as a snake, and once knocked three of his teeth out, clackety-clack on the hardwood floor. That was an accident, but she still meant to hit him. And hard.

In that time of women's lib she was no feminist, and didn't want to be. Still she sang about equality ("Second class don't turn me on at all"), about the hardship of women's divorce ("The women all look at you like you're bad/And the men all hope you are") and the joy of the Pill:

There's a gonna be some changes made  
Right here on nursery hill  
You've set this chicken your last time  
'Cause now I've got the pill

Doo's nocturnal habits came in for a thrashing, too ("So, don't come home a'drinkin' with lovin' on your mind"). All this she sang with such a broad defiant grin that she always said she was just clowning around, up on that stage.

And she clung to Doolittle all the same, threatening "fist city" if any hussy came near him, because he'd made her what she was. She owed him everything. When she married him she gave up public singing, but he bought her a \$17 Harmony guitar for her 21st birthday and said he liked to hear her sing around the house. (He also called her a stupid hillbilly, way too bashful about herself.) So she began to perform in clubs and honky tonks, realising people liked her. In 1960 she recorded "I'm A Honky Tonk Girl" on a small label, and they took a three-month road trip, sleeping in the car and living on baloney sandwiches, to hand-deliver the single to radio stations. It reached the country Top 20, she signed a deal with Decca, and she was not a housewife any more, thanks to Doo. With him by her side, she also never lacked material for her songs.

Becoming a star meant moving to a splendid plantation house and ranch in 1,450 acres at Hurricane Mills, Tennessee. There she built a modern mansion and a museum for her stage outfits, as well as for the hundreds of gifts and cards she had been sent by fans. A girl from Butcher Holler knew how to hold on to things. But Butcher Holler was there too, in a replica cabin that had been built in 1980 for the film of her autobiography, "Coal Miner's Daughter". It had antimacassars on the armchairs, lace cloths on the tables and Momma's cup of fortune-telling tea on the kitchen table. There was also a replica pithead coal-chute, "Loretta Lynn's Coal Mine No. 5". It sounded like a perfume—the perfume of her life. ■

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## A Racing Machine On The Wrist