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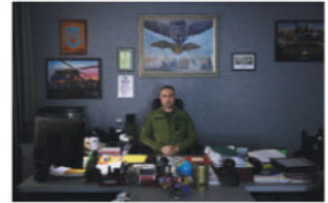
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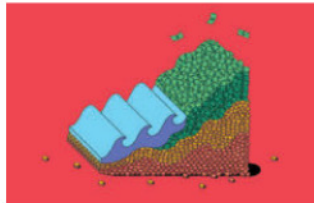
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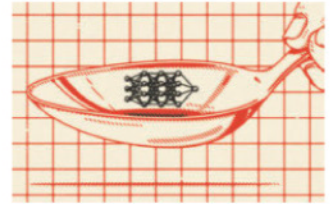
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Antony Blinken visited **China**, the first American secretary of state to do so in five years. He met several senior officials, as well as China's president, Xi Jinping, who said they had made "progress" towards stabilising relations. Both sides appeared open to further talks, but no agreements were reached. Mr Blinken said there are "many issues on which we profoundly, even vehemently, disagree". Later, at an event in California, Joe Biden called Mr Xi a dictator and said the Chinese leader had been embarrassed when America shot down an alleged Chinese spy balloon in February. China said the comments were absurd.

Mr Biden described Russia's deployment of tactical **nuclear weapons** to Belarus as "absolutely irresponsible". Vladimir Putin confirmed that the first batch of weapons, which carry small warheads for battlefield use, had been sent to its ally as a warning to countries that are "thinking of inflicting a strategic defeat on us".

A voice in the wilderness

The Russian authorities began a new trial of **Alexei Navalny**, this time accusing Russia's most prominent opposition politician of rehabilitating Nazism while in prison. The closed-door trial is being held in the penal colony where Mr Navalny is serving over 11 years on other trumped-up charges. The preordained guilty verdict in this sham case could add another 30 years to his term.

Russian officials threatened to end the deal that ensures the safe passage of Ukrainian grain through **Black Sea ports**. The agreement has been extended

until July 17th, but Russia claims its own grain exports are being impeded.

In **Moldova** the Constitutional Court placed a ban on Sor, a pro-Russian political party that has led protests against the Moldovan government. The party's leader was Ilan Shor, a businessman who fled to Israel after being found guilty of money-laundering.

Petteri Orpo became prime minister of **Finland**. The country's parliament formally backed his new centre-right coalition following an election in April, in which the ruling Social Democrats were defeated. The new finance minister is Riikka Purra, who leads the Eurosceptic Finns Party.

Estonia's parliament legalised same-sex marriage, making the Baltic nation the first country in eastern Europe to do so. The prime minister, Kaja Kallas, has formed a liberal coalition following her party's election win in March.

Four **Israelis** were killed by two **Palestinian** gunmen in an attack near a settlement in the occupied West Bank. Palestinian officials said hundreds of Israeli settlers assaulted a village in revenge; a Palestinian man died in the ensuing mêlée. Hamas, the Islamist group that runs Gaza, said the gunmen were its members and that the attack was retaliation for an Israeli raid on Jenin, where Israel fired from helicopters in the West Bank for the first time in 20 years, killing seven Palestinians.

Zied el Heni, a journalist, was arrested on charges of insulting Kais Saied, **Tunisia's** president. Tunisian judges have detained or opened investigations into more than 20 prominent figures opposed to Mr Saied in recent months.

Mali ordered a peacekeeping mission with 15,000 personnel to leave "without delay" and said it would bring espionage charges against UN officials involved in a report accusing

the government of atrocities. Since the army seized power in 2020, Mali has constrained the operations of the blue helmets and has turned instead to Wagner Group, a Russian mercenary firm, in its fight against jihadists.

Jihadists from the Allied Democratic Forces, a Congolese group backed by Islamic State, killed 41 people, most of them children, in a cross-border raid on a school in **Uganda**. It was the country's worst terrorist attack since 2010.

At least 46 women were killed in a prison in **Honduras** in a battle between rival gangs. Most of the women had been set on fire. President Xiomara Castro, who has been trying, without much success, to crack down on gang activity, including within prisons, said the violence had happened with the acquiescence of security officials. She sacked the country's security minister.



Narendra Modi travelled to America for his first full state visit (it was his sixth trip as prime minister of **India**). Mr Modi is being feted by America, which wants to deepen ties with India on defence and technology, in large part to counteract the rise of China. India is not an American ally, however, and still depends on Russia for oil and weapons. Mr Modi also met Elon Musk to discuss tech investments.

Thailand's election commission confirmed the results of a ballot in May that was won by the opposition. The commission's confirmation of the result paves the way for parliament to choose a government.

It is unclear if the progressive Move Forward party, which scored a stunning upset by coming first in the election, has enough support to form a coalition under its leader, Pita Limjaroenrat.

The age of sexual consent in **Japan** is to rise from 13 to 16 following landmark reforms passed by the country's legislature. The definition of rape is to be broadened from "forced" to "non-consensual" sexual intercourse.

Police in the **South Korean** city of Daegu stepped in to allow a gay pride festival to proceed after local officials tried to stop the event. The conservative local mayor said the organisers had not sought permission and the festival would impinge on businesses. But a court refused to impose an injunction, finding that freedom of expression was paramount.

Hunter on the defence

In a deal with the Justice Department, **Hunter Biden** pleaded guilty to failing to pay income tax. He also reached an agreement on his illegal possession of a gun that will see him avoid prosecution. Republicans accused the department of political bias in what they claim is its lenient handling of Joe Biden's son.

A **submersible** vessel carrying five passengers on a trip to the wreck of the *Titanic* lost contact with its support ship. An extensive search was launched for the *Titan*, which had limited oxygen on board.

In **Britain** MPs voted on a committee report that censured Boris Johnson for deliberately misleading Parliament. Rishi Sunak was criticised by the opposition for a lack of leadership when he declined to turn up for the vote. Most other Conservative MPs also failed to appear. But in the end only seven Tories voted against the report, a crushingly low level of support for Mr Johnson.



Britain's headline annual rate of **inflation** remained elevated at 8.7% in May, defying expectations that it would fall again. Core inflation, which strips out food and energy prices, rose to 7.1%, the highest it has been since March 1992. The government has promised to cut inflation by half this year from the 10.1% registered in January, but higher prices persist in food, clothing, recreation, health, communications and travel.

Brick by brick

The price of **housing** in Britain is also soaring. The cost of a two-year fixed-rate mortgage has shot above 6% in recent days, as lenders re-evaluate their mortgage products and remove cheaper deals from the market. Banks link their fixed-rate mortgages to market expectations for interest rates, which are rising as the outlook sours on inflation. Official statistics showed rents also surging, by 5% in the year to May, the fastest pace since the data series began in 2016.

China's central bank trimmed its benchmark lending rates for the first time in ten months, in an effort to rejuvenate growth. With Li Qiang, the prime minister, warning that "the external environment is becoming more complex and severe", the government is considering other measures to get the economy moving. The finance ministry unveiled a 520bn yuan (\$72bn) extension to tax breaks for **electric vehicles** to boost car sales.

Carlos Ghosn filed a lawsuit seeking \$1bn in damages from Nissan related to his arrest and defenestration as the carmak-

er's boss in 2018 over allegations of financial misconduct. Mr Ghosn, one of the most powerful executives in the car industry at the time, filed his claim in Lebanon, where he fled in 2019 to avoid a trial. Nissan declined to comment.

The International Energy Agency published a report on **clean energy** in developing and emerging-market economies. It said that investments in those countries would have to rise from \$770bn a year to between \$2.2trn and \$2.8trn by the early 2030s if the Paris agreement's goals on carbon emissions are to be met. China accounts for two-thirds of the current spending on clean energy, with Brazil and India taking a large bite of the rest.

Denmark retained top spot in the annual **World Competitiveness ranking** from the International Institute for Management Development (IMD). The criteria behind the ranking include international trade, government and business efficiency and technological infrastructure. Ireland leapt from 11th place to 2nd while Britain tumbled from 23rd to 29th, dragged down by worsening productivity and rising bureaucracy. America was 9th; China 21st.

The Italian government took measures to block a Chinese state-owned company from appointing a CEO at **Pirelli**, a global maker of tyres best known for its association with Formula One racing. Sinochem holds a 37% stake in Pirelli.

IndiGo, a low-cost Indian airline, placed an order for 500 Airbus A320 passenger jets, the biggest ever deal in **commercial aviation**. India has become the fastest-growing aviation market and IndiGo is the biggest domestic player. The deal was announced at the first Paris air show since 2019. At the event Air India firmed up its order for 470 planes from Airbus and Boeing.

America's Federal Trade Commission sued **Amazon** for allegedly enrolling customers into its Prime service without their consent and for making it hard for them to cancel.

Intel doubled the amount it is investing in two new chip-making factories in **Germany** to \$33bn, after the German government agreed to increase subsidies for the project to €10bn (\$11bn). It is the largest-ever foreign investment in Germany and the biggest bid by a European country to enter the chip war, following Amer-

ica's enticement of chipmakers. The **Israeli** government said that Intel would up its investment in a factory in the country to \$25bn.

Alibaba announced that Eddie Yongming Wu would replace Daniel Zhang as chief executive in September. Mr Zhang will retain control of the cloud division. Mr Wu is one of the founders of the Chinese internet giant and is a close friend of Jack Ma, another founder, as is Joe Tsai, who takes over Mr Zhang's other role as chairman. In March the company announced plans to turn itself into a holding company overseeing six divisions.

A ray of Son shine

Son Masayoshi used his first public appearance in seven months to talk up **SoftBank's** investments in artificial intelligence. Displaying his typical exuberance, the boss of the Japanese tech conglomerate told shareholders that "a huge revolution is coming" in AI and that SoftBank would "rule the world" in its development. After a period of reflection following heavy losses at its flagship Vision Funds, Mr Son said he now wants to become "an architect for the future of humanity".



Creating Ukraine 2.0

For Russia's war to fail, Ukraine must emerge prosperous, democratic and secure

UKRAINE'S WAR is raging on two fronts. On the 1,000km battlefield its armies are attacking the Russians' deep defences. At the same time, on the home front Ukraine is defining what sort of country it will be when the fighting stops. Both matter, and both will pose a severe test for Ukraine and its backers.

After two weeks Ukraine's counter-offensive is falling behind plan. Its forces have retaken some territory, but they have suffered losses and have yet to penetrate the kilometres-deep array of Russian minefields, tank traps and trenches. Even if they break through some lines, they risk being pinned down and destroyed by enemy artillery and drones.

That is a sobering prospect. However, the vast majority of Ukraine's troops have yet to enter the battle and, until they do, nobody—not even Ukraine's generals—can know the two sides' true strength. In the coming weeks the Ukrainian army will establish whether or not Vladimir Putin can hold his ground, and set the military terms for the rest of the conflict.

The home front is less dramatic, but everything depends on it. Russia may continue to occupy tracts of land, but if Ukraine ends up prosperous, democratic and secure, then Mr Putin's war will have failed utterly. By contrast, if Ukraine takes back territory only to sink into a morass of corruption, poverty and political violence, it will have surrendered the ideals for which its citizens have fought so bravely. A conference in London this week and a NATO summit in Vilnius, in Lithuania, on July 11th-12th are laying the foundations for success or failure.

Ukraine's nation-builders face formidable obstacles. The greatest is that, while Mr Putin is in power, this war is unlikely to end with a solid peace treaty. The two sides may talk—if only to avoid being seen as war-crazy. But Mr Putin's word is not to be trusted and Ukraine will be unwilling to formally sign away its claim to any territory that Russia still occupies. Instead the two armies could dig in. An informal ceasefire could follow, or a low-intensity conflict broken by missile strikes, a continued blockade and fitful, probing offensives.

The other obstacles are almost as formidable, though at least it is in the power of Ukraine and its allies to overcome them. About 6.2m Ukrainians have fled abroad: their country needs them back. More than 1m fighters will return from battle, many bearing injuries and mental trauma. The World Bank has estimated that repairing the damage from the first year of war will cost more than \$400bn—and that was before the collapse of the dam at Nova Kakhovka, most likely because of Russian sabotage. Last, as Ukraine leaves behind martial law, it must overcome a history of corruption and misgovernment that Russia has long exploited to corrode Ukrainians' faith in their leaders.

To succeed, Ukraine must work on many dimensions at the same time. To attract workers and private capital, it needs to rebuild itself. To unleash the creativity and enterprise of its citizens, it must live by the rule of law. To deprive Mr Putin of a veto over its prosperity, it must ensure that its skies and cities are safe enough from Russian aggression for normal life to flourish. Each of these depends on the others, and work should start on

them now, despite the fighting. Progress will help lock in Western support, which may ebb—especially if Donald Trump is elected in 2024. It will also signal to Mr Putin and his cronies that their war is futile.

The effort starts with money for rebuilding on a vast scale. Ukraine's economy has stabilised at about two-thirds of its former size. Ultimately, its future rests on private investment, but government money will be needed first. The London conference set out to galvanise support from development banks and Western backers as well as tempt businesses to consider a reformed Ukraine as a place to invest (see Finance & economics section).

Many countries have a vital interest in Ukraine succeeding and Russian aggression being seen to have failed, but these are straitened times. Governments will not raise enough money, especially if they protect their aid budgets, as they should. Instead they should find a legal process that allows them to treat the \$330bn or so of Russian state money they have frozen as a fund for paying out compensation to Ukraine.

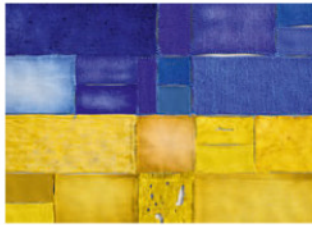
Next comes good government. The war has shunted aside many of the oligarchs who held Ukraine back. Their place has been taken by a cohort of entrepreneurs and activists, many of them with a background in technology (see Briefing). The government of Volodymyr Zelensky has moved against some corruption, including detaining the head of the Supreme Court on allegations of bribery.

However, Western officials warn that, for all his strengths, Mr Zelensky is bored by the detail that dogged reform entails. When Ukraine finally holds elections it risks lapsing back into the old, corrupt politics. That is why accession to the European Union is so important. It creates an incentive for reform and the application of the law. It also submits the government to scrutiny and creates allies for those who dream of transforming their country.

Finally comes security. Eventually, Ukraine needs to join NATO. That would offer permanent security at the lowest cost, because NATO's Article 5 guarantee would signal to Mr Putin and his successors that an attack on Ukraine was an attack on the entire alliance—a battle Russia could not win. By binding what will be Europe's biggest and best-equipped army into NATO's structures, it would also help stabilise Ukraine and its borders.

However, Ukraine gains little from joining while battle rages—because that would require suspending Article 5 and any doubt about when it applies would weaken NATO. Instead Ukraine needs bilateral security guarantees and an accelerated path to NATO membership (see International section). These guarantees need to be written into law, as they are between America and Israel. They should involve money, weapons, intelligence and investment in Ukraine's arms industry. Western troops may eventually be based in the country. The aim is to make Ukraine indigestible, rendering a future Russian invasion less feasible.

This is a fearsome agenda. If Ukraine struggles on the battlefield, a greater burden will fall on the home front and the higher will be the obstacles to success. All the more reason for Ukraine and its allies to press ahead. ■



Financial markets

The trouble with sticky inflation

Investors must prepare for sustained price pressure

AT FIRST GLANCE the world economy appears to have escaped from a tight spot. In the United States annual inflation has fallen to 4%, having approached double digits last year. A recession is nowhere in sight and the Federal Reserve has felt able to take a break from raising interest rates. After a gruesome 2022, stockmarkets have been celebrating: the S&P 500 index of American firms has risen by 14% so far this year, propelled by a resurgence in tech stocks. Only in Britain does inflation seem to be worryingly entrenched.

The trouble is that the inflation monster has not truly been tamed. Britain's problem is the most acute. There, wages and "core" prices, which exclude energy and food, are rising by around 7%, year on year (see Britain section). But even as headline rates elsewhere have dropped as the energy shock has faded, core inflation has been frustratingly stubborn. In both America and the euro area it exceeds 5%, and has been high over the past year. Across the rich world many governments are adding fuel to the fire by running budget deficits of a scale typically seen during deep economic slumps.

As a result, central banks face agonising choices. What they do next will reverberate across financial markets, threatening uncertainty and upheaval for workers, bosses and pensioners.

Equity investors are hoping that central banks can return inflation to their 2% targets without inducing a recession. But history suggests that bringing inflation down will be painful. In Britain mortgage rates are surging, causing pain to aspiring and existing homeowners alike. Rarely has America's economy escaped unscathed as the Fed has raised rates. By one reckoning, the unemployment rate would have to rise to 6.5% for inflation to come down to the Fed's target, the equivalent of another 5m people being out of work. Rising interest rates imperil financial stability in the euro area's most indebted member countries, notably Italy.

Moreover, the secular forces pushing up inflation are likely to gather strength. Sabre-rattling between America and China is leading companies to replace efficient multinational supply chains with costlier local ones. The demands on the public purse to spend on everything from decarbonisation to defence will only intensify (see Free exchange).

Central bankers vow that they are determined to meet their targets. They could, by raising rates, destroy enough demand to bring inflation down. Were they to keep their word, a recession would seem likelier than a painless disinflation. But the costs of inducing a recession, together with the longer term pressures on inflation, suggest another scenario: that central banks seek to evade their nightmarish trade-off, by raising rates less than is needed to hit their targets and instead living with higher inflation of, say, 3% or 4% (see Briefing).

This approach would resemble the "opportunistic disinflation" espoused by some Fed governors in the late 1980s. Rather than deliberately inducing recessions to bring inflation down, they sought to do so passively, from cycle to cycle. Yet today's markets are not prepared for such tactics. The pricing of infla-

tion-linked Treasuries, for instance, is consistent with average inflation expectations of 2.1% over the next five years, and 2.3% in the five years thereafter. A world of higher sustained inflation would therefore involve an epochal shift for financial markets. Unfortunately, it would be volatile, wrong-foot investors and pit winners against losers.

One source of volatility could stem from the damage to central banks' reputations. In the decades since the 1980s they have trumpeted their commitment to targets. Yet over the past two years they have failed to anticipate the persistence of inflation. Should they then pay lip service to their unmet targets, they might no longer be taken at their word. In time they could lose the ability to guide the expectations of businesses and their workers. Those expectations could become unmoored and cause lurches in prices, inducing inflation to spiral.

Volatile inflation would hurt companies, and their shares, by making it harder for them to manage their costs and set prices. It would hurt virtually every asset class by raising the likelihood that central banks would have to rush to adjust rates after an unexpected flare-up. That could bring large swings in real yields, prompting investors to demand a discount in compensation for the uncertainty, forcing asset prices down.

The new regime could wrong-foot investors in other ways,

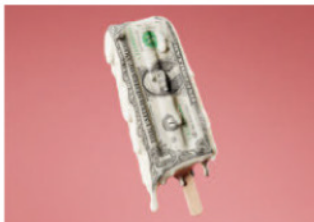
too. Were central banks more lax, it would initially flatter the prices of short-term bonds and push down their yields. In time, as the system adjusted to higher inflation, nominal rates would rise to keep real interest rates constant; in anticipation, the price of long-term bonds would fall. Investors could rush into commodities, an inflation hedge. Yet a stampede into the tiny market for futures, which are easier to trade than physical barrels of oil, would risk a bubble.

Higher inflation would also create new winners and losers. Most obviously, inflation involves an arbitrary transfer of wealth from lenders to borrowers, as the real value of debt falls. Heavily indebted borrowers, including governments around the world, may feel like rejoicing. But as bond investors realised they were being stiffed, they could punish recklessness with higher borrowing costs, including in rich countries.

Sticker shock

Other financial relationships could also become strained. If inflation was gobbling up four percentage points of returns each year, investors might start to look askance at fund managers' fees. Rising yields would improve the financial health of many defined-benefit pension schemes, by reducing the present value of their future liabilities. But benefits in retirement are not always fully protected from inflation, meaning that the purchasing power of some pensions will eventually be lower than expected. That would fuel voters' ire.

Such is the excruciating situation that central banks now find themselves in. They are likely to steer a course between high inflation and recession. Investors seem to believe that this can still end well, but the chances are that it won't. ■



The Middle East

Buying time

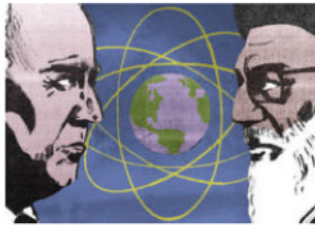
America wants to lower tensions with Iran. Good

IRAN CANNOT rival Ukraine and Taiwan for headlines, but it could soon prove as dangerous as either. Its nuclear-weapons programme has put its regime in a position to dash for a bomb. Because full-blown negotiations are impossible, the threat could yet draw the Middle East into war—including through American strikes on Iranian nuclear facilities. That is why it is good that the Biden administration is seeking to lower tensions.

Since 2018, when President Donald Trump recklessly left a pact between Iran and a group of world powers, known as the Joint Comprehensive Plan of Action (JCPOA), Iran has faced fewer constraints on its nuclear programme. The original pact lifted some sanctions; and in return, Iran agreed to abide by a set of commitments until at least 2030, including that it would cap its uranium enrichment at 3.67% and accept intrusive inspections. The goal was to freeze at a year the time needed to enrich a bomb's worth of uranium.

Mr Trump viewed this as “the worst deal ever”, yet he also decided against a military strike (the plans for one may be in his stash of classified documents). Iran has responded by accelerating its enrichment activity and continuing to act as a menace in other ways. It has supplied fleets of drones to Russia. Since September, after a young woman died in the custody of Iran's morality police, it has crushed anti-regime protests at home. In February international inspectors found particles of uranium enriched to 83.7%, just short of the 90% typically needed for a bomb, leading Israel to warn that it may attack.

The new arrangement being discussed between America and Iran—no one is calling it a deal—would seek to lower the temperature (see Middle East & Africa section). Iran would cap enrichment at 60% and accept more inspections. America would ease sanctions somewhat, for example by letting Iraq and South



Korea honour \$10bn of payments they owe Iran. Congressional approval would not be needed.

The arrangement would reward Iran for slightly less dangerous behaviour even as it flirts with becoming a nuclear-weapons state. That sounds like a dreadful outcome, until you consider the alternatives. Mr Trump's policy of bringing down the regime through sanctions has failed. GDP has shrunk by 44% since 2012 in dollar terms, but the mullahs and Revolutionary Guards are retaining power by spilling blood: 349 people have been executed this year. In the past year oil exports, mostly to China, have risen from under 1m barrels a day, to over 1.5m. A Chinese-brokered deal with Saudi Arabia has left Iran less isolated.

The JCPOA is dead: Iran's breakout time is measured in days, not years; the deal's backers in Tehran have lost sway; and the possibility of Mr Trump being re-elected means America cannot make a credible long-term commitment. The military option is no better. American-led strikes would not destroy Iran's nuclear effort, only set it back months or years. They might also ignite a regional war. America has other priorities: helping Ukraine and deterring China in Asia. The last thing it needs is a conflict in the Middle East.

Today the conditions for a grand bargain with Iran are not in place. That could change. When Ayatollah Ali Khamenei, Iran's 84-year-old supreme leader, eventually dies it could trigger a succession struggle. A deal between Saudi Arabia and Israel could shake up Middle Eastern diplomacy. With an eye on its oil supplies, China could press Iran to act more responsibly. Even if a grand bargain proves permanently out of reach, the intensity of the Ukraine war could one day fade, freeing up American military resources. Buying time while retaining the option of using force against Iran is the least bad option. ■

Growth in China

Confidence trap

China's recovery from zero-covid is spluttering. The prognosis is not good

WHEN THE Chinese government abruptly abandoned its zero-covid policy at the end of 2022, all bets were on a rapid economic rebound. After nearly three years of restrictions, the world's second-largest economy would, the thinking went, come roaring back.

In the event, China has reopened with a whimper, not a bang. A range of economic indicators, including retail sales and investment, have risen less rapidly than expected. Some analysts now think the economy might not have grown at all during the second quarter. At this rate, the government's modest GDP target, for growth in 2023 of 5%, will only just be met.

There are several reasons to be gloomy about China's economic prospects, from America's export controls on advanced

semiconductors and skittish foreign investors, to President Xi Jinping's crackdown on big tech firms. But the main culprit for the recent weakness is property, which before the pandemic was a crucial source of growth across the economy. Activity slowed, first as the government sought to rein in heavily indebted developers, and then more recently as sales have stayed weak. Between January and May, for instance, real-estate investment fell by 7.2%, compared with the same period a year ago. The danger is that the property bust now becomes an enduring malaise.

The end of the long property boom has hurt the economy in several ways. It has dragged down construction and all the associated services needed for housebuilding and sales. Because homeowners are less likely to spend money if they are worried ▶▶

▶ about their most valuable asset, the end of the boom has probably also depressed consumption. Many businesses in China use property as collateral for their borrowing, so it is likely to have cooled private investment, too.

Property bubbles rarely end well. America's last housing blow-up set off a global financial crisis. But the most instructive comparison for China today is Japan in the 1980s. Although it was much richer than China is today, its economic growth, like China's over the past decade and a half, was created by an investment boom, much of which flooded into property.

When Japan's asset-price bubble burst at the end of 1989, growth slowed dramatically. Firms and households, burdened by debt, paid off their liabilities rather than spending on goods and services. Together with a shrinking workforce, this meant that Japan's GDP growth lagged behind the rest of the rich world.

Part of the problem was that policymakers were too slow to respond. It was not until 1999 that the Bank of Japan cut its benchmark rate to zero; the government directed stimulus towards investment, rather than consumption. The bust turned into decades of stagnation.

Unfortunately, China looks as if it may repeat the same mistake. The government remains fond of directing stimulus to investment, rather than towards handouts (see Finance & economics section). The central bank is cutting rates, but by a paltry tenth of a percentage point at a time. China may also be in a worse position than Japan. Although Chinese leaders' fanfare about "common prosperity" raised hopes that a more equal distribution of income could raise consumption, the share of household spending in GDP is 38%, well below the global average of 55%. In the past six years it has not increased.

Calling all hedonists

Even if China wanted to foster more consumption-led growth, it would not easily be able to do so. Many of the government's economic policies are still designed to promote exports and investment, and to suppress consumption. Sustainably boosting households' spending, such as by building up sturdier safety-nets, would take years to accomplish. The property-driven gloom could hover over the economy not just for the rest of the year, but far into the future. ■

Antitrust and tech

Merger crush saga

Squashing the Microsoft-Activision deal would harm consumers, not protect them

THERE ARE more than 14,000 levels in "Candy Crush Saga", a maddeningly addictive mobile puzzle game. Microsoft's attempt to buy its publisher, Activision Blizzard, is encountering almost as many obstacles. The \$69bn deal—Microsoft's largest ever—sailed through the easier stages of the merger game, winning approval from jurisdictions like Japan and the European Union. But in April it was blocked in Britain, with only limited scope for appeal. As we published this, on June 22nd, Microsoft was preparing for a court battle with American trustbusters, who are in an activist mood and seem determined to stop the transaction (see United States section).

The regulators have two main objections, both misguided. The most talked-about and least concerning is that Microsoft may remove popular Activision games from rival platforms, principally Sony's PlayStation. True, Microsoft has form in this, having previously bought developers such as Bethesda only to keep their games for itself. But the gaming market is diverse enough for such "exclusives" not to harm competition. By one estimate, a combined Microsoft-Activision would account for only 14% of global gaming revenue among the biggest listed gaming companies. In any case, Microsoft has offered to make Activision's titles available for at least a decade on other platforms—including Nintendo's Switch, which currently lacks Activision hits such as "Call of Duty".

The second, more serious worry is that the deal would allow Microsoft to dominate the next phase of gaming. The firm trails Sony and Nintendo in console sales. But it has been gaining in subscriptions (whereby consumers pay a monthly fee for access to a library of titles) and in cloud gaming (in which the action is streamed to the screen, much as Netflix streams movies). Last year Microsoft had 57% of the market for subscription libraries.

Adding games like "Call of Duty" to its catalogue would make it stronger still. Subscriptions and streaming have turned the music and television industries upside down in the past couple of decades. If the same thing happened in gaming, regulators fear, Microsoft could become unassailable.

That is possible—but the bigger risk is that blocking the deal would chill such innovations, and the competition they may bring. Subscription and streaming represent alternative ways to bring high-quality games to consumers, including those who would rather pay monthly for online access than shell out hundreds of dollars for a console. They are not new markets, but new forms of competition in an existing one.

What is more, these new models are unlikely to become dominant overnight. Most gamers play only one or two titles at a time, making subscription libraries less appealing than they are in music, say, where consumers tend to listen to hundreds of songs. Cloud gaming, meanwhile, accounts for less than 1% of spending. That share will surely grow. But games' interactivity means that streaming, with its unavoidable time lags, is unlikely ever to replace the console in the way that it has killed the DVD player.

You can see why trustbusters are trigger-happy. They took flak for letting Facebook gobble up social-media competitors like Instagram and WhatsApp. Other tech markets remain concentrated (regulators may want to look at Apple's app store). But the pursuit of unnecessary cases threatens to chill dealmaking: the value of acquisitions in America so far this year is about 40% lower than the average for the previous five years. In opposing Microsoft's acquisition of Activision, regulators are throttling an emerging business model that promises more competition, not less. There must be better targets to crush. ■





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Productivity in Latin America

I am an assiduous reader of *The Economist*, always admiring and praising your global coverage, technical depth and well-argued liberal values. However, by choosing the headline “A land of useless workers” (June 10th) to describe productivity in Latin America you fell short of those standards. As a Mexican citizen, I have met and learned from informal workers. They typically work more than eight hours a day in rigorous, often unsafe conditions. Sadly, many of these workers cannot even afford healthy and balanced diets to provide them with the necessary energy that their jobs demand. They receive very low economic remuneration and perhaps even less social recognition.

Although the article was well researched and nuanced, describing all Latin American workers as “useless” was insensitive and disrespectful, to say the least.

PABLO REYNOSO

Friendship Heights, Maryland

Editor’s note: The headline was changed to “A land of frustrated workers” online to make clear that we are analysing the social and economic costs of low productivity.

I wholeheartedly agree with your emphasis on the significance of systemic conditions that determine the working environment as the key factor in labour productivity, rather than the workers’ inherent qualities. In Chile productivity lags across industries, including copper mining, where the best local operation uses 44% more labour than international peers. There are also notable productivity problems in the public sector. The reasons for this include gaps in best-practice management, a low-quality education system, an inadequate regulatory framework and insufficient innovation rates. A long and uncertain permitting process also hampers investment and can dampen competition.

A new constitution is currently being drafted. It is our hope that a significant update of the country’s political system will serve as a catalyst for a new generation of bold yet sound economic reforms.

RODRIGO KRELL

Executive secretary
National Productivity and
Evaluation Commission
Santiago

Cometh the hour...

The owl of Minerva, Hegel observed, flies only at dusk. It is only at the end of Boris Johnson’s political career, and let us not doubt that it is over, that we get the true measure of the man (Bagehot, June 17th). Self-obsessed, economical with the truth (to put it mildly) and a coward.

Mr Johnson could have tried to persuade the House of Commons to reject any recommendation from the Privileges Committee. He made no such effort. He could have campaigned against any recall petition that would force a by-election. He will lead no such campaign. He could have stood in any by-election that ensued. His name will not appear on the ballot paper in Uxbridge and South Ruislip. He has chosen instead to walk off into a well-paid sunset, where it is to be hoped that “commentators who cannot resist writing about one of their own” (including *The Economist*) will leave him well alone.

JONATHAN ALLUM

Amersham, Buckinghamshire

A rumpus on campus

Christopher Rufo may well have “quickly moved to eliminate diversity, equity and inclusion initiatives” at New College of Florida when Ron DeSantis appointed him as a trustee (Lexington, May 27th). But in fact, New College had almost no administrative DEI infrastructure to dismantle. A signee to the Chicago Principles on free speech, New College had one employee (since terminated) who worked half-time on state-mandated DEI

initiatives, and a one hour “mandatory” DEI training video, which 25% of employees completed in the most recent academic year. In the Board of Trustees meeting in which DEI was “eliminated” at New College, it was pointed out to Mr Rufo just how little DEI the school actually had.

New College is a remarkably independent-minded institution, where students can design their own major, faculty teach what they want without curricular oversight, and all students are encouraged to do independent research culminating in a year-long required thesis project. It would be hard to find a college with less potential for top-down indoctrination of students. Mr Rufo and his fellow trustees are engaged in disruptive political theatre, not a measured response to the facts on the ground at New College, a unique educational institution that in no way exemplifies illiberal leftist excess in the academy.

PETER COOK

Associate professor of
psychology and neuroscience
New College of Florida
Sarasota

The history of Verdun

Charlemagne’s column likening the Battle of Bakhmut to that of Verdun was excellent (June 3rd). But the characterisation of Verdun as having been “a small place of little renown” before its martyrdom in the first world war was wrong. The French town already had immense symbolic significance in Franco-German history as the namesake of the Treaty of Verdun (843), which partitioned the Frankish empire and can be said to have marked the separation of France and Germany into separate nations. Verdun was one of the Three Bishoprics, which were part of the Holy Roman Empire throughout the Middle Ages but annexed to France in 1552. And it was the site of a major battle in the Franco-Prussian war of 1870-71.

Indeed, one reason why the Germans chose Verdun as the

site where they would try to draw the French into a battle of attrition was because even by 1916 it already carried so much historical baggage.

MICHAEL FROST

Lewes, East Sussex

Legalese

The article trying to explain “Why legal writing is so awful” (June 3rd) missed a big factor: the language used in court decisions. Complicated language may be the reason why a contractual term ends up being litigated, but once the court has made its decision its meaning, no matter how tortured the language, is set in stone. No lawyer will run the risk of using simpler, untested language, especially if the wording touches areas of law that are complicated.

The interpretation of contractual indemnities illustrates this. After the Piper Alpha disaster in 1988 there were bitter legal fights as to who should carry the can, some of which revolved around the precise meaning of indemnities (promises to pay out or not to sue) in the contracts between Occidental, the operator of the oil platform, and various service providers. The courts decided, the meaning was settled and the exact same wording is still used 35 years on.

DAVID ROPER

Solicitor

Alford, Aberdeenshire

You let lawyers off too easily. Apart from the deficiencies mentioned, legal writing too often has Unnecessary Defined Terms (“Unnecessary Defined Terms”), repeats even one (1) number as a numeral, obfuscates by not avoiding double negatives, and puts too many words in one sentence.

JEFFREY SHERMAN

Toronto

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The battle within

KYIV

War is reshaping the Ukrainian state—for the better

WHEN RUSSIAN tanks began bearing down on Kyiv, Ukraine's capital, in February of last year, Mykhailo Fedorov was overseeing improvements to an app that provides Ukrainians with easy access to government services. At the time the app focused on fairly conventional tasks: filing tax returns, obtaining business permits, claiming benefits and so on. But the 32-year-old Mr Fedorov and his colleagues quickly added extra features. Now DIHA (the Ukrainian for "action" and also an acronym for "the State and Me") allows patriots to donate to the war effort, struggling businesses to apply for state support and ordinary citizens to report Russian troop movements. And with the war making it hard for people to visit government offices, the ability to conduct official business online has become a godsend for many.

When Volodymyr Zelensky became Ukraine's president in 2019, he promised to

modernise a state that until then had been a byword for bureaucracy and corruption. DIHA, launched in 2020, was the centrepiece of this effort. But what began as a means to mollify exasperated voters quickly became part of Ukraine's struggle for survival. To beat back the Russian onslaught and keep the government functioning, the state has had no choice but to become vastly more nimble and effective.

Wreckage and resolve

The young, tech-savvy Ukrainians leading this overhaul see it not just as a necessity, but also as an opportunity. "We call it Ukraine 2.0. We all loved Ukraine as we knew it, but there were a lot of things in it which we don't want to bring into a new one. We got a unique chance to build a new country," says Oleksandr Kamyshin, a 38-year-old former manager of a venture-capital fund who is now restructuring Ukraine's

arms industry. "The full-scale Russian invasion not only brought the horrors of war to millions of Ukrainians. February 24th 2022 was also an occasion for Ukraine to rethink itself," echoes *Ukrainska Pravda*, an online newspaper.

Like Mr Fedorov, the Ukrainian state was born in 1991. A vestige of the Soviet Union, it was seen by many Ukrainians as more of a nuisance than a benefit. Corruption was endemic, from the bribes demanded by traffic cops to the kickbacks needed to secure government contracts. The public put far more faith in civil society than in official institutions.

It was civil society, naturally enough, that spearheaded the campaign to change all this. It led the Maidan uprising of 2013-14 (pictured on the next page), a protest movement which brought about the fall of Viktor Yanukovich, the grasping pro-Russian president of the day. The new government, with the help of Western aid agencies, set up a series of institutions to battle corruption, including an independent investigation bureau, dedicated prosecutors and a special court. Mr Zelensky has since strengthened this system by installing a new council composed partly of retired American and European judges to regulate judicial conduct. The details of most public procurement are now made public, to ▶▶

▶ make crooked transactions easier to spot.

These new rules and institutions have not eliminated corruption, but they have made it a far riskier undertaking, rather than the accepted norm. In the three-and-a-half years that the anti-corruption court has been operating, 65 people have been convicted in it, including 20 judges and several MPs and senior officials. Such prosecutions were unheard-of before 2014. "In the past few years corruption stopped being a system and became an ailment that could be dealt with," says Vitaly Shabunin, an anti-corruption activist.

Threatened by rectitude

This change seems to have infuriated Vladimir Putin, Russia's president. Not only had the popular campaign for good government caused the downfall of a pro-Russian regime; it was also undermining Mr Putin's favoured technique for suborning Ukrainian politicians and, worse, it was creating an alarming example of successful reform that might inspire his own citizens. In a speech laying out Russia's case for war days before the invasion, Mr Putin included among Ukraine's supposed crimes the creation of the new units to fight corruption. It was not just a passing reference: he listed each agency individually, and denounced them all as tools of America. "Not every politician in Ukraine could name all these institutions. This was a real tribute to our work," says Mr Shabunin. "Putin realised that if he does not interfere now, these reforms would lead Ukraine into the Western world."

But far from halting the overhaul of the Ukrainian state, Mr Putin's invasion has accelerated it. The state-owned railway company, Ukrzaliznytsia, is a good example. In August 2021, just months before the invasion, it was put in the hands of Mr Kamyshin, who has not only a Cossack-style semi-shaved hairdo, but also a degree from INSEAD, a French business school. At the time, he says, Ukrzaliznytsia was a feeding trough for corrupt officials, politicians and shady intermediaries, who sold it second-rate supplies at inflated prices.

Mr Kamyshin quickly cleared out the middlemen. But to keep the trains running throughout the war, despite relentless shelling and blackouts, he also had to empower not just thrusting young managers but also the grizzled engineers who know the tracks inside out. As a result, Ukrzaliznytsia has kept essential cargo moving, be it weapons, troops, humanitarian aid or refugees. It even ferried Joe Biden, America's president, across the country on a visit in February, earning its special service the sobriquet "Rail Force One". All this has made Ukrzaliznytsia a popular brand among young Ukrainians. In November it opened its first merchandise shop in Kyiv.

In March Mr Kamyshin became the

minister in charge of the defence industry, another pit of inefficiency and graft. State-owned factories produced more shells in the first month after his appointment than they had done in the entire previous year. Mr Fedorov, now a deputy prime minister, has found a different way to speed up military procurement, crowdfunding the purchase of around 4,000 drones and the training of 10,000 people to use them.

Mr Fedorov has also turned his hand to streamlining the operations of the armed forces. (In his trainers, sweatshirt and jeans, wielding only a sticker-spattered laptop, he has probably done more damage to Mr Putin's war machine than most men in uniform.) He has helped create software to pool information from assorted drones, sensors and cameras to provide a comprehensive picture of the battlefield, which can be viewed in real time by everyone from generals to foot soldiers.

Appropriately enough for a system enabling quicker, less hierarchical decision-making, the software in question was developed not at a secret military research institute on orders from on high; instead, shortly before the war began, the army assembled a team of volunteer programmers and activists; they have applied themselves to problems as they have arisen. Mr Fedorov organises hackathons to come up with solutions to specific programming conundrums. "There is a fundamental change now in how we think, how we make decisions and what kind of a country we are building," says Mr Fedorov.

The distaste for rigid hierarchies and the devolution of decision-making are among the defining features of this new approach to administration. Those may sound like boilerplate principles of good

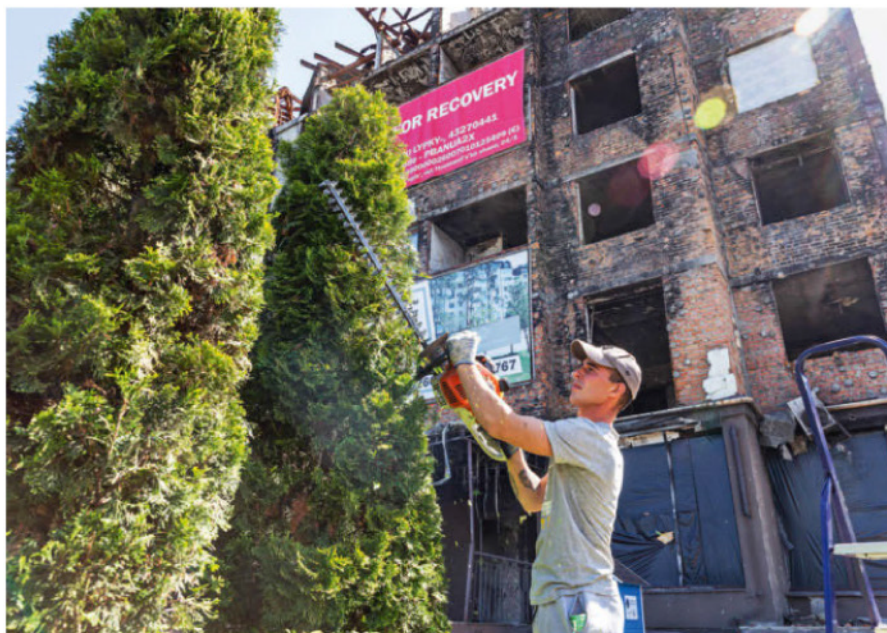
government, but they are rare in post-Soviet states. Their adoption by the Ukrainian army helps explain why it has been able to keep Russia's numerically superior forces at bay. They have also been used to great effect by Mr Kamyshin's former boss, Oleksandr Kubrakov, the minister of infrastructure, in the mammoth task of distributing all the weapons and supplies donated by Ukraine's allies. These have to be brought to the front lines without being stockpiled in big warehouses or transported along predictable routes, since both would create easy targets for Russian bombs. He has achieved the near-impossible by dividing deliveries into multitudes of small consignments, the vast majority of which are moved by private hauliers along a plethora of obscure and ever-evolving routes.

That hints at another change: treating ordinary Ukrainians as allies of the state, rather than adversaries or subjects. Civil society has also grown stronger during the war. A survey conducted in mid-2022 found that 86% of Ukrainians had volunteered in some way to support the war effort. There has been an eight-fold increase in the number of registered charities since the start of the war. At the same time, there has been a blurring of the lines between activism and government. Mr Shabunin has enlisted in the army. Mustafa Nayyem, a journalist whose social-media posts were a catalyst for the Maidan uprising, served for a time as a deputy to Mr Kubrakov, overseeing the road network, and now heads the agency charged with post-war reconstruction. His brother, a human-rights lawyer, also enlisted, and lost an eye in combat.

The new generation of reformist administrators is well aware that they are not just restructuring ministries and state-▶▶



They are probably in government now



Giving shape to a revival

owned enterprises, but are laying the foundation of a new country. “It is essential that everybody has a vision and understands what they have fought for, what we are building” says Mr Fedorov. “Without that vision, there can be no success.”

Success is far from guaranteed, however, even if the war goes well. The forces arrayed against the reinvention of the Ukrainian state are many and powerful. For one thing, not all Ukrainians support the idea. Many in the old elite are losing their meal tickets. The office of the president is preoccupied not just with the war, but also with politics; the nitty-gritty of administration is a much lower priority. And the exigencies of the invasion have put the security services in positions of great authority, often with little oversight.

Corruption remains rife, a clear sign that not all bureaucrats have turned over a new leaf. Last month the most senior judge on the Supreme Court was charged with taking bribes. A scandal involving the procurement of military rations has also come to light since the beginning of the war, leading to the sacking of several officials and the resignation of the deputy minister of defence. A reforming official gripes that in some parts of the country businesses are suffering extortion on a par with the deprivations of Mr Yanukovich’s tenure.

What is more, the war is robbing Ukraine of many of its best and brightest. In addition to those killed or disabled on the battlefield (Ukraine does not disclose casualty figures), some 6.2m people have fled the country over the past 18 months, more than 15% of the pre-war population. The workforce has shrunk by the same proportion. And some 60% of the adults who have left had university degrees, says Tetyana

Berezhna, deputy minister for economy.

The exodus is currently constrained, since men of working age are not allowed to leave the country. But with so many Ukrainians now settled elsewhere in Europe, in many cases with jobs or children in school, the likelihood is that lots of Ukrainian men will go join their relatives whenever travel restrictions are lifted. Those who stay will present problems, too: they will be traumatised by fighting, and in many cases gravely injured. “The war has generated a major demographic crisis in the country,” says Ms Berezhna.

Although the economy is showing some signs of life, it has been clobbered. It shrank by about 35% last year. The World Bank predicts that more than half the population may be living in poverty by the end of 2023. Some 3m people are unemployed. Roughly 5m are internally displaced.

The government’s priority is to try to stop the economy from atrophying yet more. It is handing out grants to small and medium-sized businesses and farmers on the condition that they create new jobs. Some 6,000 new businesses have sprung up since the war began and some 40,000 jobs have been saved by relocating firms from the most war-torn parts of the country to safer areas in the west. The state is also creating programmes to reintegrate veterans into civilian life and to make it easier for the disabled to work.

In the longer run the government also wants to make Ukraine a more attractive place to invest and do business. It is debating sweeping deregulation of the labour market—to such an extent that some observers worry it will gravely reduce workers’ rights. Accession to the European Union, which officially accepted Ukraine as a

candidate last year, will require detailed reforms to everything from energy markets to customs procedures. The process is seen by reformers as a critical safeguard, preventing the reinvention of the state from going into reverse.

The government has set all manner of lofty targets, such as doubling the size of the economy in a decade, which would require average annual growth of 7%. Its official “Recovery Plan Blueprint” calls for privatisation, stronger laws on competition and corporate governance and “de-oligarchisation”. Mr Fedorov expresses hope that the war will transform Ukraine from an economy focused on natural resources and the associated rents to one driven by technology and innovation. The authorities see IT, already 5% of GDP, as an important potential source of growth.

All of this is contingent not only on restoring security, but also on attracting vast amounts of investment. The government estimates the bill for reconstruction at more than \$750bn. Ukraine’s allies and donors have gathered in London this week for a big conference intended in part to work out how to drum up such a daunting sum (see Finance section).

But Ukrainian civil-society groups’ biggest worry about reconstruction is not that there will be too little money, but rather that it will not be well spent and much of it will be embezzled, according to a recent survey conducted by Chatham House, a British think-tank. These sorts of concerns are widespread: according to a recent poll commissioned by *Zerkalo Nedeli*, another Ukrainian online newspaper, 84% of Ukrainians agree that, even during the war, “The facts about corruption should be made public, because through corruption we will lose unity, the support of partners, and, ultimately, victory.”

The war on graft

“Ukraine in this war is fighting not only for the right to exist, but also for the opportunity to become a European country, intolerant to corruption...That is why scrutiny of officials and government becomes even more important for journalists than before the war,” says Segvil Musaeva, the editor-in-chief of *Ukrainska Pravda*. “We cannot allow our society, our army to find out after the end of this war that all this time officials have persisted in misconduct, bad governance or corruption.”

Mr Fedorov agrees. In the eyes of the trailblazers of Ukraine 2.0, it is the government’s efforts to work for its citizens, rather than exploit them, that make Ukraine worth fighting for. Everyone has been profoundly affected by the war, he explains, and everyone has become an activist, in effect. “Our society has grown tremendously,” he says, “It will not allow us to turn in the wrong direction.” ■



Ukraine

The unspooked spook

KYIV

Ukraine's spymaster Kyrylo Budanov has got under the Kremlin's skin

IT TAKES A certain amount of fear to paralyse seasoned military-intelligence officers. But a Russian attack on the officers' Rybalsky island headquarters in Kyiv in March 2022 crossed that threshold. The officers recall "terror" as missiles landed, windows popped and ramshackle buildings crumbled at the edges. The men, waiting in a reception area for a meeting with their boss, fell to the floor. Moments later a door beside them opened, and Major-General Kyrylo Budanov stepped out. "Everything is fine," one recalls him grunting, before he ordered them to get back to work. "He dusted himself off, put his cap on and went outside to inspect the damage."

The 37-year-old General Budanov, a former commando, is Ukraine's youngest-ever spymaster. As the architect of increasingly brazen operations within Russia, he is also a big irritant for the Kremlin. Aides say there have been "at least ten" attempts on his life. In the latest, on May 29th, missiles and drones targeted his Rybalsky office. They narrowly missed that and an adjacent road bridge, although drones

scraped another building. A day later Russia's president, Vladimir Putin, bragged about a "precision" attack destroying the complex. Pro-Kremlin media reported that General Budanov had been evacuated to Germany and put into a coma. *The Economist* can confirm that neither claim is true.

The spymaster's office, his undisguised address for 16 months, exudes chaotic, crepuscular energy. Sandbags block windows. Machine-guns and armour litter the floor. A turntable sits in the corner, though the audible Vivaldi comes from a YouTube playlist. The sense of absurdity is heightened by an elderly frog, swimming about a tank, and a canary. Memorabilia from General Budanov's war line the wall. In an adja-

cent corridor hangs a photo of a March cross-border raid into Bryansk in Russia, supposedly the work of independent Russian partisans. A large screen, the room's only source of light, displays a map of Moscow—the target of a drone strike in May.

Ukraine has not claimed either operation. But General Budanov barely respects the official ambiguity. "We are at war," he says. "Drones over the Kremlin showed the world that Russian defences are just a Potemkin village."

Aides huddle close when the general speaks. Under his leadership, Ukraine's main directorate of intelligence—HUR—has become a plucky, autonomous authority that punches above its weight. It resembles a gang. "Before we had managers, now we have a leader," says one veteran officer. Oleg, an operative who has known General Budanov for decades, speaks approvingly of his ability to infect others with his fervour, comparing him to a snake "hypnotising you before he comes in for the kill. Restrained, measured, never panicked. You do anything he asks."

General Budanov has his adversaries at home as well as abroad. Competing security agencies fret about his power and resources. "It's logical that military intelligence becomes powerful during war," says one rival officer. "But you can't get much done without his sign-off now." Even friends describe the military-intelligence chief as "difficult". Some find it hard to get on with him, says Brigadier-General Dmy- ▶▶

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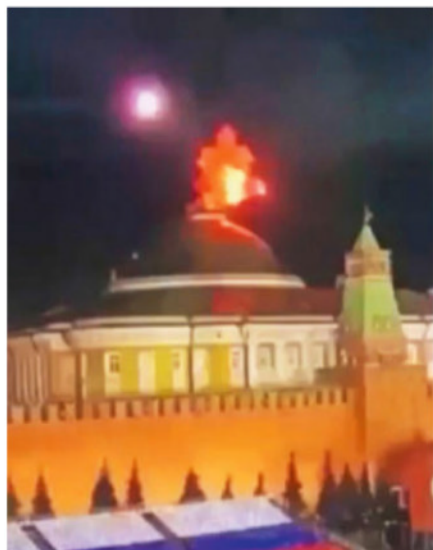
21 Charlemagne: Europe's small cars

►tro Timkov, a partner on “dozens” of operations. “He doesn’t adapt to others’ opinions.” The younger Budanov would answer back to commanders if he thought them wrong. Yet supporters say he has a “generous” side, too. A master of mind games in the outside world, says Oleg, General Budanov never extended that to colleagues. “He understands you can’t trick tricksters.”

Volodymyr Zelensky’s decision in 2020 to promote a little-known commander came as a surprise to many. But inside the services Kyrylo Budanov’s name was already legendary. The Kremlin knew something about him, too. “It was the equivalent of holding a red flag to them,” says Andrii Yusov, an HUR officer. “It’s what convinced many of us of [President] Zelensky’s national-security credentials.”

The new spymaster was revered for leading a daring raid, in 2016, to destroy helicopters at Dzhankoi air base in Russian-occupied Crimea. The geography of the operation—in the backyard of Russia’s security services—was brazen enough. On the way out General Budanov’s team also engaged Russian special forces, killing several, including a high-ranking commander. The Russians later avenged that raid with attacks of their own, missing General Budanov but killing his superior.

General Timkov, reputed to be the second-in-command on that raid, chortles through an unconvincing denial of the operation. But he offers another story that only adds to the legend. In early 2015, he says, the two were deep inside enemy lines in Donbas, in eastern Ukraine, when the then Lieutenant-Colonel Budanov was hit by an anti-infantry mine. Shrapnel sunk into his neck and shoulder-blade, and just below his heart. “Kyrylo asked us to leave him.” The group refused, and through force of willpower the wounded officer stumbled to safety more than 3km away.



Who could it have been?



“He didn’t say anything the whole way. That’s how much it hurt.”

General Budanov made his real mark after the 2022 invasion. In the early days, as saboteurs operated in Kyiv, the general was seen running about Rybalsky with a machine-gun. He masterminded critical operations at Hostomel airport, Irpin and Moschun, on the edge of Kyiv, which stopped the Russian advance—if only just. He sent supply-and-rescue helicopters into the cauldron of besieged Mariupol. He took part in many front-line operations himself. The risk-taking worried some colleagues, who felt their leader should be better protected—“but you try stopping him.” The general says he does it only because other people are in danger. “Lives are at stake. There is no room for mistakes.”

Western partners describe the Ukrainian spymaster as a straightforward and incorruptible player. He is now privy to more American and British intelligence than the Germans or French, says Philip Ingram, a former British military-intelligence colonel. Yet his bravado is not universally welcomed. Leaked documents show that the CIA had to intervene to stop General Budanov from ordering an attack on Moscow on the anniversary of the invasion in February. Sabotage and the raids inside Russia since have heightened worries among Ukraine’s allies about provoking a nuclear power. General Budanov’s statements about engineering a collapse of Russia do the same.

Yet he says that nine years of studying Russian aggression leave him uniquely positioned to assess the risks of nuclear escalation. “As the head of intelligence, I’m telling you straight out—it’s not going to happen,” he says. “For all my dislike of the Russian Federation, there are not many idiots running the country.” He insists that peace is impossible without the strategic defeat of Russia—and the “reformatting of power” there. “Either everyone will get out of the war at the same time, or one side will

lose and the other side will win. There are no other options.”

As a confidant of the president—those in government call them kindred spirits—General Budanov is understood to be playing an ever-bigger role in behind-the-scenes peace negotiations. Sources say he is a conduit to secret talks with the Chinese, and he has also been in contact with Yevgeny Prigozhin, the leader of Russia’s mercenary Wagner outfit.

In conversation it is clear that General Budanov has been thinking hard about post-war Ukraine. Last winter there was talk of him becoming defence minister. He insists his only ambition is victory. Yet secret polls conducted by Mr Zelensky’s office show they are thinking about using the cult of their hero spymaster to counterbalance a perceived rivalry emanating from Valery Zaluzhny, Ukraine’s likeable and independent commander-in-chief. General Budanov’s colleagues say they are convinced he is destined for a big political role once peace comes—if he lives that long. ■

France

Beefing it up

PARIS

The army learns from Ukraine and from a big field drill at home

IN 2021, A year before Russia invaded Ukraine, General Thierry Burkhard told *The Economist* that the French army had to “harden” itself and prepare for “high-intensity war”, possibly in Europe. One hypothetical adversary was Russia. Today, the ex-head of the army is France’s top soldier, in charge of all armed forces. His analysis turned out to be prescient. It also formed the basis of a training exercise for French and allied soldiers on a scale not seen for decades, which finished last month.

For 17 days in April and May General Burkhard led a full-scale division-level exercise in eastern France, on land that the great powers fought over more than a century ago. The final phase of ORION 23 involved a fictitious incursion by a neighbouring state into “Arnland”, played out in a 400km-wide zone of fields and woods. Some 12,000 soldiers, 400 combat vehicles and 50 fighter jets took part in live-fire exercises, hybrid warfare, simulated drills, drone attacks and inter-allied co-ordination to push back the invading force.

In his office in Paris, where a print featuring Valery Zaluzhny, Ukraine’s top general, hangs opposite a portrait of Emmanuel Macron, France’s president, General Burkhard reflects on the lessons emerging from the exercise and from the war in Uk-▶

▶ raine. “A high-intensity war is fought on a completely different scale,” he says. “I probably underestimated that.” During two decades of counter-insurgency in Afghanistan and the Sahel, the death of ten soldiers was a “national tragedy, and rightly so. That is what is happening in Ukraine every half-hour—for weeks on end.”

In the Iraqi city of Mosul, recalls General Burkhard, jihadists being tracked by French forces would resort to subterfuge to avoid aerial surveillance. Now it is French forces that have to contend with a cheap drone capable of detecting a tank, he says, and weapons of “extreme precision” that can destroy it. “We see a form of transparency on the battlefield,” he says, “an ability to see almost everywhere.” Armies must learn to reduce their electronic emissions and to stay on the move. Command posts not only have to be disguised, but must mask the traffic moving in and out. This requires a change in habits and mentality.

If deadliness depends increasingly on technology, yet modern war is also waged on a grand scale with massive consumption of ammunition and high rates of attrition, how do medium-size armies balance quality and quantity? The priority, says the general, is integrating platforms: “We need to be able to have five drones in the air linked to an artillery battery, three missile-launchers, a tank and in fact have enough agility to decide what we want to do with what we see.” Having lots of things is useless if they cannot talk to each other.

That requires ubiquitous connectivity. General Burkhard gives the Starlink constellation of thousands of satellites used by Ukraine as an example of the highly resilient networks that armies will rely on. Ships, aeroplanes and ground vehicles will need to create a “bubble” of communications over a given area—a sort of military Wi-Fi. And they will also need to be able to

cope without it. “We can no longer hope to have permanent superiority in all areas,” he argues, pointing out that neither Russia nor Ukraine has managed to gain air superiority. “Superiority in terms of permanent connectivity...is also an illusion.”

Does France have the means to achieve these objectives? Parliament is examining a military budget for 2024-30 worth €413bn (\$452bn), a hefty 40% increase in nominal terms on the budget for 2019-25. Under Mr Macron, this should enable France to meet its NATO commitment to spend 2% of GDP on defence. The new budget is clearly shaped by the war on Ukraine, which is mentioned 14 times in the relevant bill. France will modernise its nuclear deterrent, build a new-generation nuclear-powered aircraft-carrier and add 109 Caesar howitzers, 3,000 drones and more.

Paradoxically, however, France has scaled back the acquisition of some extra kit. The air force will get 48 fewer new Rafale fighter jets than previously planned, and 15 fewer A400M transport aircraft; the army will get 497 fewer Griffon and Jaguar armoured vehicles. “Because we are trying to do everything at the same time, we are sprinkling rather than defining priorities,” says Hélène Conway-Mouret, a senator.

The new budget, retorts the general, “takes us in the right direction”, even if its full effects will not be felt until 2030. Critics, he says, have failed to understand the importance of capable forces rather than sizeable ones. The number of tanks, ships and planes is not growing as fast as it might, he insists, because of the priority given to “coherence”. “It’s important that if you buy a tank, you have men trained on it, who have ammunition to train and spare parts to go in the field with it.” There is no point, General Burkhard says, in having “an army that is ready to parade on Bastille Day, but is not ready to go to war”. ■

Greece election

Tragedy intervenes

ATHENS AND ROME

Greece votes, again, following the sinking of a migrant boat

A DEVASTATING SHIPWRECK on June 14th is feared to have cost the lives of hundreds of asylum-seekers heading from Africa to Europe, throwing into question European migration policy, and in particular Greece’s treatment of migrants.

The country’s political party leaders suspended campaigning for the June 25th parliamentary vote as the interim and non-partisan government, established after May’s inconclusive election, declared three days of national mourning in the wake of the disaster.

The full details of the disaster are still unclear, but it is thought that more than 700 people crammed aboard a 30-metre fishing vessel sailing to Italy from Tobruk in Libya were left drifting off south-western Greece when the ship’s engine failed. The vessel then capsized and sank in the early hours of June 14th. Only 104 survivors were rescued: their statements to reporters have raised concerns that the Greek coastguard may have failed to avert the disaster, one of the worst ever recorded in the Mediterranean. The Greek shipping ministry, however, insists that the fishing vessel had rejected the coastguard’s offers of help because it wanted to keep going to Italy rather than being taken to Greece. Hundreds are still missing.

The feared huge loss of life has cast a shadow over the election campaign. But the right-of-centre New Democracy (ND) party led by the former prime minister Kyriakos Mitsotakis is still expected to win an overall majority in parliament under a different proportional electoral system from that used last month. In that vote ND finished 21 percentage points ahead of the radical leftist Syriza party, but fell five seats short of an outright victory.

This time, ND is tipped to take 155 to 160 seats in the 300-member house, thanks to the reintroduction of a top-up system that awards up to 50 bonus seats, on a sliding scale, to whichever party wins the most votes. One pollster said: “This tragedy undermines ND’s narrative of competence and control...and some swing voters may switch to another party, but they won’t be enough to impact the outcome.”

As flags flew at half-mast over public buildings, opponents of the previous government’s hardline stance towards asylum-seekers staged protests around Athens, including outside the offices of Frontex, the European Union agency that, ▶▶



Everything has to change



▶ alongside the Greek coastguard, patrols the bloc's maritime borders.

The Greek Council for Refugees, a leading NGO, is carrying out in-depth interviews with all the survivors. The new government, once it takes office, is expected to launch an official probe of the shipwreck, and international investigators are already on the case. Europol has sent three officers and a technical expert to Kalamata. Their job is to identify the traffickers behind the disaster. Specifically, they are charged with finding as many mobile phones as they can to see who the migrants were in contact with in the days leading up to their embarkation and which social media they were using. But, says a senior Europol official, the investigation has been complicated by the fact that very few phones survived the disaster.

What is so far known about the sinking of the vessel that cast off from Tobruk is consistent with recent developments in human smuggling in the region. Most of the victims are understood to be Egyptians, Pakistanis, Palestinians and Syrians.

"What unites these nationalities is that, with the exception of most Egyptians, they fly into Libya on regular visas that have been provided for them," says Mark Micallef of the Global Initiative Against Transnational Organised Crime. Such services can only be provided by sophisticated international criminal networks, and police investigating the disaster hope that it will give them an opportunity to identify and dismantle at least one such.

Unlike migrants from sub-Saharan Africa, those who arrive from Asia mostly set off from ports in the east of Libya like Tobruk. But since it is farther to Italy from there than from ports in the west of the country, the journey requires bigger vessels. That too requires a criminal syndicate that is not only sophisticated but well financed. "Proportionately, [the bigger vessels] are involved in fewer accidents and make fewer requests for assistance," says Mr Micallef. "But when accidents do happen, they involve hundreds of people." ■

Housing in Turkey

Going through the roof

ISTANBUL

A combination of a crazy interest-rate policy and galloping inflation has sent property prices soaring

RENTS AND property prices in Istanbul were never low to begin with. In 2015 a Qatari businessman, thought to be acting as a middleman for the country's emir, Tamim bin Hamad Al Thani, spent over \$100m for a villa on the banks of the Bosphorus, the strait that divides Turkey's biggest city between Asia and Europe. Earlier this year, another mansion, formerly the home of a sex-cult leader recently sentenced to nearly 900 years in prison for a range of crimes, sold for \$26m.

These days, however, even ordinary Istanbul properties are beyond the reach of most Turks. In the two years to May, the price of a square metre of real estate in the city has shot up by over 480%, according to Endeksa, a consultancy. Even after adjusting for inflation, which peaked at 86% year-on-year last autumn before slowing to a mere 40% in May, housing prices in Turkey as a whole increased by 51% last year, more than in any other major economy, according to a study by the Bank for International Settlements. Israel came a distant second, at 11%. Rents have spiked similarly. According to a senior municipal official, average rents in Istanbul, which is home to more than 16m people, have now surpassed average incomes.

The leading causes are reckless interest-rate cuts, imposed as a result of the misguided policies of Turkey's president, Recep Tayyip Erdogan, and a resulting surge in inflation. The combination of

these developments has encouraged those Turks with access to sufficient credit to protect their wealth by investing in property. Foreign buyers, especially Russians, have also helped drive up prices in Istanbul and along the Mediterranean riviera.

The earthquakes that destroyed large swathes of Turkey's south earlier this year, killing over 50,000 people, have had an impact as well. Many of the estimated 3m people who have been displaced by the disaster have moved to other parts of the country, causing an almost overnight spike in demand. Fears of a similarly destructive earthquake in Istanbul, which sits just north of a major faultline, have caused prices of newer and safer buildings in the city to soar. The biggest price increases, according to a recent study by Bahcesehir University's Centre for Economic and Social Research, have been in neighbourhoods far away from the faultline.

One might be forgiven for thinking that this has the makings of a bubble waiting to burst. But even a policy u-turn, which was likely to gather speed on June 22nd as Turkey's central bank prepared to announce a major interest rate increase, might not be enough to bring the property market back down to earth. Analysts expect prices to keep rising, though at a less blistering pace than before, as long as expectations of inflation remain high.

Despite the expected rate hike, they do. A new run on the lira, which has lost 15% of its dollar value since Mr Erdogan's re-election on May 28th, as well as a recent 34% increase to the minimum wage, on top of a 55% increase six months ago, are keeping inflation bubbling. There is also no telling whether the pivot to economic orthodoxy will last. Mr Erdogan has given his new economic team, headed by Mehmet Simsek, the finance minister, and Hafize Gaye Erkan, the central-bank governor, a mandate to undo the damage wrought by his earlier policies. But Turkey's leader continues to champion the idea, dismissed as hogwash by mainstream economists, that the way to tackle inflation is by lowering rates. The central bank is only as independent as he allows it to be. For millions of tenants and landlords who have spent the past couple of years at each other's throats, renegotiating rental contracts and drafting eviction notices, and for young Turks who can no longer afford a new home, this is bad news. ■



Heading ever upwards

Charlemagne | A Farewell to Fiestas

Adieu to small cars, the industrial icons that put Europe on wheels



PLACING A PEUGEOT 208, Europe's bestselling car last year, next to a Ford F-150, its American counterpart, is like comparing a Chihuahua to a Great Dane. Both have four wheels and typically serve the same purpose: to ferry a single driver from one place to another. Beyond that they have little in common. The F-150 weighs over two tonnes, twice as much as the lithe Peugeot. The driver in the American pickup truck sits a half-metre higher than the tarmac-scraping Frenchman in his family compact. Forget the flat bed attached to the back of the Ford—its interior alone feels roomier than the entire European car. A Parisian driver ever-confident of his parking skills might well attempt to squeeze his vehicle inside the cab of the American behemoth.

When it comes to motoring, Europeans long felt that size did not matter. The continent was woven together by poky cars powered by engines that would have been shamed by American lawnmowers. Yet what European autos lacked in cylinders they made up for in va va voom. The Fiat 500, Volkswagen Beetle, Austin Mini, Citroën 2CV and even the drab Trabant of East Germany all became pop-culture icons, as core to the idea of what Europe stood for as Nouvelle Vague cinema or riding on a Vespa while smoking a cigarette. Alas these industrial gems are heading to the scrapheap. Since the start of the century cars sold in the EU have gained over 200kg on average—a third of an original Fiat 500. They have grown taller, wider and longer while legally carrying no more passengers. Sport-utility vehicles (SUVs), hunks of automotive manhood tailor-made for the American plains, increasingly rule cityscapes from Helsinki to Athens.

Europe's cramped cars were a feature of its history, geography and economics. Whereas America was happy to remodel cities and suburbs to accommodate roomy Chevrolets, Europe stuck with its medieval streets and built its cars to fit (just). Fuel duties were high in Europe (which imports most of its oil), so drivers preferred wimpier engines. Americans drive vast distances for work and leisure; Europeans sometimes settle for buses, bikes and trains instead. Perhaps most important, Europe embraced mass motoring in the lean decades after the second world war. People craved the freedom personal motoring provided, and didn't mind if their heads stuck out of the sunroof while they were afforded it.

Europe even turned its reputation for bijou motors into a marketing asset: in 1959 an ad for the Volkswagen Beetle urged Americans to "Think Small". (Teenagers there who got their kicks in the back of roomy Cadillacs and station wagons probably had other ideas: not even a couple of eager contortionists could amuse themselves in the back of a European compact.)

For decades the replacements of these pint-sized wheels kept their ethos. No longer. Sales of small cars in the EU have fallen by nearly half since 2011, even as those of SUVs are up threefold. Ford's little Fiesta, which has charmed Europeans for 47 years, will end production this month. The Volkswagen Golf, a sensible starter car, is also said to be on its last wheels. The popular small-car brands that endure, such as the Fiat 500 or the Mini, now come in bloated versions. The original Mini, launched in 1959, was worthy of the name. The latest iteration of the rebooted model released in 2001 weighs twice as much and is over a quarter longer. Even top-end carmakers have moved away from thinking small: Porsche and Ferrari made their names with zippy two-seaters, but now sell great hulking SUVs as well.

The trend to distend seems odd at first. European families are getting smaller: Italians had to squeeze an average of 2.3 sprogs in the back of the Fiat 500 when it came out in 1957. Now there are just 1.3 to accommodate. (Fiat, like Peugeot and other brands, is now part of Stellantis, whose largest shareholder owns a stake in *The Economist's* parent company.) The streets of Florence or Cologne are getting no wider. Europe has ambitions to cut carbon emissions. Yet bigger cars, by and large, pollute more.

In fact, reducing carbon is one reason why small cars are ailing. New technology to make petrol models comply with green rules is expensive whatever the car size: manufacturers find it easier to pass on the costs to buyers of pricey big models than cheaper small ones. Buying an electric vehicle (Europe recently banned sales of petrol and diesel cars after 2035) often means plumping for a midsize ride, given how few good small European electric cars are on the market. Regulation has also crimped the appeal of poky motors. Children used to be bundled wherever they would fit. These days booster-seats are compulsory, but try latching down a toddler in the back row of a two-door car. Couples that used to have a main motor and a runaround have sometimes replaced the smaller one with an electric bike to zip around cities, as many mayors look to throttle car-driving. The vehicles remaining on the road are thus larger—despite attempts by policymakers to slow the march of size with taxes on heavier models.

Ciao, Cinquecento

Ultimately, fatter cars in Europe are a consequence of fatter wallets. "People buy as much car as they can afford," says Pedro Pacheco of Gartner, a research firm. "As long as it is within their budget, bigger is always better." The arc of automotive progress is long, but bends towards duller, bigger wheels.

Europe should look in the rear-view mirror and realise that it is losing a slice of its heritage, the very thing that made the continent what it is. Some of this is nostalgia, a remembrance of motoring past. Charlemagne grew up squabbling with his brother in the back of the family Mini as it navigated the streets of Paris. Later, a comically underpowered Peugeot 106 struggled to drag him and his new bride up hills in Portugal on their honeymoon. For all their flaws, those cars had a certain *je ne sais quoi*. These days such journeys would take place aboard cookie-cutter SUVs: roomy, plush—and destined to be forgotten. ■



Self-inflicted pain

Made in Britain

Inflation, increasingly, is the result of domestic bad judgments. Tackling it will hurt

THE LATEST, grim, inflation figures in Britain were not—truly—a shock. For each of the past few months a routine has emerged: the numbers come in worse than had been forecast, traders adjust expectations upwards for how fast, and far, the Bank of England will raise interest rates, and thus the cost of borrowing jumps. After that, mortgage holders fret and the government makes sympathetic noises. The figures for May, published on June 21st, followed that sorry script to the letter. The headline figure remained steady from the previous month, at 8.7%. That was above economists' expectations of a fall to 8.4%. More ominous was that core inflation, without food and energy, jumped to 7.1% from 6.8% in the previous month.

Britain is an outlier, and not in a good way. Core inflation both in America and the euro zone, though still high, has been ticking down gently—it reached 5.3% in May, in both places—and headline numbers in those economies, including food and energy, have tumbled faster. Among the G7 countries, none has higher inflation than Britain. Only Italy comes close, with a

headline rate of 7.6%. Even its trend, unlike in Britain, is firmly downwards. You have to look to smaller places, such as Austria, Iceland or Sweden, or to eastern European economies still battered by war in Ukraine, to find examples of economies in the same—miserable—inflationary boat.

What has gone so wrong? Britain is exposed to higher prices for natural gas. Put that aside, however, and it is clear inflationary pressures are overwhelmingly the result of decisions taken at home. Inflation, unlike much else, is made in Britain. Old excuses that it is imported, because of war, snarled-up supply chains or high glo-

bal food prices, no longer wash. The rate of services inflation, overwhelmingly a domestic factor, rose in May to an annual rate of 7.4% from 6.9% previously. The rate of goods inflation did drop slightly, from 10.0% to 9.7%, in part because food-price increases are not quite so rapid as before.

The culprits behind Britain's problems are many. Don't take seriously claims about Prince Harry, who recently published an overpriced but popular memoir. It's true that inflation measured by the culture sub-index is soaring, in particular non-fiction books are up by 29.4% over the last year. But the real question is why sellers in that sector can get away with high prices. The answer: they operate where demand for goods and services has grown faster than supply.

Demand is strong, in turn, because policymakers have long been trying to rev it up. Consider fiscal efforts. Britain stands out for the stimulus it gave to the economy in the pandemic and then, last year, during the energy crisis. One measure of this is to combine an estimate from the International Monetary Fund of covid-era support with one from Bruegel, an EU think-tank, of help for households and firms hit by painful energy bills. Only America doled out a bigger stimulus. Britain heavily outspent other peers: around 23.1% of national income, vastly more, for example, than the 13.3% in France.

Those setting monetary policy are also to blame. In hindsight, they were too cautious. A so-called Taylor Rule for monetary

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policy sets a simple guide for the right level of interest rates given the rate of unemployment and core inflation. Even a version calibrated to avoid big changes in rates says the bank should have been preparing to lift them to around 5.7% at a meeting on June 22nd. The day before, however, markets were forecasting only a 25-basis-point increase in the main policy rate, to 4.75%. It is becoming apparent that—because fewer Britons have a mortgage than in previous tightening cycles and, in any case, many have fixed rates for longer—the effects of rate rises have, so far, been limited. The result: the bank will probably have to tighten more to achieve the same, dampening, effect.

Come on down, the price is wrong

Easy policy combines with a weaker supply side. Again, Britain stands aside from its peers (again, in a bad way). Labour-force participation remains below its pre-pandemic level. One portion of missing workers are those—perhaps half a million more than before—too sick or tired to seek work. EU workers are also missing. And whereas, post Brexit, non-EU migrants have poured in, many are refugees or students, not full-time workers. Dario Perkins, of TS Lombard, a research outfit, calculates that total labour supply is down by about 3% from pre-covid trends. Pre-pandemic, the labour force was growing thanks to migration and a rising participation rate. He adds: “I don’t believe in wage-price spirals, but if they are going to happen anywhere, the UK seems like the obvious candidate.”

High demand with constrained supply has left some parts of the economy, such as professional services and hospitality, running hot while others, including the health service, struggle with bottlenecks and strikes. Fullers, a brewer, says it is tapping under-18s and the over-50s to work in pubs this summer. Other bars and restaurants are just cutting hours, says Tony Wilson of the Institute for Employment Studies, a think-tank. In professional services, including banking, consulting and account-

tancy, year-on-year pay growth is in double-digits, he says, as “firms are competing and outcompeting one another on pay”.

Inflation needs to fall, quickly. A study by the Federal Reserve, America’s central bank, earlier this year found that British inflation is unusually persistent: previous increases in core inflation had more power to predict further increases than those seen in Canada or the euro area. No one should expect the workforce to suddenly grow: rates of economic activity have only modestly improved over the past year as fewer workers retired and more students took on jobs. The likely alternative is for interest rates to rise.

That means heavily indebted mortgage holders will feel more financial pressure. The chancellor, Jeremy Hunt, has ruled out government help, such as tax breaks on mortgage interest, saying, correctly, that would “make inflation worse, and not better”. He is due, however, to host a meeting with banks on June 23rd, where he is expected to ask them to show flexibility to struggling borrowers. Should he want to break Britain’s pattern of sticky inflation and ever-rising interest rates he could consider one other option: putting up taxes. ■

Executive pain

Nothing to whinge about

Is London suffering because bosses there are paid too little?

BRITAIN’S BOSSES are in a funk. Last year, one-tenth of the CEOs running FTSE 350 companies stood down, more than double the tally for 2021. The number of listed companies in London has fallen by two-fifths since 2008. Some of the country’s most treasured companies, such as Arm, a chip designer, are defecting to Wall Street.

Many factors lie behind the malaise. Could relatively paltry pay for those in charge be a big one? At first glance, yes. America’s top earners are vastly better rewarded than those in Britain. Take the extraordinary case of Laxman Narasimhan, who used to run Reckitt Benckiser, a London-listed consumer-goods giant. In that job, in 2021, he got by (somehow or other) while earning £4.7m (\$6.5m), excluding his bonus. When he decamped last year to become the CEO of Starbucks he accepted a package, over \$28m, that more than quadrupled his compensation.

That pay gap was not exceptional. Average rewards are far higher over the Atlantic. Chiefs of S&P 500 companies enjoy compensation typically more generous than Mr Narasimhan’s: combine salary, bo-

nus, stock awards and other perks and the median package is worth about \$33m (£26m). That’s double the going rate of £13m for those running FTSE 100 firms, according to Refinitiv, a data provider. Julia Hoggett, who runs the London Stock Exchange, suggests that means the City scrimps on pay. And if companies won’t dole out top pound, she argues, they harm London’s ability to attract global talent.

The trouble with Ms Hoggett’s argument, however, is that the City brings in more foreign executives than are attracted to other stock exchanges. Around 45% of Britain’s largest businesses have a boss from overseas, whereas fewer than 10% of those in America are foreign, only 14% in France and 25% in Germany. As for those, like Mr Narasimhan, who leave for big payouts, such cases are vanishingly rare. Of the FTSE 100 CEOs who stood down since the start of 2022, the vast majority either retired or moved to another job in Britain.

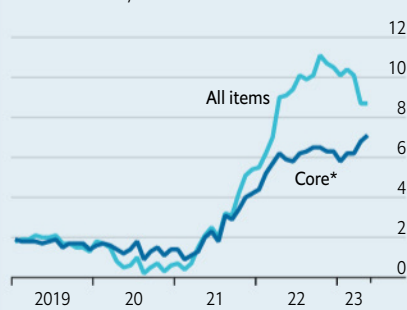
It is likelier that American firms are overpaying, and perhaps needlessly. Evidence is patchy linking higher pay for CEOs with better company performance. As You Sow, a shareholder advocacy group which produces an annual ranking of overpaid S&P 500 bosses, says the most overcompensated are also those who underperform the index. Alexander Pepper, a professor of management at the London School of Economics, sees something similar in Britain. He notes how pay for FTSE 100 bosses accelerated in the 1990s but that had little bearing on the success or otherwise of firms. Too much, evidently, is out of the control of the boss.

America looks more like an outlier, therefore, not a standard-setter. Few markets could anyway hope to keep pace with the large sums on offer on Wall Street, where companies are usually larger, harder to run and more at risk from lawsuits than in Britain. A better comparison, then, is with Europe. Brits do tend to out-earn their continental counterparts: in 2021, average CEO pay at the biggest companies in France reached the equivalent of \$9.5m and in Germany \$6.7m. Given that gap, institutional investors in British stocks are reluctant to fatten compensation packages more. A survey by the London Business School suggests that over three-quarters of shareholders see corporate pay as already too high.

Investors will probably keep a lid on pay rises. Both Pearson and Unilever have suffered shareholder revolts over remuneration plans this year. And unlike in America, British law requires that shareholders approve pay packages: dissenting votes are thus more common. As British households come under ever more economic strain, any signs of excess by company bosses will also grow harder, politically, to justify. Expect more rebellions, not fewer. ■

Core, blimey

Britain, consumer prices
% increase on a year earlier



Source: ONS *Excludes energy, food, alcohol and tobacco

Tactical retreat

A defensive posture

The defence secretary says he is out of the race for running NATO

BEN WALLACE is the great survivor of the most tumultuous recent period in British politics. He has held ministerial office, uninterrupted, from the premierships of David Cameron to Rishi Sunak. He emerged from the Boris Johnson years with his dignity intact and adoring support from the Conservative Party. His relentless backing, as defence secretary, for Ukraine has earned plaudits abroad. He had also hoped, until recently, he might succeed Jens Stoltenberg as secretary-general of NATO. "It's not going to happen," he tells *The Economist*. America wants Mr Stoltenberg to stay, he says, visibly deflated. That would defer the decision to next year.

No time for recrimination exists: a "defence command paper" is due within weeks, updating the previous one from March 2021. It will reflect many lessons from Ukraine. Mr Wallace, a former captain in the Scots Guards, identifies air defences, electronic warfare and "deep fires", such as longer-range artillery, as crucial areas for investment. The previous review assumed Britain could expand its ground forces over the decade to 2030. The war has accelerated everything. Challenger tanks will be upgraded 12 months sooner than planned, and new Swedish howitzers, bought in March to replace older guns sent to Ukraine, will be ready next spring.

The snag is money. Before a spending review in March, Mr Wallace asked the Treasury for roughly an extra £10bn (\$13bn). He got half, which will largely go to submarine projects, nuclear warheads and the replenishment of munitions. The annual defence budget, adjusted for rampant inflation, will be a puny £1.1bn higher in 2024-25 than in 2021-22. The army, which has lost almost 20,000 soldiers in a decade, is unlikely to grow. He is unapologetic: "I would rather we were medium and perfectly formed than large and hollow."

He is scathing about retired admirals who demand more ships: "These people would have us lined up with platforms that can't go to sea or regiments that can't deploy as long as they can tick the Top Trumps box", a reference to a classic children's card game. He is similarly harsh on the military services that he oversees, complaining that the army, navy and air force have favoured "trophy platforms over the mundane". The navy, he argues, has over 30 years purchased warships without investing in vital enabling capabilities such

as dry docks, cranes and the like. Ship and sub availability has suffered as a result.

Ammunition stockpiles remain a serious problem, say defence insiders. Mr Wallace notes that the Storm Shadow cruise missile, which Britain gave to Ukraine in May, has been out of production for a decade. It took almost a year to revive supply chains for NLAW anti-tank weapons, he adds. Arms companies retort that European governments will not place long-term orders. "The big challenge," reiterates Mr Wallace, "is we don't have the money." The Treasury has agreed that defence spending will rise to 2.5% of GDP "as fiscal and economic circumstances allow". But unless the prime minister and chancellor set a date, says Mr Wallace, "officials will ignore it".

If only I were in charge

Mr Wallace at times sounds like an opposition politician attacking the Ministry of Defence, not the man who has led it for almost four years. He laments a tendency to defer big projects rather than cancel them. Putting off the F-35 fighter jet cost an additional £500m, he says; that of an aircraft-carrier, billions. He complains that national regulations have hamstrung technological innovation, with rules on civil airspace impeding the development of drones: "If you have anything over a certain height, the whole bloody civilian aerospace indus-



Medium, and perfectly formed?

try descends on you."

He remains a political enigma. He emerged unscathed from the vicious battle between Mr Johnson, his successor Liz Truss and her replacement, Mr Sunak. His views on non-defence issues are largely a mystery. Some ministers grumble that he is locked in constant warfare with other departments. Tory members like the look and sound of him, and especially his role in shaping Ukraine policy. He deserves "enormous credit in getting arms to Ukraine before the war in the teeth of opposition from some in the White House", says a military official familiar with those debates. Britain is the second-largest individual contributor of military aid to Ukraine, with over £6bn pledged. Leaked Pentagon documents this spring suggested that 50 British special-forces personnel were in Ukraine, compared with just 14 Americans. A quiet flow of British intelligence has been vital.

All this was evidently not enough to get America's support for Mr Wallace's NATO candidacy. "Maybe they want a prime minister," he suggests. The White House may have favoured Mark Rutte, the Netherlands' long-serving leader, but he is said to have twice turned down the job. Mette Frederiksen, Denmark's prime minister, was until recently a front-runner. But Denmark is far short of meeting the NATO target of spending 2% of GDP on defence, which irks many eastern European countries that do. Sources close to Mr Wallace stress that the process remains open.

Whoever gets the job will have to deal with "a lot of unresolved issues in NATO", warns Mr Wallace. Many countries have no appetite for the 2% target, he says. And there is the question of the alliance's role beyond Europe. Britain's latest foreign-policy review, in March, described China as an "epoch-defining challenge" and talked anew of a "tilt" to the Indo-Pacific. Mr Wallace is more circumspect. "NATO should not mission-creep to the Pacific," he says, adding that he shares French opposition to opening a NATO office in Tokyo—an initiative he says was agreed by foreign ministers who blindsided him.

Mr Stoltenberg's eventual successor "is going to have to please both Macron and Biden", he says. America wants allies to help in confronting China. France emphasises European strategic autonomy. Perhaps surprisingly, for it is not a popular view in his party, Mr Wallace, while hailing America's extraordinary support for Ukraine, expresses sympathy with Mr Macron, pointing out the importance of collaboration by Europe's defence industries. "The French have a point in lots of areas," he says. "The answer to everything is not America first, when it comes to procurement." That is just the sort of thing a secretary-general of NATO could never say. ■

Bagehot | Lucky Labour

Luck trumps skill and strategy in British politics



MONDAY JUNE 19TH was a typical day in British politics in so far as it involved a series of humiliations for the Conservative Party. MPs approved a report on Boris Johnson condemning the former prime minister for lying to Parliament over lockdown-busting parties. Rishi Sunak skipped proceedings for a fortunately timed meeting with Sweden's prime minister. On the same day, the invite emerged for an illegal "Jingle and Mingle" event at the party's headquarters during the Christmas lockdown of 2020. A video of the event had already circulated, with one staffer overheard saying it was fine "as long as we don't stream that we're, like, bending the rules". Labour, through no efforts of their own, had their reputation comparatively enhanced.

Luck is an overlooked part of politics. It is in the interests of both politicians and those who write about them to pretend it plays almost no role. Yet, as much as strategy or skill, luck determines success. "Fortune is the mistress of one half of our actions, and yet leaves the control of the other half, or a little less, to ourselves," wrote Machiavelli in "The Prince" in the 16th century. Some polls give Labour a 20-point lead. Partly this is because, under Sir Keir Starmer, they have jettisoned the baggage of the Jeremy Corbyn-era and painted a picture of unthreatening economic diligence. Mainly it is because they are damned lucky.

If Sir Keir does have a magic lamp, it has been buffed to a blinding sheen. After all, it is not just the behaviour of Mr Johnson that helps Labour. Britain is suffering from a bout of economic pain in a way that particularly hurts middle-class mortgage-holders, who are crucial marginal voters. Even the timing helps. Rather than a single hit, the pain will be spread out until 2024, when the general election comes due. Each quarter next year about 350,000 households will remortgage and become, on average, almost £3,000 (\$3,830) per year worse off, says the Resolution Foundation. Labour strategists could barely dream of a more helpful backdrop.

Political problems that once looked intractable for Labour have solved themselves. Scotland was supposed to be a Gordian knot. How could a unionist party such as Labour tempt left-wing voters of the nationalist Scottish National Party (SNP)? The police have fixed that. Nicola Sturgeon, the most talented Scottish politician of her generation, found herself arrested and quizzed over an illicit

£100,000 camper van and other matters to do with party funds. The SNP's poll rating has collapsed and another 25 seats are set to fall into the Labour leader's lap thanks to PC McPlod and (at best) erratic book-keeping by the SNP.

It is not the first time police have come to Sir Keir's aid. He promised to quit in 2022 if police fined him for having a curry and beer with campaigners during lockdown-affected local elections in 2021. Labour's advisers were adamant no rules were broken. But police forces were erratic in dishing out penalties, veering between lax and draconian. It was a risk. Sir Keir gambled and won.

Luck will always play a large role in a first-past-the-post system that generates big changes in electoral outcomes from small shifts in voting. Margins are often tiny. Mr Corbyn came, according to one very optimistic analysis, within 2,227 votes of scraping a majority in the 2017 election, if they had fallen in the right places. Likewise, in 2021, Labour faced a by-election in Batley and Spen, in Yorkshire. A defeat would almost certainly have led to a leadership challenge; Labour clung on, and so did Sir Keir. If he enters Down-Street in 2024, he will have 323 voters near Leeds to thank.

Sir Keir is hardly the first leader to benefit from Fortune's favour. Good ones have always needed it. Sir Tony Blair reshaped Labour and won three general elections. But he had the job only because John Smith, his predecessor, dropped dead at 55. ("He's fat, he's 53, he's had a heart attack and he's taking on a stress-loaded job," the *Sun* had previously written, with unkind foresight.) Without the Falklands war in 1982, Margaret Thatcher would have asked for re-election soon afterwards based on a few years of faltering experiments with monetarism. Formidable political talent is nothing without a dash of luck.

Often the most consequential politicians are the luckiest. Nigel Farage has a good claim to be the most influential politician of the past 20 years. He should also be dead. The former leader of the UK Independence Party was run over in 1985. Then, in 1987, testicular cancer nearly killed him. In 2010, he survived a plane crash after a banner—"Vote for your country—Vote UKIP"—became tangled around the plane. Smaller factors also played in his favour: when he was a member of the European Parliament he was fortunately allocated a seat next to the European Commission president, providing a perfect backdrop for viral speeches. ("They handed me the internet on a plate!" chortles Mr Farage.) Britain left the EU, in part, because Mr Farage is lucky.

Stop polishing that lamp, you'll go blind

Too much good luck can be a bad thing. David Cameron gambled three times on referendums (on the country's voting system, on Scottish independence and on Brexit). He won two heavily and lost one narrowly. Two out of three ain't bad, but it is enough to condemn him as one of the worst prime ministers on record. "A Prince who rests wholly on Fortune is ruined when she changes," wrote Machiavelli. It was right in 1516; it was right in 2016. Labour would do well to heed the lesson. It sometimes comes across as a party that expects the Conservatives to lose, rather than one thinking how best to win.

Fortune has left Labour in a commanding position. Arguments against a Labour majority rely on hope (perhaps inflation will drop) not expectation. Good luck may power Labour to victory, but it will not help them govern. The last time Labour replaced the Conservatives, in 1997, the economy was flying. Now, debt is over 100% of GDP. Growth prospects are lacking, while public services are failing. It will be a horrible time to run the country. Bad luck. ■

GEOPOLITICAL TENSIONS RATTLE SUPPLY CHAINS: 3 WAYS YOU CAN MITIGATE RISKS AND DISRUPTION

Geopolitical tensions and regional conflicts have always had far-reaching consequences, impacting economies, societies, and global trade. Today, as supply chains have become increasingly interconnected and reliant on global networks, enterprises face heightened risks and disruptions caused by geopolitical challenges. What strategies can enterprises deploy to mitigate their effects on supply risks and disruptions?

First, diversification is paramount. Enterprises must strive to diversify their supplier base, sourcing locations, and transportation routes. Overreliance on a single supplier or region increases vulnerability to geopolitical tensions and conflicts. By identifying and qualifying alternate suppliers, establishing strong relationships, and developing robust contingency plans, enterprises can minimize the impact of supply disruptions caused by conflicts in specific regions.

Second, proactive risk monitoring and intelligence gathering are crucial. Enterprises must stay informed about geopolitical developments, regional conflicts, and associated risks that could affect their supply chains. Investing in technology-driven solutions, such as real-time supply chain visibility platforms, predictive analytics, and risk assessment tools, enables early identification of potential disruptions. By leveraging these insights, enterprises can implement preemptive measures, such as buffer stock, dual sourcing, or alternate transportation modes, to mitigate the impact of geopolitical tensions on their supply chains.

Last, but not the least, collaboration and partnership play a pivotal role. Enterprises should forge strong relationships with suppliers, industry peers, and relevant governmental and non-governmental organizations. Collaborative initiatives, such as sharing risk assessments, intelligence, and best practices, can enhance supply chain resilience. Participating in industry associations and forums allows enterprises to collectively address common challenges arising from geopolitical tensions, share lessons learned, and collaborate on risk mitigation strategies.

Geopolitical tensions and regional conflicts will continue to pose significant challenges to global supply chains. However, enterprises can navigate these risks by adopting a proactive and comprehensive approach to supply chain risk management. Diversification, risk monitoring, and intelligence gathering, along with collaboration and partnerships, are key to mitigating the impact of geopolitical tensions on supply risks and disruptions. By implementing these strategies, enterprises can fortify their supply chains, enhance resilience, and maintain business continuity in the face of an ever-changing geopolitical landscape.

“Diversification, risk monitoring, and intelligence gathering, along with collaboration and partnerships, are key to mitigating the impact of geopolitical tensions on supply risks and disruptions.”

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Africa and global institutions

Demanding a say

DAKAR AND NAIROBI

African countries are fed up with being marginalised in global institutions

THERE WAS no shortage of bigwigs at a development-finance pow-wow hosted by Emmanuel Macron, France's president, in Paris on June 22nd to discuss pressing global issues including World Bank reform, climate finance and debt distress. The expected attendees at the Summit for a New Global Financial Pact included Li Qiang, the Chinese premier, Janet Yellen, America's treasury secretary, and no fewer than 16 African presidents.

Africa's large presence reflects a fear that the continent is being short-changed as priorities shift towards helping Ukraine and dealing with climate change. That is feeding a deeper anger—that the continent has too little say in global institutions such as the World Bank, the IMF and the UN, and that some of the proposed reforms could again leave Africa out in the cold. “When decision-makers are quite far from the realities of the country it's more difficult to build empathy,” says Vera Daves, Angola's finance minister. “That's why it so important for us [Africans] to be more present within the institutions.”

Much of the work these institutions do is in Africa, where they are trying to reduce poverty (the continent has more than half the world's poor), rescue listing economies, end civil conflicts and help refugees. But African leaders are alarmed by an impending plunge in cheap financing from the International Development Association (IDA), the concessional arm of the World Bank. When covid-19 struck, the IDA raised additional funds and stepped up its support for poor countries. In the past year it has committed perhaps \$37bn around the world, up from almost \$22bn in 2019. But this depleted its larder, and its commitments will probably be about \$10bn lower in each of the next two years.

The cuts will happen even as African

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countries are being squeezed by rising interest rates and by higher food and fuel prices following Russia's invasion of Ukraine. They want, but probably will not get, the IDA's funds refilled ahead of its next scheduled replenishment in 2025.

Axel van Trotsenburg, the World Bank's senior managing director, points out that overall funding has risen, “particularly in Africa”. Yet the continent is competing for funds with two new priorities: Ukraine and climate change. The Bank is hoping to raise \$12bn for a new IDA crisis facility, but half of that would go to Ukraine and Moldova, which are not poor enough to normally qualify for the IDA's concessional loans and grants. Many Africans see this effort as evidence that international institutions apply a double standard by bending their own rules for non-African countries.

Bilateral aid (directly between countries) to sub-Saharan Africa fell by 8% in real terms to \$29bn in 2022, according to the OECD, a club mainly of rich countries. At the same time global bilateral aid rose by 15%, in large part due to \$16bn going directly to Ukraine and another \$29bn being spent at home in donor countries on hosting (mostly Ukrainian) refugees. “We have seen the international community making resources available at scale and swiftly for Greece and Ukraine,” says Hanan Morsy of the UN Economic Commission for Africa. “Solutions for Africa are not found in the same way, and that has to change.”

The Paris summit involves a big push, ►►

▶ mainly by rich countries and small island states, to do more on climate change. Africans worry that this will be at the expense of the poor. New priorities should not avert the bank's focus on poverty, says Enoch Godongwana, South Africa's finance minister. A note seen by *The Economist*, signed by every African member among others, says they want "an institution that remains strongly committed to end poverty", warning that "too broad" a mission will dilute this focus. They also called for additional funding for climate projects so that these do not reduce spending on development. Yet "it's really a zero-sum world," says Clemence Landers of the Centre for Global Development (CGD), a think-tank.

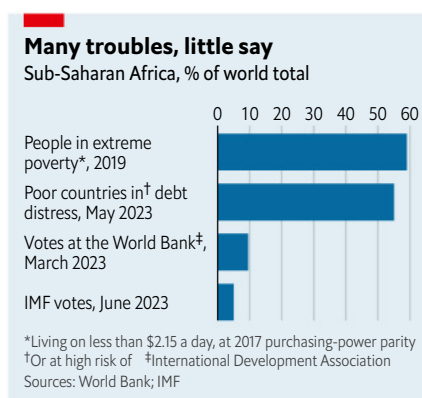
In response to the uproar, the institutions are debating some technical fixes. The G20 thinks the bank could lend more by tweaking its own rules and borrowing more from markets. Yet doing so could push up the interest rates it charges poor countries, frets Abdoul Salam Bello, the representative on the World Bank's board for 23 African countries. "They are not reforming for us," sums up one Ethiopian official bluntly. "It is for the countries that will be giving them money."

Most African countries borrow from the IMF at subsidised interest rates. Yet the fund is running short of concessional cash, says Ernest Addison, the governor of Ghana's central bank. Indeed, without new money it could be forced to slash concessional lending in a year or so. The IMF reports that it has provided unprecedented support to poor countries since the pandemic and that it is trying to get donors to stump up more.

But it is not just the availability of money that is the issue. African countries are also hamstrung by the fund's rules on how much countries can borrow, says Mamo Mihretu, the governor of Ethiopia's central bank. Just when international financial institutions are most needed to play a big role, "they're not there", he says.

Another technical fix is getting rich countries to make available to poor ones some of their special drawing rights (SDRs), a kind of global reserve currency issued by the IMF. Mr Macron may trumpet this in Paris, says the CGD. Yet in November 2021 the G20 set a global target for rich countries to contribute \$100bn in SDRs and they are still well short of meeting this, partly because Congress has not released the \$21bn that America pledged.

Faced with the prospect of declining funding and technical fixes that may not add up to much, African countries are asking a bigger question: why they have a weak voice in the Fund and the Bank, whose boards are dominated by rich countries that pay in the most capital. "If the big guys, the G7, have formulated an opinion, they stick to it irrespective of what people's



concerns are," complains South Africa's Mr Godongwana. African leaders hope to get a stronger voice at the G20, a club of the world's biggest economies, as well as in the international financial institutions.

Macky Sall, the president of Senegal and until recently the chair of the African Union (AU), the regional bloc, argues that Africa's weak representation in international institutions results in the continent having decisions foisted upon it on matters such as climate change and debt. "The G20 undermines its effectiveness and influence by leaving out such a large proportion of humanity and the global economy," he wrote in an op-ed in *Le Monde*.

Africans are also trying to push talks about international taxation from the OECD into the UN, where they have a voice. And they have demanded more of a say in global debt discussions, which remain dominated by creditors.

Africa's most ambitious geopolitical demand is for reform of the UN Security Council. Roughly half of all Security Council meetings discuss Africa. Yet the 15-member council—comprising five veto-wielding permanent members and ten rotating members—has just three rotating seats for African countries. "The inertia of the Security Council in the fight against terrorism in Africa underlines the failure of the multilateral system," declared Mr Sall of Senegal. Africa wants two permanent seats and five non-permanent ones on a new 26-member council.

The indifference displayed by African countries in particular to Russia's invasion of Ukraine seems to have focused minds on the need to listen to the continent. Some 11 members of the G20 support the AU attending, as the EU already does. In November President Joe Biden called for permanent seats for countries in Africa, Latin America and the Caribbean. "The time has come for this institution to become more inclusive," he said, "so that it can better respond to the needs of today's world." His words apply no less to the IMF, World Bank and G20. It is high time the continent with the world's fastest-growing population was given its voice. ■

Jihadists in Africa

The spreading menace

GOMA

Militants in Congo linked to Islamic State State are extending their reach

THEY CAME in the dead of night with guns, axes, machetes and petrol bombs, shooting, hacking and setting fire to students as they slept in their dormitories at a remote school in Uganda's west. After murdering 41 people, the fighters of the Allied Democratic Forces (ADF), an armed group based in eastern Congo linked to Islamic State (IS), spirited themselves back across the border, taking at least six captives with them.

The attack on June 16th is a reminder of how chaos in eastern Congo, which is terrorised by dozens of armed groups, is threatening the wider region. In addition to the ADF, these groups include the M23, a rebel movement backed by Rwanda, and CODECO, an ethnic militia accused of raping, dismembering and beheading its victims. This year alone some 1m people have fled their homes in Congo, taking the total to more than 6m, according to the UN.

Moreover, the attack highlights how jihadists have been able to spread their influence across a large triangle of east Africa—roughly from Somalia to Mozambique and Congo—often by exploiting local grievances. Uganda, which is at a nexus of this terrorist activity, has been attacked several times. The latest is its worst since 2010, when suicide-bombers from al-Shabab, a Somalia affiliate of al-Qaeda, killed more than 70 people in two almost-simul-▶▶



The awful aftermath

▶ taneous attacks in Kampala, the capital. Uganda's army, which has battled al-Shabab in Somalia for years, officially lost 54 soldiers (though the real number of casualties is understood to be far higher) when the group attacked one of its bases there in May. But it is the ADF that worries the Uganda's security chiefs most. "This threat is more important to us, because it was born here," says a senior Ugandan official.

The ADF started as an Islamist rebel outfit in Uganda, but fled to Congo in the late 1990s. Its commanders intermarried with locals and remained dormant there for many years. Then in 2013 it adopted guerrilla tactics and started massacring civilians and attacking the security forces. Congo's army fought back, killing many of its fighters and scattering the rest.

By 2017 the ADF was falling apart. It was then that the group started getting funding from Islamic State, according to a new report by the Programme on Extremism at George Washington University. From a low of just a few hundred fighters in 2018 the ADF may now have some 2,000 fighters, according to the UN's peacekeeping mission in Congo. In 2021 the group infiltrated suicide-bombers into Kampala, where they killed four people. In response, Uganda's army deployed into Congo.

Though the Ugandan army has bruised the ADF and bombed out some of its bases, the group remains resilient. It also appears to be learning from jihadists elsewhere. In the past few years it has started using more sophisticated bomb-making techniques. And in December it attempted another cross-border attack into western Uganda, although that one was easily repelled by Uganda's security forces.

The ADF has also expanded the territory under its influence in Congo. This is because even as Uganda's army has deployed against it, Congo's army has had to withdraw troops from the group's strongholds to fight the M23 elsewhere in North Kivu province. The ADF has meanwhile expanded into two neighbouring provinces: Ituri, where it is actively fighting, and South Kivu, where it is establishing sleeper cells. "The biggest beneficiary of the M23 war is the ADF," says a UN official in Congo.

East Africa's regional bloc, worried about instability and the threat of contagion, sent troops into Congo late last year to fight the M23. But they seem to have done almost no fighting. Félix Tshisekedi, Congo's president, recently accused the force of "cohabitation" with the rebel group. Now southern Africa's bloc is preparing to send its own multinational force to fight the M23 and other armed groups.

Meanwhile the jihadists themselves are internationalising their human resources and finances. The ADF imports non-Congolese fighters from east Africa into its safe zones via Uganda and Burundi. From there

it sends them to various front lines. Money comes from several sources, too, according to the Programme on Extremism. IS cells in Somalia extort money from businesses and people. In South Africa its operatives raise money through kidnapping, extortion and robbery, which is then used to finance the ADF as well as IS-linked jihadists in Mozambique. This money is moved into east Africa through money-transfer agencies and then into the ADF's hands in Congo. Similar channels are probably also used to send money to jihadists in northern Mozambique. "Unless these money transfers are cut," says a Western counter-terrorism official, "no amount of military operations are likely to stamp out this problem." ■

Iran's nuclear programme

An unenriching agreement

DUBAI

America and Iran try to step back from the brink

FOR THE past five years, since Donald Trump withdrew America from the 2015 nuclear pact with Iran, American presidents have sought a new bargain with their old foe. Mr Trump, then president, predicted that tough sanctions would compel Iran to sign a "new and lasting deal". Joe Biden's administration promised smart diplomacy to craft a "longer and stronger" agreement.

Those efforts are sputtering towards an unsatisfying conclusion. Instead of making a deal, Iran has enriched more uranium to higher purity than ever before: it is on the threshold of being a nuclear-armed

state. Desperate to halt its progress, America wants to negotiate a tacit understanding that would offer Iran a dollop of cash to freeze its nuclear work where it stands.

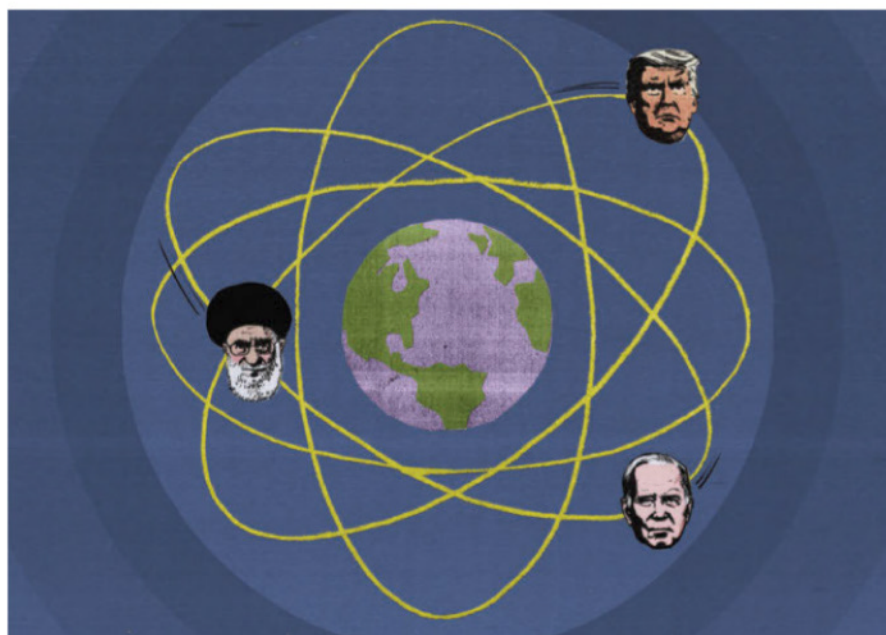
It is a far cry from the pact in 2015, the Joint Comprehensive Plan of Action (JCPOA), which imposed strict limits on Iran's uranium enrichment. Yet it is probably the best deal on offer right now, and it would be tolerated (though hardly celebrated) by Arab states keen to avoid a crisis.

The clearest picture of Iran's progress is found in a report in May from the International Atomic Energy Agency (IAEA), the UN's nuclear watchdog. The agency said Iran had accumulated 114kg of uranium enriched to 60% purity, a level that has no civilian use. That is enough to produce at least two nuclear bombs if refined further to the weapons-grade level of 90%.

At Fordow, a fortified facility built into a mountain, inspectors who tested environmental samples found traces of uranium enriched to 83.7% purity. Iran blamed that on a momentary hardware glitch, and the IAEA found no evidence that Iran had amassed a stockpile of such highly enriched uranium. Still, the shock discovery added urgency to diplomatic efforts.

The emerging deal, by all accounts, would be modest. Iran would promise not to enrich beyond the 60% threshold, though it would not have to reduce its uranium stockpile. It now has 4,385kg of the stuff at varying levels of purity. The JCPOA, by comparison, limited it to just 300kg at 3.67% and nothing above that level. There is optimistic talk that Iran would make promises unrelated to its nuclear work. It might release at least three American citizens held for years on bogus charges.

America would offer money in return. It would not lift sanctions on Iran's oil indus- ▶▶



▶ try, as it did under the JCPOA, but it would enforce them less fiercely. It could also release Iranian funds frozen abroad, such as \$7bn in oil revenue stuck in South Korea. That would be a welcome infusion for a regime struggling with high inflation and unnerved by months of protests last year.

All this has been discussed in indirect talks in recent months, some in Oman, the Gulf state that also hosted the first tentative meetings towards the JCPOA a decade ago. America insists it is premature to talk about an agreement. "Rumours about a nuclear deal, interim or otherwise, are false and misleading," the State Department said on June 14th.

But diplomats see such denials as linguistic hairsplitting. A law passed in 2015 requires Congress to review any nuclear deal with Iran. Republicans would surely oppose a new agreement, and even many Democrats would buck at supporting one that leaves Iran with a stockpile of highly enriched uranium. The Biden administration is loath to risk an embarrassing legislative defeat ahead of next year's election.

There will be no "deal", in other words—nothing like the JCPOA, a 159-page document signed by a gaggle of foreign ministers. Instead there may be a quiet, informal understanding. If Iran frees American prisoners, and if the IAEA reports that it has stopped accumulating highly enriched uranium, those would be signs that the talks have made progress. So would any gestures that ease the pressure on Iran's economy. Earlier this month America granted Iraq a waiver to pay \$2.8bn in gas and electricity debts to Iran, which had previously been blocked by sanctions.

Then there is oil. Kpler, a data firm, estimates that Iran's exports have increased from well under 1m barrels per day (bpd) a year ago to more than 1.5m bpd now. That is the highest level in five years, though still far below the 2.7m bpd that Iran shipped in mid-2018, just before Mr Trump ditched the JCPOA. Most of that oil is sold at a discount and shipped via third countries on a "ghost fleet" of dodgy tankers to China. Such transactions technically run foul of American sanctions—but only if America bothers to enforce them.

In years past, such a quid pro quo would have infuriated America's friends in the Middle East. They may be less hostile today. In March Saudi Arabia and Iran unexpectedly agreed to restore diplomatic ties after a seven-year break. The Saudi foreign minister went to Tehran for talks this month, the first such visit since 2006. After a years-long proxy war with Iran, the Saudis now want calm in the region so they can focus on ambitious plans to build a post-oil economy. Even the tiniest agreement between America and Iran would lower the risk of conflict.

Binyamin Netanyahu, the Israeli prime

minister, has made Iran's nuclear programme a defining issue of his long rule. He said this month that he opposes any "mini-agreement" between America and Iran. Yet he too may be unusually muted in his criticism. Mr Netanyahu believes Mr Biden is serious about trying to midwife a separate deal with Saudi Arabia that would see the kingdom recognise Israel. That would do much to ease the sting of an American-Iranian arrangement.

It is hard for anyone to cheer an agree-

ment that would leave Iran just shy of the nuclear threshold. But it is also hard to see an alternative. Iran's ultra-conservative rulers are reluctant to negotiate anything with America, let alone a comprehensive pact that Mr Trump could tear up (again) in 18 months. Military strikes on Iran's nuclear facilities, which both America and Israel have threatened, could drag the region into a war. A mini-deal would simply kick the can down the road—but for now that may be the best choice available. ■

Israel

Fire sale

JERUSALEM

The war in Ukraine is boosting Israel's arms exports

FOR DECADES the standout product of the Israeli arms industry was the Uzi, a submachine gun used by soldiers and action stars the world over. More recently, however, attention has shifted to the Iron Dome. Footage of interceptor missiles pirouetting in Israel's skies, shooting down Palestinian rockets, has made it perhaps the world's best-known missile-defence system. The war in Ukraine has further increased interest and proved a boon for Israel's arms exports.

On June 14th Germany's parliament signed off on a €560m (\$615m) instalment on the purchase of the Arrow-3, a missile-defence system, by the 17-nation European Sky Shield Initiative. The long-range Arrow-3, developed by the state-owned Israel Aerospace Industries and Boeing, an American aviation giant, is designed to intercept missiles above the Earth's atmosphere. It is already operational in Israel, which fears attacks

from Iran. Germany and its allies worry about Russia. At €4bn, the deal will be Israel's largest-ever arms sale. Finland and the Czech Republic, similarly concerned, have placed orders for smaller Israeli missile-defence systems. Other European governments plan to do so.

Israel began developing anti-ballistic-missile technology in the late 1980s. It has since adapted it for use against smaller rockets and artillery shells. That Israel has these systems in operational use gives them a clear advantage over competitors, says Tal Inbar, an Israeli missile-technology analyst.

Europeans have been on a spending spree since Russia's invasion of Ukraine. Last year Israeli arms-export deals hit an all-time high of \$12.5bn. Over a quarter of the sales were to Europe, a proportion expected to grow in 2023.

Drones, anti-tank missiles and advanced training systems have proved popular, along with missile-defence systems. Israel has even found customers for its used kit. An undisclosed European country wants to buy second-hand Merkava tanks, probably to replace older tanks earmarked for Ukraine.

Israel has remained on the fence in the war itself. It has sent humanitarian aid to Ukraine, but refused its entreaties for weapons. Israel frets about Russian troops near its border in Syria and about the fate of the large Jewish communities in Russia and Ukraine.

The surge in arms sales to Europe is a diplomatic boost for Israel. In the past potential customers have criticised its treatment of the Palestinians in the occupied territories. Now they will be using Israeli systems developed and used in Israel's conflicts in Gaza. Europeans who suddenly have a front line on their borders may be more understanding of Israel, suggests Jeremy Issacharoff, Israel's former ambassador to Germany.



Straight as an arrow



Tackling corporate concentration

The competition cops

DALLAS

Why Joe Biden's trustbusters have fallen short of their ambitions

AMERICA'S TOP trustbusters mean to make their policing presence felt. Lawyers, bankers and financiers now "recognise that there are cops on the beat...that we're vigorously looking to protect the American public from illegal mergers," says Lina Khan, chair of the Federal Trade Commission (FTC), which enforces consumer-protection and competition laws.

Whether Ms Khan, who became the youngest-ever chair of the FTC two years ago this month (she is 34), is a good or bad cop is a matter of fierce debate. Progressives applaud the greater scrutiny she has brought to companies' conduct—including her latest lawsuit, announced on June 21st, against Amazon, for alleged deception involving its Prime subscription service. Corporate America loathes her more partisan, boisterous approach to merger enforcement. Others accuse her of treating all big firms as criminals and most mergers as offences. David Gelfand, a lawyer at Cleary Gottlieb who worked on antitrust in the Obama administration, compares the ap-

proach to "going into a neighbourhood and saying you have a crime problem, so you're going to stop-and-frisk everybody".

Joe Biden's appointment of Ms Khan was a signal of seriousness about fighting corporate concentration. In 2021 the White House issued an executive order calling on agencies across government to focus on competition. It reckoned the dominance of a small number of firms in many markets meant higher prices and lower wages.

Ms Khan was a surprising pick, given her lack of experience as a legal practition-

er. (She rose to prominence as a law student in 2017 thanks to an article arguing that Amazon was a monopolist, and later worked for Congress, as a law professor and at a think-tank.) Mr Biden also appointed Jonathan Kanter, a lawyer who had worked against Google, to lead the anti-trust division at the Department of Justice (DOJ). The two have spearheaded a campaign to reboot trustbusting. They are pushing beyond the "consumer-welfare" standard (examining consumer prices) to encourage a broader look at other harms, including to labour and small businesses.

How successful have they been? They have certainly reframed public thinking about trustbusting. "Six years ago, if you didn't buy into the consumer-welfare standard, you weren't a serious person. Now that's completely gone," says Luigi Zingales, a finance professor at the University of Chicago Booth School of Business.

Through the threat of lawsuits and requests for information, which boost legal bills and the uncertainty of closing mergers, the trustbusters have also deterred some splashy dealmaking. So far this year there have been 4,955 deals in America, according to Dealogic, a data firm, only 3% fewer than the average for the same period over the five years before. But the total value is down some 40% on the previous average, suggesting firms are avoiding larger acquisitions (see chart on next page).

Target companies are insisting on big-▶▶

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ger break-up fees should an acquisition not fly. For example, Figma, a software company, will get \$1bn in cash from Adobe, its potential acquirer, if the \$20bn deal is scuttled. (The DOJ is said to be considering suing to block it.) But on the legal front the trustbusters, especially at the FTC, have notched up plenty of losses. The most significant court victory has been the Justice Department's challenge to Penguin Random House's proposed \$2.1bn takeover of a rival publisher, Simon & Schuster. In October a judge concurred that the deal would hand the publisher more pricing control over authors' earnings, and blocked it.

High-profile lawsuits are still winding their way through the courts, including two against Google (one initiated during the Trump administration, one by Mr Kanter's office, which is seeking to break up Google's advertising business). That one will be heard by a jury, instead of a judge, next year, in an effort to bring antitrust back to the people. "It's been at least 50 years, if not longer, since we've done a case like this in front of a jury," says Mr Kanter. Another big lawsuit against Amazon, possibly over giving preferential treatment to its own goods and services, is in the offing this year, predicts Konstantin Medvedovsky, an antitrust-watcher who works for a fund betting on merger outcomes.

Ms Khan has taken a more speculative approach. Having argued that enforcers of yore were too timid to fight tech deals that snuffed out competition, such as past acquisitions of WhatsApp and Instagram by Facebook (now Meta), she challenged Meta's deal for Within, a fledgling maker of virtual-reality fitness apps. But a judge rejected the FTC's request for an injunction. More recently the FTC sued a second time to block Microsoft's \$69bn acquisition of Activision, a gaming firm, arguing it could suppress competition in the video-game market. A hearing was set to begin on June 22nd—a very public test of whether Ms Khan is choosing the right deals to contest.

Lacking a federal privacy law or new antitrust legislation, which Congress has not approved, Ms Khan has persevered alone. But in some instances she has "sued on the grounds not of what's currently illegal but what's undesirable", says Matt Perreault, a professor at the University of North Carolina at Chapel Hill. That could backfire. "When you start losing cases, you set back the cause," says Larry Summers, a former treasury secretary.

The administration's mixed record reveals three things it missed as it set out to attack corporate concentration. First, there is a problem of competing goals. The court is "extraordinarily friendly to large corporate interest", points out Nancy Rose of the Massachusetts Institute of Technology, yet Mr Biden has not made it a priority to appoint judges with expertise in antitrust,

pushing instead to diversify the bench by race and background. "It mystifies me that there hasn't been more effort to go to school on a strategy that [President Ronald] Reagan used very successfully," which was nominating like-minded judges on antitrust, says Bill Kovacic of George Washington University Law School, a former FTC chair. To shore up the stability of the financial system, meanwhile, big banks have been allowed to merge with smaller, failed ones: an administration that has tried to fight consolidation has thus enabled it.

Busting trust

The second problem is that the person with vision for a movement may not be the best person to lead it. "The arguments they used to achieve power have gotten in the way of exercising it," says Mr Kovacic. Ms Khan took command after saying that the agencies had been failing for decades to do proper policing. That has dented morale, especially at the FTC. A poll last year of employees found that 49% said they trusted senior leadership, down from 80% in 2019. (Some observe that Mr Kanter has been more diplomatic in his criticism of staff's past work than Ms Khan, and also more strategic in the cases he has brought.)

The administration has also underestimated unintended consequences. Ms Khan has pushed the FTC to try to accomplish a lot through new rules, including banning "non-competes" (which bar employees from working for a competitor) and asserting its authority to pursue privacy violations. "In many ways, I view my tenure as a conservative one," says Ms Khan. "We're really going back to the original vision of the FTC as Congress envisioned it." But the courts and Congress may not see it that way. The Supreme Court could ultimately take up the question of the FTC's authority and circumscribe it.

Still, antitrust is a long game. "It took 12 years for the Reagan administration"—eight under Reagan, four under his successor, George H.W. Bush—"to get where they wanted on antitrust doctrine. We're in year

two," says Tim Wu of Columbia Law School, who worked in the White House on competition policy. Technology, including the rise of AI, will surely affect competition, but it is too early to say how, says Mark Warner, a Democratic senator.

Some wonder how much of Mr Biden's policy will outlast him if he does not win a second term, given his limited victories so far in court and the threat that some of the signature policies will be challenged there, including the ban on non-competes. Others are more optimistic. Bashing big business has become more common among populist Republicans, including a prominent presidential aspirant, Ron DeSantis, the governor of Florida. "The politics of this have changed, and no one wants to be on the other side of it," insists Mr Wu. Look out for Republican presidential hopefuls competing on competition policy. ■

Interstate 95

The road most travelled

PHILADELPHIA

Pain and pride around a vital highway

ON JUNE 11TH a petrol tanker tipped over and burst into flames underneath an elevated section of Interstate 95 in Philadelphia. The heat caused the northbound lanes to collapse and compromised the southbound lanes, shutting down traffic in both directions. Experts initially said repairs would take months. The disruption throws a spotlight on the I-95, which stretches for over 1,900 miles (3,100km) from Maine to Miami in Florida.

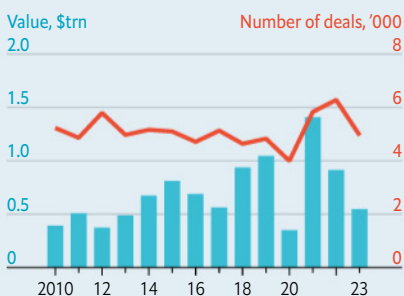
It is not America's longest highway—that is the I-90 from Seattle to Boston—but it is the busiest in terms of miles travelled. (Along certain stretches, users complain, it also stands out for truly dreadful driving.) It runs through or near many of America's big urban areas (see map on next page). The portion that collapsed was in a particularly dense stretch that carried 160,000 vehicles a day, including 14,000 lorries.

Pete Buttigieg, the transport secretary, said when he visited the site that the disruption to trucking will put "upward pressure" on shipping costs on the east coast, which may raise the cost of consumer goods. Mark Zandi, chief economist at Moody's Analytics, a research outfit, says the highway collapse will not have a material impact on the macroeconomy, but "it has been a pain in the neck."

Many lorries have been stuck in snarling congestion in places not designed for big rigs. Rebecca Oyler, head of the Pennsylvania Motor Truck Association, an in-

The real deal?

United States, mergers and acquisitions
Years to June 19th



Source: Dealogic



America's severed artery

▶ industry group, says one lorry driver taking a detour pulled down power lines, knocking out electricity in the vicinity. "I've heard from some trucking companies that simply have given up their routes," she says. "It's just simply not feasible for them to get in and out...with all the congestion and come out on top."

President Joe Biden, a big proponent of infrastructure investment, flew over the site of the collapse and pledged federal dollars to help repair it quickly (Pennsylvania also happens to be a vital swing state). The bill for the rebuild is put at \$25m-30m. Workers are on site round the clock. A live webcam of their progress is compulsive viewing. Josh Shapiro, Pennsylvania's new Democratic governor, said that it is being shown in Philly sports bars. During press briefings at the site, he stressed Philadelphia's grit and determination. More than one observer called him presidential.

Mr Shapiro announced on June 20th that traffic will flow on the I-95 this weekend. A temporary road was built at remarkable speed. Mr Shapiro was not surprised. "We can get big things done," he said. "We see a crisis and manage it effectively." ■



Misleading polls

Telling it how it isn't

WASHINGTON, DC

As response rates decline, the risk of polling errors rises

KNOWLEDGE OF MANY facets of American life comes from surveys. Every ten years the Census Bureau asks adults to tally themselves and their demographic information in an online or mail-in form: a survey. The Bureau of Labour Statistics (BLS) produces monthly estimates of the unemployment rate and other economic numbers that are derived from interviews with tens of thousands of households: another survey. And knowledge of political issues from opinion polls, of course, comes from surveys. That would not be a problem if everyone answered the pollsters. But not everyone does, and the people who don't can be very different from those who do.

Take a recent survey conducted by the *Wall Street Journal* and the National Opinion Research Centre (NORC) at the University of Chicago. The poll, published in March, purportedly showed that the popularity of many American values had fallen precipitously over the past few decades. In 1998 a poll by the *Journal* and NBC News found that 70% of adults said "patriotism" was "very important" to them; now just 38% do. Similarly, religion's score had declined from 62% to 39%; bringing up a family from 59% to 30%; and community involvement, which rose from 47% to 62% by 2019, had crashed to 27%. Only money had become more important to the average adult since 1998: 31% then, 43% now.

The *Journal* wrote that "America pulls back from the values that once defined it." A headline on Axios, an online news outlet, declared: "Rot of nation's core values quantified by single poll". On Twitter commentators agonised over the trends, blaming progressivism and secularism.

Yet the trends may not be real. Instead, according to Patrick Ruffini, a pollster at the Republican-aligned firm Echelon Insights, they mainly reflect a change in how the *Journal* conducts its polling. In the past it had joined forces with NBC News to field a nationally representative poll by telephone, a practice that grew expensive and prone to error as response rates plunged. So the newspaper recently turned to NORC, which over the past decade has developed polls that collect responses over the internet from a representative sample of Americans recruited by mail.

The problem arises when the types of people contacted by phone and the internet can be representative of Americans demographically, but statistical weirdos in

other ways. Studying the differences in populations from telephone and online surveys—which industry insiders call "mode" effects—the Pew Research Centre in 2019 pointed out that its own online panellists may have been more honest about key metrics than its telephone respondents and less subject to "social desirability bias", a phenomenon where people are more honest about things like their financial situation and height when asked anonymously than they are over the phone. Pew found that on the same question, among the same respondents, it got different responses by mode.

That means the decline of American society is a mirage—a statistical quirk rather than the fall of Western civilisation. Such quirks affect other numbers. According to the BLS's Office of Survey Methods Research, the percentage of people completing interviews for the monthly Current Population Survey (CPS) has fallen from 90% in 2013 to 71% today. The CPS is the source of key economic indicators such as the unemployment rate and labour-force participation. A decline in response rate means there is a higher chance of distortion if "non-responders" are different from the people researchers actually hear from.

Analysts at the US Census Bureau found that plunging CPS response rates during the covid-19 pandemic made the survey much less representative of poor Americans. Their best guess is that the estimate of median household income in 2020 is inflated by \$2,000 purely because of a changing population of survey-takers. Another paper, from the Global Labour Organisation, an international non-profit group, found that CPS response rates are lower in cities and hubs for manufacturing jobs.

Government researchers are hopeful they can fix problems of non-response by spending more money to interview more people, or by developing new statistical techniques for analysing samples. But other issues will persist undetected until a researcher asks the right questions. Often, as with the values survey, that is too late. ■



Hunter Biden's plea bargain

Crack case

CHICAGO

Joe Biden's wayward son pleads guilty

IF THERE EVER was a chance that Joe Biden was going to distance himself from his wayward son, Hunter, it was squashed in mid-April, when the president paid an official visit to Ireland. As Mr Biden crisscrossed the Emerald Isle Hunter was constantly by his side, wearing matching aviator sunglasses. According to the *Washington Free Beacon*, a right-wing news website, Mr Biden's lawyers, who are representing him in a case concerning child-support payments in Arkansas, claim that their client even shared a hotel bedroom with his father in Dublin. Mr Biden repeatedly told crowds how proud he was of Hunter.

Mr Biden's loyalty is genuine. But his advisers will be hoping it is also politically savvy. After five years, the criminal investigation against Hunter Biden may be coming to an end. On June 20th David Weiss, the United States attorney in Delaware, the Bidens' home state, filed charges against the president's son, noting that a plea bargain had been agreed.

Hunter Biden will plead guilty to two misdemeanour charges of not paying taxes. A felony charge of illegally purchasing a gun (for which Mr Biden apparently lied on a background-check form about his use of crack cocaine) will be dismissed after a period of probation. The president's son thus avoids a prison sentence. The judge could in theory reject the agreement, but that is unlikely.

Donald Trump compared the punishment to a "traffic ticket", arranged by a "corrupt" Department of Justice. Ron DeSantis, the governor of Florida and Mr Trump's main Republican rival, called it a "sweet-heart deal". But there is little reason to think that Mr Biden has been especially generously treated. Mr Weiss was appointed by Mr Trump, and kept in place so that he could continue the case. Just one in 50 federal criminal cases goes to trial, and few first-time offenders for non-violent crimes are sentenced to prison. Prosecutions of people who lie on federal forms when buying guns are extremely rare. According to data extracted from the government by the *Washington Post*, just 298 cases were filed in 2019, though there were almost 170,000 refusals from background checks that year.

Will the conclusion of the case mean that Hunter's problems are over? That is not yet guaranteed. Since January James Comer, the chairman of the House Oversight Committee, has released a steady drip



Staying in step

of details about Mr Biden's financial dealings when his father was vice-president. Over a period of several years the younger Mr Biden was paid large sums of money by a wide range of foreigners, who seemingly thought that by paying Hunter they could get closer to Joe. Mr Weiss's statement said that "the investigation is ongoing."

Yet there have already been five years of investigation, and so far nothing has emerged that shows Joe Biden acting in any way other than as a loving father. His son seems mostly to have overcharged gullible foreigners for legal services, which is not obviously illegal. More charges seem unlikely. For President Biden, his son's willingness to own up to wrongdoing can be contrasted with Mr Trump, who is fighting his own criminal charges. As long as Hunter can stay clean, and so not break his probation, he can probably go back to his latest pursuit: abstract painting. ■

Capital punishment

Murder on his mind

BATON ROUGE

Louisiana's lame-duck governor could clear death row before he goes

A FINAL TERM gives a politician an opportunity for courage. John Bel Edwards, Louisiana's lame-duck Democratic governor, seemed to be seizing it when he announced his opposition to the death penalty in a conversation on faith and leadership at Loyola University, a Jesuit college, in March. In a state where Donald Trump trounced Hillary Clinton in 2016 and easily captured the eight electoral-college votes in 2020, most voters have long approved of putting inmates to death. De-

spite newfound support from the outgoing governor, a bill to ban the practice died in committee in May. Abolishing it, Republicans and prosecutors argued, would incentivise murderers to go rogue.

Mr Edwards's political bravery is now being put to the test. On June 13th, 51 of the state's 57 death-row inmates filed for clemency (the other six chose not to do so). A governor-appointed parole board will hear their cases one by one—the defence has just 15 minutes to argue for the life of each inmate—and could recommend that the governor swap out capital punishment for life imprisonment without parole.

Lawyers at Capital Appeals Project, the non-profit behind the mass filing, think their best bet is to argue for a systemic indictment of the state's protocols. That is why they chose to go all in instead of testing the most sympathetic cases first.

Of the people sentenced to death in Louisiana, 67% are black and most killed a white person. Ronald Dominique, a white man known as "the Bayou strangler" who raped and murdered 23 (mostly black) boys and men in the decade to 2006, did not get the death penalty, whereas Bobby Hampton, a black man, is on death row for allegedly killing a convenience-store clerk during a 1995 robbery in which there is evidence that another man was the shooter. Though the Supreme Court ruled that it is forbidden to execute a person with an intellectual disability, 40% of those on death row have one. The defence points to a concentration of sentences coming from two parishes as evidence of prosecutorial overreach; and notes that since 1976, 83% of the state's capital cases have been reversed.

Louisiana, however, has less of an appetite for killing than other states, says Cecilia Kappel, a defence lawyer. In the past five decades, the Bayou State executed 28 people (and none since 2010); Texas killed 583 and Oklahoma 120. Beyond a struggle to get the right drugs—some pharmaceutical firms now refuse to supply prisons with the chemicals used to kill—many attribute the resistance to the state's Catholic heritage. In 2022 Pope Francis declared capital punishment "morally inadmissible" in all cases. Sister Helen Prejean, a nun from New Orleans, says a pro-life state should not put people to death. Though Republican lawmakers are gung-ho about outlawing abortion (see next story), their law-and-order convictions seem to trump their inclinations to preserve adult life.

The race to replace Mr Edwards is already under way. The attorney-general, Jeff Landry, leads the pack: fundraising reports show he has far more cash on hand than anyone else. His office plans to fight the clemency pleas and on the campaign trail he has called for executions to start again. With each passing day the window for mercy in Louisiana closes a little more. ■

Abortion politics

Radicals v incrementalists

BATON ROUGE

One year after *Dobbs*, the pro-life movement is in flux

FOR THE first 12 years of her life Audrey Wascome's grandparents raped her to make child pornography. She dodged pregnancy, but because of scar tissue her bladder no longer works as it should. On May 10th Ms Wascome, now an anti-violence advocate, testified before the Louisiana House's criminal-justice committee for a bill that would carve out exceptions for rape and incest from the state's abortion ban. Pro-lifers responded by calling for punishment for rapists rather than "death penalty" for fetuses, and argued that exceptions would make women clamour to put ex-lovers behind bars to "dispense with the inconvenience of giving birth". Fixing one tragedy with another, they said, does no good. At roll-call the bill died, with lawmakers voting neatly on party lines.

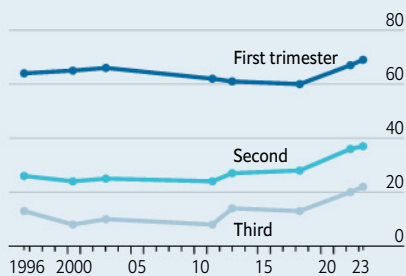
After the vote, pro-lifers convened for a celebratory lunch in the private suite of the lieutenant-governor. A pastor prayed for "the unborn life, liberty and limited government". Like the movement overall, many of the pro-lifers at the capitol were born-again Christians—a "God-squad" of mostly white Catholics and evangelicals who consider themselves to be wrestling an evil as grave as slavery or the Holocaust.

Before the ruling in *Dobbs v Jackson Women's Health Organisation*, which one year ago scrapped *Roe v Wade* and let states ban abortion, pro-lifers were a pretty united bunch. Leaders and grassroots organisers found a common enemy in *Roe*. But since the Supreme Court decided to "stay out of the dehumanisation business for good", as one pro-lifer put it, the movement has been in flux. After the festivities—some say the founding fathers rejoiced in heaven when *Roe* fell—pro-lifers realised sending power back to the states was just the beginning. "*Dobbs* was the day we waited for for close to 40 years," says Gene Mills, head of the Louisiana Family Forum, a non-profit group. "What now?"

They agree on one thing: the work is far from done. Abortion is not outlawed everywhere, and where it is, women circumvent bans by driving to out-of-state clinics or buying pills online. In California and New York, which together recorded a quarter of America's abortions before *Dobbs*, nearly 23,000 fetuses are still aborted each month. Many find the new patchwork of policies morally untenable, comparing it to pre-civil-war times when slavery was legal in some states, but not in others.

Choosing choice

"Abortion should be legal during each of the following stages of pregnancy"
United States, % agreeing



Source: Gallup

Fiercer opposition also makes things harder. Between 2020 and 2022 the share of Americans who vowed to vote only for pro-choice candidates nearly doubled; in the five years to 2023 the percentage who say third-trimester abortions should be legal rose from 13% to 22% (see chart). To many on the left, *Dobbs* is now the animating force that *Roe* was on the right.

Hearts, minds and "born privilege"

Different pro-life factions, however, have different priorities. Wyoming has extended Medicaid for new mothers and North Carolina pledged \$160m for child care, foster care and parental leave. New Mexicans are looking into the Comstock Act as a basis for a national ban, Arkansans are build-



The permanent campaign

ing a "monument to unborn children" at their capitol and Texans are working on the legal logistics of criminalising travel for abortions. Some are flirting with a ban on morning-after pills, others are attacking in vitro fertilisation, arguing that too many "babies on ice" are discarded.

Two broad camps are jockeying to set the movement's direction. Establishment pro-lifers use political connections to score policy victories with judges and legislators. The National Right to Life Committee, the oldest pro-life organisation, attributes *Roe*'s fall to years of "chipping away" at it. In defence of a 15-week ban, Marjorie Dannenfelser, the president of Susan B. Anthony Pro-Life America, another big group, said that promoting politically viable policies is more important than gunning for gold. Incrementalists point to Kansas and Kentucky, both Republican states that rejected abortion-ban referendums last year, as evidence that rash moves can backfire.

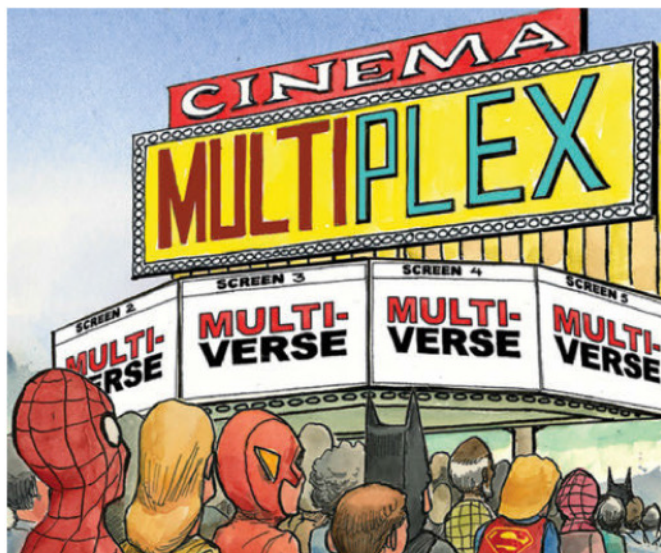
Younger pro-lifers, boosted by groups like Students For Life, tend to be more absolutist. Though a greater share of older people think abortion should be illegal in some or all cases, 18- to 29-year-olds are most likely to want total bans. Budding activists resist any exceptions, dreaming of a federal ban and of going after birth-control pills. Being "massively pro-family" is where they break with their parents' generation, says Zachary Schnaars, a final-year student at Louisiana State University. He feels his cohort has suffered more from the decline of the family unit.

Many have replaced the "hard-core, alt-right talk of hellfire" with language more empathetic to the mother, says Keagen Alexander, a student from Houston. Using the lingo of the left, young advocates talk about "born privilege" (discrimination against the unborn) and the environmental costs of "chemical abortions" (for which there is no scientific evidence). They reckon on these are the best ways to win over other young hearts and minds.

Historically, incrementalists have not chided the movement's fringe for going too far, even when extremists shot providers and firebombed clinics in the 1980s, says Karissa Haugeberg of Tulane University. The radicals made the establishment look more reasonable. Things changed when in May 2022 a Louisiana legislator proposed a bill to let the state bring homicide charges against women who had illegal abortions. Over 70 pro-life organisations opposed it. Backing the bill threatened the case that they had worked so hard to construct: that being anti-abortion is also pro-woman. Radicals pushed back, arguing that if one truly believes that abortion is murder it is logically inconsistent to fail to prosecute the killer. In this ethical framework, rape and incest exceptions make no sense. ■

Lexington | Multiplexed

Hollywood's favourite new plot device offers escape for a society lamenting its choices and traumas



“OH, JAKE,” BRETT said, “we could have had such a damned good time together.” So writes Ernest Hemingway in “The Sun Also Rises”. “Ahead was a mounted policeman in khaki directing traffic. He raised his baton. The car slowed suddenly pressing Brett against me. ‘Yes,’ I said. ‘isn’t it pretty to think so?’”

It is pretty to think so, and if Hollywood got its mitts on Hemingway’s oeuvre today, the story would not end with such aching futility. As the baton came down the scene would jump to another world, or timeline, where Brett and Jake—he, in this other reality, having dodged that emasculating war wound—are rolling in the hay, then (wave of the baton) another reality in which Brett, now a matador, is bringing a bull to its knees and then (this time a wave of her red cape) another where she is helping a wrinkled Cuban fellow in a tiny boat reel in a giant fish, with a heave from the Incredible Hulk and, inevitably, his chuckling buddy Thor.

It is a multi-splendoured thing, the multiverse: a science-fiction plot device that has been around for decades, yet has suddenly spread through cinema and television with the speed of Quick-silver and the ensorcelling power of Dr Strange (both © Marvel Entertainment). By combining characters and cultural references old and new, it can bind together grandparents, parents and children, as well as many brands and the most convoluted plots.

The newest summer spectacle, “The Flash”, resurrects not only three different Batmen (played by Ben Affleck, Michael Keaton and George Clooney) but also several Superpeople of both genders reaching back to the black-and-white era. It winks at the audience with references to “Star Wars”, “Scooby Doo” and “Back to the Future”. The effect is of a self-aware palimpsest begat by TikTok and a pinball machine. “Look at this!” cries the Flash—well, one of the two or three Flashes—at the climax. “These worlds collapsing and colliding! We did this!” Indeed they did (truly, it is a meta-multiverse). Just how they did it is worth pondering only in a dorm room blue with pot smoke. Using a bowl of spaghetti, a Batman explains that “Time isn’t linear,” though it must be admitted that, during the film’s 144 minutes, it can certainly feel that way.

Much of this is just good fun, of course. Asking why one enjoys a rollercoaster ride is an invitation to turn delight into homework. Yet the ubiquity of the concept of the multiverse does raise the

question: Why now? Technology is clearly part of the answer. It has made these movies possible not just through advances in graphics but by training audiences to toggle among countless open-browser tabs, even as their politics and news media are teaching them that reality is slippery, hard to name or trust. But certain themes that come up again and again suggest that these films also respond to some deeper yearning.

Earlier this year a multiverse movie, “Everything Everywhere All at Once”, won seven Oscars, including for best picture. It was in essence a Marvel action film dressed up in musings about identity (as are, come to think of it, Marvel movies). Evelyn, played by Michelle Yeoh, is a Chinese-American immigrant who discovers she has great power in an alternative reality and must travel the multiverse to save it from destruction (via a bagel) by another powerful being who turns out to be a different-reality version of her alienated daughter. The two are reconciled and the multiverse saved by Evelyn’s embrace of empathy and kindness.

The Flash, by contrast, after disastrously dashing back in time to tinker with events, discovers that to save the world he must let his mother die. “The Flash” may be tougher-minded, but the basic message is the same: parenting is hard. One hopes the sprogs take that in, along with their \$12 popcorn.

As those summaries suggest, these films are also obsessed with choice and contingency. When the show ends and the lights come up you can feel less inspired than sad, considering a society suffused with regret, more preoccupied with individual trauma and with sorting out the past, and recycling its tropes, than dreaming of the future. The escapism on offer is not just the old comic-book fantasy of a humdrum existence transformed by a spider bite. It is that in another reality, right now, the audience member might have made choices that led to a grander life, or at least Hillary Clinton might have campaigned harder in the Midwest.

Spidey sense

For Lexington’s money the best of this multiplying genre is the jazzy, animated series of “Spider-Verse” movies emerging from Columbia Pictures, the second of which is in cinemas now. In his “Hitchhiker’s Guide to the Galaxy” novels, Douglas Adams romped with the idea of infinity, positing that it meant that anything imaginable, such as a planet of sentient mattresses, must exist somewhere. Each planet of the infinite Spider-Verse hosts a Spider-creature of some sort—a cat, a punk rocker, a Tyrannosaurus Rex—with a costume, powers and an agonising back story like that of the original Spider-Man, who failed to stop a robber who subsequently killed his beloved Uncle Ben. Interdimensional travel allows these Spider-beings to join forces, and can also bring them into conflict with one another.

Intimate tales of trauma and parental struggle are, as usual, chained to the onrush of Armageddon, but the series wears these themes both more lightly and more soulfully. In a fleeting scene in the new film (“Across the Spider-Verse”) the audience glimpses a Spider-therapist listening to a Spider-Man on a couch talking about his uncle. “Let me guess,” Spider-therapist interrupts with a hint of impatience, looking up from his pad of paper. “He died?”

The emerging arc of the series is that the hero, Miles Morales, is determined to transcend the cycle that the other Spiders accept as written. “Everyone keeps telling me how my story is supposed to go,” he exclaims. “Nah! I’m going to do my own thing.” It may be that the multiverse of cinematic multiverses will, in the end, offer up something new. ■



Argentina's upcoming election

It's still the economy, stupid

Annual inflation of 114% is pushing Argentina to the right

SATURDAY JUNE 24TH will be a momentous day in Argentina: Lionel Messi, a superstar footballer, will turn 36. It is also the day the election season officially begins in the country. As politicians limber up to compete as presidential hopefuls for the poll later this year, they face a daunting backdrop. The annual inflation rate, of 114%, is the world's third-highest. The share of people who cannot afford basic foodstuffs and services has risen from 30% in 2018 to 43% today. Unsurprisingly, the main concern of voters is the economy. And it is pushing them to favour politicians who offer radical fixes to their country's economic malaise.

So far, some 20 candidates have thrown their hat in the ring. They will battle it out to win the backing of their parties in primaries on August 13th. The winners of those will move to the first round of the presidential election on October 22nd. But the depth of Argentina's economic problems means that the election this year is particularly unpredictable.

Since 1946, when General Juan Domin-

go Perón came to power, Argentina has mostly been ruled by the populist movement that took his name. But Peronism appears to be at its lowest ebb: just over a quarter of the electorate say they will cast their ballot for a Peronist. Under President Alberto Fernández annual inflation has tripled. Capital controls have tightened, fueling a gigantic black market for dollars, the currency in which Argentines save. The central bank has printed so much money that the amount of cash in circulation has almost quadrupled to 3.8trn pesos.

Both Mr Fernández and his vice-president, Cristina Fernández de Kirchner (no relation), have said they will not run for office. The potential Peronist hopefuls include Eduardo de Pedro, a protégé of Ms Fernández, and Sergio Massa, the economy minister, although he has not formally an-

nounced he will run. Neither is hugely popular. Instead, the polls are dominated by the centre-right opposition, Juntos por el Cambio ("Together for Change" or JxC), and La Libertad Avanza ("Freedom Advances"), the party of Javier Milei, a libertarian congressman (see chart 1 on next page).

For months the strongest candidate from JxC seemed to be Horacio Rodríguez Larreta, the technocratic mayor of Buenos Aires. Yet his emphasis on gradual change has resulted in him losing appeal as the economy worsens. This has opened up the floor for Patricia Bullrich, a former security minister. Whereas Mr Larreta is trying to bring moderate Peronists into JxC, Ms Bullrich opposes any alliance with the movement. She favours a sharp devaluation and a rapid reduction in public spending. Both want to enshrine central-bank independence, reduce the total fiscal deficit (expected to be 3.8% of GDP this year), slash currency controls and unify Argentina's mind-boggling array of exchange rates.

Some Argentines find this playbook unappealing. The previous administration was led by Mauricio Macri, the founder of the main party involved in JxC. He removed subsidies, lifted currency controls and agreed loans totalling \$56bn with the IMF. The formula ended in crisis in 2018. Instead, many want more extreme solutions. That has fuelled the rise of Mr Milei, who calls his programme a "chainsaw plan", as it is so sweeping. He wants to scrap the central bank and swap pesos for ▶▶

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dollars. He promises to cut taxes, privatise state firms, scrap subsidies and export restrictions, and re-establish private pension funds. He also wants to introduce a voucher system in schools and privatise health care. The number of government ministries would be reduced from 18 to 8.

Mr Milei attracts voters fed up with a bloated state. But his eccentric style—he lives with five mastiffs, four of which are named after famous economists, and also wants to create a legal market for organs—is particularly attractive to young men. When polled, a little over a fifth of voters say they will choose him.

His plans for dollarisation have gained the most attention. Mr Milei's programme is unclear, but suggests either a full-scale dollarisation of the economy, or for citizens to choose a currency of their liking. Many economists think official dollarisation is unfeasible. In some forms it would require the central bank to have large dollar holdings to back the banking system. Yet the central bank's net foreign exchange reserves are a negative \$1.5bn, estimates Miguel Kiguel of Ecnviews, a consultancy.

Dollarisation is supposed to make it impossible to plunder the central bank to fund the government. A previous effort in the 1990s that pegged the peso to the dollar stopped hyperinflation for a few years. Yet the system backing the peg was too lax to restrain the government, and so deficits kept piling up. When it became clear that one peso was not worth one dollar, Argentines rushed to withdraw their dollar savings from banks in 2001. The government then, in effect, confiscated these. Argentines were given devalued pesos, and the worst crisis in the country's history ensued. GDP fell by 17% and unemployment nearly doubled to 24%.

Despite this, many like the fact that Mr Milei offers radicalism. However in recent local elections his allies have not done well. This could mean that, in a general election, he may win only in big cities. But if Ms Bullrich wins, she has said that she would make an alliance with Mr Milei.



Greenback nation?

Whoever is the next president has a tricky task ahead. Public spending has grown from 26% of GDP in 2000 to almost 40% today. Government revenues, however, have not caught up. They represent 32% of GDP. But informality makes the tax base small. According to the statistical agency, 36% of Argentines work in the informal sector, though many economists put the figure higher. The few Argentines who do pay taxes are overburdened. The World Bank estimated that in 2019 a typical medium-sized firm in Argentina would owe taxes and social charges equivalent to a whopping 106% of its pre-tax profits (see chart 2).

Beyond raising taxes, the country has few other options to get cash. Since it has defaulted on its sovereign debt nine times, it is shunned by international capital markets and cannot borrow (except from multilateral lenders). Argentina could increase revenues by exporting. But successive Peronist administrations have built walls around the country. Trade is equivalent to only 33% of GDP, one of the lowest shares in the world. Argentina is among only a dozen countries which tax agricultural exports, according to César Litvin, a consultant in Buenos Aires.

All this means that Argentina's governments have often turned to the central bank, which enjoys only notional independence, to finance the fiscal deficit. In March the government updated an agreement with the IMF to refinance its outstanding loan, which stipulates that the central bank may not finance more than 0.6% of government spending in 2023. Yet in the first five months of this year central-bank financing has already exceeded this limit, says Marcos Buscaglia of Alberdi Partners, a consultancy. Much of the money is not funnelled directly to the Treasury.

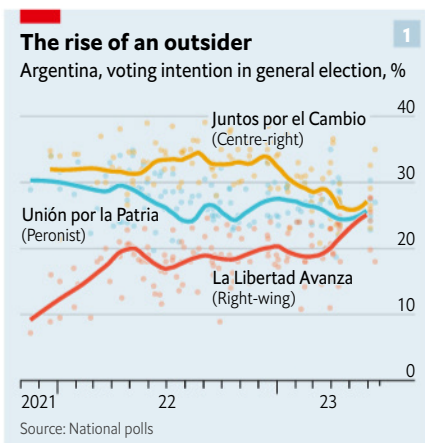
Instead, according to Mr Buscaglia, the government has been selling peso-denominated bonds to public-sector entities, which then sell the bonds back to the central bank. This, in effect, puts cash in the government's hands.

Sorting out the economy will require short-term pain. In order to cut the fiscal deficit, the government will need to reduce public spending and subsidies, on which around 2% of GDP is spent. Yet that will raise energy prices, which will push up inflation. Similarly, to boost trade Argentina will need a single exchange rate. Yet that will probably require devaluing the peso, which will push up prices. That could lead to social unrest.

Implementing such reforms is politically challenging. Argentina's constitution divides the country into 24 provinces with lots of autonomy. Much of the surge in public spending over the past two decades has been fuelled by the provinces rather than the federal government. Any incoming president will have to negotiate with 24 governors who often run their regions like fiefs. In some of Argentina's poorest provinces, over two-thirds of employees work for some form of government.

The next president may, however, be helped by a stronger harvest. This year one of the worst droughts in Argentina's history wiped out over \$22.5bn worth of soya, corn and wheat exports, worth 3.2% of GDP. The harvest is expected to recover next year. Increasing demand for lithium could also help. Recent investments in the world's second-largest field of shale gas, in the West, could boost energy exports.

Ms Bullrich and Mr Milei may tout quick fixes. But it will take persistence to win back the trust of foreign investors and Argentine savers. "None of our problems will be solved under one government," says Ricardo Carciofi of the University of Buenos Aires. "The secret is to solve the problems of today and persevere without changing direction for years, decades even." For Argentina's volatile politics, that is a tall order. ■



Guatemala

No country for journalists

GUATEMALA CITY

Press freedom is being stifled

JOSÉ RUBÉN ZAMORA, a Guatemalan journalist, has often exposed corruption in the Central American country. In 2008 he was kidnapped, beaten and drugged by unknown assailants, before being dumped outside the capital. Some 15 years later, he is still being targeted. On June 14th, a court sentenced Mr Zamora to six years in prison for money-laundering and ordered him to pay a \$40,000 fine. He was cleared of charges of blackmail and influence-peddling. The case is widely considered spurious. It is a worrying sign of eroding press freedom ahead of the first round of a presidential election on June 25th.

Alejandro Giammattei, the outgoing president (he cannot run again), insists the trial had nothing to do with journalism and everything to do with Mr Zamora's business activities, which included asking an acquaintance to deposit \$40,000 in cash in a bank for him. Mr Zamora argues that the use of cash was necessary to protect donors from the ire of the authorities. *El Periódico*, the newspaper Mr Zamora founded in 1996, closed in May—he claims that the authorities repeatedly intimidated its donors and journalists (the government denies these allegations).

Mr Zamora's punishment is “a very bad signal for democracy”, says Carolina Jiménez Sandoval, the head of the Washington Office on Latin America (WOLA), an American think-tank. Ahead of this year's presidential election, the right to take part in politics has also been “severely violated”, she notes. The country's electoral authorities have made apparently arbitrary decisions to bar candidates, including Carlos Pineda, a businessman who became the surprise front-runner after campaigning on TikTok, a video app.

This is part of a broader trend of democratic backsliding. Several countries in Central America are moving in the direction of Daniel Ortega's Nicaragua, the original model for despotism in the region. The rule of law is quickly eroding in El Salvador under Nayib Bukele, its millennial president. Unlike these two other nations, though, Guatemala is not dominated by one individual. Rather, its political, military and economic elites entrench their hold on power through a system described by WOLA as “corporate authoritarianism”.

Democracy started to unravel in Guatemala in 2019 when the then-president, Jimmy Morales, disbanded CICIG, a UN-created

anti-impunity task-force. This trend deepened under his successor, Mr Giammattei. Threatened by questionable legal challenges, many lawyers and judges have fled the country in recent years. Since November two dozen journalists have gone into exile.

When interviewed in May the founder of *El Periódico* was handcuffed, well-dressed and gaunt after ten months in a cell. He correctly guessed that he would receive between five and seven years in jail, adding that Guatemalan democracy had always been imperfect, but that it had significantly worsened of late. “We are passing a threshold, and it will be progressively

more difficult to practise journalism in Guatemala,” he sighed. He believes the article that particularly irked the authorities before his arrest was a report on irregularities surrounding the government's covid-19 vaccine deal.

Marielos Monzón, who is part of a media collective called *NoNosCallarán* (They Will Not Silence Us), believes the sentencing of the “emblematic” Mr Zamora is a “clear message” to anyone who practises her profession. Ms Monzón thinks the situation is the worst in the country since 1996, when the post-civil war era began. “They are leaving us two paths,” she says. “The path to exile or the path to prison.” ■

Canada

Of buoys and men

VANCOUVER

Canada has a shortage of lifeguards

MICHAEL OLSEN first became a lifeguard when he was a teenager in Australia. Now 81 years old, and after careers in tech and in the postal service, he has gone back the poolside. Most of his co-workers at the Nepean Sportsplex in Ottawa, the capital of Canada, are high-school and university students. He is currently the oldest lifeguard in the province of Ontario—but he may be joined by other octogenarians if a nationwide trend continues. “I've been downsized from jobs before,” he says. “It's nice to know that I'm in demand now.”

Canada has a shortage of lifeguards. This has caused dozens of pools to close across the country—some temporarily and others permanently. On June 2nd Ontario's government lowered the minimum age to be a lifeguard, from 16 to 15,

in order to encourage more youngsters to take up summer jobs.

The shortage is mostly the result of the pandemic, which shuttered pools. When they reopened, many lifeguards who were fired during lockdowns did not return. Training can be expensive. Although the initial course costs hundreds of Canadian dollars, over the years additional lessons and the like can add up to C\$1,500 (\$1,134), estimates Christopher Love of the Manitoba Lifesaving Society. Training also takes a whopping 135 hours.

The number of lifeguards is ticking up again. But it is still not what it was before the pandemic. In 2019, the province of Manitoba trained around 1,000 lifeguards. In 2021 only 200 received training. In 2022, 900 did. Ahead of the busy summer season, the Lifesaving Society, a charity, offered free training for 12 people in Winnipeg this month. Only four people signed up.

Similarly, some pools are subsidising the costs of training. Lifeguards who have worked in other countries, such as Mr Olsen, are also being fast-tracked into jobs; previously, they would have had to retrain. (Even so, he still had to prove he could swim 400 metres in under 12 minutes and haul up a weight of 9.1kg from the bottom of the pool.) Other municipalities are offering gift cards, to Starbucks and the like, to attract recruits.

Higher wages help, too. Municipalities in British Columbia are trying to make waves in the labour market. Lifeguards working for the city of Vancouver can earn C\$28 an hour, more than C\$12 higher than the current minimum wage. Meanwhile, lifeguards who patrol the city's ten beaches make C\$35 an hour. Surf's up.



Not going swimmingly



Critical minerals

Asia's new resource competition

PERTH

Can Australia break China's critical-minerals monopoly?

JUST AS OIL was weaponised by its suppliers in the 1970s, so China's dominance in the supply and processing of critical minerals could prove threatening. Cobalt, graphite, lithium, nickel, the rare earths and more are called critical for good reason. They are crucial to defence, smartphones and other digital technologies. A handful are essential to wind turbines, batteries and electric vehicles. A clean-energy future is inconceivable without them.

China has a near monopoly on many of these minerals. It supplies nearly 90% of processed rare-earth elements. It is by far the biggest processor of lithium. In the Indo-Pacific region, this is driving Australia, Japan, South Korea and others to seek to diversify away from China—in the process defining a new resource-based geopolitics.

Plans for new critical-mineral supply-chains are being drawn up in multilateral forums such as the Quad grouping of America, Australia, India and Japan. Resource-rich countries like Australia and Indonesia (with lots of nickel and plans for a

battery industry) aim to profit from a minerals bonanza. The focus of much of the strategising, according to the National Bureau of Asian Research, a think-tank in Seattle, is on three things: “friend-shoring”, shifting supply-chain management from “just in time” to “just in case”, and ensuring spare capacity in minerals processing.

Mineral-related initiatives are coming in droves. China's dominance, says Australia's resources minister, Madeleine King, is a “strategic challenge”. On June 20th her government unveiled a critical-minerals strategy to address it. Australia is the biggest producer of lithium, the third-biggest producer of cobalt and fourth-biggest of

rare earths—yet a processing minnow. It aims to become, by 2030, “a globally significant” producer of processed critical minerals. It can “play its part in making sure we build secure supply chains”, says Ms King.

To that end Australia is committing A\$500m (\$343m) to projects under its new strategy. That is in addition to an existing A\$2bn fund to get early-stage critical minerals projects off the ground, among them a rare-earths refinery. This year Australia's government blocked a Chinese entity from raising its stake in a rare-earths company on national-security grounds.

As a free-trade partner of America's, Australia hopes to qualify for green subsidies under President Joe Biden's Inflation Reduction Act. In April a delegation of Australian producers visited Tokyo, hoping that Japanese investment and long-term purchase contracts will do for Australia's critical-minerals industry what they did for its now pre-eminent iron-ore and gas sectors. Last year Japan made critical minerals one of 11 strategic sectors deserving of government support. In March, Japan and America agreed to co-operate on minerals supply chains, including by countering “non-market” actors (ie, China).

South Korea, with global ambitions for electric vehicles and batteries, looks especially vulnerable to competition between America and China on this issue (and others). As part of President Yoon Suk-yeol's commitment to “comprehen-▶▶

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▶ sive resource-security measures”, his government earlier this year released a plan to secure critical-mineral supplies. The aim is to cut the country’s import dependence on China from 80% to 50% by 2030 and to increase its use of recycled minerals, from 2% to 20% of the total. South Korea has struck partnerships with countries including Australia, Indonesia and Kazakhstan, as well as the EU. It has joined an American-led, multi-country Minerals Security Partnership, announced last year.

Taiwan and India are also groping their ways towards adopting new critical-minerals strategies. The challenge, in nearly all cases, is China’s lock on processing, which is costly, complex and potentially environmentally hazardous to develop. Dozens of metallurgical stages are required to turn a rare earth ore into the final product. Only tiny amounts of critical minerals can be extracted from vast quantities of ore. Decades ago, China made processing central to its industrial plans, using massive subsidies and lax environmental standards. Its domination reflects that decades-long strategy.

By and large, its customers did not mind when it used its processing monopoly to drive down prices in order to deter global competitors. The risks of China’s dominance have grown, however. For Japan that became apparent in 2010, when China suspended exports of rare earths to it in reprisal for a spat over some disputed islets. Last year it threatened to withhold critical minerals from two American defence contractors, Lockheed Martin and Raytheon Technologies, in protest over America’s arms sales to Taiwan.

The pandemic caused others to wake up to the perils of a monopoly processor, by underscoring the vulnerability of supply chains generally. Russia’s invasion of Ukraine further highlighted the risks of doing business with a potential enemy. By withholding supplies of gas to European customers, Russia sought to weaponise a crucial commodity. (It is also a key exporter of nickel and palladium.)

Yet one case study shows how hard creating alternative mineral supplies can be. After Japan’s China stand-off in 2010 its government encouraged a Japanese trading house, Sojitz, to sign purchase contracts with an Australian producer, Lynas Rare Earths, while backing it with cheap loans. China fought back by flooding the market to suppress rare-earth prices. In Malaysia, political opposition grew to a new Lynas processing plant, despite the International Energy Agency giving it a clean bill of health. A Chinese propaganda group backed by the Communist Party had spread disinformation about the project. Lynas survives thanks to cheap loans from Japan, which recently advanced it a further A\$200m (\$136m) in investment.

Given such hurdles, and the high costs

International Yoga Day

Narendra Modi’s yoga evangelism

LONDON

The Economist joins an invigorating mass contortion in Trafalgar Square

TRAFALGAR SQUARE, like many public places in London, is crammed with British Indian history. On one of its giant plinths is a statue of Charles James Napier, conqueror of Sindh in 1843. On another is Henry Havelock, who beat the rebels at Kanpur in 1857. On June 20th the square hosted a more contemporary display of Indian empire-building—in the form of 300 British Indians and assorted others (including *The Economist*) practising yoga.

It was an early celebration of international yoga day, a UN initiative launched at the urging of Narendra Modi in 2015. Critics of the Indian prime minister’s Hindu-nationalist agenda view his yoga evangelism with suspicion, given the practice’s Hindu origins. The yoga chant “Om” is a sacred sound in Hindu scripture. The Sun Salutation, a common set of yoga poses, is associated with

Hindu prayer. Yet the annual yoga day is, like the practice itself, more obviously inclusive. It also signifies increased Indian confidence and visibility—and Mr Modi’s genius for marketing his country and himself. A daily practitioner, the Indian leader himself marked yoga day by leading a multinational contortion at the UN headquarters in New York.

For many in Trafalgar Square, yoga was a spiritual, but non-sectarian, answer to the pressures of modernity. Inderpal Chandel, a 45-year-old from Hounslow, credited her daily practice with easing a workplace injury that for 17 years put her on crutches: “My life was changed by yoga.” For many, too, it was a way to sustain an Indian identity in the West. “Yoga should not be minimised for recreation, but appreciated culturally and wholly,” says Mamata Subramanian, a 30-year-old raised in Ohio. Though relatively few were diehard Modi fans, most said the prime minister had raised the prestige of Indian culture. “He’s not polite but he’s pushy, and that’s a good thing,” says Mohit Singh Bharti, 31, mortgage adviser and immigrant from Jaipur.

Yoga-wise, this newspaper concurs. Trafalgar Square, a place of protest and revelry, had never rung with more civilised instruction than that offered over the course of the two-hour session. “Feel awareness in your toes intently.” “Any remaining thoughts and feelings, just relax and make a note of them.” And, ahead of the gut-crushing *pawanmuktasana*, which encourages flatulence: “If you hear any noises, be kind to yourself and your neighbour.”

If this was rascality, as the imperialist Napier said in an altogether less benevolent context, it was a “very advantageous, useful, human piece of rascality”.



Half butterfly and full Nelson

of environmentally safe processing, any new capacity will require long-term support, Ms King argues. Tiny rare-earth mining companies cannot afford the railways and other supporting infrastructure that Australia’s giant iron-ore companies run. Lynas’s chief executive, Amanda Lacaze, calls for “straight-up industry planning” to rival China’s 30 years of strategic thinking on critical minerals. Co-operation among like-minded countries will also be crucial, says John Coyne of the Australian Strategic Policy Institute in Canberra. His institute’s “Darwin dialogue” aims to enhance co-ordination between America, Australia and

Japan on rare earths.

How different might critical-mineral supply chains eventually look? Mr Coyne says the goal, achieved through investment and co-operation, should be more resilience and competition and less reliance on China. There is far to go before reaching even that modest aim. China’s hold is imposing, and the costs of entry into processing steep. Even the boss of Raytheon, the world’s biggest maker of guided missiles, this week told the *Financial Times* that ending its reliance on Chinese supplies of critical minerals looked “impossible...We can de-risk but not decouple.” ■

Afghanistan and opium

A new drug war

NAD ALI, HELMAND PROVINCE

The Taliban is cracking down impressively on poppy cultivation

EARLY THIS month, the Taliban turned up at Akhtar Mohammad's farm in Helmand province, in southern Afghanistan, wielding sticks. In half an hour they destroyed a field of poppies that had taken the farmer a year to cultivate—leaving Mr Mohammad close to despair. “Now the Taliban have destroyed my opium I demand they feed my children,” he says. “Or I will have to sell one of them to feed the others.”

Before the Taliban seized power in August 2021, the illicit trade in opium, a gum produced from poppies, helped pay for their insurgency. The mullahs encouraged farmers to plant poppies and taxed the trade. But drugs are deemed *haram* (prohibited) under Islamic law. Shortly after taking power the Taliban's supreme leader, Hibatullah Akhundzada, banned narcotics. And stunning recent evidence from across the country's opium belt in the south and east suggests he meant it.

According to satellite imagery from Alcis, a British firm, poppy cultivation in the southern province of Helmand, where most of the crop is grown, fell from over 120,000 hectares in April 2022 to less than 1,000 hectares a year later. Anti-poppy units are patrolling the province, meting out the treatment Mr Mohammad received. The results in Nangarhar province, another big producer, are similar. Only 865 hectares are under poppies now, compared with over 7,000 hectares in 2022.

It will be harder to eliminate poppies in remoter regions, such as Badakhshan in the north-east. Still, the results thus far point to a dramatic success. David Mansfield, a researcher who has studied Afghanistan's illicit economy for over 25 years, reckons Afghanistan's poppy production will drop by 80% between 2022 and 2023.

It is hard to exaggerate how bold this is. When the Taliban took over, Afghanistan produced 85% of the world's opium. According to UN estimates, the crop and related drug trade provided a total income of \$1.8bn–2.7bn in 2021, equivalent to 9–14% of GDP. That was more than official exports of goods and services. Around 450,000 Afghans were employed in the opium trade.

The Taliban have form. They banned poppy cultivation during their previous spell in power, in 2000, with similar results. It duly dropped from around 82,000 hectares in 2000 to less than 8,000 in 2001. The ban was rolled back only later that year, amid the looming prospect of an in-



Taliban governance

vasion by America and its allies. For the next 20 years, despite promises of government enforcement and millions of dollars spent by Western donors and UN agencies on “alternative livelihoods”, Afghanistan saw an opium-producing bonanza. This was a totemic failure for the Western-backed development effort. Nothing was more indicative of the weakness of the country's elected governments, and the impotence of their Western allies.

Some doubt the Taliban can sustain the ban. Afghanistan's economy is in crisis. It shrank by 35% between 2021 and 2022. Two-thirds of the population needs urgent humanitarian assistance. This is not, to put it mildly, a good time for thousands of itinerant harvesters to lose their jobs.

Poppy farmers are increasingly aggrieved, as the opium price climbs. In the south and south-west of Afghanistan the price of a kilogram of opium reached almost \$360 in November 2022, three times the price a year earlier. In the bazaars of Helmand and neighbouring Kandahar province, rumours are rife that the Taliban are slyly profiting from the ban. “I respect the decree of the Taliban's supreme leader, but the decree should apply to all farmers,” says Haji Mohammad Jan, a farmer in Kandahar, whose two-hectare poppy plantation was razed last month.

Even if sustained, the ban may have less impact on the global drug trade than some hope. As Vanda Felbab-Brown at the Brookings Institution, a think-tank in Washington, points out, cheap synthetic opioids abound. If Afghan production dries up for long, fentanyl producers from China and India could take over the profitable European market. For now, however, it is worth marvelling at the spectacle of an Afghan government enforcing its writ. Under 20 years of Western-backed government, the country's opium producers were largely unpunished. That is no longer the case. ■

South Korea and net zero

Greenwashing in Seoul

SEOUL

A country that promised to lead on climate is lagging

ADDRESSING THE UN's annual climate summit in 2009, South Korea's then-president promised his country would be “an early mover when it comes to tackling climate change”. Lee Myung-bak pledged that South Korea would allocate the equivalent of 2% of GDP per year to the fight over the next five years and host an inter-governmental initiative, the Global Green Growth Institute, outside Seoul. “Instead of saying you first,” said Mr Lee, the former head of Hyundai Construction, South Korea would henceforth act “me first”.

Considering the shape of the country's economy, this was ambitious. South Korea's rise from post-war destitution, to become the world's 12th-largest economy, was driven by polluting heavy industry and fossil fuels. Perhaps predictably, then, neither Mr Lee nor his successors have done much to help the country meaningfully curb its emissions. A decarbonisation “blueprint” recently released by the current government of Yoon Suk-yeol provides further reason to doubt that it will.

South Korea's emissions did not peak until 2018, almost a decade after Mr Lee made his commitment and much later than in most other industrialised countries. The country subsequently adopted a legally binding commitment to reduce its emissions by 40% relative to their 2018 level by 2030, and to achieve net-zero emissions by 2050. But this would be hard even with massive government intervention. To achieve its net-zero target South Korea would have to reduce emissions by an average of 5.4% a year. By comparison, the EU must reduce its emissions by an average of 2% between its baseline year and 2030, while America and Britain must achieve annual cuts of 2.8%.

Far from broaching the necessary serious measures, South Korea seems content to pay lip-service to the issue. In effect, Mr Yoon's proposals take aim at the too-modest measures promised by his predecessor, Moon Jae-in. Besides instituting South Korea's net-zero commitments, Mr Moon aimed to cut reliance on coal-fired electricity generation, from 42% of total generation to 22%. His government issued fairly modest subsidies to renewables. It also “instructed” South Korean industry to curb its emissions, from 261m tonnes a year in 2018 to 223m by 2030, without providing many regulatory or fiscal measures to help it do so. Mr Yoon, while reaffirming South

► Korea's headline targets, has back-pedalled on much of that.

He has cut his predecessor's renewables subsidies, and also his targeted increase in renewables. Mr Yoon has at least proposed a welcome boost to South Korea's nuclear-power generation, which Mr Moon disliked on the basis of his supporters' exaggerated safety concerns. But Mr Yoon has not yet revealed plans for new nuclear power stations. Bowing to corporate pressure, he has also watered down his predecessor's demands of industry. Its lobbyists complained that the pollution curbs de-

manded of businesses would "weaken industrial competitiveness", destroy jobs and be a "burden" on the economy. Mr Yoon has both reduced and deferred them. Around 75% of the wished-for industrial emissions cuts are now supposed to happen after 2027, which is when Mr Yoon is due to leave office.

His government claims South Korea will still meet its commitments for 2030. Its promise to bring some nuclear power plants already under construction online and increase renewables, somehow or other, would at least help with that. So, if

realised, would the government's talk of increasing use of hydrogen as an industrial fuel, as well as carbon-capture technology. Mr Yoon has gone so far as to promise public investment, subsidies and loans for such clean technologies. But those measures are yet to materialise, and unless that changes it will be hard to accept the president's claims at face value.

The main outcome of his blueprint is a signal to industry that there is no hurry, says Youn Se-jong of Plan 1.5, an NGO working on climate policy. "It's only going to postpone the necessary transition." ■

Banyan Showa retro

Japan is nostalgic for a past that was in some ways worse than its present

THE YEARS slip away as one walks through the gates of Daiba Itchome Shotengai, a 1960s-themed shopping district in Tokyo's bay area. Children munch on *dagashi*, cheap and old-fashioned Japanese snacks. A couple of 20-somethings take turns at dialling a rotary telephone. A newspaper headline on the 1964 Tokyo Olympics reads dreamily: "Clear blue sky—opening ceremony of the century". A model of an under-construction Tokyo Tower, the building that would come to symbolise Japan's post-war recovery and economic boom, stands in one of the hallways.

The mall is one of many odes to Japan's Showa era, which corresponds to the reign of Emperor Hirohito (1926-89) but which has become synonymous with the boomtime 1950s-80s. Seibu-en, an amusement park in Saitama, near Tokyo, rebranded itself as a 1960s-themed townscape in 2021. Rural areas have started promoting Showa architecture to attract tourists. For some young Japanese, the epitome of cool involves visiting 1960s-style cafés known as *kissaten*; pictures of their archetypal fare, such as emerald-green melon soda floats, flood social media. Kayokyoku, tunes from the Showa era, and city pop, an upbeat, Western-fused music genre that peaked in the 1970s, are back in vogue.

The fascination with Showa reflects a longing for Japan's more dynamic past. The country has never been richer or safer at home than it is today. Yet to many Japanese it feels stagnant, mired in political apathy, slow economic growth and a pervasive sense of relative decline. A recent survey showed that only 14% of young Japanese believe their country's future will "get better". Showa Japan, a place of remarkable growth, was a different case. Voter turnout among young

Japanese was then twice as high as it is today. "It was a time when people strongly believed: all your dreams can come true," says Kubo Hiroshi, 64, who founded Daiba Itchome Shotengai.

That social and economic dynamism is reflected in Showa's adventurous aesthetics. Bright colours and exuberant designs—such as the glitzy chandeliers and plush velvet seats in many *kissaten*—are common features. An exciting inrush of Western influence on music and fashion added to the feeling of post-war transformation; disco-like city pop often features English lyrics. The atmosphere of the subsequent Heisei imperial era (1989-2019) can feel cold and sterile by comparison. (Otaku culture, which involves geeks obsessing over manga and video games, emerged during Heisei.)

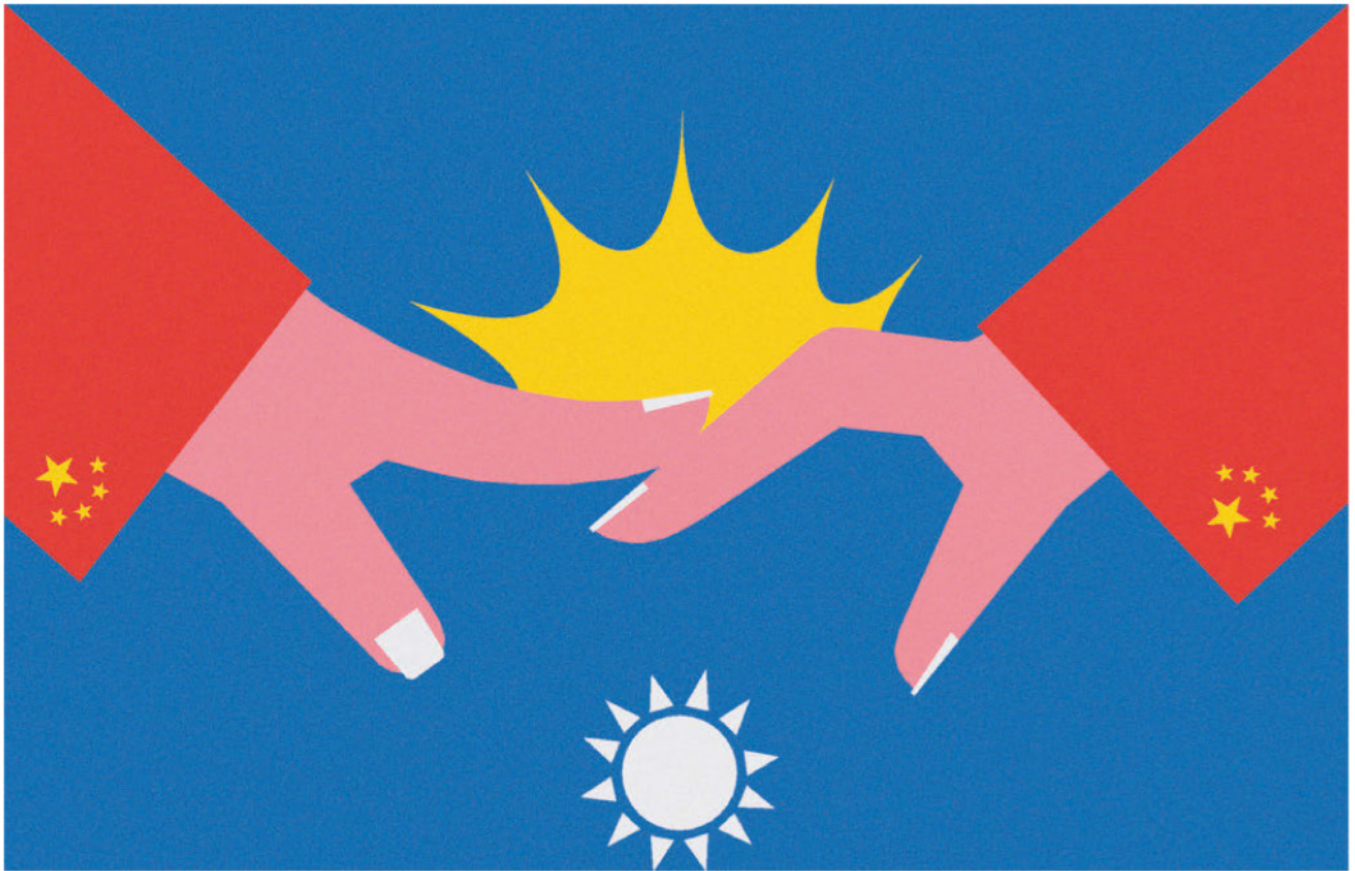
Showa retro has a demographic significance, too. It reflects the country's bulge in pensioners, who naturally hanker for the time of their lost youth. Inamasu Tatsuo of Hosei University suggests that Showa nostalgia is distinct from the retro fashions of America and Europe because

of how many of those who experienced the period first-hand are participating in it. Some nursing homes and sports gyms aimed at older users have been redecorated in 1960s colours and style.

There is a downside to Japan's nostalgic obsession. Young Japanese use the term "Showa" to denote outdated, yet irksomely persistent, views—similar to the way that young Americans use the phrase "OK Boomer" to express indignation at pampered and entitled baby-boomers. Outworn Showa attitudes include sexism, wage slavery and an adherence to seniority-based hierarchies. When Banyan asked a group of 20-something Japanese, including aficionados of Showa chic, if they would actually like to have lived in that bygone time, almost all shook their heads. "Maybe I'd like to experience Showa just for a day to see the architecture and culture," says Shichijo Miu, 20, who runs a Showa retro student club at Musashi University in Tokyo. "But when it comes to social attitudes, there's a lot I don't support."

The endurance of Showa's stultifying side also has to do with demography. Men who came of age in the post-war era still dominate Japanese politics and the upper echelons of many institutions. The average age of Cabinet members is over 60, and only two out of 24 are women. Japan's gender-pay gap is the worst in the G7. In the hands of its fuddy-duddy leaders, Japan has been slow to embrace digital technology (sending faxes is still routine in offices). The government opposes legalising same-sex marriage, even though a majority of the public supports it. The Showa aesthetic can enrich contemporary Japan, and a memory of Showa dynamism inspire it. Still, in some ways the Showa mindset is holding it back.





China and Taiwan

Conflicting thoughts

When it comes to a war with Taiwan, many Chinese urge caution—even some ardent nationalists

IT TAKES LITTLE to spark fury among nationalist netizens in China, especially when the topic is Taiwan. Any action that could be viewed as a challenge to China's claim to the island arouses a chorus of calls for war. Their voices alarm Western officials, who fret that Chinese policymakers may make concessions to their public's swelling nationalism and the bellicosity it has spawned. Last year China's leader, Xi Jinping, hinted that the West may be right to worry. He warned President Joe Biden that, concerning Taiwan, the views of Chinese citizens "cannot be defied".

During a recent trip to Beijing, Antony Blinken, the first American secretary of state to visit China in five years, met Mr Xi, who made conciliatory comments about "stabilising China-us relations". But for the rest of Mr Blinken's visit the message was clear. "There is no room for compromise or concessions on Taiwan," China's most senior foreign-affairs official, Wang Yi,

warned him. Qin Gang, the foreign minister, declared that Taiwan was "the most prominent risk" in bilateral relations.

Many online commentators in China argue that it is no longer worth trying kid-glove tactics with Taiwan. "Separatists", they say, have become too entrenched there; only war can secure it for China. If Mr Xi agrees, he does not say so openly. At a Communist Party congress last October, he said China would "continue to strive for peaceful reunification with the greatest sincerity and the utmost effort" while reserving "the option of taking all measures necessary". Despite his stated respect for public opinion, he does not want his hands to be tied by it.

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For now, Mr Xi may well prefer caution. War with Taiwan, after all, could mean taking on a nuclear-armed superpower, too. He may also wonder how much his own public would support it. The internet offers a crude guide. Lacking helpful clues that might be provided by a free press and open political debate, Chinese officials pay much attention to online opinion. They must sense that amid the clamour on social media for military action, some influential netizens oppose the idea. Even among ardent nationalists there are fissures. Some urge caution about going to war, or even argue that fighting may never be necessary: Taiwan will naturally capitulate when it becomes evident that China's power has eclipsed America's.

In a recent paper, Adam Liu of the National University of Singapore and Xiaojun Li of New York University Shanghai argued that support for a near-term war, to the exclusion of all other options, was tiny. Their conclusions were based on a survey they conducted in China between late 2020 and early 2021. Of more than 2,000 respondents, a mere 1% wanted their country to mount a military assault on Taiwan (not just on its outlying islands) before the island's presidential election in January 2024. The ballot will see a new leader elected to replace Tsai Ing-wen, who is retiring and whose centre-left Democratic Progress-▶

▶ sive Party angers China by stressing Taiwan's separate identity.

Even if China were to decide to go to war by next January, only 55% said that would be acceptable. One-third said it would not be. The authors said their data did not support the idea that demand for the swift mounting of a full-blown attack had grown sharply since Ms Tsai became president in 2016. On the contrary, their survey, taken together with other academics' findings, suggested that "public support for armed unification has remained relatively stable, despite the rapid deterioration in Beijing's relations with both Washington and Taipei," the scholars wrote.

Their research was conducted before Vladimir Putin launched an all-out invasion of Ukraine in February 2022. Russia's unexpected setbacks in that war, and the West's solidarity in response to it, must have been sobering for some supporters of rapid steps towards *wutong*, the common shorthand in Chinese for reunification by force (online, to confuse censors, they often use the characters for "parasol tree", which are also pronounced *wutong*—though censors usually do not mind calls for war as long as the party and its leaders are not being criticised for failing to act).

Wait, wait

Calls abound for caution about the scale of the task of conquering Taiwan militarily. One such has come from Wu Haipeng, the editor-in-chief of the government's main portal, China.com. Last month Mr Wu wrote on his blog that China had to resolve various "problems" before it could use military means. His proposals for doing so sounded like distant goals. One problem, said Mr Wu, was America's arms supplies to Taiwan and its strengthening of its military posture around the island. To counter this, he suggested, China should beef up its air and rocket forces, as well as its navy—implying that China's military build-up in recent decades has yet to give it the muscle required. He also said China needed to enable its economy to resist sweeping American sanctions that a war would entail. That will not be easy for a country so dependent on global trade.

In January Hu Xijin, a former editor-in-chief of *Global Times*, a nationalist tabloid, set out three conditions for launching a war. First, China should have at least 1,000 nuclear warheads (the Pentagon believes that it currently has more than 400 and will not achieve Mr Hu's goal until 2030). Second, it should have more missiles and bombs ready for use than do the combined arsenals of America, Japan and Taiwan. Finally, it should be able to launch a rapid, crippling strike against all of Taiwan's military facilities. He said this task would require "far more" munitions per day than the most intense periods of bombardment

by America during the wars in Iraq and Kosovo in the 1990s and 2000s. Implicit in his message: much more time is needed.

Like several other prominent nationalists (as opposed to the many who flood social media with short messages like "When are we going to attack? It needs to be quick!"), Mr Wu and Mr Hu do not appear to be braying for war as soon as some in America fear. In a memo in January General Michael Minihan, the head of America's Air Mobility Command, wrote: "My gut tells me we will fight in 2025." In 2021 Admiral Philip Davidson, then chief of the US Indo-Pacific Command, said: "I think the threat is manifest during this decade, in fact in the next six years."

Some of China's most radical nationalists (the "parasol-tree faction", as netizens often call them) have faced fierce criticism online. One of them is Li Yi, a commentator with more than 16,000 followers on Weibo, a Twitter-like service. Last month, in an online video, he said that even if China were to lose 140m people (one-tenth of its population) in a war over Taiwan "it wouldn't be much at all" and that "with a bit of education" young Chinese would all agree that, for the sake of unification, casualties on such a scale would be fine.

The backlash against Mr Li has come from within the nationalist camp as well as from more liberal types. "Which stupid people have given him the cloak of 'patriot'?" said one nationalist blogger with 335,000 followers. Another, with 798,000 followers, asked: "How should we deal with such inhuman, Nazi language?" On June 3rd Huang Jisu—co-author of a book, "Unhappy China", that became a huge hit among China's nationalists in 2009—gave an online lecture to a neo-Maoist group (a flag-waving lot). Referring to Mr Li's remarks without naming him, he described people who held such views as "fascists".

Some netizens have even been airing misgivings about going to fight. In April a screenshot of such a post, with its origin unspecified, circulated on Weibo. "If there's a war, I wouldn't go and I wouldn't let my child go," it said, a few days after China's armed forces staged threatening exercises around Taiwan in response to a meeting in America between Ms Tsai and the speaker of America's House of Representatives, Kevin McCarthy. "I live at the bottom rung of society. No one pays attention to us in peacetime. They only think of us at a time of difficulty," the message said. Nationalists responded with outrage. "This kind of person will always be at the bottom, their thinking is at the bottom..." wrote one to his nearly 4.2m followers. But among hundreds who responded to his invective, some took issue. "I won't go. Let the children of leading cadres go first, they have good red genes," said one. Officials may be weighing up such words. ■

China in the region

Eyes on Okinawa

BEIJING

As if China isn't involved in enough territorial disputes

WHEN XI JINPING strolled around the national archives in Beijing earlier this month, it seemed like a routine tour. China's supreme leader commented on various items that piqued his interest, such as ancient scripts engraved on animal bone and an astronomical map from the Song dynasty (960–1279). But his remarks about a manuscript from the Ming dynasty (1368–1644) received the most attention. It described old ties between the Chinese province of Fujian and the independent Ryukyu kingdom, a collection of islands that was later annexed by Japan and turned into Okinawa prefecture. The book, said a staffer, "plays an important political role". Mr Xi responded that, having served as a senior official in Fujian, he was aware of the "deep" history of the exchanges.

That may not seem like much of a statement. The Chinese government has never asserted a claim to the Ryukyu Islands. But for years a collection of Chinese scholars, analysts and military officials have questioned Japanese rule there, with some arguing that the islands' inhabitants paid tribute to Chinese emperors long before they recognised Japan's authority. So it is curious that Mr Xi's comments were reported on the front page of the *People's Daily*, the official newspaper of the Communist Party. Some observers think it was meant to send a message to Japan.

That was the idea a decade ago, during ▶▶



On the lookout



▶ the first “Ryukyu boom”, as some scholars now call it. Back then, China and Japan were sparring over five East China Sea islets, which Japan controls and calls the Senkakus, but which China claims and calls the Diaoyus. As tensions rose, Chinese commentators also began pressing the Ryukyu issue in state-run media. Analysts believe they were allowed—and perhaps encouraged—to mouth off in order to strengthen China’s bargaining position and to make clear to Japan that nationalist sentiment was strong in China.

Today there are signs of a new Ryukyu boom. Days after Mr Xi made his comments, a state-television report in the southern city of Shenzhen raised many of the same questions about the islands and quoted Chinese specialists who stopped just short of denying Japanese sovereignty over Okinawa prefecture. They spoke of China’s benevolent role in the early history of the Ryukyus, contrasting it with descriptions of Japanese bullying.

June Teufel Dreyer, a specialist on both China and Japan at the University of Miami, sees a familiar pattern. When China wants to make a controversial claim, it may first get mentioned at a low-key conference, she explains, then cited in a government document or media report, followed by a reference from a senior official. “It’s a way to create a *fait accompli* by inches,” says Ms Dreyer.

In the case of the Ryukyu Islands, the inferences made by Chinese commentators extend to other territorial disputes. Japan’s claim to the Senkakus is based in part on its assertion that they had long ago been administered from the Ryukyus. But some observers think all the bluster is actually related to Taiwan.

Last year Japan, citing concerns about a conflict over Taiwan, announced that it would boost its military capabilities in the Ryukyu Islands, expanding bases and adding troops. The island of Okinawa (which is part of the Ryukyu chain) is already home to several American military facilities. China may see its Ryukyu boom as a way of signalling its displeasure. But it is unlikely to dissuade Japan from beefing up the Ryukyus’ defences. Quite the opposite. ■

Clothes and diplomacy

Dress to impress

Why foreign dignitaries wear red when meeting Xi Jinping

XIOMARA CASTRO, the president of Honduras, had laid the groundwork for a successful visit to Beijing this month. In March her country ditched ties with Taiwan in favour of China. Honduras is also in the process of joining the Shanghai-based New Development Bank, a World Bank knock-off co-founded by China. But perhaps Ms Castro felt something extra was needed. When she met her counterpart, Xi Jinping, she wore a red trouser suit and shirt with a flowing red neck tie (pictured).

The Honduran president is hardly the first foreign dignitary to pay sartorial homage to China by wearing the national colour. Past and present leaders, from Robert Mugabe to Vladimir Putin, have donned red ties for talks with Mr Xi. On at least two occasions Narendra Modi, India’s prime minister, has slotted a red handkerchief in the pocket of his Nehru jacket when greeting China’s president.

First ladies have often gone further. Richard Nixon’s wife, Pat, set the tone by wearing a red overcoat when she and the president made their historic trip to China in 1972. Michelle Obama (along with her daughter) wore a crimson dress to a meeting with Mr Xi in Beijing in 2014. Melania Trump did the same when he visited Florida in 2017. On a trip to China in 2018, Brigitte Macron, France’s first lady, wore a bold red coat during one outing, and a long red dress for an art-gallery tour in Beijing.

To the Chinese red represents pros-

perity and good fortune. In the 14th century Zhu Yuanzhang, the first emperor of the Ming dynasty (and leader of the Red Turban rebellion), declared it “the most distinguished colour”. Over time red became associated with popular customs. Chinese people give red envelopes stuffed with cash as holiday gifts. New parents often receive red eggs to celebrate the birth of a child.

Chinese mythology tells of a beast called Nian who terrorised children at the start of the lunar new year, until villagers discovered that the monster was scared off by a small child wearing red. That, according to the tale, is why Chinese began hanging red lanterns to mark the new year and other holidays.

Crimson-clad foreign officials are probably hoping to be favoured by, rather than shielded from, Mr Xi. Red has been a symbol of left-wing politics since the French revolution and was adopted by the Communist Party. Chinese children were long taught that their national flag—five golden stars on a red field—represented the “fresh blood of martyrs”.

For some foreign dignitaries, red has indeed brought luck. Nixon’s visit was a success, marking a new era in Sino-American relations. Ms Castro left Beijing with agreements that, she hopes, will bring Chinese investment to Honduras. But just as often foreign leaders sporting a little red look go home disappointed. Ties with China tend to turn on more than just ties.



The colour of money, she hopes



NATO and Ukraine

Joining the club

WASHINGTON, DC

America is not keen for the country to enter the alliance—yet

PRESIDENT JOE BIDEN was blunt this month about Ukraine's chances of joining NATO. "I'm not going to make it easier," he declared. Despite its bold fight against Russia, the country still has to prove itself: "Does it meet all the standards every other nation in NATO does?" Joining the alliance, he insisted, "is not automatic".

America thus finds itself unusually isolated in the transatlantic alliance it founded and that it has long dominated. It is the indispensable supporter of Ukraine's war, providing the lion's share of military aid (see chart on the next page). Yet it is now the most reluctant of the allies to admit Ukraine to NATO.

In the run-up to the alliance's summit in Vilnius next month, its members are determined to preserve unity. They will seek agreement through two parallel quests. One is to reach a linguistic compromise signalling that Ukraine is moving closer to NATO membership—without promises of quick accession. The second concerns a lattice of enduring bilateral and multilateral security commitments to bolster pledges to support Ukraine "for as long as it

takes". This secondary offer will fall short of collective defence, as enshrined in NATO's Article 5, which holds that an attack on one ally is an attack on all. Instead the aim will be to enable Ukraine to defend itself, now and in the future.

The West is struggling to dispel the ghosts of two past failures, in Budapest in 1994 and in Bucharest in 2008. In Budapest, America, Britain and Russia offered Ukraine "security assurances" in a memorandum because Ukraine had agreed to remove Soviet nuclear weapons from its soil. The assurances proved hollow.

In 2008 America was the champion of NATO enlargement, pushing for Ukraine to be admitted to the "membership action plan" (MAP), an antechamber to full accession. France and Germany resisted, worried about antagonising Russia. The alliance awkwardly promised that Ukraine and Georgia "will become members of NATO" but did nothing to enact the pledge. Today the roles are reversed. France wants a clear "path towards membership" and America resists making firm commitments. (Germany has been reluctant

throughout, hiding behind France in 2008 and America now.)

Why the change of heart? Because in 2008, says Ivo Daalder, a former American ambassador to NATO, the idea of war between NATO and Russia seemed "preposterous"; today it does not. If Article 5 is to mean anything, he argues, admitting Ukraine would be tantamount to NATO promising to fight at its side. That is something Mr Biden has avoided, fearing nuclear escalation and even a third world war. These are not idle concerns, particularly given Russia's threats and its decision to deploy tactical nukes to Belarus.

The Bucharest debacle irked Vladimir Putin, Russia's president, but gave no security to NATO aspirants, paving the way for Russia to attack Georgia in 2008, and Ukraine in 2014 and 2022. These days, notes Kurt Volker, another ex-ambassador to NATO, "grey zones are green lights" for Russian aggression. The French view is that the West must not again fail to act on its security promises. The American view is that it must not again make a promise it does not intend to honour. And given that Mr Biden's re-election campaign has started, and that China poses the gravest concern to America, he may recoil from making deeper commitments to Europe. Yet he cannot say no to Ukraine on the grounds that it is at war; that would be giving Russia a veto and an incentive to keep fighting.

One compromise promoted by Jens Stoltenberg, the NATO secretary-general, would be to let Ukraine skip MAP as Fin- ▶▶

land did when it joined in April. Sidestepping MAP would offer Ukraine a sense of progress without promising membership soon. America is open to the idea, officials say, despite Mr Biden's stern words.

Others want NATO to go further. Mr Stoltenberg's predecessor, Anders Fogh Rasmussen, thinks the alliance should signal it may be open to inviting Ukraine to join next year, at the Washington summit marking NATO's 75th anniversary. Mr Volker thinks working to hasten Ukraine's membership "will shorten this war and prevent the next one" by sending Russia the message that it cannot win.

In the White House, bigwigs think this is all semantic nit-picking. In practice, they say, no ally is pushing for Ukraine to join while it is at war. So better to focus on how to help Ukraine defend itself, not as an alternative to membership but as a step towards it. The need for sustained support may become all the more important if Ukraine's counter-offensive continues to make only slow progress. Russia seems intent on a long war. Mr Putin may be waiting for 2025, hoping that a return to the White House of Donald Trump—or at least a Trumpist Republican—will disrupt support for Ukraine.

In many ways, the West will be offering to provide more of the same, more systematically, over the coming years: weapons, intelligence, training, money and so on. The new promises would be made bilaterally and collectively—perhaps by the G7 but more probably the "quad" of America, Britain, France and Germany—rather than by NATO. Some European officials say different aspects of the package—strengthening the defence of Ukraine's skies or seas, for instance—might be led by different countries according to their capacity and appetite for risk, eg, sending personnel to train troops in Ukraine. These promises may be signed before the Vilnius summit.

Word choice matters intensely. Ukraine understandably rejects more assurances. Rather it wants "guarantees" of help over decades to ensure that its army can defend the country, as set out in the "Kyiv Security Compact", a proposal by Mr Rasmussen and Andriy Yermak, the chief of staff to Ukraine's president, Volodymyr Zelensky. Their paper also envisages guarantors using "all elements of their national and collective power" to respond to any attack on Ukraine. This leaves open the possibility of the country's friends intervening more directly than they have hitherto.

That may explain why the Americans dislike "guarantees". Instead Eric Ciaramella, who has worked at the White House under both Democratic and Republican administrations, proposes more neutral words such as "arrangements" and "commitments" in a recent report for the Carnegie Endowment for International Peace, an

American think-tank. His five-point plan seeks to make the Kyiv Security Compact more binding, not least though "strong political and legal codification", ie, Trump-proofing the system. It also calls for predictable military supplies, mechanisms for talks and data-sharing and links to both Ukraine's EU accession process and to post-war reconstruction planning.

There are concerns that a big international commitment might offer a Republican president an opportunity to break with Biden-era policy, as Mr Trump did with the Joint Comprehensive Plan of Action, which was Barack Obama's deal to limit Iran's nuclear programme. Much depends on whether Congress would enshrine a multi-year commitment in bipartisan legislation so as to resist not only "America-first" isolationism, but also the vagaries of yearly appropriations in Congress.

Israel shows that America can sustain support for other countries when successive administrations choose to. Yet as an example for Ukraine it is imperfect. Israel is the strongest military power in the Middle East and the only one with nuclear weapons. Ukraine faces a much bigger and richer foe and one with the world's largest arsenal of nukes. Telling Ukraine to fend for itself may push it to seek nuclear weapons. And strengthening its army so that it can deter Russia may prove very costly. America gives Israel \$3.8bn a year; it shells out tens of billions a year on Ukraine.

Despite promising to assist Ukraine "for as long as it takes", the West still has little notion of how or when the war will

end. Some hope that diplomacy might follow a Ukrainian battlefield success. More likely is a process of "fighting and talking". Peace missions are multiplying. Envoys from Brazil, China and African countries have recently shuttled between Kyiv and Moscow. Ukraine says talks can start only when Russian forces leave its entire territory, including Crimea, which Russia annexed in 2014. Russia retorts that Ukraine must first accept "new realities": its control of nearly a fifth of Ukrainian land.

Welcome are the peacemakers

America once dismissed outsiders and their calls for an immediate ceasefire. On balance, it now thinks their involvement strengthens Ukraine and isolates Russia. That is because of the attachment of many to the UN Charter, which prohibits using force to take another state's land. An international "summit for peace" may soon be held, possibly in Paris. It would exclude Russia and, European officials hope, include the likes of Brazil, China, India and others from the global south. Antony Blinken, America's secretary of state, says that during his recent visit to Beijing he and President Xi Jinping "talked a lot" about the war in Ukraine and the "positive role" China could play in ending it.

So much for the talking. As for the fighting, Ukraine believes the best guarantee of peace is a military victory that forces Russian troops out of Ukraine and, ideally, Mr Putin out of power. Does America back these aims, given the worry it might prompt Mr Putin to use nuclear weapons? Right now such differences are moot, because Ukraine does not seem close to a spectacular victory. But Ukraine may discover what Israel has long known: America can be a constraint as well as an ally, especially when interests diverge.

In the end, the West's promise to support Ukraine "for as long as it takes" may mean only "for as long as it does not lead to nuclear escalation"; or "for as long as there is no reasonable diplomatic solution". If and when the fighting stops, America may have to reconsider Ukraine's accession to NATO. Ukraine might achieve more than anyone expects but less than it wants to. In that situation, as with West Germany when it joined in 1955, Article 5 would cover only territory controlled by the government. Ukraine would then, in effect, give up on retaking lost territory by force. Membership may offer a way to bridge the gap between Ukraine's demands and what it can achieve in battle, or what the West is prepared to bankroll. Some think Ukraine is becoming so powerful that it would be safer to have it within NATO than outside. Membership may ultimately offer the best way to cement a truce and guard against a renewed conflict. For all his aggression, Mr Putin has never attacked a NATO state. ■





Trade and geopolitics

Enter the investment police

Citing national security, America plans to screen investments into China

RULES TO POLICE investment by American firms in China have acquired a phantom quality: always imminent, always delayed. In recent months the steady beat of debate on the topic has quickened to a drumroll. In March America's Treasury and Commerce Departments delivered reports on potential rules. The next month Jake Sullivan, President Joe Biden's security adviser, trailed the policy in a speech. An executive order from Mr Biden is expected to follow. America's allies are mulling similar restrictions. On June 20th the European Commission announced plans, albeit vague ones, to propose an initiative by the end of the year.

When Mr Biden's executive order does appear, it is likely to focus on investments in three "force-multiplying" technologies: advanced semiconductors, artificial intelligence (AI) and quantum computing. The exact permutation of prohibitions and notification requirements remains unclear, but the rules will affect only a sliver of American investments in Chinese firms, which were worth more than \$1trn at the end of 2021. According to data from Rhodi-

um Group, a research firm, American firms made \$120bn of foreign direct investment in China and \$62bn of venture-capital (vc) investment during the past decade (see chart on next page).

Geopolitical brakes on American capital are not an entirely new idea. Some companies with ties to China's military are off-limits to investors and the CHIPS Act bars firms that receive its subsidies from making investments that could benefit China's semiconductor industry. Advocates say outbound-investment rules are a necessary extension to America's patchwork of trade restrictions: if export controls pre-

vent Chinese firms from buying some dual-use technologies and inbound-investment screening stops them snapping up American firms that make them, American capital should not be allowed to fund the technology's development in China.

Placing limits on America's globetrotting investors comes with risks. One is writing over-broad rules which limit capital flows and burden investors without good reason. Paul Rosen, a Treasury official, said in May that the rules would focus on "investment dollars that come with know-how and expertise". European leaders say restrictions are needed to prevent "know-how leaking". But figuring out what sorts of investment are leaky is tricky. A tech giant hoping to expand its advanced-computing efforts in China would presumably fall foul of this standard, but the case of investment firms, and their ultimate investors, is less straightforward. A private-equity fund might acquire a company but offer no operational advantage, whereas a small vc investment could come with technical expertise worth protecting.

According to the Centre for Security and Emerging Technology, a think-tank, in 2015-21 American investors, including the vc arms of chipmakers Intel and Qualcomm, participated in funding rounds that accounted for 37% of the \$100bn raised by Chinese AI companies. American pension funds' appetite for returns has made them beneficiaries of such investments. Consider GGX Capital, one of the most active American investors in Chinese AI compa- ▶▶

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panies, according to data from PitchBook. Our analysis of public disclosures suggests that six American pension funds and endowments with combined assets exceeding \$600bn have committed around \$2bn to GGv Capital's funds in the past decade.

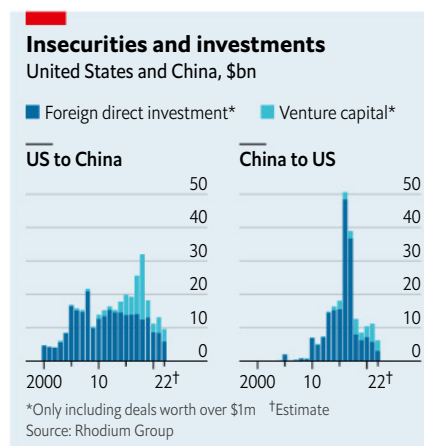
The national-security risk presented by such investments is an open question. So is that of whether Chinese investors could in any case replace the funding if American investors were restricted. Some feel the Biden administration should provide firmer answers before it requires asset managers and pension funds, which are typically exposed to hundreds of global investment funds, to search for traces of Chinese tech companies in their portfolios.

Another danger is mission creep. Under Mr Biden, economic and national-security policy have become increasingly indistinguishable. Last year the president directed the Committee on Foreign Investment in the United States (CFIUS), the American inbound-investment watchdog, which has seen its caseload explode in recent years, to consider wider factors including supply-chain resilience. Scrutinising outbound investments on the basis of broad standards of national interest could become unwieldy. Fears of a growing investment bureaucracy have led some to suggest using existing sanctions rules instead.

Though Mr Biden's initial policy on outbound investment is expected to be narrower than anything that could be called a "reverse-CFIUS", there is no shortage of hawks outside the White House who imagine outbound-investment screening as a tool for industrial policy. In 2021 a bipartisan group of congressmen introduced a bill to screen outbound investment broad enough to have affected more than 40% of American investment in China, according to Rhodium Group. Last month an updated version of the bill was released. It would establish restrictions on investments not just in advanced technology but in industries including carmaking and pharmaceuticals, and give the White House the authority to expand the list.

The proliferation of trade restrictions does not stop at America's borders. Some attribute the delay in Mr Biden's executive order to trouble gathering support for new rules among allied countries. The Group of Seven (G7) jamboree of world leaders came and went in May with only a milquetoast commitment on the issue. Few countries globally place any restrictions on outbound investment, but screening of inbound investment is increasing rapidly. Europe is beefing up its protections: 18 of the EU's 27 members have such rules, covering an increasingly diverse list of "strategic" sectors. The commission's plans for outbound-investment rules threaten a growing tangle of red tape.

The effect on Western investment in



China depends on the eventual scope of any rules. American investment is already falling. VC flows to China have plummeted by more than 80% since their peak in 2018. As the business environment in China worsens, there is no sign of a reversal. This month Sequoia, a big American VC firm, announced that it would split off its Chinese business by 2024. For now, hawkish policymakers can rest assured that China is doing their job for them. ■

Batteries

Electric shock

SHANGHAI

Why is China blocking graphite exports to Sweden?

IN EARLY 2020 Swedish battery-makers noticed something alarming. Their Chinese suppliers were no longer able to sell them graphite, a mineral crucial to the production of lithium-ion cells. The Swedes assumed the problem would pass. Yet three years on, as Chinese investments in the battery industry have surged in Europe, Swedish firms are still largely cut off. In 2020 China's exports to Sweden of two types of graphite nearly disappeared. In 2021 and 2022 they vanished completely.

Although China's commerce ministry has issued no formal ban, many Chinese graphite exporters face a prohibition in all but name. One company was told that licences to export graphite to Sweden were no longer being issued by Chinese regulators. Given that China supplies more than 60% of the world's natural graphite and almost all the man-made version, the situation alarms producers that rely on China for the graphite anodes used in their cells. A halt in supplies from China can upset supply chains, raise costs and disrupt production. For Sweden, where the industry is just getting off the ground, a total ban on

exports could do serious damage. In its only official statement on the matter, the European Commission said earlier this year that the drying up of Chinese graphite exports "is creating negative repercussions for battery production in Europe, a key sector for the EU green transition".

China frequently throws its weight around when it seeks to punish countries over political disputes. In a row with Australia that started in 2020, it officially banned imports of coal from down under (the restriction was lifted this year) and put in place an unofficial ban on lobsters, with devastating consequences for Australian sellers who had come to rely almost exclusively on Chinese appetites. Officials in China have often threatened to ban exports of minerals such as rare earths to America as retaliation for sanctions. Export bans for battery minerals such as lithium and cobalt have become more common. According to the OECD, a club mostly of rich countries, China was the greatest offender in restricting the supply of materials needed for the transition to renewable energy.

Grasping the reasons behind the Swedish graphite ban could be just as important as dealing with it. At first blush, the ban appears to have been triggered by one of many small diplomatic spats between China and Sweden in recent years. In late 2019 Swedish PEN, a free-speech advocacy group, gave an award to Gui Minhai, a publisher and dissident who is imprisoned in China. The Chinese embassy in Stockholm immediately lashed out with threats against Sweden. Mr Gui, a Swedish citizen, has been at the centre of a dispute between the two countries since he was kidnapped by Chinese agents in Thailand in 2015. In 2020 and 2021 people familiar with Mr Gui's case believed it was the motive for the graphite restrictions. The same people now believe there could be more to it than a petty quarrel over an award. ▶▶



Mine, all mine

▶ As graphite exports to Sweden have slumped, China's overall battery and electric-vehicle investments across Europe have soared. In Hungary China's top battery-maker, CATL, poured \$8bn into a factory last year, which amounted to one of the biggest foreign investments ever made in the country. In Poland smaller but similar factories are being built by Chinese firms. At the same time, graphite exports to those two countries have rocketed. Hungary imported more than \$230m-worth of one form of graphite in 2022, up from just a few thousand dollars' worth of the stuff five years earlier.

As it happens, one of the most competitive firms in Europe's nascent battery

business is Northvolt of Sweden. The company has begun to expand in Europe and will receive subsidies to build new factories. It is unclear what impact, if any, the graphite ban has had on Northvolt. But it is believed to have the potential to raise costs at a time when competition to win market share is fiercer than ever. The insiders aware of the Chinese graphite ban have started to question if the unofficial measures have been designed to stymie innovation in Europe as China builds a foothold there. In May one Chinese firm, Putailai, announced a \$1.3bn investment to build Europe's largest factory for making anodes. It will become a core supplier to the Swedish battery industry. ■

Work and savoir-faire

From debutantes to directors

GLION

Europe's last finishing school targets a new market

THE THREE-MARTINI lunch may be over, but the business dinner is here to stay—and it is a prospect that fills some executives with horror. For those who find the multiple rows of cutlery and wine glasses baffling, or who keep forgetting which side-plate is theirs, help is on hand to decode the hidden rules of etiquette. On the hills overlooking Lake Geneva, a company offers executives an extra layer of social polish to boost their confidence—and, perhaps, their career.

Established in 1954, the Institut Villa Pierrefeuf, perched above Montreux, is the last finishing school in Europe. Its courses, which range from one to six weeks, cover everything from seating precedence and tea-service protocol to black-belt-level etiquette challenges such as eating a banana with a knife and fork. Historically, most of its students were young women preparing for the marriage market. Today, as social codes relax and demand for such an education wanes, Villa Pierrefeuf is exploring a new pool of clients: business executives. Viviane Néri, the Institut's principal, says it is no longer a finishing school but a "starting school".

A five-day course in the "European art of dining" (which costs around SFr5,000, or \$5,570) features modules on menu planning, English-style table setting and French-style table manners. The students carefully taking notes on wine pairing and cutlery arrangement work in fields such as technology, corporate law and banking. Some are there to master a foreign culture. Ahmed Aftab Naqvi, the head of an advertising network in India, says that a spell at Villa Pierrefeuf has helped him to "understand the diversity



of cultures, customs, traditions and etiquette". Others hope that their refined manners will command respect from colleagues. "I wanted to be elevated," says one employee of a tech giant based in California.

Some lessons have not changed in years. Students are instructed that, once a meal is over, they can place their linen napkin on the right (French style) or the left (English style). But in other ways the school has had to adapt. Ms Néri has changed courses to suit professionals, scrapping the old nine-month diploma and offering classes all year round which clients can attend on their annual leave. Schools which failed to adapt have had to close, or take on less glamorous roles. Le Manoir, a former finishing school in Lausanne, these days serves as the international headquarters of Tetra Pak.

American medicine

Doctor Walmart will see you now

ELM SPRINGS, ARKANSAS

Why big companies see opportunity in primary care

WITH HIS long white coat, stethoscope, wily eagerness to discuss "population health management" and "patient-centred" medicine, Ronald Searcy seems the Platonic ideal of a primary-care doctor. The most unusual thing about him is where he works: a compact facility complete with examination rooms, dentist's office, phlebotomy lab and x-ray room tucked into a Walmart in north-west Arkansas. Since 2019, Walmart has opened 32 of these "health centres" in five states; by the end of next year it plans to more than double that number, and expand into two more states.

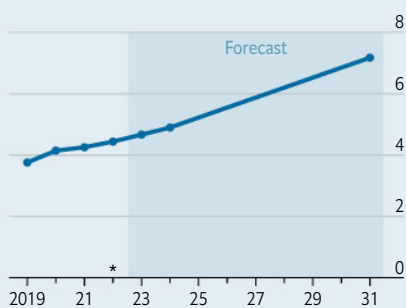
Walmart is not the only big company expanding its medical offerings. Earlier this year Amazon acquired One Medical, a concierge practice (meaning clients pay an annual membership fee) with offices in cities across America. Dollar General, a discount retailer, has set up a partnership with DocGo, which runs mobile health clinics, and has launched a pilot programme at three shops in Tennessee. Walgreens and cvs, both retail pharmacies, have robust primary-care offerings; last year more than 5.5m patients visited a cvs MinuteClinic, making it one of the biggest providers in the country, and earlier this year cvs completed its acquisition of Oak Street Health, an elderly-focused primary-care provider with offices in 21 states. What do these companies see in the medical business? The answer, befitting America's Byzantine and rent-filled health-care system, is both simple and complex.

The simple answer is money. Americans spend a stunning amount of it on health: roughly 18% of GDP in 2021, far exceeding the rich-country average of about 10% and more than double the ratio of some, such as South Korea, with healthier and longer-lived populations. Americans' spending is forecast to rise by 5.4% per year over the next eight years (see chart on next page), outpacing economic growth and accounting for almost 20% of GDP by 2031. The bulk of that spending will come from Medicaid and Medicare, federal programmes that cover health-care costs for, respectively, poor people and over-65s.

The complex part reflects changes in how insurers, including Medicaid and Medicare, pay for coverage; as well as changes in how consumers are willing to get it. Start with the insurers. The predominant payment model is fee-for-service, in ▶▶

In sickness and in wealth

United States, health spending, \$trn



Source: "National Health Expenditure Projections, 2022-31", by S.P. Keehan et al., *Health Affairs*, 2023 *Estimate

► which insurers reimburse doctors for each visit or procedure. Its advantage is simplicity. Its downside is that it encourages medical consumption but, for the most part, is indifferent to outcomes: doctors get paid the same amount whether a patient gets healthier or not.

From 2016 to 2021, however, the share of health-care spending on "alternative payment models" rose from 29% to 40%. In a survey in 2022 most payers believed that these payment models, in particular those that let doctors share in the upside of keeping patients healthy, would rise. This approach, known as "value-based care" (VBC), is an artefact of the Affordable Care Act. It incentivises doctors to keep patients healthy—for instance, by letting them share in savings if a patient with a chronic condition takes her medication and stays out of hospital—rather than simply paying them for every procedure performed. Companies are betting that they can make more money on this model than the old one.

Retailers launching or expanding their primary-care offerings are also betting on consumer habit. The most recent Consum-

er Pulse Survey by Accenture, a consultancy, showed that nearly one-third of consumers—and more than one-third of those between 18 and 35—were open to getting medical care at a grocery store or big-box retailer, and more than 90% of customers would trust a retailer with their medical data. Retailers believe that this sort of trust, along with their convenience (75% of Americans live within five miles of a Dollar General, and 90% within ten miles of a Walmart) is a winning combination.

Better technology improves VBC, both by giving insurers more health measures to judge a doctor's success, and by providing doctors with a better way to stay in touch with their patients. Walmart Health and OneMedical, for instance, use apps that show patients their medical history, including upcoming appointments and when they need to repeat their prescriptions. Both of these companies also have in-house pharmacies to which they can direct patients. And the primary-care doctor is the de facto co-ordinator and gatekeeper for a patient's whole medical care. Some worry that VBC could provide an incentive for insurers to deny referrals and necessary care, and keep the savings. But if the patient gets sicker, they share those costs too.

Managing that downside risk will be tricky. The sort of proactive care and patient contact that VBC requires may be cheaper with a smartphone than without one, but it is not cheap. Providers need to invest in technology, but may also need to keep on top of patients with repeated phone calls and home visits—the sorts of things that apps cannot do. Firms that get it wrong will struggle. Those that get it right will increase their share of the immense tide of money sloshing around America's bloated and inefficient health-care system, and may also, incidentally, keep people healthier. ■

Commercial aviation

Jet stream

LE BOURGET AND MUMBAI

India leads a boom in orders for passenger planes

TRADITIONS AROUND at the annual airshow that rotates between Paris and Farnborough. One is visitors' observation that a glittering capital city, with the Eiffel Tower visible through the haze at the end of the runway, is preferable to a British town so unremarkable that its main attraction is its biennial airshow. Another is complaints about the heat from those trudging airstrips covered in commercial jets, fighter planes, helicopters and other pieces of high-tech kit.

The most predictable convention is that Airbus, a European aerospace giant, will take the opportunity while on home tarmac to deliver a blow to Boeing, its American rival in the duopoly supplying the world's big passenger jets. On June 19th it did not disappoint. Amid a slew of smaller deals, the most eye-catching was a whopper from IndiGo, an Indian low-cost carrier. Its order for 500 narrow-body jets from Airbus's A320 family, to be delivered in 2030-35, is the biggest ever struck. Boeing's only significant riposte was to confirm an order made in February by Air India for 190 of its competing 737 MAXs and 30 of its wide-body long-haul jets.

If Boeing was disheartened, Darren Hulst, its boss of commercial marketing, did not show it. The orders unveiled in Paris are part of a rush by airlines to expand their fleets, in order to cope with a resumption of rapid growth in air travel as the pandemic recedes. Mr Hulst noted that Boeing's order book swelled by over 1,100 planes in the ten months following last year's Farnborough show, and that the world's airlines would require 42,600 new planes by 2042.

Carriers are clamouring for new metal. The combined backlog at Boeing and Airbus is around 12,000 planes. Air India wants almost as many as IndiGo; it confirmed in Paris that it would buy 250 Airbus jets. In May Ryanair, Europe's biggest airline, ordered 300 737 MAXs. Late last year United, an American carrier, ordered 200 jets, split between Airbus and Boeing. At the Paris show, Riyadh Air displayed a Boeing 787 painted in a striking purple livery. The new airline, financed by Saudi Arabia's sovereign-wealth fund, has ordered 39 of Boeing's popular wide-body jets, with a view to starting operations in 2025. Using the Saudi capital as a base, it aims to open up the country to international tourism. It is expected to place a huge order for short-►



Make money, live better

▶ haul planes soon.

Amid the bonanza, questions remain. First, can Airbus and Boeing increase production, laid low during covid-19, to meet demand? Airbus, which saw delivery rates of its A320s sink to 40 a month during the pandemic, aims to deliver 75 a month by 2025. Ramping up supply chains will not be easy, especially as many firms laid off their costliest and most experienced staff.

Another question lingers over India. Demand there is soaring, as the world's most populous country gets richer. South Asia, where India accounts for 90% of the

traffic, will be the world's fastest-growing air-travel market over the next two decades, according to Boeing. Whereas China has a fleet of 4,000 planes, India's fleet numbers just 700. IndiGo, which operates around 300 of them, has 1,330 more coming, to serve what has already become the third-largest domestic aviation market in the world.

Yet the rapid expansion of IndiGo, which controls around 60% of the domestic market, has come at a cost. Its latest fiscal year was the fourth in a row to end with losses. Part of its success is down to the

failure of other Indian carriers. One competitor, Jet Airways, went bankrupt in 2019 and another, Go First, collapsed last month. Their grounding should enable surviving operators to increase ticket prices, but officials have been clear that such rises must be constrained.

A consequence is that underlying the excitement around the colossal new orders are concerns about whether some buyers will stay aloft. Another airshow tradition is for pundits to suck air through their teeth and wonder if the future is really as rosy as the numbers suggest. ■

Bartleby Textbook writing

"Scaling People" is not like every other management book. Thank God

TOO MANY management books rest on a vague idea that has been stretched to breaking point. You can tell from the depth of the margins just how hard an author has had to work to draw the thesis out. Their covers are bright and zingy. Their titles either contain action-packed words like "strive" and "ignite" or give birth to some ghastly new portmanteau like "stressilience" or "charismility". They are determined to take lessons for bosses from anywhere but an actual business: termites, hunter-gatherers, Novak Djokovic, salad dressing. The unspoken rule of most management titles, it seems, is to avoid the actual practice of management.

What a relief, then, to read a book that breaks the mould. It lands with an intimidating thud. It looks and feels like a textbook. It is full of exercises and templates. And it is unapologetically practical in its focus. "Scaling People" is written by Claire Hughes Johnson, a tech-industry veteran who spent more than a decade at Google before joining Stripe, a digital-payments unicorn, as its chief operating officer in 2014. By the time she left that role in 2021, the firm had gone from 160 employees to over 7,000. In a world of coders, creators and visionaries, her work was to make things work.

Much of the book is a manual for creating what Ms Hughes Johnson calls an operating system—the set of documents, metrics and processes that produces a consistent framework for making decisions and improving performance. There is a section on planning, with advice on setting good goals and deciding on the cadence of meetings and reviews that sets the right drumbeat for a company. There is another on hiring people, from building a recruitment pipeline to the interview process and the

task of bringing new employees on board. There are chapters on improving team performance and on giving feedback.

"Scaling People" is a product of Silicon Valley. It grapples with the problems of very fast growth; its context is one of founders, developers and product teams. For incumbents in highly regulated industries or employees in public-sector bureaucracies, the problems of scaling up may seem very remote. Stripe's early decision to run a programming competition called "Capture the Flag", for instance, helped build its reputation as a place for talented developers to go to. Established firms need to work less hard to create awareness among potential candidates but may have a tougher time building a name for innovation.

But the insights on which such practices are founded—in this instance, getting candidates to do actual work as part of an application process and filling a hiring pipeline rather than waiting for jobs to open up—are transferable. And most of the book is devoted to problems that bedevil all industries and companies.



Among other things, Ms Hughes Johnson gives tips on how to run an effective meeting; these include having a round of "check-ins" at the start (getting everyone to say what they want from the meeting, for instance) so that people are focused and so that the quietest members of the group participate early. She offers advice on how to do performance reviews, which decisions you can and should delegate to other people, and how to save high-performing employees from burnout. It is all refreshingly pragmatic.

Behind the tactics lies a clear philosophy, which is to make the implicit explicit. That means being clear about how specific decisions are going to get taken: is this a consensual process or an autocratic one? It means writing things down: by articulating Stripe's culture, the startup can be clear to prospective joiners what the company's norms are. It means saying things that other people are not saying, especially if those things are causing dysfunction.

It also means being aware of your own behaviour and preferences. Ms Hughes Johnson has long kept a "Working with Claire" document that spells out to new members of her team what they can expect: how she likes to take decisions, how quickly she will respond to messages, what she wants from them in a one-to-one meeting.

Her advice will not suit everyone. There will be too much emphasis on process for some corporate cultures. But there is something thought-provoking for every boss. Your bedside table may groan with books on what Mr Djokovic can teach you about leadership or the lessons to be learned from mayonnaise. This book is trying to do something far more original and useful: turn you into a better manager.



Schumpeter | The Mexican-American wave

Move over, Bud Light. Surrender to the power of the Hispanic market



THE KING is dead. ¡Viva el rey! That is the cheer ringing through drinking dens this summer as Bud Light, America's self-styled "king of beers" for 22 years, is dethroned by Modelo Especial, a Mexican brew. Spare a thought for the vanquished. Rarely has an effort to rejuvenate a brand gone as spectacularly wrong as when Bud Light's marketers entered into a liaison with a transgender social-media star, only to fall victim to America's culture wars. On the bright side, it offers a chance to examine a little-known success story. Constellation Brands, an American firm that went into brewing only a decade ago, offers a lesson in how to wage an old-fashioned corporate insurrection, Mexican-American style.

Schumpeter should declare an interest. Having lived for many years in Mexico, parts of his life have been spent accompanied by one Mexican brew or another. Modelo Especial was rarely one of them. South of the border, it doesn't have huge cachet. Yet in America the same beer, with the same taste, has overtaken even Corona Extra, its better-known sister brand. That is because, in straightforward business terms, Constellation got everything right, from manufacturing to distribution to retailing. Most of all, it grasped the growing power of the Latino consumer.

The Modelo Especial story starts with antitrust. Not the new-fangled sort in which size itself is considered taboo, but the old-school idea that buying a competitor can lead to higher prices. It dates back to 2013, when AB InBev, the Belgium-based owner of Budweiser, paid \$20bn to take control of Grupo Modelo, Mexico's largest brewer, whose brands such as Corona and Modelo Especial were rivals to Bud Light north of the border. America's Justice Department intervened. It determined that, in order to maintain competition, AB InBev should divest Modelo's entire US business to Constellation, which was then a relatively little-known wine and spirits seller worth \$8.1bn. (AB InBev kept the Grupo Modelo business in Mexico and the rest of the world.) Today Constellation is worth \$45bn and is one of the most respected consumer-goods companies in America.

Bump Williams, a consultant who first noticed that in the four weeks to June 3rd, at-home sales of Modelo Especial had shot past Bud Light in dollar terms, uses a vivid expression to describe the way Constellation nurtured the brand. He calls it "feeding the hot

hand". When the company noticed that the beer was taking off, it did not let a perception that Corona was the front-runner distract it. It threw its weight behind the mood of the marketplace.

Its priority was to ensure that supply met demand. That involved making a huge bet on Mexico. When Constellation acquired the brands, it resolved to brew them south of the border. Since then it has increased its production capacity in Mexico four-fold, at a cost of \$6.4bn—more than the \$4.8bn it paid for the brands in 2013. It is not stopping there. It plans to invest up to a further \$4.5bn over the next three fiscal years, boosting capacity by more than 70%. Investing in Mexico has not been without setbacks. In 2020 protesters, backed by Andrés Manuel López Obrador, Mexico's populist president, voted in a plebiscite to stop Constellation from building a factory close to the border because of concerns about water shortages. So it moved the factory to Veracruz, on Mexico's wetter east coast, with the president's blessing.

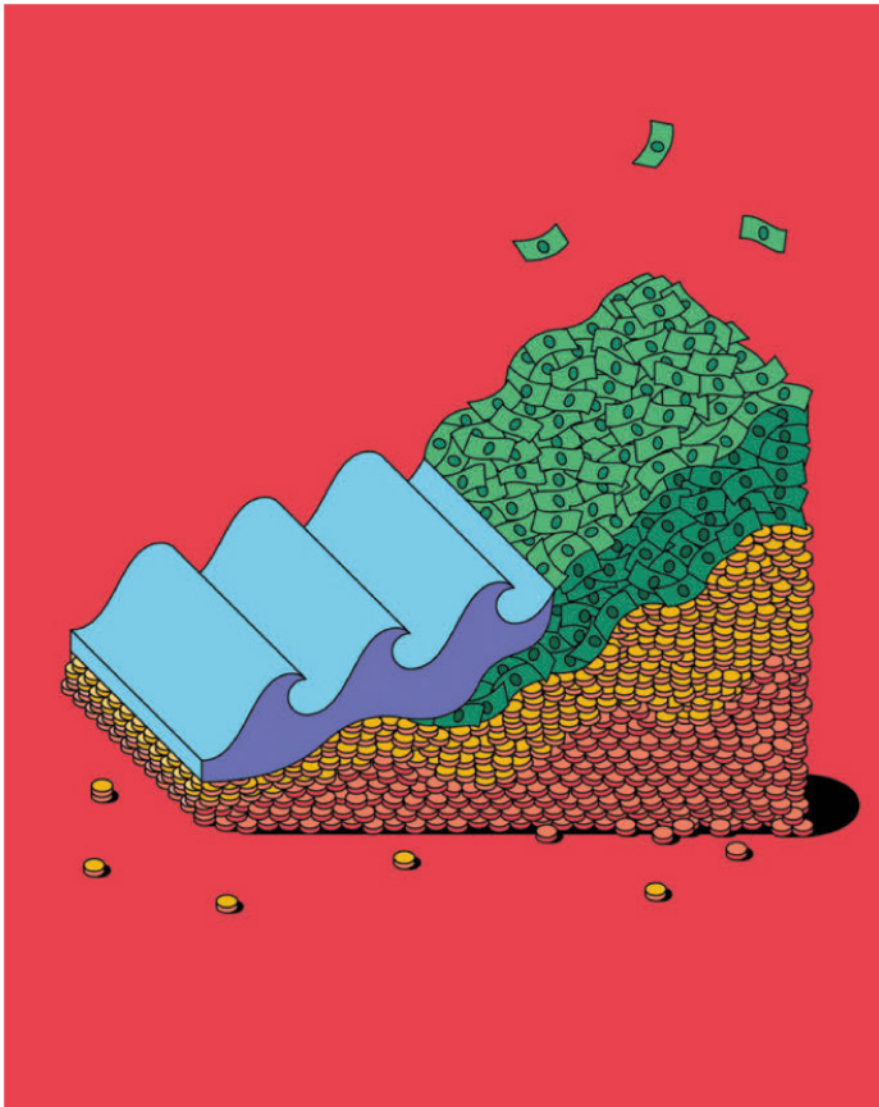
Distribution in America was the next challenge. To start with, Constellation focused on bringing Modelo Especial to a few cities with big Hispanic communities, such as Los Angeles and Chicago. After the brand took off there, it expanded farther afield. It built brand awareness one step at a time and worked closely with its distributors to ensure that supply kept flowing. Once in shops, Constellation focused on showcasing the Modelo brand. "They're wine guys, they know the value of display," says Mr Williams. They also got pricing right. Instead of foisting large increases on consumers, Constellation made incremental price rises. For many years, Modelo Especial has been the fastest-growing beer in America, says Scott Scanlon of Circana, a market-research firm. Yet more impressive is that it is a premium brand, rather than a budget one, at a time when wallets are stretched—and a full-bodied beer, rather than a low-calorie one, when waistlines are.

The reasons for its consumer appeal are twofold. First is advertising. Unlike Bud Light's, it is not gimmicky. It tells stories of ordinary people who have overcome hardship. That has helped it pull off the trick of remaining authentically Mexican even as it joined the big-beer league. Second is the market itself. Its core consumers are Latinos, who have growing economic power in America. According to McKinsey, a consultancy, it is not just their population that is increasing faster than the American average. So is their spending power. If America's Latinos were their own country, they would have had the third-fastest-growing economy after China and India during the past decade.

The flamin' hot hand

This power may cast a halo effect on other products of Mexican descent. Tequila looks likely to overtake vodka as America's best-selling spirit. Grupo Bimbo, a Mexican multinational that is America's biggest baker is, like Constellation, a respected consumer-goods company. In a sign of the times, a new film, "Flamin' Hot", tells the story of how a Mexican-American janitor convinced Frito-Lay, owned by PepsiCo, to produce spicy Cheetos to win over the Hispanic market, reviving its business. (The snack's true genesis is disputed, but its popularity is in no doubt.)

Modelo Especial may yet lose its crown as Bud Light gets over its current crisis. Yet the fizzing growth of the Mexican-American brand suggests it could eventually gain a more lasting lead. It is lamentable for business in general that America's cultural divide has done so much damage to Bud Light's reputation. But the consolation is that Modelo Especial's success suggests the cultural divide between America and Mexico is narrowing. ■



A steady grind

NEW YORK

Persistent inflation is as corrosive to investing as it is to the real economy

IT IS MORE than two years since high inflation returned to the rich world, and hopes that it will quietly fade are themselves fading. True, prices are rising more slowly than in 2022, when the pace hit 9.1% in America, 10.6% in the euro area and 10.4% globally. But the view that this was just a passing lurch looks ever less plausible. Britain's rate has been stuck at 8.7% for two months. American "core" prices, which exclude volatile food and energy, are 5.3% higher than a year ago, a rate that has barely fallen for the past six months.

If inflation continues to fester, the ef-

fects will quickly be felt in financial markets. Sustained price rises do not affect all asset classes equally, so a relative repricing will be required. But those one-off profits and losses will not be the only consequence. In the real economy, inflation corrodes trust by continually and arbitrarily redistributing wealth. In the financial one this corrosive dynamic is less obvious, but just as real.

Central bankers remain adamant that they will return inflation to their targets, typically 2%. Many on Wall Street, though, are sceptical. Jean Boivin, who runs the re-

search arm of BlackRock, the world's biggest asset manager, makes his argument bluntly. "Central banks can always bring inflation back to 2% if they really want to, but now it would require too big of a demand crush to bear." He believes it will instead settle around 3-4%. Richard Clarida, vice-chair of the Federal Reserve from 2018 to 2022, has a similar view. "Mr Powell's Fed...will eventually get the inflation rate it wants," he recently wrote for this newspaper. "But it is likely to be something more like 'two point something' than 'two point zero.'" Asked what "something" means, he replies: "It could be 2.8% or 2.9% when they start to consider rate cuts."

The likelihood of monetary guardians explicitly admitting that they will tolerate inflation above 2% is low. Every time Jerome Powell, the chairman of the Federal Reserve, is asked about the possibility, he vehemently denies it. Such a shift, especially with prices already rising much faster than 2%, would immediately damage the Fed's credibility: if the target can be ignored once, why not again?

Yet the forces ranged against central bankers, which will push up prices by constraining supply and boosting demand, are fearsome. Demographic trends are shrinking workforces in much of the rich world, which may lead to shortages of labour. The fragility of global supply chains—exposed by the covid-19 pandemic, the war in Ukraine and fracturing Sino-American trade—has incentivised countries to replicate them locally. On the demand side, higher defence spending, the investment required to cut greenhouse-gas emissions and the costs of supporting ageing populations are all increasingly seen as essential.

Rate-setters could, through ultra-high interest rates, destroy enough demand in other parts of the economy to bring inflation down to 2%. But with so many structural factors pushing prices up, the sceptics argue, this would involve inflicting a politically unacceptable level of economic damage. And the longer inflation remains above target the more it raises expectations of future price rises, which can then become self-fulfilling. The world may thus have entered a regime in which central bankers pay lip-service to their inflation targets but shy away from measures severe enough to meet them. In other words, 4% may be the new 2%.

Another roll of the price

An extra percentage point or two in the annual rate of inflation may not seem much. Yet the impact on investment returns is huge. Buy a ten-year government bond when inflation is 2%, and the principal that is eventually returned will be worth 82% of its original value. When inflation is 4%, that figure falls to 68% (see chart 1 on ►►)

next page). Over the longer run the gap yawns even wider. The principal on a 30-year bond will, when returned, be worth 55% of its original value if inflation averages 2% over that time. With 4% inflation, it will be worth 31%.

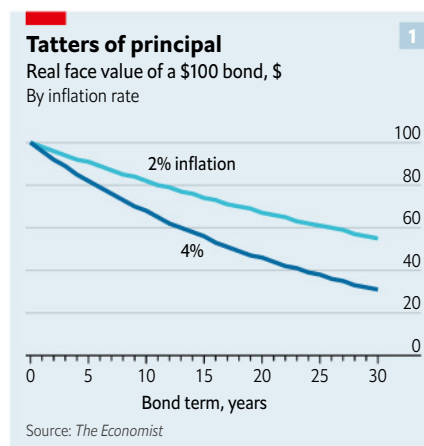
But the erosion of the value of both the principal and the fixed interest payments is not the only way that higher inflation affects investments in bonds. Rising prices fuel expectations that central banks will raise rates, which in turn pushes yields in the bond market up to match those expectations. Bond prices are an inverse function of yields: when yields rise, prices fall.

The scale of this second effect would depend on the duration of the bond. If markets think central banks are prepared to tolerate slightly elevated inflation, they will assume there will be fewer increases in rates in the immediate future, not more. This expectation would push short-term yields down and prices up. Meanwhile, in addition to the expectation of higher rates eventually, the volatility and uncertainty brought on by higher inflation would raise the “term premium” (financial jargon for the extra yield long-term lenders demand in return for taking on more risk). The overall effect would be that, during the initial adjustment, bond portfolios with shorter durations would do much better than those with more distant maturities.

Could inflation-linked bonds offer more protection? In theory, yes, though in practice there are not enough of them to go around. Inflation-linked Treasuries, for example, comprise just 8% of the total. And even these can fare badly under inflation that is not merely high but also volatile and unpredictable, if this instability prompts large swings in real yields. Last year was a case in point. Real yields soared alongside inflation, hurting the value of inflation-linked bonds alongside the vanilla sort. An index of inflation-linked Treasuries compiled by Bloomberg, a data provider, fell by 12% over the course of the year.

On the face of things, shares are ideally suited to weathering spells of high inflation. They derive their value from the underlying companies' earnings, and if prices are rising across the economy then those earnings, in aggregate, ought to be rising as well. Suppose inflation stays elevated but stable and the economy is otherwise humming along, says Ed Cole of Man Group, an asset manager. Managers should be able to control costs and adjust prices in response. And in any case, “Equities are nominal beasts. If the numbers are going up, everyone pats themselves on the back.”

In the very long run, data compiled by Elroy Dimson, Paul Marsh and Mike Staunton, three academics, for Credit Suisse's *Global Investment Returns Yearbook* back this up. Globally, between 1900 and 2022, stocks beat inflation handily, posting an



annualised real return of 5%.

But there is a snag: the higher inflation rises, the less stable it tends to be. Take American consumer-price inflation going back to 1913, when official data begin. After years in which prices rose by between 0% and 5%, the average inflation rate for the subsequent 12 months was within 1.8 percentage points of the first one. (So a year of 2% inflation was, on average, followed by one of between 0.2% and 3.8%.) When prices rose by between 5% and 10%, the average change for the subsequent year jumped to 3.8 percentage points. Inflation of 4% would leave little room for error.

Once bitten, price shy

Such volatility is much harder for businesses to handle. Mr Cole points to industries with high fixed costs, such as IT outsourcing, commercial services and construction, in which firms can do little to trim wage bills while remaining in business. If those costs rise in line with inflation, but revenues are slower to adjust, volatile inflation can generate big swings in margins and earnings.

Moreover, during individual periods of high inflation, the historical record is less comforting for shareholders. Between 1900 and 2022, in years in which inflation rose above around 7.5%, the average real

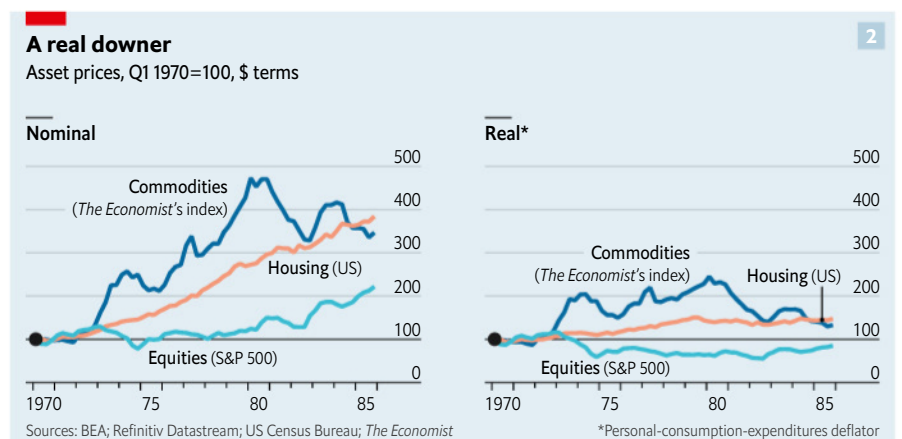
return on equities flipped from positive to negative. Even when inflation was lower than this, it tended to reduce the real returns from shares. In other words, though stocks tend to outpace inflation in the long term, in the short term they do not offer a true hedge against it.

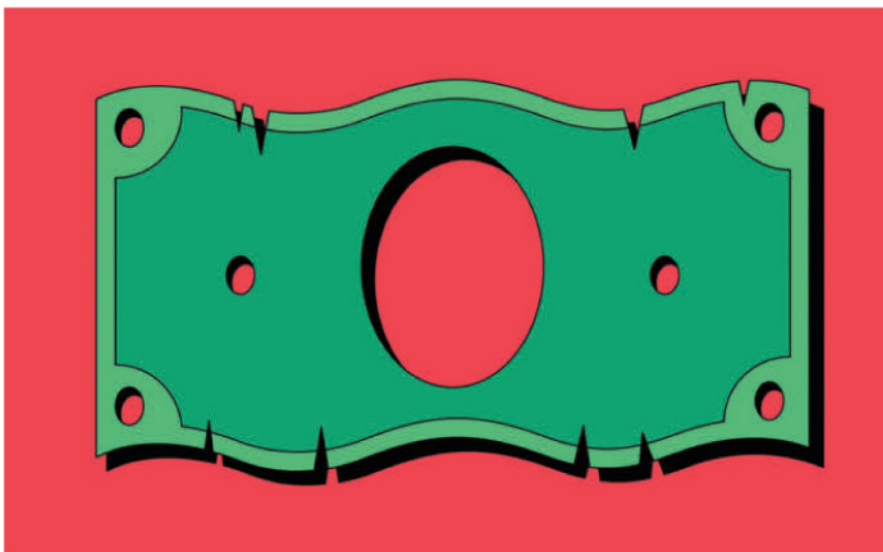
Real assets will fare much better if inflation remains high (see chart 2). Property and infrastructure generate income streams, in the form of rents and usage charges, that can often be raised in line with inflation or may even be contractually linked to it. As the supply of such assets is constrained, their real prices are also likely to rise as investors seek out assets that carry some protection against inflation.

That is also true of commodities. Measured by returns on commodity futures (financial contracts that give investors exposure to commodities without the hassle and expense of owning actual iron ore or cattle), this class of assets has historically done even better in real terms than stocks. In years of above-average inflation, the excess real return of a diversified portfolio of commodity futures over cash has averaged 11.4%. The asset class even tends to do well when high inflation combines with low or negative growth, with excess returns averaging 10% in such “stagflationary” years.

The trouble with all such physical assets is the difficulty of investing in them. The total value of all commodity futures is less than \$500bn—barely 1% of that of America's stockmarkets. Should investors pile into them en masse, they would push prices up enough to render the exercise futile. Infrastructure, meanwhile, is dominated by private investment managers, who tend to focus on selling to big institutional investors, such as pension funds and university endowments. Individuals, in contrast, struggle to buy such assets despite their appeal in a high-inflation world.

Other vendors poised to capitalise on churn in the financial markets are active asset-managers. They have had a miserable time during the years of easy money that followed the financial crisis of 2007-09. ▶▶





▶ Data compiled by Strategas Securities, a brokerage and research firm, show that in each year from 2010 to 2021, the majority of active managers who measure their performance against the S&P 500 share index failed to beat it. Such underperformance is not limited to America. S&P Global, another research firm, reckons that in the ten years to 2022, 90% of European active managers produced worse returns than the broader market.

In part this is down to arithmetic. Overall market performance is the average of each investor's, which makes beating the index a zero-sum affair. On top of this, active managers charge fees (often 1-2% or more a year), which brings their average performance down—so in aggregate, they are likely to underperform. Even accounting for this, though, the years of rock-bottom interest rates and relentlessly buoyant markets were hard on stockpickers. "If everything goes up together, it doesn't matter how much skill you've got," says Luke Ellis, Man Group's boss.

By contrast, the return of high inflation and the volatility it brings allow skilled investors to outperform. In particular "dispersion", or big differences in performance among different assets, offers active managers the chance to prove their worth. "Lots of people having a tough time doesn't mean a bad opportunity set," says Mr Ellis.

Yet even Mr Ellis does not think that "you'll suddenly see 70% of active managers outperforming the index". Many will be wrong-footed by macroeconomic conditions that they have never had to grapple with before. More insidiously, their clients will only gradually adjust to the wealth-destroying effects of inflation. Jeremy Grantham, a veteran fund-manager, recently wrote of his surprise that money-managers have not yet started to routinely adjust share-performance charts for inflation, as was routine in the 1970s and 1980s.

Do so, and the numbers look much worse. Nominally, the S&P 500 index fell by 19% in 2022, but it would need to rise by more than 30% over the course of this year to recoup its losses in real terms. And as investors see chunks of their savings being eaten away by inflation, paying another couple of percentage points to their fund-managers will become much harder to stomach. Just as, in the real economy, inflation prompts consumers to suspect firms of profiteering, in the financial one it will pit both retail and institutional investors against those managing their money.

Sugar and price

A surprising winner from sustained high inflation, argues Martin Jaugietis of BlackRock, might be defined-benefit pension schemes, which in America hold assets worth some \$17trn. Such schemes invest regular payments from workers and their employers in return for the promise of a set income in retirement (usually a fixed percentage of the worker's final salary). The financial health is determined by their "funding ratio", or the value of their assets relative to the present value of the future payments they must make to retirees. As interest rates rise, this present value shrinks, since schemes can buy higher-yielding bonds, locking in cash flows that will help pay future liabilities.

Provided their assets do not fall too much, the higher nominal interest rates brought on by persistent inflation would therefore be a fillip for defined-benefit schemes. This is especially true for American ones, says Mr Jaugietis, since they do not typically raise payouts to pensioners in line with inflation. Sure enough, in 2022 the funding ratios of American schemes improved markedly as inflation and interest rates rose, despite plunging asset prices. Even in Britain, where retirement payouts tend to be linked more closely to

inflation, funding ratios shot up.

Yet, as in the real economy, each winner from inflation creates a loser. In this case, the workers who have contributed to defined-benefit schemes that are not inflation-linked will lose out. After ten years of 4% inflation, someone who expected to retire with an income of \$50,000 a year would see the purchasing power of that income fall by around a third. In effect the boon for defined-benefit schemes would be paid for by an arbitrary reduction in their members' wealth. Many pensioners would be in the same position as workers who struggle to secure pay rises that keep pace with inflation, and just as aggrieved.

The final category of participants in financial markets that might welcome higher inflation is governments. The world over, their debt burdens have ballooned—first in the aftermath of the financial crisis of 2007-09 and then during the covid-19 pandemic, on which the rich world spent 10% of its GDP. Europe's energy crisis has triggered yet more spending. Six of the G7 group of large, developed economies have gross government-debt-to-GDP ratios above 100%; only Germany's is below.

The only ways to chip away at these vast piles of debt other than inflation are turbo-charged growth, tax rises or spending cuts. The first is unlikely; the others are politically painful. So governments may quietly rejoice as the real value of their debt is inflated away.

Yet in doing so, they risk falling foul of two groups. One is voters, whose savings lose purchasing power at the same time. The more immediate danger comes from the bond market. Investors in sovereign debt will be acutely aware that inflation is eating into their returns. Expect them to rake through governments' fiscal statements with ever finer-toothed combs for signs that worse is to come.

Emerging-market countries are used to this treatment, and to the wild swings in borrowing costs and exchange rates it can bring. But for the rich world the adjustment would be painful. Britain's flirtation with disaster in September, when an irresponsibly inflationary budget sent gilt yields soaring and the pound through the floorboards, may offer a taste of things to come. Governments that lose the trust of lenders are in for a rough ride.

The idea that central banks might quietly allow inflation to fester, taking a chunk of society's stability and trust with it, may seem speculative. But look back at the past century and you will struggle to find an instance of inflation rising as far as it did in 2022, then immediately coming back under control. The trade-offs required to get it there look nightmarish. The generation of investors that is learning for the first time how to deal with elevated inflation may have plenty of time to study it. ■



Double dip

Vanishing growth

HONG KONG

China's post-covid economy was supposed to roar. Instead, it is faltering again

CHINA PRIDES itself on firm, unswerving leadership and stable economic growth. That should make its fortunes easy to predict. But in recent months, the world's second-biggest economy has been full of surprises, wrong-footing seasoned China-watchers and savvy investors alike.

Early this year, for example, China's economy grew faster than expected, thanks to the country's abrupt exit from covid-19 controls. Then, in April and May, the opposite happened: the economy recovered more slowly than hoped. Figures for retail sales, investment and property sales all fell short of expectations. The unemployment rate among China's urban youth passed 20%, the highest since data were first recorded in 2018. Some now think the economy might not grow at all in the second quarter, compared with the first. By China's standards this would be a "double dip", says Ting Lu of Nomura, a bank.

China has also defied a third prediction. It has failed, thankfully, to become an inflationary force in the world economy. Its increased demand for oil this year has not prevented the cost of Brent crude, the glo-

bal benchmark, from falling by more than 10% from its January peak. Steel and copper have also got cheaper. China's producer prices—those charged at the factory gate—declined by more than 4% in May compared with a year earlier. And the yuan has weakened. The price Americans pay for imports from China fell by 2% in May compared with a year earlier, according to America's Bureau of Labour Statistics.

Much of the slowdown can be traced to China's property market. Earlier in the year it seemed to be recovering from a disastrous spell of defaults, plummeting sales and mortgage boycotts. The government had made it easier for indebted property

developers to raise money so that they could complete delayed construction projects. Households that refrained from buying last year, when China was subject to sudden lockdowns, returned to the market in the first months of 2023 to make the purchases they had postponed. Some analysts even allowed themselves the luxury of worrying about whether the property market might bounce back too strongly, reviving the speculative momentum of the past.

Yet this pent-up demand seems to have petered out. The price of new homes fell in May compared with the previous month, according to an index from Goldman Sachs, a bank. Although property developers are keen to complete building projects, they are reluctant to start them. Gavekal Dragonomics, a consultancy, calculates that property sales have fallen back to 70% of the level they were at in the same period of 2019, China's last relatively normal year. Housing starts are only about 40% of their level then (see chart on next page).

How should the government respond? For a worrying few weeks, policymakers looked as though they might not do much at all. The official growth target for this year—around 5%—lacks ambition. Beijing seemed keen to keep a lid on the debts of local governments, which are often urged to splurge for the sake of growth. The People's Bank of China (PBOC), the central bank, seemed unperturbed by falling prices. It may have also worried that a cut in interest rates would put too much of a squeeze on banks' margins, because the in-▶▶

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▶ interest rate they pay on deposits might not fall as far as the rate they charge on loans.

But on June 6th the PBOC asked the country's biggest lenders to lower their deposit rates, paving the way for the central bank to reduce its policy rate by 0.1 percentage points on June 13th. The interest rate banks charge their "prime" customers then fell in tandem, which will further lower mortgage rates. Although the cut was negligible, it showed the government was not oblivious to the danger. A meeting of the State Council, China's cabinet, on June 16th, dropped hints of more to come.

Robin Xing of Morgan Stanley, a bank, expects further cuts in interest rates. He also thinks restrictions on home purchases in first- and second-tier cities may be relaxed. The country's "policy banks" may provide more loans for infrastructure. Local governments may be allowed to issue more bonds. China's budget suggests it expected land sales to stay steady in 2023. Instead, revenues have so far fallen by about 20%. If the shortfall persists for the entire year, it would deprive local governments of more than 1trn yuan (\$140bn) in revenue, Mr Xing points out. The central government may feel obliged to fill that gap.

Will this be enough to meet the government's growth target? Mr Xing thinks so. The slowdown in the second quarter will be no more than a "hiccup", he argues. Employment in China's service sector began this year 30m short of where it would have been without covid, Mr Xing calculates. The rebound in "contact-intensive" services, such as restaurants, should restore 16m of those jobs over the next 12 months. When jobs do return, income and spending will revive. Another 10m of the missing jobs are in industries like e-commerce and education that suffered from a regulatory storm in 2021. China has struck a softer tone towards these firms in recent months, which may embolden some of them to resume hiring as the economy recovers.

Others economists are less optimistic. Xu Gao of Bank of China International argues that further monetary easing will not work. The demand for loans is insensitive to interest rates, now that two of the economy's biggest borrowers—property developers and local governments—are hamstrung by debt. The authorities cut interest rates more out of resignation than hope.

He may be right. But it is odd to assume monetary easing will not work before it has really been tried. Loan demand is not the only channel by which it can revive the economy. Zhang Bin of the Chinese Academy of Social Sciences and his co-authors estimate that if the central bank's policy rate dropped by two percentage points, it would cut interest payments by 7.1trn yuan, increase the value of the stockmarket by 13.6trn yuan and lift house prices, bolstering the confidence of homeowners.

If monetary easing does not work, the government will have to explore fiscal stimulus. Last year local-government financing vehicles (LGFVs), quasi-commercial entities backed by the state, increased their investment spending to prop up growth. That has left many strapped for cash. According to a recent survey of 2,892 of these vehicles by the Rhodium Group, a research firm, only 567 had enough cash on hand to meet their short-term debt obligations. In two cities, Lanzhou, the capital of Gansu province, and Guilin, a southern city famous for its picturesque Karst mountains, interest payments by LGFVs rose to over 100% of the city's "fiscal capacity" (defined as their fiscal revenues plus net cash flows from their financing vehicles). Their debt mountains are not a pretty picture.

If the economy needs more of a push, the central government will have to engineer it. In principle, this stimulus could include extra spending on pensions and consumer giveaways. The government has, for example, extended tax breaks on electric vehicles that have helped boost car sales.

Officials could also experiment with high-tech consumer handouts of the kind pioneered by cities in Zhejiang province during the early days of covid. They distributed millions of coupons through e-wallets, which would, for example, knock 70 yuan off a restaurant meal if the coupon holder spent at least 210 yuan in a week. According to Zhenhua Li of Ant Group Research Institute and co-authors, these coupons packed a punch. They induced more than three yuan of out-of-pocket spending for every one yuan of public money.

Unfortunately, China's fiscal authorities still seem to view such handouts as frivolous or profligate. If the government is going to spend or lend, it wants to create a durable asset for its trouble. In practice, any fiscal push is therefore likely to entail more investment in green infrastructure, intercity transport and other public assets favoured in China's five-year plan. That would be an utterly unsurprising response to China's year of surprises. ■

Hitting a wall (again)

China, 2019 average=100
Seasonally adjusted



Source: Gavekal Dragonomics



War economics

The big sweep

Rebuilding Ukraine will require money, but also tough reforms

UKRAINE SUFFERED a brutal winter. Russia lobbed missiles at civilian and energy infrastructure, attempting to terrorise the population and cut off the green shoots of economic growth. It had some success. A sentiment indicator surveying Ukrainian firms hit a low in January. But as the country's soldiers began their counter-offensive, so the economy pushed back. In April and May the sentiment indicator signalled economic expansion. Vacancies continue to rise, as businesses seek workers. Forecasts are increasingly rosy, too. Dragon Capital, an investment firm in Kyiv, expects GDP growth of 4.5% this year.

There is nevertheless a long way to go: Ukraine's economy shrank by more than a third at the start of the war. Agriculture has been hit hard by the bursting of the Kakhovka dam; many iron and steel facilities are destroyed or in Russian-occupied territory; foreign investors are understandably cautious; many workers are fighting or have fled the country. Thus policymakers, financiers and business types gathered in London on June 21st and 22nd for an annual conference. Their task was to work out how to support Ukraine's recovery.

The first order of business was the immediate reconstruction of the country, so that it can meet the basic needs of its people, especially next winter. Ukraine has asked for \$14bn to cover this year, of which a chunk will go on grants to households to rebuild their homes and to firms to repair ▶▶

► their businesses. So far, only a portion of these funds have been raised.

Ukraine also needs cash for its long-term recovery. In March the EU, UN, World Bank and Ukrainian government together put the cost at \$41bn over the next decade, a figure reached before the destruction of the Kakhovka dam. The International Finance Corporation, an arm of the World Bank, thinks two-thirds of the money will need to come from public sources because of the difficulty of enticing private money. This would amount to an annual cost of 0.1% of the West's GDP over the same period. In London, Ursula von der Leyen, head of the European Commission, proposed that the EU should provide 45% of the funding until 2027 in grants and loans.

Next comes reform. Seasoned donor-country experts are impressed by what Ukraine has so far achieved under war conditions. The country has completed an IMF programme and continued with changes to improve the transparency of property transactions and public procurement, meaning international donors can use the country's lauded Prozorro online platform, which makes information public and digitally accessible. The country has also completed two out of seven judicial and anti-corruption reforms required to open formal accession negotiations with the EU.

The integration of electricity markets between Ukraine and the EU shows the value of pushing ahead. Long-planned as part of a shift towards the West, the process sped up after Russia's invasion. It involved technical adjustments and painful market reforms on Ukraine's side to create a competitive, open wholesale market. "It was quite brave of EU politicians to realise the integration so quickly," says Maxim Timchenko, boss of DTEK, one of Ukraine's biggest energy firms. The bravery has paid off. Ukraine and the EU are able to trade electricity, and investors can begin to tap Ukraine's vast potential for green energy.

The question now is whether such private money will actually arrive. Under war conditions, investors usually need some kind of guarantee from a public body to take the leap. One idea under consideration in London was for donors not only to provide war insurance or guarantees, but to help prop up a reinsurance market.

If such guarantees can be arranged, the final step will be to take advantage of opportunities, which ought to be plentiful given the amount of aid pouring into Ukraine and the country's economic potential. Some observers even think private investment could surpass the \$41bn estimated to be required for Ukraine's long-term reconstruction. Yet that is only if everything goes to plan. Ukrainian reformers will need to take inspiration from their countrymen's bravery on the battlefield, as will foreign investors. ■

Energy prices

Failing to ignite

Against widespread expectations, oil and gas prices remain low

IN THE MONTHS after Russia's invasion of Ukraine any hint of bad news sent energy prices into the stratosphere. When a fire forced an American gas plant to close, strikes clogged French oil terminals, Russia demanded Europe pay for fuel in roubles or the weather looked grimmer than usual, markets went wild. Since January, however, things have been different. Brent crude, the global oil benchmark, has hovered around \$75 a barrel, compared with \$120 a year ago; in Europe, gas prices, at €35 (\$38) per megawatt-hour (MWh), are 88% below their peak in August.

It is not that the news has suddenly become more amenable. The Organisation of the Petroleum Exporting Countries (OPEC) and its allies have announced swingeing cuts to output. In America the number of oil and gas rigs has fallen for seven weeks in a row, as producers respond to the meagre rewards on offer. Several of Norway's gas facilities—now vital to Europe—are in prolonged maintenance. The Netherlands is closing the largest gas field in Europe. Yet any uptick in price quickly fades away. What is keeping things steady?

Disappointing demand may be part of the answer. In recent months expectations for global economic growth have fallen. The failure of several banks this spring raised fears of recession in America. Inflation is hitting consumers in Europe. In both places, the full impact of interest-rate rises is still to be felt. Meanwhile, in China, the post-covid rebound is proving weaker than expected. Anaemic growth, in turn, is dampening demand for fuel.

Yet look closer and the demand story is partial at best. Despite its disappointing re-



covery, China consumed 16m barrels per day (b/d) of crude in April, a record. A rebound in trucking, tourism and travel since the grim zero-covid period means that more diesel, petrol and jet fuel is being used. In America, a 30% drop in petrol prices compared with a year ago augurs well for the summer driving season. In Asia and Europe, high temperatures are expected to last, creating more demand for gas-fired power generation for cooling.

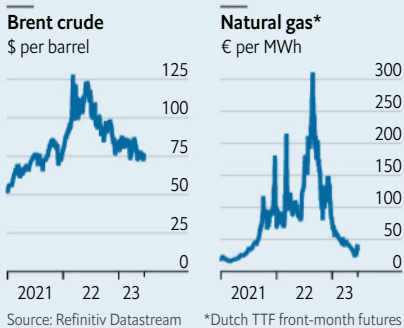
A more convincing explanation can be found on the supply side of the equation. The past two years of high prices have incentivised production outside of OPEC, which is now coming online. Oil is gushing from the Atlantic basin, through a combination of conventional wells (in Brazil and Guyana) and shale and tar-sands production (in America, Argentina and Canada). Norway is pumping more, too. JPMorgan Chase, a bank, estimates that non-OPEC output will rise by 2.2m b/d in 2023.

In theory, this should be balanced by production cuts announced in April by core OPEC members (of 1.2m b/d) and Russia (of 500,000 b/d), to which Saudi Arabia added another 1m b/d this month. Yet output in these countries has not fallen by as much as promised—and other OPEC countries are increasing exports. Venezuela's are up, thanks to investment by Chevron, an American giant. Iran's are at their highest since 2018, when America imposed fresh sanctions. Indeed, a fifth of the world's oil now comes from countries under Western embargoes, selling at a discount and thus helping dampen prices.

For gas, the supply situation is trickier: the main Russian pipeline delivering to Europe remains shut. But Freeport LNG, a facility which handles a fifth of America's exports of liquefied natural gas, and was harmed by an explosion last year, is back online. Russia's other exports to continental Europe continue. Norwegian flows will fully resume in mid-July. Most important, Europe's existing stocks are vast. The bloc's storage facilities are 73% full, compared with 53% a year ago, and on track to reach ►►

On troubled waters

Oil and gas prices



▶ their 90% target before December. Rich Asian countries, such as Japan and South Korea, also have plenty of gas.

When inflation was soaring and interest rates remained modest, commodities, notably crude oil, were an attractive hedge against rising prices, pushing up prices as investors flooded in. Now that speculators expect inflation to drop, the appeal has dimmed—just as higher rates make safer assets like cash and bonds more alluring. As a result, speculative net positioning (the balance between long and short bets placed by punters on oil futures markets)

has slumped. Higher rates also raise the opportunity cost of holding crude stocks, so physical traders are offloading their stock. The volume in floating storage fell from 80m barrels in January to 65m barrels in April, its lowest since early 2020.

Prices could well rise later in the year. The International Energy Agency, an official forecaster, projects that global oil demand will reach a record 102.3m b/d over 2023. Oil supply, too, will hit a record, but the forecaster reckons the market will tip into deficit in the second half of 2023—a view shared by many banks. As winter ap-

proaches, competition for LNG cargoes between Asia and Europe will intensify. Freight rates for the winter are already rising in anticipation.

Still, last year's nightmare is unlikely to be repeated. Many analysts expect Brent crude to stay close to \$80 a barrel and not to reach triple digits. Gas futures markets in Asia and Europe point to a 30% rise from today's levels by the autumn, rather than anything more extreme. Over the past 12 months commodity markets have adapted. It now takes more than a hint of bad news to send prices rocketing. ■

Buttonwood Quokkas v porcupines

Animal spirits in financial markets are hopelessly divided

THE QUOKKA, an Australian marsupial about the size of a domestic cat, has full cheeks and a curved mouth that convey the impression—often to delighted tourists—that the critter is smiling. It has been dubbed the happiest animal on Earth. Yet these days it has competition from another species: the American stock investor. The S&P 500 has already risen by 14% this year. An increase of another 10% would take the index back to its all-time high, set in January last year. Excitement about artificial intelligence has lit a fire under companies seen as potential beneficiaries.

Although climbing stock prices represent an impressive turnaround, they are not the most astonishing market shift. That award goes to the collapse in volatility. In the past 12 months the VIX, an index that measures expected volatility in stock prices, using the cost of insuring against extreme moves, has declined by more than half, falling from around 30 to 13. The last time it was so depressed was in early 2020, before the disruption of covid-19, when concerns about stagnation were more common than worries about inflation. Considering that the VIX is sometimes referred to as the “fear gauge”, its low level suggests a quokka-like placidity in the stockmarket.

This outlook is all the more astonishing given the surfeit of things about which an investor could worry. There is, for instance, considerable uncertainty about the Federal Reserve's next move, which would be a good reason for investors to want a little more protection. When the S&P 500 touched an earlier peak in 2021—a period of higher volatility—the federal funds rate sat at zero (it is now 5%) and ten-year Treasury yields at 1.5% (now 3.7%). Moreover, high rates may prompt something else to break.

Recent ructions in American banking were hardly on the radar-screens of investors until days before Silicon Valley Bank and Signature Bank went bust. The failure of another lender, First Republic, came at the beginning of May. Today's optimism makes it hard to remember that those troubles were so recent.

Yet there is another species that looks rather less placid. If stock investors are the quokkas of the financial kingdom, bond investors are the porcupines: wary and naturally defensive. The decline of the VIX stands in stark contrast to its equivalent in the Treasury market. Although the MOVE index, which tracks the price of insuring against bond-market volatility, has declined from a 13-year high in March, it is still twice as high as it was pre-covid. Bond investors remain far from convinced that the good times have returned.

The divergence in sentiment between the quokkas and porcupines is very different from the early stages of the pandemic, when stocks were extremely volatile and government bonds far less so. Back then, investors were preoccupied with covid's

economic fallout, the development and deployment of vaccines, and the pace of economic reopening. Then inflation picked up and the Fed's actions became the overwhelming focus.

It might be tempting to observe the difference and judge that either the bond or stockmarket must be wrong. But that would not be quite right. If artificial intelligence emerges as a transformative force for the bottom line of major technology companies, but not for economywide growth, it would be a tremendous boon for investors in shares and mean little for government bonds.

The problem is that such an outcome is far from assured—and investors are beginning to price stocks based on earnings that are unlikely to materialise any time soon. The price-to-earnings ratio of the S&P 500, based on expected earnings over the next 12 months, has climbed from below 16 late last year to 19 now. This is still below the highs set during the pandemic, when earnings expectations were smothered by lockdowns and restrictions, but is higher than at any other point in the past two decades.

What the divergence in animal spirits does say is that investors in the stockmarket—mistakenly or not—have left behind concerns that preoccupied them just a couple of months ago. They have traded their manifold worries for an optimistic narrative about artificial intelligence. The rosy outlook suggested by the lack of volatility is ultimately a judgment not just that the new technology will become a revolutionary moneymaker for America's listed companies, but that the Fed's decisions will not shake the financial system again and that the economy will withstand the impact of interest-rate rises. As things stand, it looks like a bold bet.



Asian farming

Making hay

MAUJGARH, PUNJAB

India's evolution from agricultural basket case to breadbasket

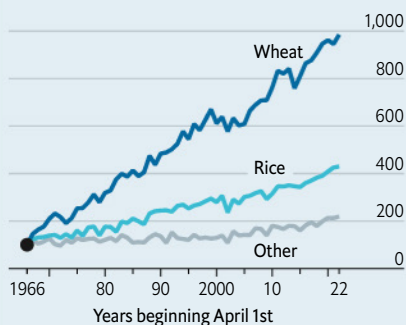
INDIAN AGRICULTURE has a poor reputation, which is not unfair. About half the country's workforce toils on the land. Their labour unfolds in the brutal heat and tends to be done by hand or in unsheltered, rudimentary vehicles. Seasonal financing often comes through informal channels, with lending at annual rates approaching 30%. Paralysing debts are not uncommon. Production efficiency is low; yields for corn, rice, wheat and other crops are a fraction of those in America, China and Europe. In Punjab, the country's agricultural heartland, roadside signs forgo typical advertisements for cars, films and phones, and instead hawk foreign-language training, overseas education and expedited visas. What local farmers want is not a new gadget but a way out.

Yet in some senses, rather than stagnating, Indian agriculture is flourishing. Working conditions may be grim, but record harvest follows record harvest—and famine is a thing of the past. Farming exports in the fiscal year ending in March were up by 9% on the previous 12 months, hitting \$26bn and representing 7% of India's outbound trade. During the global food scare that followed Russia's invasion of Ukraine last year, India became a pivotal exporter of rice and wheat (it is the world's second biggest producer of both), as well as other grains. In one of many such examples, it recently agreed to send 20m tonnes of wheat to the Taliban in Afghanistan, adding to 40m tonnes last year.

India would be more important still to global agriculture were it not for the periodic export restraints and tax surcharges that the government imposes. Such restrictions are not the only official obstacles. Subsidies for fertilisers and pesticides have depleted soil fertility. Some countries occasionally ban imports from India out of concern about chemical residue. Minimum price supports have led to an emphasis on thirsty crops, such as rice, in regions where water is scarce, depleting aquifers. Restrictions on sales mean farms are often divided among children into smaller, less efficient plots. The average holding has shrunk from 5 acres in the late 1970s to 2.5 today. To maximise output on such tiny plots, wheat farmers throughout northern India burn the post-harvest stubble in order to shrink the time between reaping and sowing, producing a thick, toxic cloud over much of the land.

They've had their Weetabix

India, cereal production, 1966=100



Source: Centre for Monitoring Indian Economy

However, Indian agriculture has begun a subtle evolution—in terms of policies, technology and finance—that is helping bypass the many official constraints. This is apparent in the economic data. A little more than a decade ago, agriculture and manufacturing produced similar amounts of gross value added, a measure that subtracts purchase costs from revenues to capture contributions to economic activity. The most recent numbers show that agriculture contributes a quarter more.

HDFC Bank, India's most important private financial institution, has increased agricultural lending from \$1.2bn in 2015 to \$7.5bn last year, charging somewhere in



In the green

the region of a third to half the rates that are typically found in the informal market. And where HDFC goes, other private-sector banks follow. This lending boom is helping sharply reduce costs for farmers, and means they are less likely to fall foul of occasionally violent loan sharks.

Supply chains are also increasingly innovative. In 2020, during a covid-19 lockdown, Anushka Neyol moved from Delhi, where she worked on startups including a baby spa, to her family farm, which sits near the Pakistani border. She began to experiment with types of wheat, as well as distribution through the internet, selling directly to bakeries and restaurants in big cities, bypassing a sclerotic government auction apparatus known as the mandi system. Clients include Subko, a coffee chain in Mumbai that boasts of uniquely sourced coffee, chocolate and wheat.

Another approach can be seen in Nashik, a city 170km or so inland from Mumbai. In 2004 Vilas Shinde, a local resident, began exporting grapes from a small farm. Six years later he founded a co-operative, Sahyadri Farms. Co-operatives have a long and decidedly mixed record in India. They have been tried in a number of different forms, but usually dissolve in disagreement within a few years. Sahyadri's success suggests at least that another outcome is possible. The co-operative now comprises around 21,000 farms, which mostly produce fruits and vegetables excluded from the official pricing and distribution system. It has the scale to justify the inspections and shipping required for international markets. Customers include Hindustan Unilever for tomatoes, Walmart for frozen fruits and a network of European grocers for grapes, reflecting a national trend towards such crops, which are more amenable to India's hot weather and cheap labour. Surrounding Sahyadri is an embryonic Indian wine industry, which includes a winery named Sula Vineyards.

Meanwhile, technology and market forces are seeping into the broader production processes. McKinsey, a consultancy, reckons that there are at least 1,000 Indian "agtech" companies, which have raised some \$1.6bn. Through cheap smartphone apps, satellite data can now provide guidance on soil treatment, sowing and harvest dates, as well as when and how to employ fertilisers and pesticides. These changes attract plenty of attention and excite investors, blurring practical limitations. Visit a farmer whose inexpensive mobile phone has a cracked screen, limited memory and spotty connections, and it is evident that transformation will have to unfold gently. By the time it comes, some of the likely adopters will have read the writing on the billboards next to Punjabi roads and gone elsewhere. But change—halting, hidden, partial—is taking root. ■

Free exchange | Lockheed's law

The rule that will make it cheaper for the West to build up its armed forces



AROUND THE world a boom in defence spending is under way. Aroused from their complacency by Russia's invasion of Ukraine and China's designs on Taiwan, the 24 of 31 NATO members that do not meet the club's 2%-of-GDP defence-budget target have promised to make good. China's own military spending grew by 4.2% in real terms last year. Globally, new defence commitments and forecast spending add up to over \$200bn, a figure that could rise as high as \$700bn under plausible assumptions.

This represents an abrupt reversal of a decades-long decline. During the second world war the Allies devoted half of their GDP to fighting. In the 1960s, at the height of the cold war, governments typically spent 6% of GDP on defence. But after the Soviet Union collapsed, the world reaped a "peace dividend" from shrinking defence spending. Last year global defence spending was \$2.2trn, or just above 2% of GDP—close to an all-time low.

As spending starts to rise, there is a puzzle. Why is the coming bill not bigger still? Even if politicians honour recent pledges, the world will spend less on defence, relative to GDP, than in 1990.

Part of the answer lies in the fact that defence spending escapes a problem plaguing many governments: that of cost disease. This issue was first outlined by William Baumol, an economist, in the 1960s. The malady applies in labour-intensive industries, such as health care and education, in which productivity grows only slowly because automation is difficult. As innovation boosts output and wages in, say, manufacturing, it becomes necessary to pay nurses and teachers more, to stop them quitting and heading for the nearest factory. As a result, industries suffering from cost disease must, over time, spend more in real terms in order merely to stand still. Baumol presciently worried about health-care spending swallowing up an ever-larger share of GDP.

Armed forces benefit from the reverse phenomenon. Call this "Lockheed's law", after the giant American defence contractor. Cost disease bites in places where, in Baumol's words, "the human touch is crucial". Yet in America only one-third of total defence spending goes on paying salaries. Indeed, every country that is falling short of NATO's 2% target is closer to America's spending on armed-forces personnel, as a share of GDP, than it is to Uncle Sam's other armed-forces spending. This suggests that arming NATO will

be more about buying additional and superior equipment rather than going on a hiring spree.

Although Russia and Ukraine have deployed enormous conscripted armies, Western countries that are rearming remain mostly committed to the idea that quality beats quantity. Better, the logic goes, to have a smaller army equipped with state-of-the-art artillery, tanks, planes and equipment than a bigger one with rusty kit. To the extent it seeks to compete in manpower with its adversaries, the West tries to do so through big alliances such as NATO (ie, by spreading labour costs among countries, rather than turning a greater proportion of workers into soldiers).

There is also plenty of scope for the automation of defence: machine learning is already replacing human satellite-imagery analysts, for instance. Those companies, like Lockheed, which make military gear have no productivity problem—quite the opposite. America's statisticians produce price indices for kit, covering everything from missiles to ships. The calculations behind these indices are fiendishly complicated. They can answer the sort of question that a ten-year-old boy might ask. How much does it cost to blow up an enemy's position? How much does it cost to travel at 1,000 miles an hour in a military jet? The data produced show that armed-forces capabilities have been getting relatively cheaper: quality-adjusted missile prices have fallen by about 30% since the 1970s. In cash terms, America spends about the same on military aircraft as it did in the mid-1980s. Even though the purchasing power of the dollar in the wider economy has fallen over that period, it will buy about the same amount of airpower.

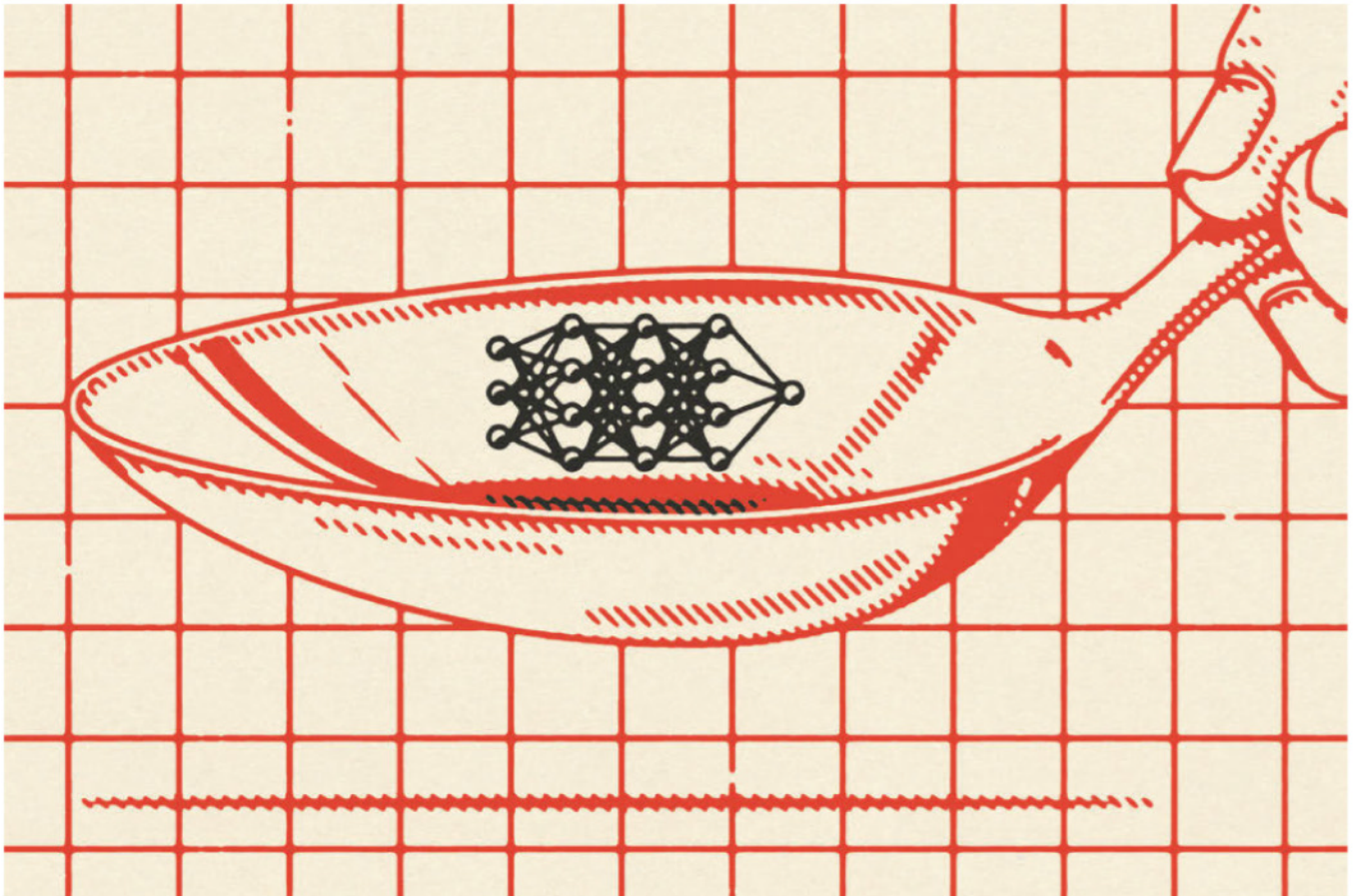
The result is that shrinking budgets can still buy awesome armies. Economic growth makes the effect even starker. As soldiers posted in the South China Sea are well aware, China has vastly more military might than it did three decades ago. Yet in 2021 it spent 1.7% of its GDP on defence, down from 2.5% in 1990.

Under the gun

Lockheed's law is not without limitations. Periods of sudden defence spending tend to cause shortages, which send prices soaring. Having armed Ukraine, NATO now needs to replenish its stocks of weapons, but defence supply-lines are stretched. More profoundly, health and education spending make peoples' lives better. Defence spending is usually about forestalling threats and repelling adversaries. To the extent that military outgoings must rise simply because the world has become more dangerous, they are an unwelcome extra cost. The peace dividend was no myth.

Ultimately what matters in war is not the absolute level of a country's defence capabilities, but its strength relative to that of enemies. If everyone is upgrading capabilities, then the result will be an arms race in which, for every innovation, there must be a countervailing rise in spending. The technological change that has enabled Russia to launch Iranian drones stuffed with explosives at civilians has raised the cost of defending Ukraine, for example. In a zero-sum battle, only technologies that the West alone has access to can really be thought of as helping to contain costs. A hot war between great powers would still send defence spending soaring to agonisingly high levels.

Nevertheless, it will reassure Western politicians—many of whom are struggling to meet the needs of ageing populations, accelerate decarbonisation and deal with rising interest payments—that not everything on which they must spend gets more expensive through the sheer force of economic logic. Some military muscle can be put on without endlessly rising costs. ■



Artificial intelligence

Time for a diet

If AI is to keep getting better, it will have to do more with less

WHEN IT COMES to “large language models” (LLMs) such as GPT—which powers ChatGPT, a popular chatbot made by OpenAI, an American research lab—the clue is in the name. Modern AI systems are powered by vast artificial neural networks, bits of software modelled, very loosely, on biological brains. GPT-3, an LLM released in 2020, was a behemoth. It had 175bn “parameters”, as the simulated connections between those neurons are called. It was trained by having thousands of GPUs (specialised chips that excel at AI work) crunch through hundreds of billions of words of text over the course of several weeks. All that is thought to have cost at least \$4.6m.

But the most consistent result from modern AI research is that, while big is good, bigger is better. Models have therefore been growing at a blistering pace. GPT-4, released in March, is thought to have around 1trn parameters—nearly six

times as many as its predecessor. Sam Altman, the firm’s boss, put its development costs at more than \$100m. Similar trends exist across the industry. Epoch AI, a research firm, estimated in 2022 that the computing power necessary to train a cutting-edge model was doubling every six to ten months (see chart on next page).

This gigantism is becoming a problem. If Epoch AI’s ten-monthly doubling figure is right, then training costs could exceed a billion dollars by 2026—assuming, that is, models do not run out of data first. An analysis published in October 2022 forecast that the stock of high-quality text for training may well be exhausted around the

same time. And even once the training is complete, actually using the resulting model can be expensive as well. The bigger the model, the more it costs to run. Earlier this year Morgan Stanley, a bank, guessed that, were half of Google’s searches to be handled by a current GPT-style program, it could cost the firm an additional \$6bn a year. As the models get bigger, that number will probably rise.

Many in the field therefore think the “bigger is better” approach is running out of road. If AI models are to carry on improving—never mind fulfilling the AI-related dreams currently sweeping the tech industry—their creators will need to work out how to get more performance out of fewer resources. As Mr Altman put it in April, reflecting on the history of giant-sized AI: “I think we’re at the end of an era.”

Quantitative tightening

Instead, researchers are beginning to turn their attention to making their models more efficient, rather than simply bigger. One approach is to make trade-offs, cutting the number of parameters but training models with more data. In 2022 researchers at DeepMind, a division of Google, trained Chinchilla, an LLM with 70bn parameters, on a corpus of 1.4trn words. The model outperforms GPT-3, which has 175bn ▶▶

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▶ parameters trained on 300bn words. Feeding a smaller LLM more data means it takes longer to train. But the result is a smaller model that is faster and cheaper to use.

Another option is to make the maths fuzzier. Tracking fewer decimal places for each number in the model—rounding them off, in other words—can cut hardware requirements drastically. In March researchers at the Institute of Science and Technology in Austria showed that rounding could squash the amount of memory consumed by a model similar to GPT-3, allowing the model to run on one high-end GPU instead of five, and with only “negligible accuracy degradation”.

Some users fine-tune general-purpose LLMs to focus on a specific task such as generating legal documents or detecting fake news. That is not as cumbersome as training an LLM in the first place, but can still be costly and slow. Fine-tuning LLAMA, an open-source model with 65bn parameters that was built by Meta, Facebook’s corporate parent, takes multiple GPUs anywhere from several hours to a few days.

Researchers at the University of Washington have invented a more efficient method that allowed them to create a new model, Guanaco, from LLAMA on a single GPU in a day without sacrificing much, if any, performance. Part of the trick was to use a similar rounding technique to the Austrians. But they also used a technique called “low-rank adaptation”, which involves freezing a model’s existing parameters, then adding a new, smaller set of parameters in between. The fine-tuning is done by altering only those new variables. This simplifies things enough that even relatively feeble computers such as smartphones might be up to the task. Allowing LLMs to live on a user’s device, rather than in the giant data centres they currently inhabit, could allow for both greater personalisation and more privacy.

A team at Google, meanwhile, has come up with a different option for those who can get by with smaller models. This approach focuses on extracting the specific knowledge required from a big, general-purpose model into a smaller, specialised one. The big model acts as a teacher, and the smaller as a student. The researchers ask the teacher to answer questions and show how it comes to its conclusions. Both the answers and the teacher’s reasoning are used to train the student model. The team was able to train a student model with just 770m parameters, which outperformed its 540bn-parameter teacher on a specialised reasoning task.

Rather than focus on what the models are doing, another approach is to change how they are made. A great deal of AI programming is done in a language called Python. It is designed to be easy to use, freeing coders from the need to think about ex-

actly how their programs will behave on the chips that run them. The price of abstracting such details away is slow code. Paying more attention to these implementation details can bring big benefits. This is “a huge part of the game at the moment”, says Thomas Wolf, chief science officer of Hugging Face, an open-source AI company.

Learn to code

In 2022, for instance, researchers at Stanford University published a modified version of the “attention algorithm”, which allows LLMs to learn connections between words and ideas. The idea was to modify the code to take account of what is happening on the chip that is running it, and especially to keep track of when a given piece of information needs to be looked up or stored. Their algorithm was able to speed up the training of GPT-2, an older large language model, threefold. It also gave it the ability to respond to longer queries.

Sleeker code can also come from better tools. Earlier this year, Meta released an updated version of PyTorch, an AI-programming framework. By allowing coders to think more about how computations are arranged on the actual chip, it can double a model’s training speed by adding just one line of code. Modular, a startup founded by former engineers at Apple and Google, last month released a new AI-focused programming language called Mojo, which is based on Python. It too gives coders control over all sorts of fine details that were previously hidden. In some cases, code written in Mojo can run thousands of times faster than the same code in Python.

A final option is to improve the chips on which that code runs. GPUs are only accidentally good at running AI software—they were originally designed to process the fancy graphics in modern video games. In particular, says a hardware researcher at Meta, GPUs are imperfectly designed for “inference” work (ie, actually running a model once it has been trained). Some

firms are therefore designing their own, more specialised hardware. Google already runs most of its AI projects on its in-house “TPU” chips. Meta, with its MTIAS, and Amazon, with its Inferentia chips, are pursuing a similar path.

That such big performance increases can be extracted from relatively simple changes like rounding numbers or switching programming languages might seem surprising. But it reflects the breakneck speed with which LLMs have been developed. For many years they were research projects, and simply getting them to work well was more important than making them elegant. Only recently have they graduated to commercial, mass-market products. Most experts think there remains plenty of room for improvement. As Chris Manning, a computer scientist at Stanford University, put it: “There’s absolutely no reason to believe...that this is the ultimate neural architecture, and we will never find anything better.” ■

Nootropics

Hard-working, but incompetent

Study drugs can make people worse at problem-solving, not better

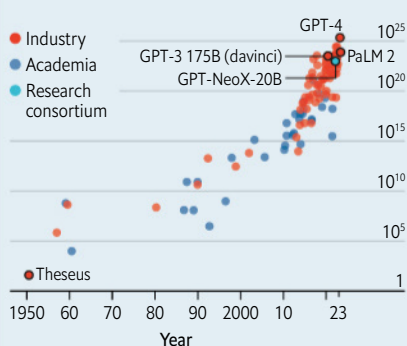
FOR MORE than six months Americans have been struggling to get their hands on medications like dextroamphetamine (better known as Adderall) and methylphenidate (Ritalin). Officially, these stimulant drugs are used to treat attention-deficit hyperactivity disorder (ADHD).

Unofficially, the drugs are also popular with devotees of “nootropics”—chemicals that supposedly boost brainpower. Students and workers in industries from tech to finance take the medications in the hope they will improve their concentration and ability to get things done. But a new paper suggests that this may be ill-advised. The drugs seem to make people slightly worse at solving problems, not better.

In the paper, published on June 14th in *Science Advances*, a group of researchers led by Peter Bossaerts, an economist at the University of Cambridge, tested how Adderall, Ritalin and another stimulant drug called modafinil (Provigil) affected 40 healthy people’s ability to perform optimisation problems. They used the “knapsack task”, in which participants had to work out which items to put into a bag. The idea was to maximise the value of the items without exceeding the carrying weight of the sack. The researchers used several trials of varying difficulty, each with different weight limits and lists of items. ▶

Galaxy brains

Computing power used in training AI systems
Selected systems, floating-point operations, log scale



Sources: Sevilla et al., 2023; Our World in Data

▶ The participants visited the lab on four separate days. On each day they were given either a placebo pill or one of the drugs under study. The study was double-blind, meaning neither the participants taking the pills nor the experimenters handing them out knew which had been administered on which day. They found that participants achieved slightly worse end-results on the task after taking a drug. The drugs did not impair people's ability to find an optimal solution. Participants managed this in around half of the trials, whether they took the drugs or the placebo pills. But they did cause a small drop in the value of participants' knapsacks across all trials, by making the non-optimal solutions worse.

Perhaps more striking was how drugs changed the way people attacked the task. After taking Adderall or Ritalin (but not Provigil) the participants spent far longer working on their knapsacks than they did when they had taken the placebo pill. (Participants were given four minutes to complete each trial but could submit an answer earlier if they thought they had found a good solution). When given Ritalin in particular, subjects were around 50% slower at completing trials. That was roughly equivalent to the delay expected from going from the easiest to the most difficult trial in the placebo session.

This extra time was spent moving items in and out of the knapsack, somewhat erratically. The authors assessed the productivity of each move by measuring how much it increased the value of a sack, and found that participants were about 9% less productive when they had taken one of the study drugs compared with a placebo pill. "It was like they were trying to solve a jigsaw puzzle by randomly throwing pieces in the air," says Dr Bossaerts.

The authors argue that although the drugs made people more motivated and helped them put more effort into the task, this was more than cancelled out by the fact that the drugs decreased the quality of all that effort. In other words, although people tried harder, they became far less competent. Just how much the drugs hindered performance seemed to depend on how good a participant was without them. Star performers during the placebo session fell to the bottom of the pack when they had taken the drugs.

Popping stimulants is commonplace in industries like software and finance. One survey of 6,500 American college students reported that 14% had used the drugs for non-medical reasons. This latest study adds to a growing pile of evidence suggesting that such drugs do little to improve cognitive performance in people who do not need them. For tech bosses looking for efficient employees, and workers hoping to clock off at a reasonable hour, the stimulant shortage may be a good thing. ■

Sustainable construction

Growing timber town

Sweden plans to build a city made from cheap, green, fireproof wood

THERE IS a global race to build the tallest wooden skyscraper. The record was held by Mjostarnet, an 85-metre tower on the shore of Lake Mjosa in Norway, which hosts flats, a hotel and a swimming pool—until Ascent, an 87-metre structure, was completed in Wisconsin in July 2022. And it will be put in the shade in turn by other buildings: a 90 metre tower is planned for Ontario, and a 100 metre one for Switzerland. (By way of comparison, St Paul's cathedral in London is 110 metres tall.)

This week, though, a Swedish firm announced it was going for a different sort of record. It unveiled plans to build what could be the world's biggest wooden city. Stockholm Wood City will be built in Sickla, an area in the south of the Swedish capital. Construction on the 250,000 square-metre site will begin in 2025. When complete, ten years later, it will contain 2,000 homes and 7,000 offices, along with restaurants and shops. The 12bn-krona (\$1.4bn) project is led by Atrium Ljungberg, a Swedish urban development company.

By using wood the company hopes to reduce the project's carbon footprint by up to 40%, compared with building in concrete and steel, says Annica Anäs, the company's boss. Wood is a sustainable material that can be produced from renewable forests, which Sweden has in plenty. When used for building, it locks up the carbon that the trees absorbed from the atmo-

sphere while growing. As with other modern construction projects using timber, Wood City will still use some concrete and steel in places like the foundations, but the overall amounts will be greatly reduced. As wooden buildings are much lighter, their foundations can be smaller.

The Swedish project will, as existing wooden skyscrapers do, employ large prefabricated sections made from what is called "engineered timber". Instead of ordinary lumber, chipboard or plywood, engineered timber is a composite in which layers of wood are laminated together in specific ways. The wood grains in each layer are aligned to provide individual components of the building, such as floors, walls, cross braces and beams, with extremely high levels of strength. And because these parts can be manufactured in a factory, where tolerances are finer and quality control is easier to maintain than on a building site, the use of prefabricated sections cuts down on the delivery of raw materials and allows construction to proceed more quickly.

The burning question

Another advantage is that construction will not be as noisy as it would be if the town were built from concrete and bricks, adds Ms Anäs. This makes wooden buildings particularly suitable for urban redevelopment in general, since putting them up is less likely to annoy the neighbours. It should also be profitable. Ms Anäs is looking for a return on investment of 20% or better. "Sweden is progressive when it comes to wood construction," she says. "But I don't see any reason why it shouldn't work elsewhere."

The biggest concern most people have about wooden buildings is the risk of fire. The buildings in Wood City will be fitted with several fire-protection systems, such as sprinklers and flame-resistant layers, as would also be found on their concrete or brick counterparts.

At the same time, researchers are coming to believe that engineered timber is, by its nature, extremely fire resistant. To help win approval for the construction of the Ascent building, the US Forest Service carried out tests on the laminated timber columns it would use. After finding them difficult to burn, the columns were awarded an exemplary three-hour fire-resistance rating because they maintained their structural integrity.

Without a sustained heat source the charring of the outer layer of a big piece of timber protects the structure inside—try lighting a camp fire when you only have logs. Many of the large urban fires of old, like the Great Fire of London in 1666, were mostly fuelled by small sections of timber acting as kindling. So when it comes to building in wood, it is best to think big. ■



When houses grow on trees



#MeToo in Taiwan

The breaking wave

TAIPEI

A television drama about Taiwanese politics has sparked a social reckoning

THE CLOCK is ticking down to presidential elections in Taiwan. Functionaries in the two main parties frantically smear the rival candidate and scramble to shape the image of their own, hiring influencers, coining catchy slogans and framing touching moments with voters on the street. But there is one key difference between the universe of “Wave Makers”, a hit political drama that came out on Netflix in April, and Taiwanese reality: in the series, the China question, usually the fulcrum of the island’s politics, does not exist.

This conceit means that the focus is on domestic issues rather than grand matters of national identity or the threat of invasion. Drawing on deep research and interviews, the show zooms in on the sacrifices women are asked to make for supposedly important causes. It tells a hopeful story of one character standing up for another—and, in a feedback loop between life and art, it has inspired real women in Taiwan

to stand up for themselves.

The fictional election is a vehicle to examine thorny questions of politics and morality. How much should people be willing to give up for the sake of a wider goal? Where is the line between pragmatic compromise and hypocrisy? All the characters wrestle with clashes between their political mission and personal ideals. The liberal presidential nominee is against the death penalty, but dare not say so in public. A young campaigner is castigated as a sell-

out by his friends for missing protests because he was busy making party-propaganda videos. His well-worn riposte is that power, not protests, brings about change.

The compromises that have most stirred Taiwanese viewers are those demanded of the two main characters. Played subtly by Hsieh Ying-xuan (pictured left), Weng Wen-fang is the lesbian daughter of an influential elder in the liberal party. She loses a local election after a public spat with one of her father’s conservative friends, who insults her girlfriend. Weng’s mother urges her to apologise. In politics, she says, you think of the “big picture” and compromise. Weng refuses. The “greater good”, she realises, is often just an excuse to cover up wrongdoing.

When she discovers that a young member of the campaign team, Chang Ya-ching (Gingle Wang, pictured right), is being asked to “let things go” for the sake of the party’s image, she insists that they fight back. Chang has fled from an affair with her former boss, a slick politician now running for vice-president with the right-wing party. He has a USB stick full of naked photos, which he uses to harass and control Chang and others. After Chang is molested by another man in her new job, Weng urges her to report it. But holding the assailant to account is tough: their party is nominally progressive, but its internal structures are ▶▶

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► stiff and patriarchal. Its female candidate for president asks them to hush things up.

Much of the plot was drawn from life. The two screenwriters of “Wave Makers”, Chien Li-ying and Peng Wei-chao, a former campaigner who goes by the pen name Cynical Chick, spent two years interviewing political operatives. At first, says Ms Chien, they simply thought that Taiwan’s election culture would be colourful material for a television series. Sexual harassment did not feature in their plans. But as they developed the characters, they realised that almost every woman they spoke with, in politics and other professions, had experienced it. Hardly any had reported it.

That mirrors wider evidence about gender relations in Taiwan. On the face of it, they are more equal than elsewhere in East Asia. A higher proportion of women sit in Taiwan’s parliament than in others in the region, for example. But ossified norms and taboos have hindered reporting of harassment, says Chi Hui-jung, an activist who serves in the government’s supervisory body: “Girls are taught to be very polite. You can’t be bad-tempered. You can’t complain.” As a result, Taiwanese women who are abused convince themselves “that it’s no big deal”. A survey in 2021 found that 82% of women sexually harassed in the workplace did not make formal complaints. Nearly half of those who kept quiet had “brushed it off as a joke”.

Taken at the flood

“Wave Makers” has helped shatter the *omertà*. On May 31st a woman who once worked for Taiwan’s ruling Democratic and Progressive Party declared: “I’m going to be my own Weng Wen-fang.” In a Facebook post she recounted being sexually harassed at work and how she was encouraged not to report it.

A cascade of #MeToo testimonies followed. Within a fortnight scores of allegations of sexual harassment were made against members of all the island’s main political parties. The wave of accusations took in prominent academics, doctors, musicians, writers, artists, diplomats and exiled Chinese dissidents.

On June 2nd Ms Chien disclosed her own #MeToo experience. As a student, she said, she idolised a Chinese poet. She was flattered when, on a visit to Taiwan, he asked to meet her. Then, she alleges, he sexually assaulted her (he denies it). Ms Chien said nothing about the episode for years, even while writing “Wave Makers”. The man was famous; she felt she was a nobody. But the surge of denunciations in the show’s wake—and the overwhelming support for accusers in Taiwanese society—encouraged her to tell her story, too.

In the past, Ms Chien says, it was especially hard for women to speak up if an offence occurred in an organisation meant

to serve a noble cause, whether that was artistic, political or the security of a place that sees itself as the idealised foil of a big bully: “They always make you think about the greater interest and swallow it.” Today Taiwan is entering a real-life election season and faces a military threat from China. But high stakes don’t justify silencing victims, Ms Chien insists—and Taiwanese women are no longer willing to be treated like hostesses. “We are educated intellectuals, not the armrests for your sofa. Please remove your hand from my thigh.”

Witty and propulsive, “Wave Makers”

was the most-viewed show on Netflix Taiwan within two days of its release; it stayed in the top ten for five weeks. And it has sparked a social reckoning. Tsai Ing-wen, Taiwan’s president, has apologised for failing to prevent sexual harassment in her party and across society. The cabinet has promised to review the legal framework for such cases and to propose amendments in parliament this summer. The writers are not surprised by the torrent of allegations, but didn’t expect their show to unleash it. “Everyone must have been holding it in,” says Ms Chien, “until they couldn’t.” ■

Public art in California

Dreaming spire

SAN FRANCISCO

A sculpture on an island in San Francisco Bay points towards regeneration

VIEWED UP CLOSE atop an island in San Francisco Bay, the city’s newest public artwork rises like a tapering needle of polished steel. From a different angle, it blazes like a beacon at sunrise and sunset. From the vantage of a departing visitor turning to look back, Hiroshi Sugimoto’s “Point of Infinity” seems to be matte blue and nearly disappears, leaving a faint outline like a doorway cut into the sky.

Continuously shifting but always sublime, the monumental sculpture is a fitting first commission for San Francisco’s ambitious scheme to turn two Bay islands into a new offshore neighbourhood and art destination. Rising 69 feet (21 metres), the piece

is a meditation on eternity and human imagination in a place that has seen its share of innovation and near-death experiences. Perspective is everything, it suggests. As this newspaper and others have reported, San Francisco may have entered an economic “doom loop”. The spire is a sliver of hope for a rebirth.

The rocky outcrop called Yerba Buena Island sprouted the adjacent man-made expanse named Treasure Island in the 1930s as a Depression-era project to host America’s world’s fair. The Golden Gate International Exhibition opened on it in 1939, the pavilions stocked with art, including a huge mural begun on the spot by Diego Ri- ►►



To infinity and beyond

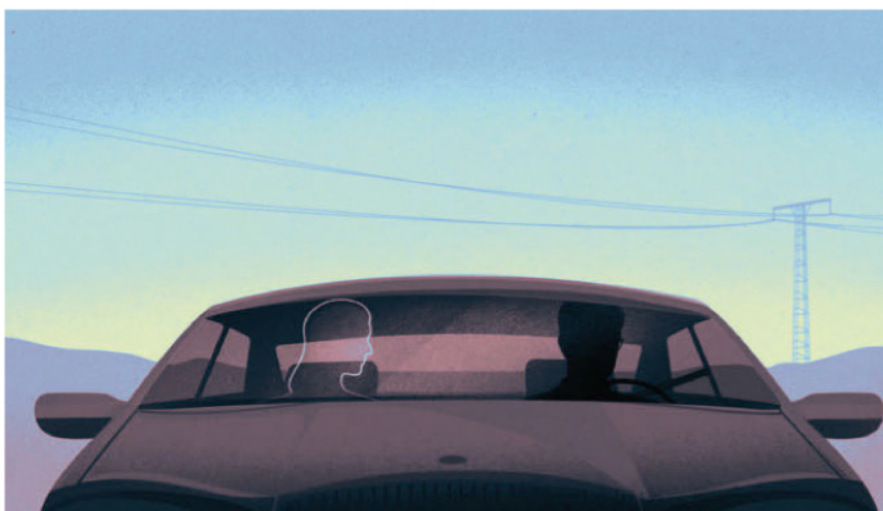
vera. The aim was to showcase America's modernity and urban progress. Decades later the city's goal is the same: to reinvent the urban experience for the 21st century, as a walkable community of 8,000 homes surrounded by water and parks and world-class works of art.

Taking inspiration from two famous arty islands, Governors Island in New York and Naoshima in Japan, the city's arts commission seized on the rare opportunity to build "a magnet for cultural tourism" from scratch on the site, which was occupied by the US Navy after the fair. The private development has a budget of some \$5bn to build homes, shops, hotels and a ferry landing. The investors are subsidising the dwellings designated as "affordable" (around a quarter of the total), along with nearly 300 acres of parks and a budget of \$50m for public art.

Mr Sugimoto's sculpture was chosen unanimously by the commission from 495 contenders, says Jill Manton, director of the city's Public Art Trust. The Japanese artist, who lives and works in Tokyo and New York, was initially approached to make a piece for San Francisco's airport, but the hilltop location seized his imagination. The spectacular spot with panoramic views called for a special installation, one representing what Mr Sugimoto calls "humanity's yearning for the infinite". His sculpture is based on the mathematical formula for infinity, and is made up of two converging curved lines, rendered in high-grade mirrored steel, which get closer and closer but never meet. The piece tapers to a vanishing point only 21 millimetres wide.

It is meant to be "symbolic of humankind's pursuit of knowledge and innovation", Mr Sugimoto said at its unveiling earlier this month. It is also a meditation on time, one of his enduring interests as a photographer and architect. Acting as a huge sundial, it will throw a shadow on a precise point at noon on the autumn and spring equinoxes, registering the movement of the Earth. When it is formally opened later this year, visitors will wend their way up an elegant approach to a park designed by Walter Hood, an acclaimed landscape architect.

For V. Fei Tsen, president of the city development agency that is overseeing the project, the piece "sets the tone for what this island can be for art". Not just international stars but local artists and community schemes will be represented. In its time Naoshima, too, was a disused military base that was revived through culture, Ms Tsen points out. Neither a recent spate of lawsuits between the investors nor San Francisco's wider woes have dismayed her. "Economic cycles always come into play," she says phlegmatically. Like many in a place built on the booms and busts of gold rushes, her credo is: "I have faith." ■



Kooky American fiction

A road trip in limbo

I Am Homeless If This Is Not My Home.

By Lorrie Moore. *Knopf*; 208 pages; \$27. *Faber*; £16.99

FINN IS A schoolteacher who traffics in conspiracy theories. "The real story is never the official one," he insists. He believes that PowerPoint augurs the end of civilisation, and he tests his own sanity by replying to newspaper editorials and waiting to see if his screeds are published: "In this manner he could tell, roughly, how deranged he was that day." Finn is still hung up on his "richly bleak" former girlfriend, so he is glad to find himself on an unexpected road trip in her company. The only hitch is that his ex happens to be dead.

"Everyone at some point in their lives should have a long great love affair with a magnificent lunatic," Finn declares in "I Am Homeless If This Is Not My Home", Lorrie Moore's weird and beautifully idiosyncratic new novel, her first since 2009. (She is better known for her short stories, which have won numerous awards.) Running to only around 200 pages, this deceptively slim volume packs a wallop. It's not just that the book ponders weighty themes, such as love, death, suicide and the meaning of life. It's also that Ms Moore writes in a way that demands constant attention, imbuing each of her sentences with an almost antic ingenuity.

The American author's talent—evident in abundance here—is for using humour and beguilingly odd details to yield grand truths about what it means to be human. Her characters are decidedly off-kilter, but feel more real than twee.

Lily, Finn's ex-girlfriend, is a suicidal depressive who works as a "laugh therapist", dressing up as a clown to shake people, mostly children, out of their gloom. (She "even wore floppy shoes, the laces of which she had once used to strangle herself".) While Finn is in New York to spend time with his dying brother—whose eyeballs "were turning the golden earwax brown of bruised fruit"—he is summoned home to Illinois to deal with a crisis concerning Lily, who may have at last succeeded in doing away with herself.

Does Finn actually spot Lily wandering around in her filthy shrouds and clown shoes in the cemetery where she had been buried, pulling stink bugs from her sleeve and smelling vaguely of rot? "I suppose I'm death-adjacent," she explains to him. Do they in fact take a long drive together to what will be her final resting place, discussing their fraught love and many trials? Stretches of the book have a hallucinogenic quality, disorienting and unreal. Finn, whose hold on reality was already tenuous, may simply be undone by his grief.

It is not entirely clear what relationship Finn's story has with a series of interspersed letters from the mistress of a 19th-century boarding-house, except that these missives are written to a beloved sister who also happens to be dead. Perhaps life is always haunted by past loves, past wounds, old memories barely remembered, and perhaps these are all essential parts of it. As Finn observes: "No longer caring about a thing was key to both living and dying. So was caring about a thing."

North Korea's ruling family

Granddaughter of the revolution

The Sister. By Sung-Yoon Lee. *Macmillan*; 304 pages; £15. To be published in America by *PublicAffairs* in September; \$30

COMMUNISTS ARE fond of vitriol. Karl Marx called Jeremy Bentham, the father of utilitarianism, the “insipid, pedantic, leather-tongued oracle of the ordinary bourgeois intelligence of the 19th century”. Vladimir Lenin said that Georgi Plekhanov, a Russian philosopher, had “set a new record in the noble sport of substituting sophistry for dialectics”, a brutal put-down in the lexicon of Marxist jargon.

Now there is a new champion of un-hinged execration. Whether reviling the “stinky breath emanating from [the] bawling traps” of South Korean missile experts, or telling their president, Yoon Suk-yeol, to “shut his mouth, rather than talking nonsense”, Kim Yo Jong has a barbed tongue befitting the sister of Kim Jong Un, dictator of nominally socialist North Korea. Yet as Sung-Yoon Lee argues in “The Sister”, behind the snark is a woman of immense power: an influence over her nuke-wielding brother and, possibly, his successor.

Ms Kim came to the world's attention in 2018 during the Winter Olympics in Pyeongchang, South Korea, when she became the first member of North Korea's ruling family to visit the South since the Korean war. Now she is almost as prominent a symbol of North Korean despotism as the brother she often accompanies. As head of the propaganda operation, her sardonic wit has animated North Korea's invective for a decade. Her willingness to say vile things to wind up America and South Korea positions her, in Mr Lee's words, as “Even Worse Cop” to Mr Kim's “Bad Cop”.

The opacity of North Korea means that Mr Lee's claims are often plausible rather than proven. Advanced in an exuberant prose style, they sometimes outstrip the evidence. Forensic scrutiny of greetings and handwriting in guestbooks smacks of over-interpretation, though readers fond of sartorial analysis may enjoy the detailed record of Ms Kim's fashion choices.

As for his speculation on whether she might succeed her brother: though a fun parlour game for North Korea-watchers, such predictions should not be taken too seriously. As the author recalls, Fujimoto Kenji—the Kim family's sushi chef until he fled in 2001—may have been the only person outside North Korea to be on the record as having foreseen Kim Jong Un's ascent.



Lady in waiting

Still, marshalling what is known about Ms Kim—a woman of such mystery that the North Korean state has never confirmed that she actually is Mr Kim's sister—is worthwhile. Mr Lee's book is not just a profile of a central figure in what is arguably the world's most brutal dictatorship, but also of her clan. By showing how the family operates, “The Sister” offers insights into the workings of the only hereditary monarchy to style itself as communist; a regime willing to let millions starve while it spends billions on weapons.

Above all, it shows how Ms Kim and her brother learned the art of diplomacy from their father, Kim Jong Il. The book chronicles the senior Kim's use of kidnapping and missile tests as overtures to negotiations with America and South Korea. His children dutifully copied these tactics at the summits that followed the Olympics. For now, the younger Mr Kim is fixated on military development, but history suggests he will one day want to talk. Those across the table would do well to have studied the family's approach to bargaining and be adept at decoding its propaganda. ■

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Department of sanitation

Heaps of trouble

Wasteland. By Oliver Franklin-Wallis. *Hachette Books*; 400 pages; \$30. *Simon & Schuster*; £20

IN “OUR MUTUAL FRIEND”, Charles Dickens's last complete novel, stray paper “hangs on every bush, flutters in every tree, is caught flying by the electric wires, haunts every enclosure”. Since those words were published in the 1860s, the world's waste problem has changed in both scale and composition. These days plastic in one form or another is strewn on verges, clogs rivers and swirls around oceans in vast gyres. Circulated by winds and tides, tiny nanoplastics have penetrated all manner of watery ecosystems, reaching both the Earth's poles and its highest peaks, with unknown consequences for the planet.

Worried by the pollution caused by a throwaway culture, Oliver Franklin-Wallis—a British journalist who has written for *The Economist*—heads to places that best illustrate this profligacy. In “Wasteland” he visits an Indian landfill that is piled almost as high as the Qutub Minar, a well-known minaret in Delhi; Ghana's largest second-hand clothes market, through which 15m garments are thought to pass every week; a former mining area in America that is blighted by dumped lead, zinc and cadmium; and a defunct nuclear-power plant in the north-west of England, which contrasts starkly with the natural beauty of the nearby Lake District. He sees these places as evidence of human myopia about the Earth's fragility and the finitude of its resources.

Rubbish, the author notes, is often deposited “on the margins, and on the marginalised”. He explains the concept of “toxic colonialism”, whereby trash is shipped by wealthier countries to poorer ones, and shows its detrimental effects up close. But he also acknowledges that the waste trade can sometimes be beneficial to communities on the receiving end: what one person deems useless, another sees as a potential source of income.

Throughout his tour of disfigured landscapes and industrial incinerators, Mr Franklin-Wallis decries the tactic of “planned obsolescence”: ie, the marketing of products that quickly need to be replaced. A notorious early-20th-century example was the “light-bulb cartel”, who conspired to slash the lifespan of their filaments. These days items ranging from “fast fashion” to wireless earbuds are ▶▶

liable to be thrown away or forgotten in a drawer before long.

The book comes alive in its descriptions of people and places. A paper-mill worker in southern England is “bald and aquiline, monkish, with the gentle stoop of an under-watered tulip”. The appearance of a zero-waste zealot in the north of England is “somewhere between affable climate activist and festival drug-dealer”. The colours and buzz of a market day in Accra are sketched in short, lively sentences, as is the dusty decay of an abandoned town in Oklahoma. Happily, Mr Franklin-Wallis

writes stylishly about ugly things: cranes at a site for burning garbage “move slowly, Damoclesian, their noise a deep rumble”; the flow of rubbish at a waste plant is “relentless, the choreography balletic”.

“Wasteland” is heavy on facts, many of them interesting and sobering. Twenty thousand plastic bottles are sold around the world every second. The world produced 2bn tonnes of solid waste in 2016, a figure that will rise to 3.3bn tonnes by 2050. But the piles of numbers can occasionally be a strain. At such moments, readers may find themselves agreeing that

waste is “not the most appealing subject” for a book, as the author himself admits near the beginning of his.

Overall, however, he dispels that impression. “Wasteland” does not offer novel solutions to the problem of waste. Mr Franklin-Wallis wants you to buy less and recycle more, along with a crackdown on “greenwashing” (whereby companies make exaggerated claims about their environmental credentials). But he succeeds in outlining the size of the challenge. His book should prompt serious discussion in boardrooms and parliaments. ■

Johnson The ghost in the AI machine

Talking about artificial intelligence in human terms is natural—but wrong

MY LOVE'S LIKE a red, red rose. It is the east, and Juliet is the sun. Life is a highway, I wanna ride it all night long. Metaphor is a powerful and wonderful tool. Explaining one thing in terms of another can be both illuminating and pleasurable, if the metaphor is apt.

But that “if” is important. Metaphors can be particularly helpful in explaining unfamiliar concepts: imagining the Einsteinian model of gravity (heavy objects distort space-time) as something like a bowling ball on a trampoline, for example. But metaphors can also be misleading: picturing the atom as a solar system helps young students of chemistry, but the more advanced learn that electrons move in clouds of probability, not in neat orbits as planets do.

What may be an even more misleading metaphor—for artificial intelligence (AI)—seems to be taking hold. AI systems can now perform staggeringly impressive tasks, and their ability to reproduce what seems like the most human function of all, namely language, has ever more observers writing about them. When they do, they are tempted by an obvious (but obviously wrong) metaphor, which portrays AI programmes as conscious and even intentional agents. After all, the only other creatures which can use language are other conscious agents—that is, humans.

Take the well-known problem of factual mistakes in potted biographies, the likes of which ChatGPT and other large language models (LLMs) churn out in seconds. Incorrect birthplaces, non-existent career moves, books never written: one journalist at *The Economist* was alarmed to learn that he had recently died. In the jargon of AI engineers, these are “hallucinations”. In the parlance of critics, they are “lies”.



“Hallucinations” might be thought of as a forgiving euphemism. Your friendly local AI is just having a bit of a bad trip; leave him to sleep it off and he’ll be back to himself in no time. For the “lies” crowd, though, the humanising metaphor is even more profound: the AI is not only thinking, but has desires and intentions. A lie, remember, is not any old false statement. It is one made with the goal of deceiving others. ChatGPT has no such goals at all.

Humans’ tendency to anthropomorphise things they don’t understand is ancient, and may confer an evolutionary advantage. If, on spying a rustling in the bushes, you infer an agent (whether predator or spirit), no harm is done if you are wrong. If you assume there is nothing in the undergrowth and a leopard jumps out, you are in trouble. The all-too-human desire to smack or yell at a malfunctioning device comes from this ingrained instinct to see intentionality everywhere.

It is an instinct, however, that should be overridden when writing about AI. These systems, including those that seem to converse, merely take input and pro-

duce output. At their most basic level, they do nothing more than turn strings like 001000101001010 into 1011100100100001 based on a set of instructions. Other parts of the software turn those 0s and 1s into words, giving a frightening—but false—sense that there is a ghost in the machine.

Whether they can be said to “think” is a matter of philosophy and cognitive science, since plenty of serious people see the brain as a kind of computer. But it is safer to call what LLMs do “pseudo-cognition”. Even if it is hard on the face of it to distinguish the output from human activity, they are fundamentally different under the surface. Most importantly, cognition is not intention. Computers do not have desires.

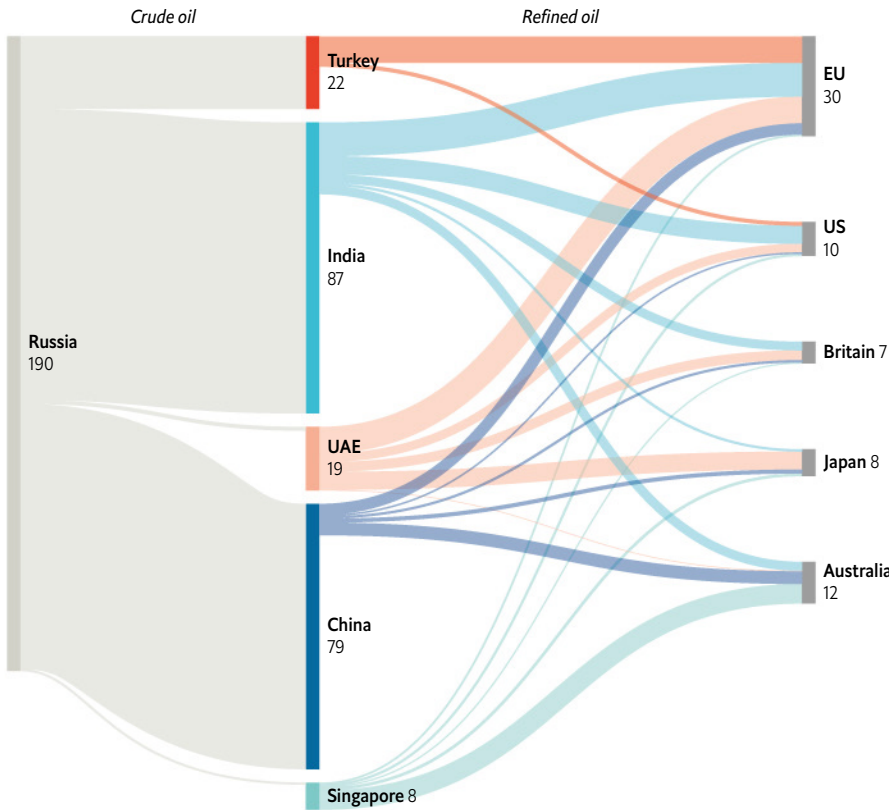
It can be tough to write about machines without metaphors. People say a watch “tells” the time, or that a credit-card reader which is working slowly is “thinking” while they wait awkwardly at the checkout. Even when machines are said to “generate” output, that cold-seeming word comes from an ancient root meaning to give birth.

But AI is too important for loose language. If entirely avoiding human-like metaphors is all but impossible, writers should offset them, early, with some suitably bloodless phrasing. “An LLM is designed to produce text that reflects patterns found in its vast training data,” or some such explanation, will help readers take any later imagery with due scepticism. Humans have evolved to spot ghosts in machines. Writers should avoid ushering them into that trap. Better to lead them out of it.

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“Writing With Style”, a new version of *The Economist’s* style guide by Lane Greene, our Johnson columnist, is out now.

→ Countries that ban imports of Russian crude still buy refined oil products potentially made from it

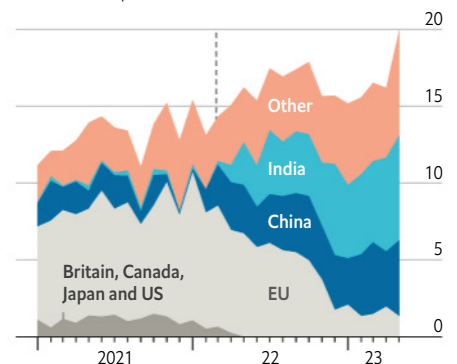
Seaborne oil trade, million tonnes
February 24th 2022-June 18th 2023



Russian crude-oil production
Million barrels per day



Seaborne crude-oil imports from Russia
Million tonnes per month



Sources: CREA; Kpler; Rystad Energy; bruegel.org

What goes around comes around

New buyers of Russian crude are now exporting more refined oil to the West

WESTERN COUNTRIES imposing sanctions on Russia's oil industry have had to thread a needle. Every barrel the country sells helps finance its war in Ukraine. But a sharp cut in Russian exports would send prices surging, raising the value of Russia's remaining output.

Seeking to avoid this risk, the G7 group of big economies in September announced a price cap. This lets insurers and shippers under their laws deal in Russian oil only if it is priced below a given level. Firms in the "price-cap coalition", which also includes the EU and Australia, make up the bulk of global maritime-services capacity. The cap took effect in December at \$60 a barrel of crude oil, 30% below the market price.

On February 5th the countries set new limits of \$100 for oil products worth more than crude, like diesel, and \$45 for those that are cheaper, like fuel oil. The EU, join-

ing other Western countries, also banned imports of such goods from Russia.

At first glance, these rules seem to have scrambled pre-war trade routes, with China and India replacing the EU and G7 as the main recipients of Russia's seaborne oil. But a recent report by the Centre for Research on Energy and Clean Air, a think-tank, suggests that the real change is not so drastic, because the new buyers may still sell the oil to the West after refining it.

The report designates China, India, Singapore, Turkey and the United Arab Emirates as "laundromats" for Russian oil. Together, during the war's first year the volume of their imports of Russian crude climbed by 140% (77.3m tonnes, worth \$50bn) from the previous year. Their exports of refined oil products to price-cap countries also rose in volume by 26% (10.3m tonnes, worth \$19.5bn), compared with just 2% to other destinations.

The laundromats are not necessarily selling products made from Russian crude to the West. They could easily use oil from other sources to generate refined exports, and make up for the shortfall with Russian supplies. But on net, bans and price caps have not stopped Russian oil from powering Western economies. They have just

created opportunities for middlemen.

This does not mean that the cap is failing. As long as it cuts Russian profits, it is doing its job. And the new rules do impose costs on Russia. Shipping oil to China and then to Europe burns a lot of it in the process. Refiners have to adjust to new grades of crude. And dodging the price cap requires new, possibly unfavourable deals with non-Western tankers and insurers.

However, these costs are hard to measure. Although tracking firms report that Russia's Urals crude sells for \$25-35 a barrel below the global Brent benchmark, records of sales to countries such as India reveal much higher prices. Russia also ships oil to China via pipelines, avoiding the price cap.

Official Russian figures show oil production 8% below pre-war forecasts, and revenues in the first quarter of 2023 down 40% year-on-year. But some of the firms handling Russian oil may have Kremlin ties, keeping additional income close to Mr Putin. And if global oil prices rebound, the \$60 cap will prove ever harder to enforce. ■

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Tell me lies about Vietnam

Daniel Ellsberg, leaker of the Pentagon Papers and anti-war activist, died on June 16th, aged 92

TWO THATCH huts were still smouldering when Daniel Ellsberg and his group reached the village. It took nothing to destroy them; just a Zippo lighter. Children were searching for toys in the ashes. In the first days of his posting to Saigon in 1965, to advise on General Edward Lansdale's "pacification" programme, he had fallen in love with Vietnamese children: their nimbleness, their boldness, their fascination with the hair on his arms. They had followed him around like a cloud of birds. Now he watched one little girl pull out a blackened doll.

He was directly implicated in this. Since 1964 he had been working at the Pentagon as assistant to John McNaughton, number two to Robert McNamara, the secretary of defence. With McNaughton, he had scoured for gory details of Vietcong atrocities to justify heavier American involvement. (Those burned huts, he was told, were VC hideouts.) Together they had drafted lies for McNamara to tell the press.

He did not see the wrongness of that because he was a patriot and a hawk; an all-American, who wanted to serve the president wherever he was sent. Though he was an intellectual, not any sort of jock, he had enlisted in the marines, passing out as a first lieutenant and taking his rifle company briefly to the Middle East. In Vietnam, as a civilian, he encountered the enemy in glimpses: shadows in ricefields, wooden traps dropped on a trail. From those signs alone, he knew America could not win a war there. With luck, however, limited military interventions might do the job.

At the same time, his unease was growing. He had a deep-seated horror of military attacks on civilians, laid down in childhood as he heard reports of the bombing of Warsaw and Rotterdam. At school in a tranquil suburb of Detroit he was shown a slim, silver magnesium bomb whose flames could not be doused with water, only with the sand that stood in a bucket in each classroom. He knew then that nothing was so purely evil as the deliberate bomb-

ing of women and children. When war became nuclear, he resolved to oppose those weapons always. At the RAND Corporation in California he took part in planning America's strategy after nuclear attack, but his own aim was to make that insanity impossible.

In 1968 he was back at RAND again, helping to compile for McNamara a "History of the US Decision-Making Process on the Vietnam Policy" since 1945, loosely known as the Pentagon Papers. This played to his strengths. War policy was a perfect worked example of his Harvard dissertation on how people weighed risk and uncertainty when they made decisions. His "Ellsberg paradox" showed that they tended to shy away from ambiguity and act on what they thought probable, even if the evidence was scant and equivocal and the outcome might be worse. In the Pentagon Papers, this was the *modus operandi*. The Gulf of Tonkin incident in 1964, when an attack by North Vietnam on an American ship gave a pretext for getting involved in Indochina, was largely invented. The enemy's intentions were assumed or guessed at. The secret objective of bombing North Vietnam, in McNamara's own words, was to contain China.

As that bombing escalated, Mr Ellsberg knew he had to expose the lying, killing machine. The evidence was in his own four-drawer safe, easily released. All the same, he waited, weighing the risks and uncertainties. If he leaked the papers, he would probably go to jail for a long time. If he did not, he was a coward perhaps, but would also keep his job and the secrets entrusted to him. Did his duties as a faithful employee and a provider outweigh his duties to the human race? The moral course was not clear-cut.

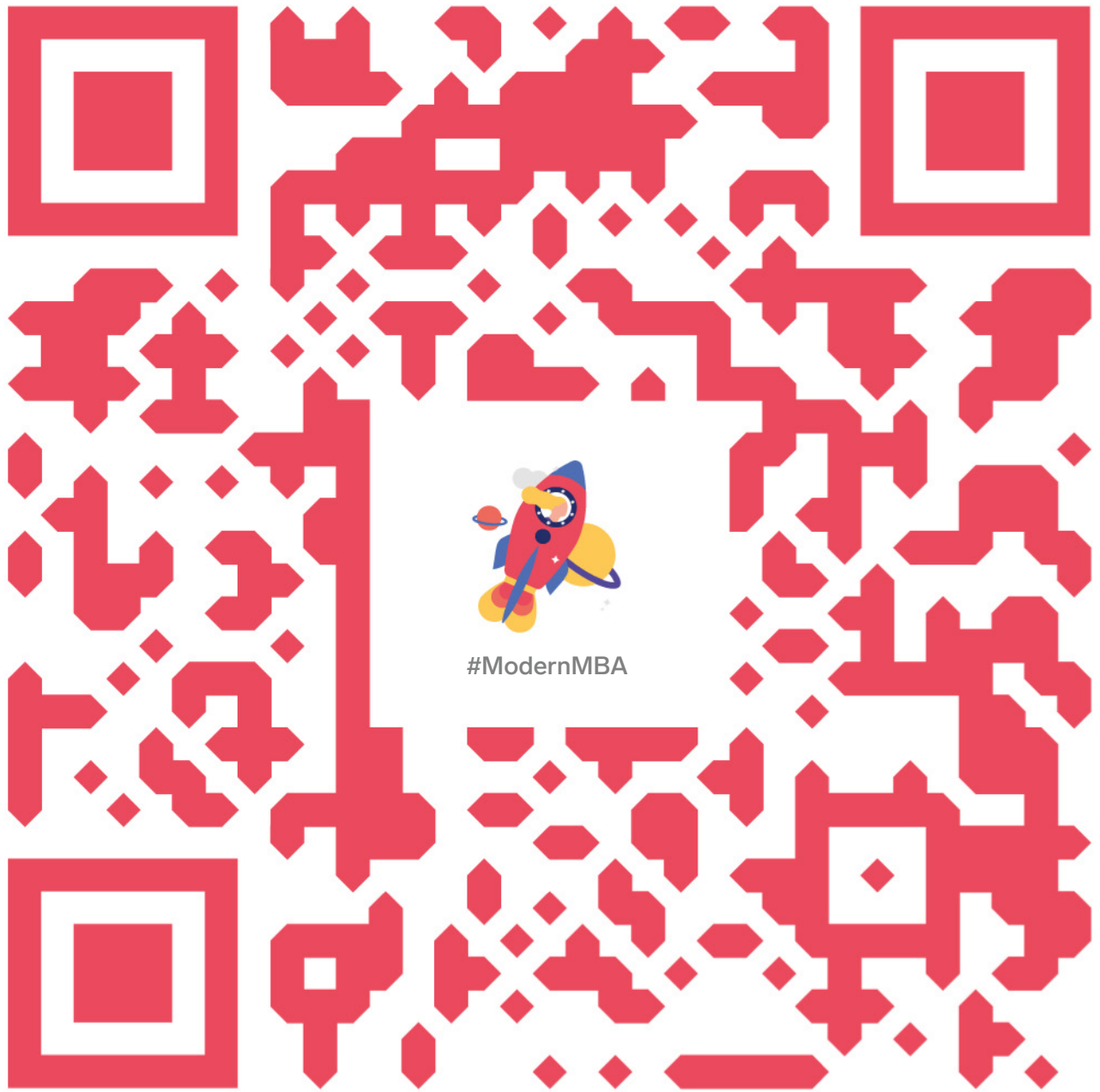
Yet the war itself was immoral, and that decided him. When in 1969 he heard a draft-resister, Randy Kehler, speak of a world of non-violence and the "beauty" of going to jail in the name of peace, he wept for more than an hour. That was the life he wanted to lead. He began to smuggle the "History", 7,000 pages in all, out of the RAND complex in his briefcase by night, copying it on a Xerox machine with the help of a friend. On his way home after the first session, in the small hours, he paused to body-surf on the waves of the Pacific. He was free; he had found the power to resist.

The copies went to Neil Sheehan, a reporter for the *New York Times*, and in June 1971 the *Times* began to serialise the findings. President Richard Nixon tried to stop publication, both there and in the *Washington Post*; but when the case went to the Supreme Court the court upheld the freedom of the press against executive pressure. It was a famous victory. The Ellsberg trial, in 1973, was another: he was charged under the Espionage Act, which carried a maximum sentence of 115 years in jail, but all charges were dismissed. He was now a hero of the anti-war movement.

Yet he felt he had failed, because he had not stopped the war. At best, he had shortened it. And it was not the leak that achieved even that; it was Nixon's decision to "get this sonofabitch" by creating the "Plumbers" to burgle the office of Mr Ellsberg's former psychiatrist, to prove him unhinged. When the Plumbers moved on to try to raid the Watergate complex, a scandal erupted that spared Mr Ellsberg prison and brought down the president. Ending the Vietnam war was then only a matter of time.

He campaigned for it with all his lean-built energy and eloquence. Then, for half a century, he proselytised for peace and against nuclear weapons. He was arrested 90 times. The Iraq war energised him especially, founded as it was on the same deliberate delusion that had underpinned Vietnam. Wholeheartedly, he supported the whistleblowers—Edward Snowden, Chelsea Manning—who followed his example. He urged those who knew the truth not to wait, as he had, until the bombs were falling.

He had once believed Americans were the good guys. Now, injured to seeing perfidy and conspiracies everywhere, he accused America of imperial ambitions in the post-colonial world. There were no good or bad guys any longer, he thought, only right and wrong. And, having weighed all the risks and run several of them, he knew without a doubt which side he had come down on. ■



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