The Economist

What Ukraine can teach Taiwan

Britain's dangerous asylum deal

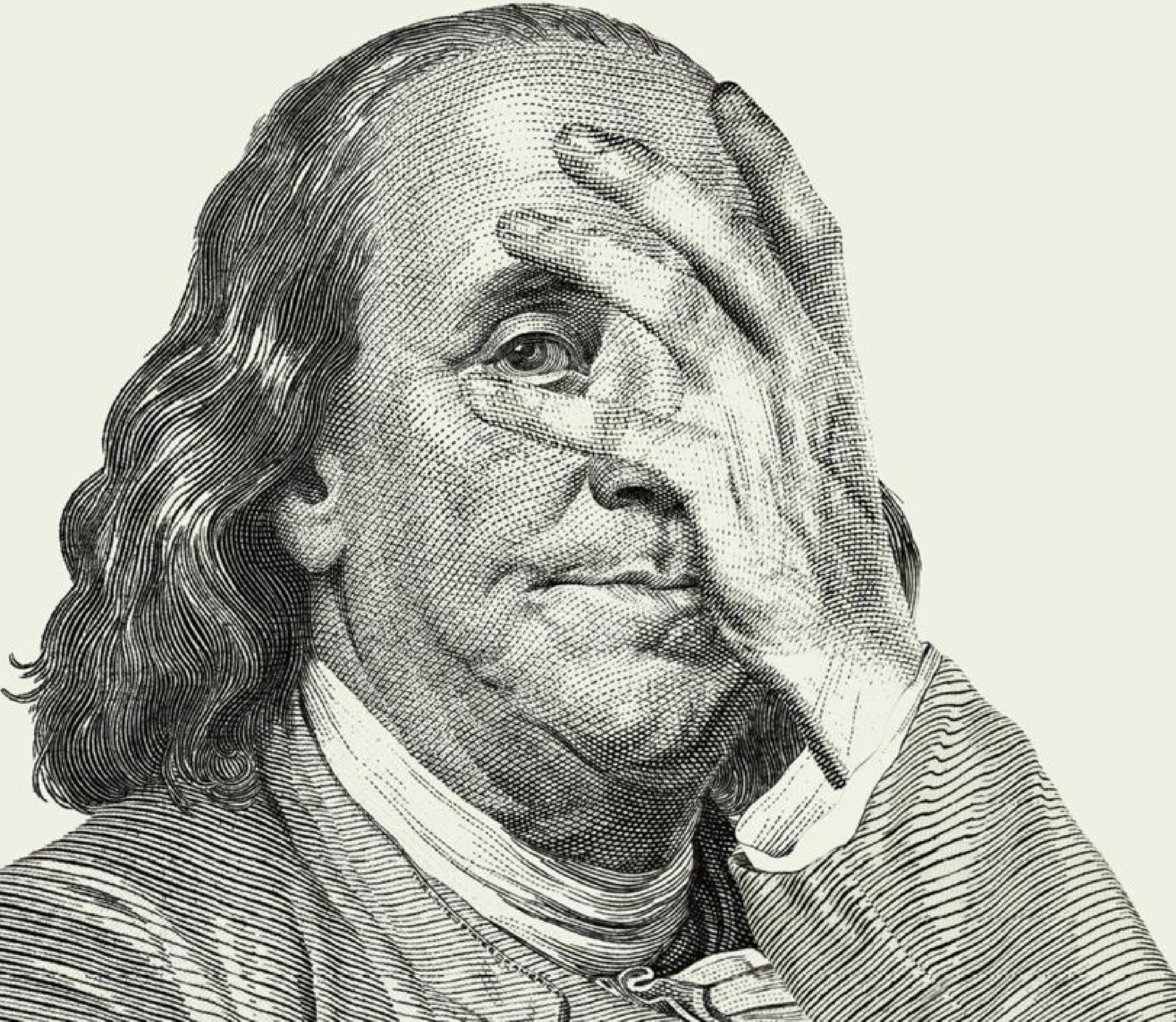
How to make a better spacesuit

A special report on central banks

APRIL 23RD–29TH 2022

THE FED THAT FAILED

How inflation humbled America's central bank



The world this week

Politics

Apr 21st 2022

Ukraine's president, Volodymyr Zelensky, said that a Russian assault had begun along a 400km front line in the east of the country. The attack had long been expected after Russia withdrew its troops from the north in order to concentrate on securing its objectives in the south and east. These are thought to include seizing all of the Donbas region and full control of a "land bridge" connecting Russia with the Crimean peninsula, which it annexed in 2014. Ukraine said it had repelled a number of Russian advances, but expected more. There were also a number of missile strikes on Kyiv and on Lviv, a city in the far west of Ukraine. The number of refugees passed 5m.

Russia's defence ministry released a video of a test of its Sarmat intercontinental ballistic missile, which can be fitted with nuclear warheads. Vladimir Putin, Russia's president, said the test would give "food for thought for those who…try to threaten our country".

Ukraine claimed to have hit the *Moskva*, the flagship of Russia's Black Sea fleet, with two missiles. Russia later admitted that it had sunk, although it blamed the loss on a fire. The sailors' families were given little information about survivors.

NATO countries began to deliver heavier weapons to Ukraine to help repel the Russian offensive. America, Britain and Canada all promised to supply heavy artillery. Russia stepped up its warnings of negative consequences if Finland and Sweden join NATO. The Finnish parliament held a debate on membership this week.

In Sweden dozens of people were injured, most of them police, when riots broke out in several cities over plans by the leader of a far-right Danish group to burn a copy of the Koran. He was conducting a "tour" of areas that have big Muslim populations.

Emmanuel Macron clashed with Marine Le Pen in their only televised debate ahead of the French presidential election on April 24th. Ms Le Pen was put on the spot about her previous links to Russia. She attacked Mr Macron over the high cost of living.

What to believe

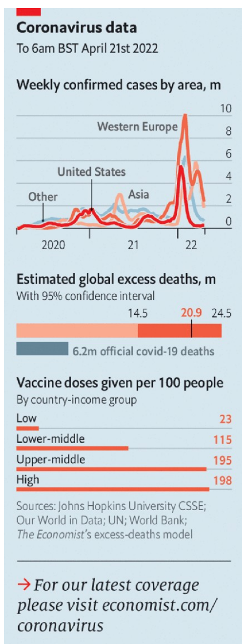
The authorities in Shanghai eased a weeks-long lockdown for some of the city's 25m residents. A health official said the virus was "under effective control" in parts of the city. But the government also reported that 17 people had died after contracting covid-19, the first such deaths acknowledged by the state since 2020. Reports suggest the actual death toll in Shanghai is higher.

Protests continued in Sri Lanka over an economic crisis, which has seen food and fuel prices rocket. Police fired live rounds into a crowd of demonstrators, killing at least one. The government has suspended debt payments and is negotiating with the IMF.

Pakistan carried out air strikes in Afghanistan, killing almost 50 people, in response to an increase in attacks in Pakistan by jihadists that Pakistan says are based in Afghanistan.

José Ramos-Horta won East Timor's presidential election. A winner of the Nobel peace prize, Mr Ramos-Horta was president between 2007 and 2012. He says he ran for office again to bring stability to the young country.

More than 100 Palestinians were said to have been injured in the compound of Jerusalem's al-Aqsa mosque in clashes with Israeli riot police, who accused the Palestinians of throwing stones and fire crackers at Jews praying at the Wailing Wall below. Several hundred were arrested, most of whom were later released. Israel carried out an air strike in Gaza after it said a rocket was fired from there, the first such attack in months. No one was hurt.



The Economist

The worst drought in the Horn of Africa since 1981, together with conflict in Ethiopia, may lead to as many as 20m people going hungry this year, the UN warned. It says that about 6m people in Somalia are on the brink of famine. Millions more are starving in Ethiopia's rebel-held Tigray region.

At least 443 people were killed, and dozens more are missing, after floods swept away nearly 4,000 homes around the South African city of Durban. Many of those who died lived in shanty-towns.

The British government's latest scheme to tackle illegal immigration was widely denounced. It involves deporting asylum-seekers who cross the English Channel without permission to Rwanda, 6,500km from Britain. Their claims will be reviewed in the African country, where they will be given asylum if successful. Even some government MPs criticised the plan.

Boris Johnson apologised to Parliament for breaking covid restrictions in 2020, for which the police have fined him. MPs from his party, the Conservatives, rallied round the prime minister. The opposition claims he lied to Parliament.

Power play

In a blow to President Andrés Manuel López Obrador, Mexico's congress voted down a constitutional reform to hand back control of the power industry to the state-owned electricity company. However, the president may be able to preserve some parts of his signature policy after the Supreme Court ruled that elements of the reforms could be adopted as normal legislation. Mr López Obrador did manage to push a law through congress that nationalises lithium reserves. "The lithium is ours," he boasted.

America's border force had 221,000 "encounters" with migrants crossing the Mexican border in March, the highest number in two decades (some in that count crossed several times). Nearly 110,000 were expelled under Title 42, a pandemic health measure. It expires next month, prompting fears of even more crossings.

The Biden administration appealed against a court ruling that rescinded a requirement for masks to be worn on public transport. In the meantime airlines have made it optional for passengers and crew to wear a mask. The mandate had caused angry scenes on planes when travellers refused to mask up and had become a political lightning-rod.

Business

Apr 21st 2022

Having built a stake in Twitter, then being offered and rejecting a seat on its board, Elon Musk proposed taking the company private with a $43bn bid. In response Twitter adopted a poison pill that in effect discourages anyone from accumulating more than 15% of its shares (Mr Musk holds 9.2%). Many wonder if all this is just more mischief-making by Mr Musk, who has clashed with Twitter over free speech, though he is trying to get other backers on board.

Meanwhile, Tesla reported a record quarterly net profit of $3.3bn as sales soared. The electric-car maker has largely weathered the supply-chain crunch that has hampered production in the industry, despite the shutdown of its factory in Shanghai amid a covid outbreak. Mr Musk, Tesla's boss, said he would make 1.5m vehicles this year, up by 60% from last year, despite the bottlenecks.

A regulatory filing revealed that Amazon will conduct a racial audit of its employees' pay and conditions. It will be led by Loretta Lynch, a former attorney-general under Barack Obama. It follows demands from activist shareholders that big firms do more to avoid policies that have disparate effects on different groups.

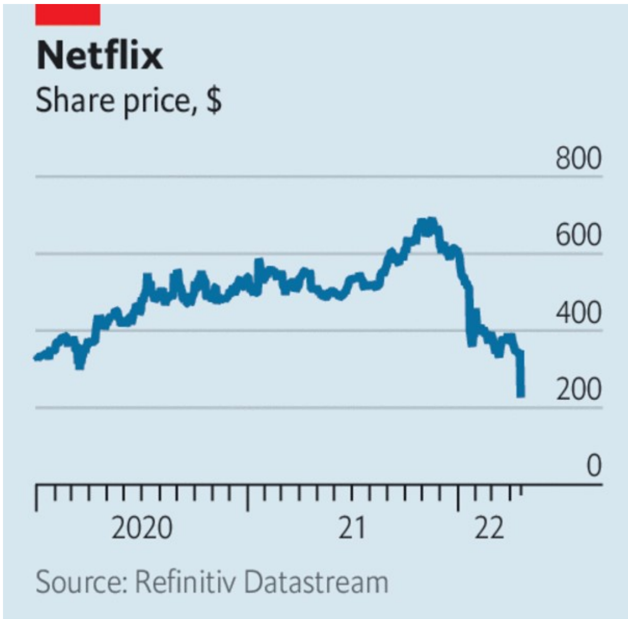
Game over

With China's regulators cracking down on the tech industry, Tencent decided to block access on its platforms to foreign video games that have not been approved by the government, such as "Grand Theft Auto". A regulator reminded game providers that they are "strictly prohibited" from live-streaming content that displeases the censors.

Japan's finance minister said that the yen's dramatic weakening against the dollar was "undesirable", and making imports more expensive. The Japanese currency has fallen by 10% against the greenback this year to a 20-year low. Pressure on the yen is being caused by the increasing contrast between the monetary policies of Japan and the rest of the rich world. While the Federal Reserve and other central banks have raised interest rates, the Bank of Japan has remained committed to keeping them low, and to buying an unlimited quantity of government debt.

The war in Ukraine will contribute to a slowdown in global growth, according to the IMF, which now expects the world economy to expand by 3.6% this year, almost a percentage point below its previous forecast in January. GDP growth in the euro area was revised down to 2.8% (from 3.9%) because of its reliance on now partially embargoed Russian oil and supply-chain disruptions.

China's GDP was 4.8% larger in the first quarter of 2022 than a year earlier. The figure was better than expected, but didn't capture the full effect of recent lockdowns in Shanghai and other cities, which were imposed in mid-March. Other data point to a slowing economy. Retail sales in March were down by 3.5% and the unemployment rate climbed to 5.8%, the highest it has been since the pandemic began.



The Economist

Netflix shook investors by reporting its first drop in subscribers for more than a decade. The media-streaming service lost 200,000 users over the first three months of the year, and expects another 2m will leave in the current quarter, almost 1% of its customer base. It blamed some of that on the 100m households that share their passwords with freeloaders, but competition from Disney+ and a rise in living costs also play a part. In Britain a record number of households are cancelling streaming services, a survey found. Netflix's share price tumbled. Bill Ackman, a big investor, cashed out at a loss.

Food delivery is another industry showing signs of a post-pandemic slowdown. Just Eat Takeaway, which operates in 23 countries, said that growth remained "challenging", and signalled that it has lost its appetite for Grubhub, a smaller American rival that it took over less than a year ago. It is exploring options for the subsidiary, including a possible sale.

It was a busy week for Blackstone. The investment firm joined with the Benetton family of Italy to offer €58bn ($63bn) to take Atlantia private. Atlantia operates Rome's two main airports and three on the French Riviera, as well as 9,400km of toll roads. The Benettons already own a third of the company. Blackstone also agreed to buy out American Campus Communities, a provider of student housing across the United States, in a deal worth $12.8bn.

Financial instruments

The hedge-fund billionaire who owns Steinway filed documents to return it to public markets in an IPO. John Paulson's firm bought the piano-maker in 2013, topping a crescendo of offers with a $512m bid. Founded by a German immigrant to New York in 1853, Steinway's forte today is as a luxury brand, notably in China. There are around 40m practising Chinese pianists compared with 6m Americans who like to tickle the ivories.

KAL’s cartoon

Apr 23rd 2022

Economist.com Kal

Dig deeper into the subject of this week’s cartoon:
The West needs to send Ukraine more and better weapons
How to deter China from attacking Taiwan
Why Olaf Scholz hesitates to send Ukraine heavy weapons

KAL’s cartoon appears weekly in *The Economist*. You can see last week’s here

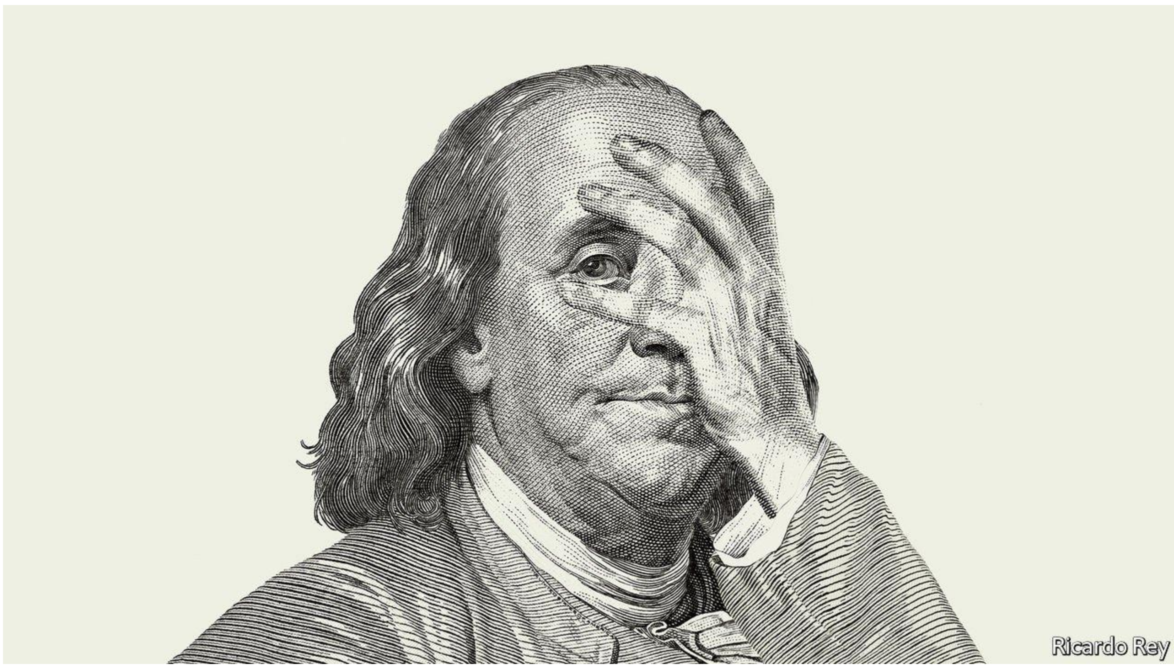
Leaders

The Fed that failed

Why the Federal Reserve has made a historic mistake on inflation

What comes next will set the path for the world economy

Apr 23rd 2022



CENTRAL BANKS are supposed to inspire confidence in the economy by keeping inflation low and stable. America's Federal Reserve has suffered a hair-raising loss of control. In March consumer prices were 8.5% higher than a year earlier, the fastest annual rise since 1981. In Washington inflation-watching is usually the preserve of wonks in shabby offices. Now nearly a fifth of Americans say inflation is the country's most important problem; President Joe Biden has released oil from strategic reserves to try to curb petrol prices; and Democrats are searching for villains to blame, from greedy bosses to Vladimir Putin.

It is the Fed, however, that had the tools to stop inflation and failed to use them in time. The result is the worst overheating in a big and rich economy in the 30-year era of inflation-targeting central banks. The good news is that inflation may have peaked at last. But the Fed's 2% target will remain a long way off—forcing agonising choices on the central bank. Apologists for

America's policymakers point to annual price rises of 7.5% in the euro area and 7% in Britain as evidence of a global problem, driven by the soaring price of commodities, especially since Russia's invasion of Ukraine. Nearly three-quarters of the euro zone's inflation is attributable to rocketing energy and food prices.

America, though, benefits from abundant shale gas, and its higher incomes mean that staples have a smaller effect on average prices. Strip out energy and food and the euro zone's inflation is 3%—but America's is 6.5%. Also, America's labour market, unlike Europe's, is clearly overheating, with wages growing at an average pace of nearly 6%. Recent falls in the prices of oil, used cars and shipping probably mean that inflation will fall in the coming months. But it will stay far too high, given the underlying upward pressure on prices.

Uncle Sam has been on a unique path because of Mr Biden's excessive $1.9trn fiscal stimulus, which passed in March 2021. It added extra oomph to an economy that was already recovering fast after multiple rounds of spending, and brought the total pandemic stimulus to 25% of GDP—the highest in the rich world. As the White House hit the accelerator, the Fed should have applied the brakes. It did not. Its hesitancy stemmed partly from the difficulty of forecasting the path of the economy during the pandemic, and also from the tendency of policymakers to fight the last war. For most of the decade after the global financial crisis of 2007-09 the economy was hung over and monetary policy was too tight. Predicting inflation's return was for those who wore tinfoil hats.

Yet the Fed's failure also reflects an insidious change among central bankers globally. As our special report in this issue explains, around the world many are dissatisfied with the staid work of managing the business cycle and wish to take on more glamorous tasks, from fighting climate change to minting digital currencies. At the Fed the shift was apparent in promises that it would pursue a "broad-based and inclusive" recovery. The rhetorical shift ignored the fact, taught to every undergraduate economist, that the rate of unemployment at which inflation takes off is not something central banks can control.

In September 2020 the Fed codified its new views by promising not to raise interest rates at all until employment had already reached its maximum sustainable level. Its pledge guaranteed that it would fall far behind the curve. It was cheered on by left-wing activists who wanted to imbue one of Washington's few functional institutions with an egalitarian ethos.

The result was a mess which the Fed is only now trying to clear up. In December it projected a measly 0.75 percentage points of interest-rate rises this year. Today an increase of 2.5 points is expected. Both policymakers and financial markets think this will be enough to bring inflation to heel. They are probably being too optimistic again. The usual way to rein in inflation is to raise rates above their neutral level—thought to be about 2-3%—by more than the rise in underlying inflation. That points to a federal-funds rate of 5-6%, unseen since 2007.

Rates that high would tame rising prices—but by engineering a recession. In the past 60 years the Fed has on only three occasions managed significantly to slow America's economy without causing a downturn. It has never done so having let inflation rise as high as it is today.

An American contraction therefore hangs over the global economy as part of a trio of risks, along with Europe's energy security and China's struggle to suppress covid-19. Poor and middle-income countries in particular have a lot to lose from sharply higher rates at the Fed, which will tempt away capital and weaken their exchange rates, especially if a global downturn saps demand for their exports at the same time.

Does the Fed have the stomach to inflict such economic pain? Many economists advocate higher inflation, because in the long run interest rates would go up in tandem, lifting them further away from zero, below which they are hard to cut in a crisis. Inflation is already helping the federal government by shrinking the real value of its debts. Around 2025, when the Fed reviews its policymaking framework, it will have the chance to raise the target. There is nothing special about 2%, except the fact that the Fed has promised it in the past.

My word is my bond

Inflation that is stable and modestly above 2% might be tolerable for the real economy, but there is no guarantee the Fed's stance today can deliver even that. And breaking promises has consequences. It hurts long-term bondholders, including foreign central banks and governments which own $4trn-worth of Treasury bonds. (A decade of 4% inflation instead of 2% would cut the purchasing power of money repaid at the end of that period by 18%.) It might add an inflation risk premium to America's cost of borrowing. And if even America broke its inflation promises in tough times, investors might worry that other central banks—many of which are looking over their shoulders at indebted governments—would do the same. In the 1980s the recessions brought about by Paul Volcker's Fed laid the foundations for inflation-targeting regimes worldwide. Every month inflation runs too hot, part of that hard-won credibility ebbs away. ■

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Somebody else’s problem

Shipping asylum-seekers to Rwanda could wreck the Refugee Convention

The fact that Britain's plan could work is what makes it so dangerous

Apr 23rd 2022

BRITAIN WAS one of the first countries to ratify the Refugee Convention of 1951, which spelled out countries’ obligations to protect fugitives from persecution who had arrived in their territories and not return them to danger. The convention was “an excellent instrument”, said Selwyn Lloyd, a Conservative minister in the Foreign Office. No country in Europe was doing as much to help refugees, boasted another minister.

The country still leads the world in devising new ways of dealing with refugees. Now, however, Britain is leading in the opposite direction. The Conservative government is perturbed by the growing number of people (some 29,000 last year) who reach Britain in small boats crossing the Channel from France. On April 14th it signed a memorandum of understanding with Rwanda which would allow it to fly asylum-seekers who reach Britain’s shores straight to the African country without listening to their claims. Rwanda, which gets cash as part of the deal, will consider whether to grant them asylum—in Rwanda. They will not be allowed back to Britain.

If the Conservatives pull this off, it will be a perilous new step for the world's refugee system. Britain is not trying to process asylum claimants offshore, as Australia did when it interned boat people in Nauru and Papua New Guinea. Nor is it trying to push asylum-seekers back to the country they arrived from, as America has done since covid-19 hit (although it will soon relent) and as the European Union has done with Syrians who cross from Turkey to Greece. Britain proposes to send people 6,500km away, regardless of where they came from.

The plans have been attacked by the Labour Party, refugee groups and the Archbishop of Canterbury. Even the most senior civil servant in the Home Office has demurred. None of that will worry the government, which relishes scraps with such softies. And many of their objections are the wrong ones.

Critics claim that the Rwanda scheme will be costly, like Australia's, and that it may not work as intended. Judges could strike it down. Britain may end up sending so few people to Rwanda that asylum-seekers will not be deterred from crossing the English Channel. But it is not clear that an asylum system ought to be cheap. And if Britain fails to send many asylum-seekers to Rwanda (as has happened with Denmark, which signed a much vaguer deal with the country last year) it will embarrass the British government but no one else.

The much greater danger is that the plan works. If Britain manages to send thousands of asylum-seekers to Africa, others are likely to get the message and not try to come to Britain at all. Few refugees would find Rwanda congenial. Boris Johnson, Britain's prime minister, calls it "that dynamic country" and "one of the safest...in the world"; his home secretary, Priti Patel, says it has "many, many interests in common" with Britain. Such praise is overblown. Rwanda may be orderly, but it is also extremely poor and has one of Africa's scariest, most repressive governments. Britain has accurately criticised its human-rights violations in the past, although it may refrain from now on. Dealing with an autocrat messes with your moral compass.

If asylum-seekers steer clear of Britain, other rich democracies will surely wonder why they should adhere strictly to decades-old conventions. They too are likely to start cutting deals to offload their asylum-seekers onto poorer countries, no matter how autocratic. The world will stumble towards a new system for processing refugees, in which money buys immunity from claims. The countries most able to accommodate desperate people will end up doing even less than they do today.

Calais, not Kigali

Some of Mr Johnson's and Ms Patel's arguments are right. They correctly observe that the Channel crossing is dangerous and that asylum-seekers must pay smugglers to arrange the journey. The sight of ever more people crammed into dinghies irks voters, who can be generous towards immigrants when a crisis is in the news—witness their enthusiasm for welcoming Hong Kongers and Ukrainians. It is genuinely difficult to balance control of borders and compassion towards refugees.

But if chaos, danger and illegality are the problems, a better solution exists. France has suggested that Britain ought to process asylum claims on French turf. That would create new problems, the greatest of which is that Britain would almost certainly receive more asylum claims than it does now (lacking a moat, France gets twice as many). But it would clean up the mess in the Channel and on the north coast of France, where would-be asylum-seekers wait in awful conditions for a chance to cross. It would entail no soul-sapping deal with an autocrat. And it would uphold the principle that protecting refugees is a shared obligation, not something to buy your way out of. ■

Give them the tools

The West needs to send Ukraine more and better weapons

The next phase of the war may be harder—and just as important

Apr 23rd 2022

T HE BATTLE of Kyiv may be over, at least for now, but the battle of Donbas is becoming more intense. On April 18th Ukraine's government reported a wave of attacks along a 400km stretch of the front lines, mostly in the Donbas region, parts of which have been under the control of Russian-backed separatists since 2014. Vladimir Putin wants to grab the rest of Donbas, along with other bits of southern and eastern Ukraine. That may not sound as important as the siege of Kyiv, but the consequences of a Russian victory would be almost as bad.

Mr Putin has little to show for his war so far, which has succeeded mainly in killing civilians, mangling his own forces and levelling much of eastern Ukraine. The loss of an untold number of Russian soldiers (more than 20,000, according to the Ukrainians), eight generals and the flagship of Russia's Black Sea fleet, the *Moskva*, has been humiliating. If the latest push makes headway, Russia's dictator can claim vindication, while Ukraine will be left divided and disheartened. Russia might then choose to press its advantage, or simply “freeze” the conflict, leaving a devastated Ukraine to slide into dysfunction. Either way, Mr Putin would have prevented Ukraine from becoming the prosperous, pro-Western rebuke to his own rule that he so clearly fears.

It would be rash to assume that Russian forces will be as incompetent in the east as they previously were in the north, around the capital. For a start, they are now attacking from their home territory, not the temporary positions in Belarus they had taken up under the pretence of conducting “exercises”. Their supply lines will be shorter. And they will seek to fight on relatively open terrain where, in contrast to the forests around Kyiv, it will be easier for the invaders to spread out and harder for the defenders to ambush them.

Ukraine needs more help. The Western response so far, particularly that of America, has been remarkable. A steady flow of weapons, especially portable anti-tank and anti-aircraft missiles, made a huge difference in the defence of Kyiv. But to hold the Russians back along a long front, let alone force them to retreat from the territory seized since the war began on February 24th, will take heavier weapons too: tanks, planes, artillery and an abundant supply of ammunition to go with them.

This is not a simple matter. Ukrainian forces use mainly Soviet-era weaponry. In the short term, they need more of it: things like Mi G fighter jets and T-72 tanks, as well as S-300 missiles and Gvozdika howitzers. NATO countries that used to be Soviet satellites, such as the Czech Republic, Poland and Slovakia, have stocks of such kit, and have given Ukraine some of it. They should hand over more. But it will soon run out, and cannot be replenished, so the West needs to start supplying the more modern armaments used by most NATO countries, and training Ukrainian soldiers to use them. This week America, Britain and Canada said they would provide Ukraine with heavy artillery—a step in the right direction.

The good news is that NATO’s supply lines into Ukraine, mainly from Poland, are now well established. So far, Russia has not found an effective way to disrupt them. If the weapons continue to flow and the war grinds on, Russia’s economy, only around the size of Spain’s even before the war began and economic sanctions were imposed, will not be able to keep supplying weapons on the same scale that NATO can. If Mr Putin is to be defeated, and Ukraine allowed to determine its own future, it is not just the Ukrainian soldiers in Donbas, currently being pummelled by Russian jets, missiles and artillery, who will have to keep their nerve. NATO must be steadfast, too. ■

Read more of our recent coverage of the Ukraine crisis

How to become a porcupine

How to deter China from attacking Taiwan

What Taiwan can learn from Ukraine about resisting invasion

Apr 23rd 2022

THEY MAY be on the other side of the world, but few are watching the war in Ukraine more intently than the Taiwanese. The battle for survival of a young democracy against a bullying, autocratic neighbour that scorns its right to self-determination could one day be their own. When Xi Jinping and Vladimir Putin, the despotic presidents of China and Russia respectively, say their friendship has "no limits", Taiwan shudders.

Two obstacles prevent the mainland from forcing "reunification" with Taiwan, which it deems part of Chinese territory, even though the island has had a separate government since 1949. One is the 180km-wide strait of Taiwan. The other is America's military might. But China is fast building the wherewithal to overcome both. Some American commanders think China might attack before the end of the decade.

An invasion of Taiwan would be a disaster in several ways. It could snuff out one of Asia's most admirable democracies. Because Taiwan produces the world's most advanced computer chips, it would wreak havoc in the global economy. Breaching the “first island chain” that girds the mainland from Japan to Malaysia would also grant China’s armed forces unfettered access to the open ocean. That would endanger Japan and overturn the American-made order in the Indo-Pacific.

To prevent such a calamity, Taiwan, America and its allies must act on the (evolving) lessons of Russia’s invasion. The most important lesson is that the threat is real, and it is better to prepare now than to have to improvise in the heat of battle. Ukraine has shown how a stout fighting spirit, brave leadership, a resilient population—and Western arms—can keep at bay a bigger enemy. The better Taiwan prepares, the less likely China is to risk an invasion.

So Taiwan should think harder about defence. Its decision to rely less on conscripts and build a more professional force is a good one. But it should continue to provide military training to all men (and why not women, too?) and create a territorial defence force. It should also increase its military budget, which stands at about 2% of GDP—low for a country in such danger (Israel spends 5.6%). Just as Germany recently has, it should give spending a big boost as a signal of intent. It cannot hope to outspend China, whose defence budget is 20 times larger, or field more soldiers. Instead it will have to concentrate on becoming indigestible.

Luckily Taiwan already has a sound military doctrine to build on, the “Overall Defence Concept”, issued in 2017 but not fully embraced by the top brass. It is a “porcupine” strategy, based on ubiquitous mobile and concealable defensive weapons, especially missiles for use against ships and planes. This would mean giving up at least some of the expensive jets, ships and submarines Taiwan is currently seeking—but many of those are likely to be blown up when the shooting begins anyway.

Such a shift would be a huge gamble. In today’s “grey zone” conflict Taiwan faces constant harassment, such as incursions near its airspace that must be met by a stretched air force. Although Taiwan, as an island, is harder to invade than Ukraine, it is also harder to resupply. It may have to fight alone for weeks or months. And it cannot be certain whether or how soon America would come to its aid. The priority must be to hold out. Look at Ukraine: the longer it has fought, the more help it has received.

America can ease the transition. In return for military reform, it should provide more support. This should include upgrading political and military contacts, selling or giving more weapons, providing overt training and hosting joint exercises. Taiwan has pitifully little experience of operating with friendly forces. America should draw up and rehearse detailed plans—not least with Japan and other allies—to respond to a range of crises, from a naval blockade of Taiwan to an invasion.

All this will infuriate China. That is why President Joe Biden should be careful to maintain "strategic ambiguity", whereby America helps Taiwan defend itself but does not state clearly that it would go to war with China if it invaded. In the case of Ukraine, in contrast, he has said explicitly that America will not join the fighting for fear of starting "World War III".

Promising to fight for Taiwan, as some advocate, would do little to deter China, which already assumes America will do so. And such a promise would, at the very least, cause a diplomatic crisis. Better, therefore, to focus on practical steps to sharpen Taiwan's quills. A year ago this newspaper called Taiwan "the most dangerous place on Earth". America and Taiwan must encourage China to see it that way, too. ■

Read more of our recent coverage of the [Ukraine crisis]

Vested interests

The push for shareholder democracy should be accelerated

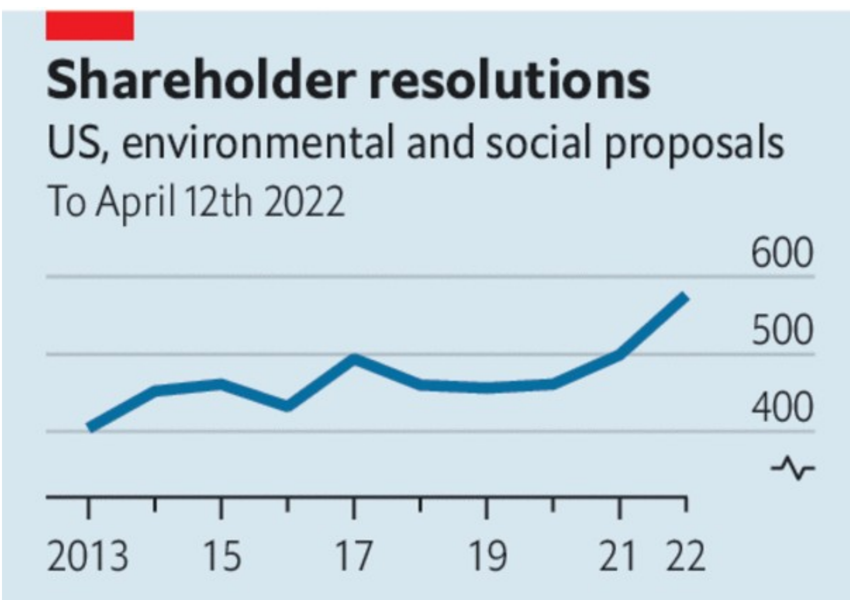
It is still too hard for small shareholders to be heard

Apr 23rd 2022

KEEPING SHAREHOLDERS satisfied used to be straightforward. If a firm could announce juicy profits, healthy cashflow and a perky dividend at the annual general meeting (AGM), applause was assured and few hard questions would be asked. But in recent years these meetings have shifted from routine talk of balance-sheets to loud battles over companies' broader purpose. Where once it was enough for bosses to nod to some vague notion of "stakeholder capitalism", now some investors demand that they present detailed strategies on everything from the environment to racial justice and even abortion. More, too, are highlighting the dissonance between companies' stated values and their political donations. Shareholders at American firms face a record volume of proposals on environmental and social issues: 576 resolutions as of April 12th, up from 499 last year. In the coming weeks an unprecedented number will be put to a vote.

This reflects investors' growing and understandable interest in mitigating risks that could threaten a wide variety of firms, such as climate change. It is also a side-effect of gridlock in Washington. Frustrated at the near-impossibility of getting bills through Congress, many activists are seeking change by passing motions at AGMs instead. This year the number of climate-related proposals faced by American firms has jumped by more than 40%. This is not the only lever that environmentalists can pull. In Europe they are increasingly using the courts to sway fossil-fuel firms and other big emitters. In California the state government is seeking to re-establish its credentials as a green pioneer. Nonetheless, shareholder activism is potent, and likely to intensify.

This is partly because it has become simpler. The past decade has seen a concentration of voting power among managers of large index funds. Three asset managers—BlackRock, State Street and Vanguard—together own over a fifth of the average company in the S&P 500, but wield even greater clout, because only 30% of retail investors bother to vote their shares. So the decision to approve a shareholder resolution often rests with just a few managers and pension trustees overseeing assets owned by millions. That means activists can concentrate their lobbying on a few big decision-makers, rather than having to track down and cajole lots of small ones.



The Economist

Most green and social proposals at American AGMs still fail, but they are gaining support. On average last year they won 34% of the vote, up from 19% a decade ago. Conservatives are worried. If managers decide their job is to pursue a long list of social goals, rather than to boost returns, capitalism will grow less efficient. Resistance is mounting. A new law in Texas bans that state from signing contracts with firms or investing in funds that shun fossil fuels. Other Republican-led states are considering bills to make it harder for pension funds for public workers to favour social goals over returns for pensioners.

Regardless of the merits of any individual proposal, it is reasonable to be uneasy that such a tiny group of asset managers exerts so much power over America's companies and, by extension, its economy. Fortunately, there are hints of democratisation. Startups and fintech firms are devising tools to make it easier for retail investors to vote their shares. The Securities and Exchange Commission has drawn up new rules, which will take effect later this year, allowing shareholders to appoint directors individually rather than as a slate supported by either management or dissidents. Most important is a push to allow investors in index funds, who currently can neither sell their holding of a given firm within an index, nor influence that firm via the fund's vote, to vote their shares directly. BlackRock has started letting some institutional clients do something similar already.

Such reforms are technically and legally fraught. Nonetheless, they are necessary. Firms should answer to all their shareholders, not just the well-organised few. Today most investors have little chance to turn ownership into a proportional share of influence. Efforts to make it easier for them to voice their priorities should be welcomed—and accelerated. ■

Letters

On Ukraine and the EU, business ethics, Britain, Hungary, hotels, water

Letters to the editor

A selection of correspondence

Apr 23rd 2022

Letters are welcome via e-mail to letters@economist.com

Ukraine in the EU

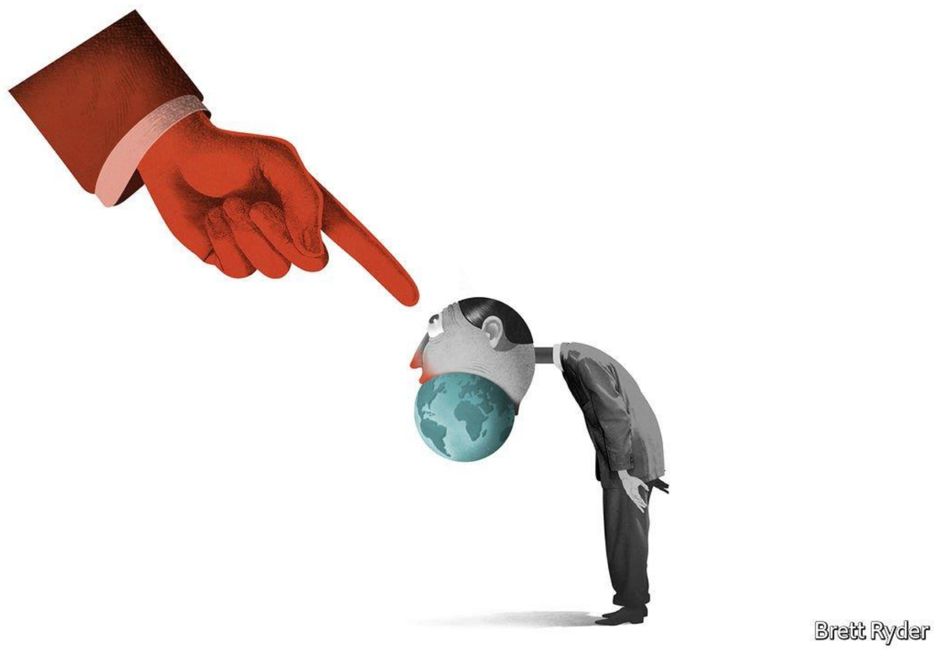
To focus on the eligibility of Ukraine as a candidate for European Union membership looks at only one part of a complicated equation (Charlemagne, April 2nd). You underestimate the perils of enlargement—Britain and Hungary are the two outstanding examples of failed membership, though others come close—and ignore the frailty of EU governance, which makes it impossible for the Brussels institutions to take on and internalise the national problems of newcomers. Emmanuel Macron has observed that as the EU gets to be more federal, accession becomes more challenging.

Instead of pushing a membership bid, which, as you say, even if successful would take a very long time, it would be better for Ukraine to aim for a new category of EU affiliate membership. This implies a swift upgrading of Ukraine's current association agreement. Affiliation would be open to all the

EU's neighbours that choose to trade within its regulatory orbit, requiring respect for its values but not adherence to its objectives of political, economic and monetary union.

Affiliate membership should be underpinned by participation in a new security architecture for Europe, established jointly by the EU and NATO, offering protection for Ukraine. Of course, this means eventual EU treaty change, but that forms a valid agenda for Mr Macron's second mandate.

ANDREW DUFF
Former member of the European Parliament
Cambridge



Business morality

Schumpeter's column on war and wokery (April 2nd) critiqued Jeffrey Sonnenfeld's promotion of business ethics. The column reckoned that unelected executives making "moral choices on behalf of customers and employees could undermine faith in democracy". However, com pany executives do indeed make moral choices, and on a daily basis. Every decision one makes, or avoids making, is a moral and ethical one. The question then is not whether chief executives should make ethical decisions, but if they will do so consciously and deliberately, or passively and mindlessly. Whether one agrees with any particular decision or action is one thing, but Mr Sonnenfeld's crusade to make such decisions clear, reasoned and well articulated should be praised, not derided.

M. ANDREW MCCONNELL
Chief executive
Rented
Atlanta

McDonald's leaving Russia or Nike featuring Colin Kaepernick in its advertisements are calculated choices. Indeed, in a world where voters are faced with at best only two real options at elections, perhaps the instantaneous ability to vote with one's feet on which company to buy from or work for is more democratic than the ballot box.

DOMINIC KING
Bath

Judges v the government

Your report on the efforts by Suella Braverman, the British government's attorney-gen eral, to rein in the judiciary identified a deliberate political strategy at play ("A Johnsonian lawyer", April 9th). However, it missed the main contradiction in Ms Braverman's argument that the judiciary is pitching itself against the authority of the people. For instance, in the case of the prorogation of Parliament, judicial rulings protected the sovereignty of that body. So in fact the judiciary is protecting the people from a government that is abusing its power. If such an abuse were to take place in a foreign country we would see it as an autocratic attack on democracy. This behaviour in Britain needs to be called out for what it is. The road to autocracy is a slippery slope.

STAFFORD LLOYD
Fareham, Hampshire

Liberals v the people

You say that "there is no cure" for the populist politics practised by Viktor Orban, Hungary's prime minister ("Vaccinated against Viktor", April 9th). There is a cure for Orbanism, and it is the same as the cure for Trumpism. It is to listen to the concerns of the large number of people who vote for right-wing populists and engage with them. Instead, liberals usually denounce those people as, in Hillary Clinton's unfortunate word, "deplorables".

In 2010, Gordon Brown came across Gillian Duffy on the campaign trail for that year's general election. An ordinary woman, she was no right-wing racist, but a lifelong Labour voter. She was concerned about immigration. Instead of engaging with her (perhaps explaining the benefits of immigration) Mr Brown turned his back and called her a bigot. Labour has not been in power since.

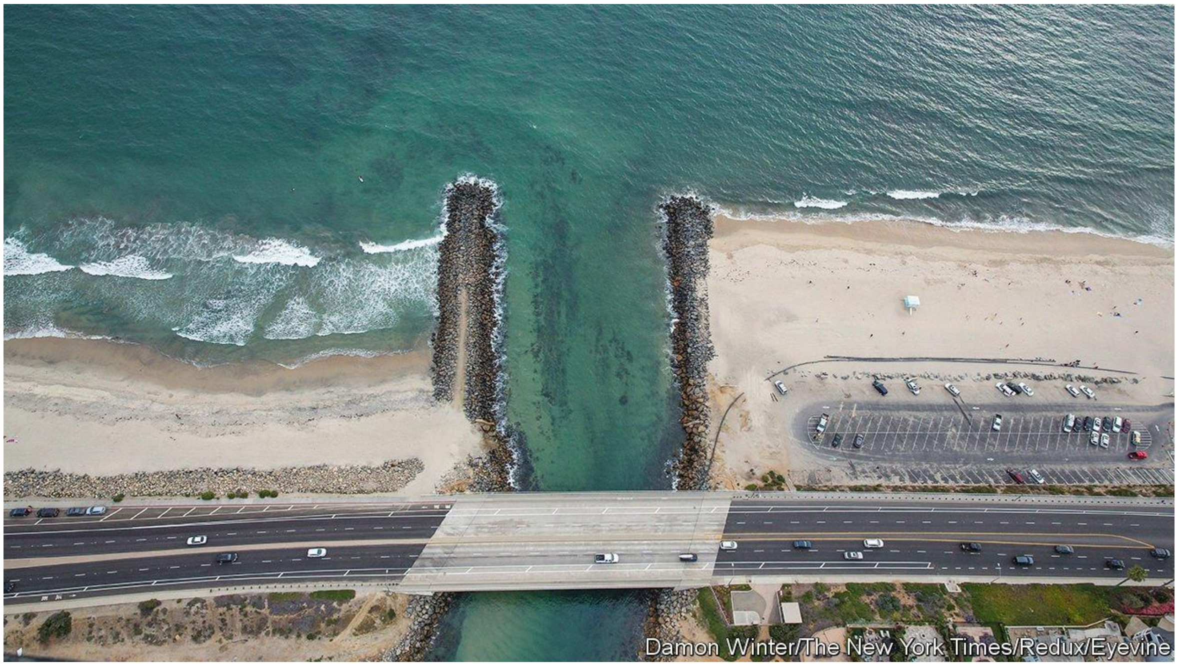
The current divisiveness and polarisation of politics works both ways. As long as liberals are too holier-than-thou to engage with those who vote for the likes of Mr Orban and Donald Trump then populists will find it easy to attract votes from people who feel no one else listens to them.

ANNE-LOUISE CROCKER
Shoreham, Kent

No respite from work

Regarding the future of business travel, video-conferencing has blurred the boundary between work and hotel as much as work and home ("[The return of the road-warrior]", March 26th). Cancelling meetings because of travel no longer holds true. Executives who cross time zones can expect longer days. Hotels can expect more in-room service requests. Can I get breakfast delivered at 4am? Can I connect the hotel's TV to my laptop? As hotel rooms become backgrounds, there will be a premium on nice ones.

PROFESSOR DAVID SINTON
University of Toronto


Damon Winter/The New York Times/Redux/Eyevine

Liquid markets

"Hold the salt" (April 2nd) did a fair job at capturing the reality of water supply in California. There are other important points that apply to California and other water-scarce regions in the world. The price of water generally reflects its cost of delivery rather than its scarcity. Higher prices often reflect infrastructure costs (for a desalination plant, for instance) rather than the opportunity cost of running dry.

"Conservation" in California may look good relative to historical use, but roughly 50% of residential water in California is used for landscaping. The state's cities need not fear a shortage, since water can always be taken from agriculture, which uses approximately 80% of the state's "developed" water.

The environment, which receives the remaining "undeveloped" water, is under extreme stress because of diversions for human use. Desalination is indeed important for the state, but it is no solution to bigger issues with agricultural over-appropriation and underpricing of increasingly scarce water.

DAVID ZETLAND
Lecturer in political economy
Leiden University College
The Hague

You underestimate the ingenuity of Californians in using less water. For years now they have practised “If it's yellow, let it mellow; if it's brown, flush it down” as part of their toilet routine.

Another very popular bathroom practice is to shower with a friend. This not only saves water, but allows you to soap-up those hard to reach places. And you get to know your friend better.

ANTHONY SWEENEY
Darien, Connecticut

By Invitation

- **[Russia and Ukraine: Ian Bremmer counts the cost of the war to Vladimir Putin]**
- **[Russia and Ukraine: Dominic Lieven says empires eventually end amid blood and dishonour]**
- **[Russia and Ukraine: Poland’s prime minister says the West’s appeasement of Vladimir Putin must stop]**

Russia and Ukraine

Ian Bremmer counts the cost of the war to Vladimir Putin

The political scientist predicts that an ugly conflict is about to get uglier

Apr 23rd 2022

THE OUTCOME of Russia's war in Ukraine remains in doubt. But there is no question that Vladimir Putin's decision to launch a large-scale invasion is one of the worst strategic decisions any leader of a powerful country has made in decades. There is no plausible outcome in Ukraine that won't leave Mr Putin and Russia far worse off than before February 24th, when the war began.

Mr Putin has cost his country the lives of thousands of young soldiers, some of them conscripts. He claims that Russians and Ukrainians are "one people," but his war has given Ukraine a stronger sense of national identity than it's ever had before and transformed it into Russia's bitter enemy. He has shown the world that his army is ineffectual, and that billions of dollars spent on modernising Russia's military has been wasted. He has given NATO a sense of unity and purpose it hasn't had in decades and non-members like Finland and Sweden new reasons to join. His actions have driven members including Germany to boost defence spending. Others have dispatched troops close to Russia's border. Mr Putin has convinced Europe that it must stop buying Russia's most valuable exports. He has brought sanctions and export controls on his country that will inflict generational damage. For Europe and America he has crossed the Rubicon. Most grievously, he failed to prepare the Russian public for the true human, financial and material costs of his "special military operation."

Jokes about Russian vaccines and long tables aside, a primary cause of Mr Putin's miscalculation must surely be his personal isolation. He appears no longer to listen to opposing points of view. How else could he have believed his army could capture Kyiv in two weeks? (The former president of the European Commission, José Manuel Barroso, says Mr Putin bragged as much to him in 2014.) How could Mr Putin have thought that Ukrainians would quickly surrender once the invasion began? In response to Ukraine's invasion, threats to cut off European energy supplies and other "consequences you have never seen", Mr Putin appears to have expected the West to do little more than it did when Russia seized Crimea eight years ago. He did not anticipate that America would so quickly render a large portion of his foreign-exchange reserves functionally useless.

By refusing to brook dissent inside Russia, Mr Putin has turned a deaf ear to important warnings and persuaded those around him that their personal security and prosperity depend on loyalty to him and his version of the truth. One small but important example: Mr Putin said during the early days of the conflict that "conscripted soldiers are not and will not be involved in combat operations." That assertion was quickly proven false. There are three possible explanations for this, and all would damage Russia's president. The first is that Mr Putin lied to the Russian people about something he should have known that he wouldn't be able to hide. Second, Russia's generals lied to him. Third and, frankly, most likely: misinformation has reached every level of Russia's military, and senior officers are not aware of what's happening down the chain of command. But whatever the case, all of these explanations undermine Mr Putin's credibility, both at home and abroad, and compromise the effectiveness of Russia's armed forces for years to come.

There is no reason to believe that Russia's failed "phase 1" effort to capture Kyiv will lead to significant improvements in the flow of information up and down the flow of military command. Incentive structures remain too warped. And if Russia's armed forces aren't producing accurate information about what's happening in the field, or about the resources needed to achieve military objectives, and if Mr Putin and his generals continue to hold unrealistic ideas about what is achievable, the next phase of the war—focused on securing Russian control of the Donbas region—won't proceed much more smoothly than the first phase. Ukraine's soldiers in that region are battle-tested by eight years of combat. Underestimating the skill and determination of Ukrainians to fight, and the willingness of Western governments to supply them with weapons and training, has already cost Mr Putin dearly.

For the Russian president, the stakes for military failure could hardly be higher. If his appeals to national pride and his pledges to end a (fictional) genocide of ethnic Russians in Donbas fall flat, the Russian president will probably take steps he would surely prefer to avoid. These might include the use of chemical weapons to turn the military tide as Ukrainians cannot defend against them, nor can they return attacks in kind (which will allow Russia to advance). He doesn't have much more to lose. Russia already faces a transatlantic political and military alliance that has imposed historically harsh sanctions on his country. Western governments continue to support Ukraine, to accuse Russia of war crimes and genocide, and to treat Mr Putin like a pariah. A scorched-earth approach would probably win him a limited military victory. And he knows that almost everything the West could do to him is already in process—short of a ban on Russian energy imports that Mr Putin surely believes is coming soon anyway.

Western hopes that Russia's generals, its security forces, its oligarchs or its people will soon remove Mr Putin from power are likely to be in vain. Sky-high oil prices will keep the Russian economy afloat for some time, even as the long-term damage to Russia's economy done by sanctions and export controls will be severe. Given the political climate, it's impossible to know the true state of Russian public opinion, but there is no evidence that Mr Putin faces any serious domestic challenge. Russia's people see the images of war their government wants them to see, and they are now being fed a steady diet of Ukrainian atrocities, Western plans to humiliate Russia and the determination of their president and soldiers to defend their motherland.

In short, Mr Putin, Russian and Ukrainian soldiers, and Western leaders should not expect the kind of clean victory that any of them desires. Instead, an ugly war is about to get much uglier.

Ian Bremmer is the founder and president of Eurasia Group.

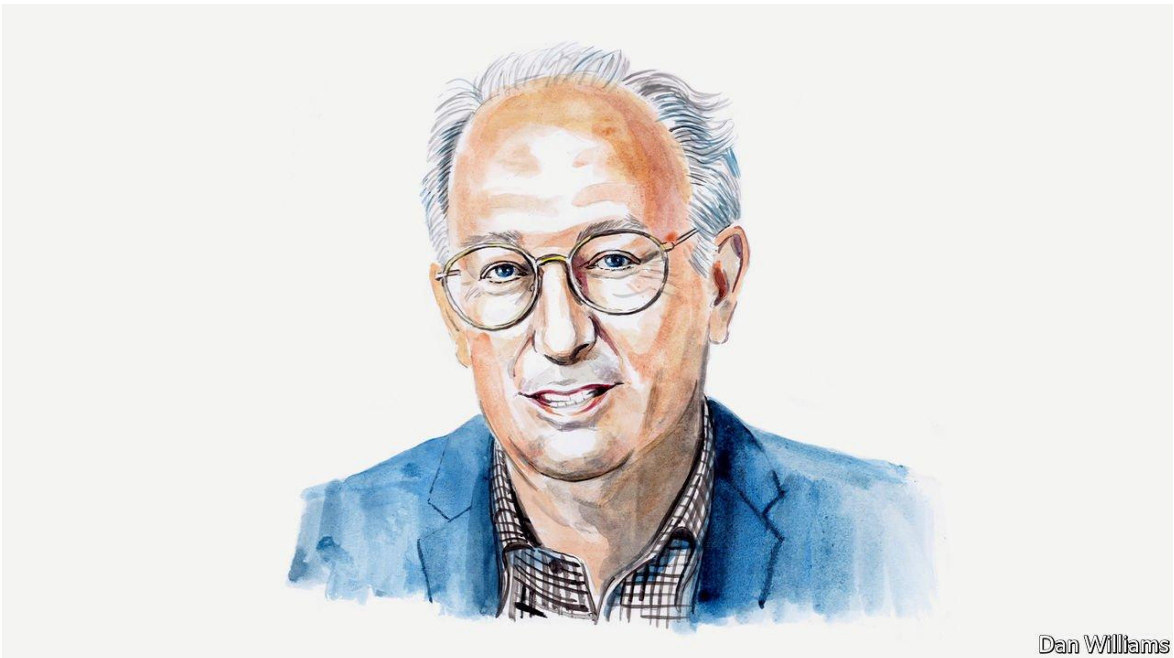
Read more of our recent coverage of the [Ukraine crisis]

Russia and Ukraine

Dominic Lieven says empires eventually end amid blood and dishonour

The academic argues that Russia's invasion of Ukraine is a case in point

Apr 23rd 2022



EMPIRES ARE great powers. Their demise is usually accompanied by geopolitical convulsions and wars. They are also multinational polities with peoples living cheek by jowl. Turning an empire into nation states with sharply defined sovereign peoples and borders seldom comes without great conflict. Russia's invasion of Ukraine is a case in point.

In the 1880s the chief legal adviser to the Russian foreign ministry wrote that if the national principle—to every people its own state—was ever applied in the vast region then ruled by the Romanovs, Habsburgs and Ottomans the result would be mayhem. He was correct. It took two world wars, many lesser conflicts, genocide and ethnic cleansing on a vast scale to turn the imperial map of central and eastern Europe into the post-1945 national map. Much of the Middle East is still living with the consequences of the demise of the Ottoman empire and of the British and French empires that briefly filled part of the void the Ottomans left behind. European-style ethno-linguistic and democratic nation-states had great difficulty putting down roots in a world where allegiance was traditionally defined by local community, religion, dynasty and region.

The consequences of imperial collapse often take a generation or more to emerge. Bangladesh's secession from Pakistan happened 24 years after the end of British India. Although the end of the British empire was managed better than most, post-imperial conflicts still rage today all the way from Ireland, across the Middle East (Cyprus, Iraq, Palestine) to Fiji. The worst of these is the confrontation between India and Pakistan over the disputed border region of Kashmir.

The most frightening example of the delayed impact of an empire's collapse is interwar Germany. Like Russia in 1991, Germany in 1919 was on its knees but remained by far the most latently powerful country in the region. A combination of post-imperial resentment and regained power led it to challenge the territorial settlement agreed in the Treaty of Versailles, facilitating another world war. This is not to make comparisons between Adolf Hitler and Vladimir Putin. With or without Hitler, Germany would probably in time have challenged the post-war order in east-central Europe.

After 1945, the Soviet Union was the surviving empire. Now we are living with the consequences of its collapse. It was a miracle that this empire, with its bloodstained history and its massive security apparatus, disintegrated between 1985 and 1991 with barely a shot fired in its defence. The invasion of Ukraine is the belated revenge of the old Soviet security apparatus for what it sees as 30 years of humiliation, retreat and defeat.

From a Western perspective, the near-bloodless demise of Soviet communism was almost a fairy tale. It fed the belief—terrifyingly reminiscent of Europeans before 1914—that contemporary Western civilisation marked the end of history and the final triumph of liberal values. But for the Russians, the 1990s were anything but a fairy tale. The economy and political institutions disintegrated. Life expectancy plummeted. Some 25m ethnic Russians suddenly found themselves outside Russia's borders. Russia was demoted from superpower to beggar. It is unsurprising that many Russians love Mr Putin (with much less provocation, Americans elected Donald Trump under the slogan "Make America great again").

As always, the loss of Russia's empire meant most to its elites. It deeply wounded their sense of status, self-esteem and world-historical significance. The loss of Ukraine specifically has hurt Russians more than that of the other Soviet republics. Possession of Ukraine has long been essential to Russia's existence as a great empire; its secession in 1991 sealed the Soviet Union's fate. Crimea's loss hit Russians especially hard. The great naval base in Sevastopol was vital to Russian power in the Black Sea region and had a unique place in Russia's historical memory (owed above all to the great sieges during the Crimean and second world wars).

Both because of its importance to Russia, and owing to internal divisions between the Russian-speaking east and the rest of the country, I always believed that an independent Ukraine could only survive if Russia's relations with the West remained good. Ukraine could act as a bridge between the two. When Ukraine was forced to choose between Russia and the West—as happened definitively in 2014—disaster followed.

Mr Putin's initial strategy has failed. He will probably now attempt to conquer all the Donbas region and the land bridge between it and Crimea. If this succeeds, Ukraine will never accept this new border as a basis for long-term peace. The brave war of independence against the invading Russian ogre will become a central—and unifying—core of the Ukrainian national myth. Even after Mr Putin departs, any future Russian government will find it hard to retreat from Donbas (let alone Crimea) and retain legitimacy. If other borderland wars, such as in Kashmir, in former empires are a guide, the Russo-Ukrainian conflict could last in a semi-frozen state for decades, threatening international stability and periodically bursting into renewed fighting. It might even escalate into nuclear confrontation.

Dominic Lieven is an author and academic. His forthcoming book, "In the Shadow of the Gods: The Emperor in World History," will be published in May.

Read more of our recent coverage of the Ukraine crisis

Russia and Ukraine

Poland's prime minister says the West's appeasement of Vladimir Putin must stop

Mateusz Morawiecki wants more support from the European Union

Apr 23rd 2022

THE WAR IN Ukraine makes us realise that, though history is a good teacher, it has some poor students. Several Western European politicians have forgotten the lesson offered by the Munich agreement of 1938. The analogies with the present situation are striking. The policy of appeasement, spearheaded by Britain's prime minister at the time, Neville Chamberlain, was followed by the outbreak of the second world war within a year.

In February 2007, almost 70 years after the infamous Munich conference, Vladimir Putin openly announced his desire to dismantle the post-cold war order in Europe. The following year, he attacked Georgia. Six years after that, he occupied Crimea and set Donbas in eastern Ukraine ablaze. And, another eight years on, he began the bloodiest stage of his plan so far. The demons of history have returned. We are witnessing genocide again.

In this environment the West has acted like a frog in water brought gently to the boil. It has not reacted even as Russia has added heat. In 1999 when Russian troops razed Grozny to the ground and murdered tens of thousands of Chechens on Mr Putin's orders, the West turned a blind eye saying that it was Russia's internal business. When Russian troops entered Georgia, the West remained passive again.

This new version of appeasement could not have resulted in anything other than conflict. That is because the mechanisms of totalitarianism remain the same now as they were seven decades ago. And the mechanisms of appeasement remain the same, too. Russia has committed atrocities and, unless it is stopped, images such as those seen in Bucha, Irpin and Mariupol will appear more often.

We in Poland have warned for more than a decade against a policy of appeasement towards Mr Putin's resurgent imperialistic aspirations but we have been met with suspicion and even contempt. Many European politicians, when they left politics, have been more interested in getting jobs with Russian energy companies than in helping us. But now the situation in Ukraine is a horror story, and the fate of the Ukrainian people and the future of the whole of Europe depend on our actions.

European countries have provided some economic aid to Ukraine, as well as weaponry. But there is so much more that could be done. Confiscation of any Russian assets and foreign reserves abroad would be a good place to start, with the proceeds used as a resource to help Ukraine. More weapons should also be sent to support the Ukrainian armed forces. Poland would like to supply, with NATO's consent, all kinds of arms to its neighbour. In addition, all of Europe should also be coming together to make plans for rebuilding Ukraine after the war.

At the heart of the approach, however, must be sanctions. I have consistently and unceasingly appealed for maximum economic sanctions against Russia. But Europe, despite imposing some sanctions, is moving too slowly. Meanwhile, the Kremlin has put all its efforts into trying to defend the rouble. Partly as a result of European energy purchases, Russia has a current account surplus, and the rouble is stronger now than before the war. Weak sanctions, instead of strangling Russia’s economy, seem to be making it more resilient, as oil and gas prices have risen.

If we really want to stop Mr Putin, we have no choice but to deliver an economic shock. The EU must impose an embargo on Russian energy resources and exclude all Russian banks from the SWIFT system that enables the transfer of money. In addition, the international community must start collecting evidence of Russian war crimes in Ukraine. Only the toughest sanctions and the supplying of weapons to Ukraine will be able to stop the Russian army and defend Ukraine’s democracy and freedom. It will come at a cost to the people of Europe as the cost of energy would be likely to surge, but it is a small price to pay. The sooner we do this, the sooner the war will end.

The other thing that Ukraine’s neighbours need is direct economic help from the EU. It is time to follow the example of the individual volunteers who have come from all over Europe to Poland, Slovakia and Romania, contributing their time and their money to bring help and hope.

Ukrainians, who have found refuge in Poland since 2014, already constitute at least 7%, and perhaps 10%, of our country's population of 38m. Pictures of refugees around the world often show depressing images of people crammed into large makeshift camps. You do not see that in Poland, even though we have received around 2.8m people in less than two months.

The whole country is helping. Aid is being organised by the government, by NGOs and by millions of ordinary citizens. No one needed to be asked to contribute. Perhaps that is why the EU officials who have given €6bn ($6.5bn) to Turkey since 2016, as part of its deal to help handle refugees, do not feel the need to help Poland now. But such help is becoming more important by the week. So far we have received nothing but declarations.

Reallocating unused funds does not change anything. What is needed is a serious systemic solution. And the only way to achieve that is if the EU lives up to its values. The choice could hardly be simpler: either you support Ukraine or you support Russia. There is no middle ground. Those responsible for torture and war crimes should be cut off. Those who have not learned from the history of appeasement are doomed to repeat it.

Mateusz Morawiecki is Poland's prime minister.

Read more of our recent coverage of the Ukraine crisis

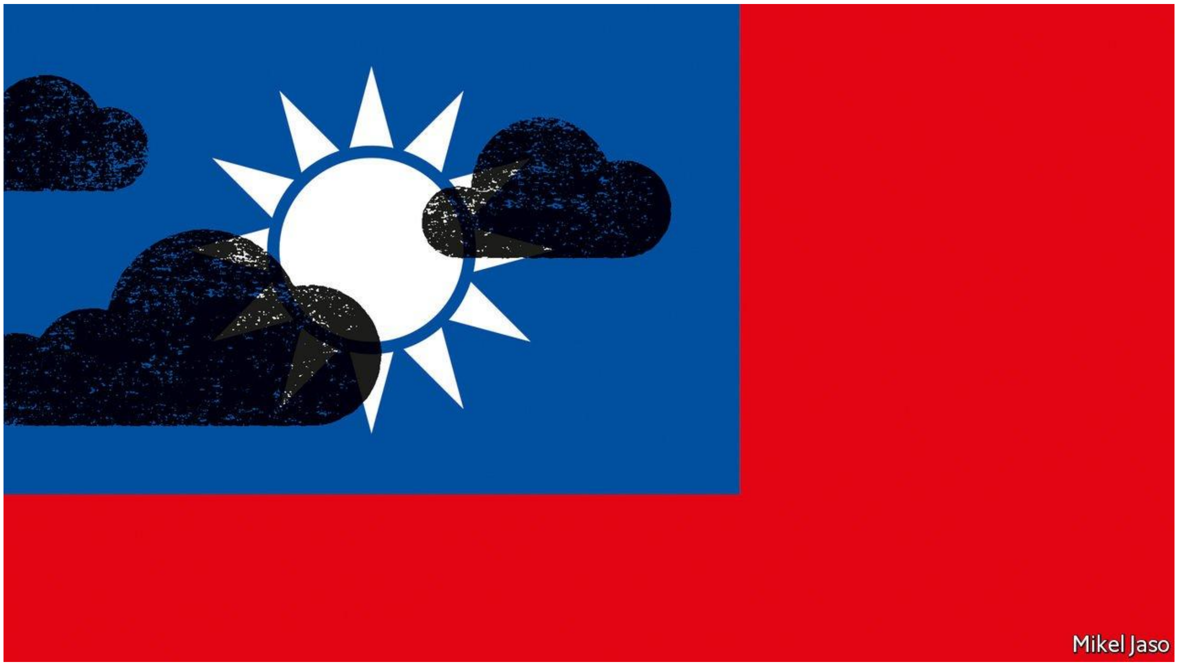
Briefing

“War is here”

What Taiwan can learn from Russia’s invasion of Ukraine

Fighting spirit and the right Western arms may stymie a powerful foe

Apr 23rd 2022 | Taipei, Tokyo and Washington, DC



ON A FRIDAY night in Taipei, dozens of people gather in a bookstore to learn what to do if war comes to Taiwan. The shop window is plastered with slogans denouncing China and supporting freedom in Tibet, Xinjiang and Hong Kong. Nearby is a new protest wall: a Ukrainian flag speckled with Post-it notes in English, Mandarin and Taiwanese. “Stand with Ukraine”, says one. “Fuck Putin”, exclaims another. A third declares: “China, Russia: *langbeiweijian*”, ie, a wolf and a *bei* (a mythical beast) colluding to do evil. This refers to a traditional story of two deformed creatures—a wolf with long front legs and short hind ones, and a *bei* with the opposite impairment—collaborating to devour sheep.

With China and Russia declaring their friendship has “no limits”, Taiwanese fear they will be the next prey. How to survive? In the bookshop, a former naval signaller and a Krav Maga martial-arts instructor lead discussions on disaster planning, self-defence, mutual aid, treating wounds and more. Such workshops have become especially popular since the invasion of Ukraine, notes T.H. Schee, the signaller. “A year ago, most people thought we would never see war in our generation,” he explains. “Ukraine made everyone realise: war is here.” The session is a rare chance to overcome defeatism, he thinks. “We focus on protecting yourself, your family and your community first. We empower them to do something.”

Invasion from the mainland has been a worry ever since China’s nationalist rulers lost a civil war against the communists and fled to Taiwan in 1949. For a long time the two entities both claimed to be the legitimate government of China. A distinct Taiwanese identity has gradually formed, but Taiwan, which still calls itself the Republic of China (ROC), dares not declare itself independent for fear of provoking the mainland. That leaves it in limbo: a vibrant democracy and the world’s biggest purveyor of advanced semiconductors, which has diplomatic relations with just 14 countries.

Over the decades, Taiwan has swung from the delusion of reconquering the mainland to a deepening hopelessness—a sense that it can do little on its own to defeat an invasion. As a share of GDP, defence spending fell from 5.2% in 1990 to 2.7% in 2000 and 1.9% in 2020 (it may rise to 2.1% this year). The Stockholm International Peace Research Institute reckons that, in dollar terms, China’s defence budget is 20 times larger than Taiwan’s.

Defence spending has been unpopular in Taiwan, in part because of the legacy of nearly four decades of military dictatorship, which ended in 1987. The armed forces are shrinking as they give way to an all-volunteer force. What little remains of conscription—four months for men—is regarded as a waste of time and often shirked. The infantry’s strongest skills, Mr Schee quips, are “painting walls, picking grass and falsifying documents”. For a time, some Taiwanese thought trade with China might stay its hand, but the aggressive nationalism of Xi Jinping, China’s president, has dispelled that illusion. For the most part, Taiwan has sheltered behind the shield of American deterrence.

Russia’s invasion of Ukraine is causing a profound rethinking. The stout resistance by Ukrainians gives some Taiwanese hope that they, too, might be able to hold off a powerful foe. Yet the war also brings two sobering thoughts. One is that neither the threat of sanctions nor the West’s arming of

Ukraine deterred Russia. The other is that Russia's nuclear threats have deterred America from intervening directly. China, too, has nuclear weapons.

Contradictory emotions are apparent in a poll by the Taiwan Centre for International Strategic Studies, a think-tank. It showed a startling jump in the share of Taiwanese willing to fight to defend Taiwan, from 40% in December to 70% in March. A similar percentage supported extending the conscription period, a move currently under debate. But confidence that America would intervene has dropped markedly, from 55% to 43%. Scarcely a third of respondents thought Taiwan could hold off an invasion alone.

Weapons enough and time

Many in Taiwan thus watch the war in Ukraine with a mix of hope and dread. Its full lessons will depend on the outcome. But an obvious one is the importance of time: to prepare defences and international assistance before a war; and, once one starts, to hold out long enough for help from friends to arrive.

But Ukraine is a largish country in the heart of Europe; Taiwan is a smallish island-state. Taiwan is thus blessed and cursed by what John Mearsheimer of the University of Chicago calls "the stopping power of water". Taiwan is harder for a foe to invade, but also harder for its friends to resupply. Another difference is economic heft. It will be tougher for the West to impose sanctions on China of the kind it has used to punish Russia. As the world's second-largest economy (the largest if measured at purchasing-power parity), China is far more diversified and more integrated in global trade than Russia.

Even so, many in the West hope President Vladimir Putin's military troubles in Ukraine will give Mr Xi pause. He will be even more conscious of the possibility of military failure—for him and for China's Communist Party. The People's Liberation Army (PLA) has not fought a war since its border conflict with Vietnam in 1979. Its leaders worry about "peacetime disease". A Pentagon report notes that it is undergoing extensive reforms that could hamper its combat readiness until 2027 (but give it better options thereafter).

China’s generals will learn from Russia’s mistakes in Ukraine, as they do from any conflict with parallels to Taiwan (the Falklands war of 1982 is a favourite). “From a technical point of view, the Ukraine issue can indeed be seen as a rehearsal for a Taiwan Strait crisis,” Jin Canrong of Renmin University in Beijing told guancha.cn, a nationalist Chinese news site. “This is a very good learning opportunity. China can learn a lot from it, such as how to fight militarily, what pressure may be encountered politically, how to relieve that pressure, and so on.”

Nothing Mr Xi learns from foreign examples is likely to alter his fundamental approach. He still favours reunification without fighting, but is prepared to use force, particularly if Taiwan makes a dash for independence. The signs are that China’s leader, who is 68, wants to achieve unification within his lifetime, ahead of his stated goal of “national rejuvenation” by 2049, the centenary of the communist victory. Events in Ukraine are unlikely to change his conviction that China has a window to achieve its goals while America is divided at home and struggling to restore credibility abroad after decades of failed interventions and erratic foreign policy. And though some American alliances have been revitalised of late, Mr Xi may be heartened by the prospect of Russia preoccupying the Pentagon for years—just as wars in Afghanistan, Iraq, Libya and Syria did for much of the past two decades.

Successive Chinese leaders have built the PLA into a formidable force, designed to conquer Taiwan while fighting off American reinforcements. Its navy now counts more ships than America’s. It has developed a range of anti-aircraft and anti-ship missiles and sensors (known as anti-access/area-denial or A2/AD), intended to strike American and allied forces thousands of miles into the Pacific. The Pentagon says China’s conventional build-up is being matched by a nuclear one, with the aim of turning a minimal deterrent of a few hundred warheads into a stockpile of more than 1,000 warheads by 2030—closer to the size of America’s and Russia’s arsenals.

The Economist

For now, the PLA will maintain its relentless testing and harassment of Taiwan, including frequent incursions into its air-defence identification zone (ADIZ). These are part of China's "grey-zone" tactics which stop short of combat but practise for conflict and strain the island's defences and its politics. Given China's cyber-attacks and disinformation campaigns, many in Taiwan argue it is already under attack.

Should it come to war, the main lesson that China will draw from Ukraine is the need for speed—ideally achieving victory within days—to ensure that Taiwan's government cannot organise concerted resistance and America cannot intervene effectively. The PLA appears to have planned primarily for three types of assault: a missile barrage, an air and naval blockade, and a full-scale invasion. None guarantees a swift outcome. Bombardment will cause heavy damage but cannot easily force a surrender. A blockade would take even longer. And the mustering of an amphibious invasion force is likely to be spotted well in advance of an attack, as Russia's build-up was. It is anyway unclear that China has enough modern amphibious ships to move an invasion force quickly across the 180km Taiwan strait.

Some combination of these three strategies may hold more promise. Jacob Stokes of the Centre for a New American Security, a think-tank in Washington, posits one possibility: China stages a large-scale naval exercise near Taiwan, then swiftly uses the ships to blockade the island. Like Mr Putin, Mr Xi threatens nuclear escalation against anyone who challenges the quarantine. As America debates how to respond, China uses the time to gather and launch its invasion force, and perhaps to decapitate the island's government. "It's one of the scariest scenarios," says Mr Stokes. "It raises the cost of intervention from the outset."

Hard as ROC

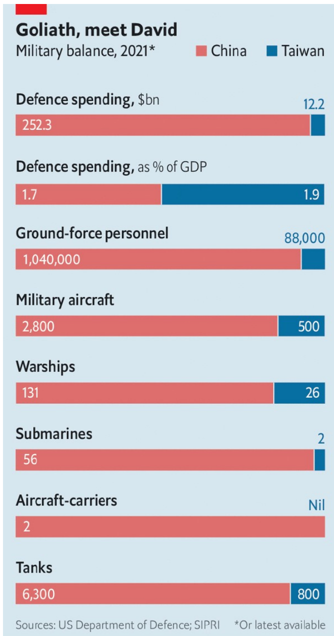
Taiwan has for years talked about adopting its own A2/AD tactics as part of an "asymmetric" strategy, in which the weaker side uses defensive weapons, concealment and subterfuge to frustrate its foe. America has been encouraging Taiwan to develop a "porcupine" doctrine. The concept has gone by names such as "Hard ROC" and the "Overall Defence Concept". The latter was championed by a former Taiwanese military chief, Lee Hsi-Ming. It called for Taiwan to buy "a low quantity of high-quality platforms", eg, jet fighters, ships and submarines, to fend off China's grey-zone attacks. And it emphasised acquiring "a large number of small things", especially anti-ship missiles, to ward off an invasion—preferably at sea, possibly on the beaches and if necessary in the mountains of Taiwan. Mr Lee points to the Javelin anti-tank missile used by Ukrainian soldiers. "If Ukraine had only tanks, could they fight Russia? Think of 1,000 Ukrainian tanks versus 10,000 Russian tanks. Then think of 10,000 Russian tanks versus 100,000 Ukrainian Javelins. That is asymmetric warfare."

Taiwan still espouses an asymmetric strategy, but Mr Lee's vision appears to have been watered down through a combination of individual services' love of expensive kit and genuine doubts. Taiwan is buying and developing mines and anti-ship, anti-tank and anti-aircraft weapons, but far too few, argues Mr Lee. He and American critics question the billions being spent on expensive systems—be they indigenous attack submarines or American M1 Abrams tanks, Apache and Black Hawk helicopters and F-16V jets. "They are buying stuff for things that won't give them much security," argues Evan Medeiros of Georgetown University. In a war, he suggests, many of the high-end weapons will be quickly destroyed or rendered ineffective; the American navy might tell Taiwan not to deploy its submarines lest they be mistaken for Chinese ones.

Shu Hsiao-huang of the Institute for National Defence and Security Research, a think-tank funded by the defence ministry, demurs: “We have the Taiwan Strait. So our first battle is going to be there. We need equipment to control the air and sea.” He also argues that, right now, “the threat of war is 10% but the peacetime threat of grey-zone activity is 90%.” And even in a war, he says, Taiwan must be ready to keep air corridors and sea lanes open because it has no guarantee that America will. Phil Davidson, the former commander of American forces in the Indo-Pacific, argues that Taiwan needs offensive weapons. “There’s too much discussion of an amphibious assault. China has a lot of other ways to pound Taiwan into submission, including missiles and cyber-attacks. If the Chinese don’t know their forces or points of departure are at risk, you cannot deter them. You can’t win at soccer only in defence. You have to be able to score a goal.”

The ambiguous American

It is of course easier to play *catenaccio*, the rigid Italian “strong chain” defence, if your teammates can hit the back of the net. The Baltic states have no jet fighters, but rely on NATO allies to protect their airspace against Russia. Can Taiwan count on America? There is no equivalent of NATO in Asia. America promises to help Taiwan with the means to defend itself but leaves unsaid whether it would go to war with China over the island. America hints at a greater readiness to fight, and risk nuclear escalation, for Taiwan than for Ukraine. Yet this falls well short of the “sacred obligation” to defend every inch of NATO, as President Joe Biden puts it. Such “strategic ambiguity” is meant to prevent both an attack by China and a declaration of independence by Taiwan. But as the balance of power shifts, the danger is that such uncertainty may fail to deter the former, and dishearten the latter.



The Economist

In contrast with the mutual-defence commitment of NATO's 30 allies, America's alliances in Asia are more akin to a hub with spokes. America has separate agreements with Australia, Japan, South Korea and others—but they have no obligations to each other. That said, many of them have voiced their interest in preserving the status quo across the Taiwan strait. Ad hoc partnerships are forming for limited purposes. The "Quad"—a loose group of America, India, Japan and Australia—discusses everything from maritime security to economic co-operation and covid. Under the AUKUS partnership, America works with Australia and Britain to develop nuclear-powered submarines for Australia; this is being extended to domains such as hypersonic missiles. Some hope these networks will mesh into a whole strong enough to contain China, but mounting a coherent joint response will be difficult.

Japan's role is important, given its powerful navy, its proximity and the American forces on Okinawa and elsewhere on its territory. On clear days, Taiwan is in sight of Yonaguni, Japan's westernmost territory. The two countries are among each others' top trading partners, though they have no formal ties. The shipping lanes around Taiwan are essential for Japan's trade, in particular energy and food imports. People-to-people ties are strong, too. Taiwan is far less resentful of its time as a Japanese colony than other countries once ruled by Japan are.

For all Japan's pacifist leanings, there is a growing realisation that it is bound to be involved in any war over Taiwan. To help Taiwan, America would rely on its bases in Japan. China may attack them, either pre-emptively or in response to intervention. It could try to seize the disputed Senkaku islands near Taiwan, which Japan controls, or otherwise violate Japanese territorial waters or airspace. The capture of Taiwan would usher in Chinese dominance in Asia, which Japan has historically resisted. Abe Shinzo, a former Japanese prime minister, summed it up last December: "A Taiwan contingency is a Japanese contingency, and therefore a contingency for the Japan- US alliance. Beijing, President Xi Jinping in particular, should not have any misunderstanding in recognising this."

Grey-zone scenarios put Japan in a trickier position. Following changes to the interpretation of the constitution in 2015, Japan's self-defence forces (SDF) can be deployed for combat even if Japan is not attacked, so long as the situation is deemed to be of "existential" importance. Yet that is a fundamentally political assessment. The public might balk; so too might Komeito, the pacifist coalition partner of the dominant Liberal Democratic Party. Japanese war games often end with participants tying themselves up in legal knots.

Precisely how Japan might help is unclear, not least because American and Japanese forces lack a NATO-style integrated military command. Neither has much experience of operating with Taiwan. Broadly speaking, the Japanese would focus on defending Japanese territory, including American bases; securing strategic choke-points around Japan; and providing rear-area logistical support, such as supplying fuel and ammunition and treating wounded soldiers. "Without Japan, the US cannot mobilise and surge," says Koda Yoji, a former commander of Japan's naval forces.

In Washington, meanwhile, calls are growing for America to do more to defend Taiwan. Republicans, in particular, urge the Biden administration to provide better weapons and military aid, abandon strategic ambiguity and even station American troops on the island. But for the foreseeable future Taiwan is likely to remain in the twilight zone: a country whose status is undefined and whose vital partnership with America is unclear.

The invasion of Ukraine shows that war can clear away ambiguities and hesitations. Taiwan's best hope of survival is to deny China a quick victory. It will probably have to fight alone for a time. The longer it can hold out, the likelier it is to win sympathy, admiration and military support. Even now, time may well be Taiwan's most important military asset. "Every day, when Xi Jinping draws back the curtain, he should see the capability that Taiwan, America and the other allies have deployed and tell himself: 'Today is not the day for an invasion,'" muses Mr Davidson. "We had to run a deterrence strategy for 40 years during the cold war. That may be what winning looks like." The struggles of the Russian wolf show how the Chinese *bei* might be kept at bay. ■

Read more of our recent coverage of the [Ukraine crisis]

Asia

Asia’s Ukraine dilemma

Interests, not values, underpin Asia’s ambivalence about Russia

“Democracy v autocracy” is an unhelpful lens through which to see the region’s calculations

Apr 23rd 2022 | DELHI, HANOI, SEOUL, SINGAPORE AND TOKYO


Seb Agresti

HAVING FOUND itself at a crossroads, Indonesia is attempting to go in every direction at once. On March 2nd it joined much of the world in deploring Russia’s invasion of Ukraine. A few days later its president, Joko Widodo, known as Jokowi, said Russia and Ukraine were both friends of Indonesia. By the middle of April, against a domestic backdrop of protests against rising costs, a fierce debate had broken out within government about whether to take advantage of the crisis by buying discounted Russian oil, with payments perhaps routed through India.

Indonesia is in a tricky position. This year it holds the rotating presidency of the G20, a club of the world’s biggest economies. Jokowi does not want to humiliate Russia. Nor does he want to preside over a high-profile flop: Western leaders have indicated they could ditch the main meeting in Bali in November if President Vladimir Putin turns up. “Our strategy is Bon Jovi’s

'Livin' on a Prayer'," says Evan Laksmana, an Indonesia expert at the National University of Singapore, meaning, "just hope that something gets resolved in the next month or so".

Governments across Asia are performing feats of acrobatics to avoid antagonising America, Russia, China or their own citizens. Some leaders elsewhere, such as President Joe Biden, consider the swift condemnation of Russia's actions by Asia's West-leaning economic heavyweights—Australia, Japan, New Zealand, Singapore, South Korea and Taiwan—proof that "democracies are rising to the moment and the world is clearly choosing the side of peace and security."

Yet many Asian countries, including big democracies like India and Indonesia, are reluctant to criticise Russia openly. The number of Asian states siding with America and Europe at the UN on Ukraine-related issues has been declining. Commentators in Washington see this as a failure of the West to win the moral argument. They think Asians see America and its allies as hypocrites, who have themselves invaded countries and given refugees from war-torn places outside Europe a hard time.

But few Asians share the European and American perception of the war as a grand battle between democracies and autocracies. For many of them, including most of America's allies in Asia, responses to Russia's invasion have been dictated first by cold calculations of interests, with values coming a distant second.

Many Asian governments look to America for security even though China is their chief economic partner. Their backyard—the "Indo-Pacific", as America now likes to call it—is where the tussle between the two powers is playing out. "The future of global order will be decided not by wars in Europe but by the contest in Asia," Shivshankar Menon, a former Indian foreign secretary, wrote recently. For Asia, the war in Ukraine has added an unhelpful extra dimension to what was already a tricky balancing act.

In Asia this year, planned gatherings of world leaders will highlight the problem. These include the G20 as well as APEC meetings in Thailand and the annual East Asia Summit in Cambodia, also in the autumn. In normal times, Mr Putin might attend all of them. "Those countries haven't made a strategic choice over the Russia-Ukraine conflict: they are still sending invitations to Putin," says Jimbo Ken of Keio University in Tokyo.

At the end of May Japan is set to host a summit of the Quad, a security grouping whose other members are America, Australia and India. Its discussions—which usually focus on China—may be complicated by India's neutral stance towards Russia. "How can we pursue Quad co-operation without sharing principles?" Mr Jimbo asks. For Japan's government, India's position is worrisome mainly because of the message it sends: it may be harder to rally European support for Asian countries facing Chinese pressure if they remain neutral on Ukraine. "It is important to share with other Asian nations a view that we mustn't allow any change to the status quo by force," Kishida Fumio, Japan's prime minister, has said.

From America's point of view, Yoon Suk-yeol, South Korea's president-elect, talks the right talk. He says he wants to make his country a "global pivotal state" that spreads "freedom, peace and prosperity through liberal democratic values". Mr Yoon has called for more help for Ukraine and pressure on Russia.

But South Korea also frets. China is by far its largest trading partner and the source of many inputs for its giant manufacturing sector. Antagonising Russia and China would create security risks—both have sway in North Korea. Though it is a big exporter of arms, South Korea has repeatedly refused to supply Ukraine with weapons. It has imposed sanctions on Russia, albeit more slowly than its Western allies. But since the war began it has boosted its imports of cheap Russian energy. (So, too, has Taiwan.)

Take my hand, we'll make it I swear

Mr Yoon has hard choices to make. During his campaign, he promised to ask America to redeploy nuclear weapons to South Korea (they were removed three decades ago) and said he would install more American-made anti-missile defences, known as THAAD. China would be enraged by either move. It may retaliate with economic and other punishments.

In South-East Asia, Singapore has been the most vocal critic of the invasion. Concerned that it might embolden big countries to bully small ones, the city-state has placed sanctions on Russia. But among others in the region, including American allies such as Thailand and the Philippines, pragmatism has won the day. Although most countries voted at the UN in early March to condemn the invasion, many in their follow-up statements refrained from naming and shaming Russia, and later abstained from the vote suspending it from the UN's human-rights body.

Russia is South-East Asia's largest supplier of weapons. Most of the kit goes to Vietnam, which imports 80% of its arms from Russia, but hundreds of millions of dollars' worth of guns also flow to Myanmar, Laos and Thailand. "It would be extremely costly for Vietnam if it lost access to Russian arms and military technology," says Carl Thayer of the University of New South Wales. Yet Vietnam disapproves of Russia's invasion and views America as a more important partner, says Le Hong Hiep of the ISEAS-Yusof Ishak Institute, a think-tank in Singapore.

That both Vietnam and India are reacting to the Russian invasion with similarly calculated ambivalence shows how countries' political systems do not necessarily determine their responses to the war. India is a noisy democracy. Vietnam is a secretive Communist dictatorship. Both are on increasingly good terms with America and wary of China, but are also big buyers of Russian arms. For their own security, they see a need to preserve good relationships in Moscow.

Or consider the case of Cambodia, an autocratic country which has close ties to both China and Russia. To the surprise of both, Hun Sen, its prime minister, took a stand against Russia's aggression by co-sponsoring one of the UN resolutions. In recent months he has been making it clear he wants better relations with the West.

The Economist

That countries in South-East Asia are responding to the Ukraine crisis on the basis of perceived self-interest rather than ideology should be of no surprise to America. Even before the war, Mr Biden's administration had been fostering a spirit of diplomatic pragmatism. It was being careful not to overemphasise human rights in its dealings with countries in the region. When touring South-East Asia, senior White House officials mainly focused on finding ways of meeting countries' economic and security needs, rather than lecturing to them about politics.

But across Asia, government policies towards the war are often out of sync with public sentiment. In Singapore, where officials have been gung-ho about joining in with America, citizens are more circumspect. Many ethnic-Chinese Singaporeans consume China's state media, which tout a pro-Russian line. They think that Singapore should cosy up to China, and believe that America provoked the Russian invasion, says Ian Chong of the National University of Singapore.

In South Korea, official backing for Ukraine has failed to match the enthusiasm of ordinary people's support. Many citizens have made donations to Ukraine. There have been frequent public protests against Russia. Yet when Volodymyr Zelensky, Ukraine's president, addressed South Korea's parliament he found himself speaking to a near-empty hall where the few lawmakers fiddled with their phones. There was no standing ovation.

Whoa, we're half-way there

It is in non-aligned countries such as India and Indonesia where the attitudes of government and the public seem most at odds. On Indian television popular commentators who usually devote their energies to praising the government and attacking its enemies have taken a strongly anti-American line. They blame the war on American provocation of Russia, including NATO's expansion. They push this angle much harder than the government itself, which has avoided saying who is at fault. Their views are echoed in India's living rooms. According to a YouGov poll in late March, 54% of Indians approved of Mr Putin's leadership in the first month of the war (and, confusingly, 63% of Mr Zelensky's). Fully 40% supported Russia's invasion.

Indonesians feel similarly. "This is about the sovereignty of Russia," says Riza Ghautama, a 42-year-old exporter of crude palm oil. He says he does not support Russia's invasion but understands why it felt compelled to act. Russia, he says, was just trying "to defend itself". Connie Bakrie, an Indonesian defence expert who has the ear of the armed forces, accuses the West of hypocrisy. How can it condemn Russia for securing a sphere of interest, when Western powers have done the same with Guam, the Falkland Islands and New Caledonia—territories belonging to America, Britain and France, respectively? "What is the difference?" she asks.

Such talk stems from a widely held perception in Indonesia that America is at heart an imperialist power that does not play by its own rules, says Radityo Dharmaputra of the University of Tartu in Estonia. "If you are pro-Ukraine, then you are pro-America, and thereby supporting the idea of American imperialism in the region," says Mr Radityo, summing up a common belief among Indonesians. Social-media posts in many Asian countries propagate such narratives. Though many of these online fulminations against the West may be the product of disinformation campaigns, they find receptive audiences.

Indonesia's rulers have so far managed to avoid alienating America, Russia, China and their own citizens. Their reluctance to make hard choices has yet to cause major embarrassment. But cracks are showing: on April 20th Janet Yellen, America's treasury secretary, and others walked out of a meeting of G20 finance ministers when the Russian delegate started speaking.

Relative to the other great powers, Russia is a bit player in Asia. For countries in the region the really difficult decisions lie ahead. They relate to the rivalry between America and China, which has been fuelled by Russia's invasion. American talk of an intensifying "battle between democracy and autocracy" has ratcheted up the tension. Time and again South-East Asian countries have said they do not want to have to choose between America and China. But there will be "a point where many in the region will be hard pressed not to choose", says Mr Evan of the National University of Singapore. "You are going to be made to choose, or at least you will be pulled one way or another." ■

Read more of our recent coverage of the Ukraine crisis

Moo with the times

Indian cows (and buffaloes) are going online

A new breed of startups wants to formalise cattle trading

Apr 21st 2022 | VAJEGHAR

SIX COWS munch on dry grass in a barn in Vajeghar, a village some five hours from Mumbai. Ajay Shilimkar, a dairy farmer, beams as he introduces them to your correspondent. One, named Laali, is his most recent acquisition. “She listens to what I say. I don’t need a stick,” he says. Laali moos triumphantly.

Until recently, Mr Shilimkar would have gone to one of India’s many livestock fairs in search of a new beast. But he found Laali on Animall, a cattle-trading platform. The seller, who listed her for 45,000 rupees ($590), lived just 20km away. Mr Shilimkar reckons he saved at least 10,000 rupees that would otherwise have gone to a middleman.

Mr Shilimkar is among 75m dairy farmers in India, and Laali one of 200m cows (there are another 100m buffaloes). The dairy industry is worth $174bn and produces a fifth of the world’s milk. Enticed by the prospect of juicy margins from formalising a highly fragmented market, many startups have emerged in the past few years. The companies make money by charging fees or providing extra services, such as online vet appointments. Animall claims to have made 1m sales since it was set up in 2019, and has received $23m in investment. Gaurav Choudhary of Pashushala, the first such startup to be founded, in 2018, says his aim is “democratising cattle”.

Livestock fairs, where most animals are still bought and sold, can be expensive and chaotic. Farmers shell out entry fees to register their beasts. They must pay for labourers to load and unload the animals, as well as for transport to and from the fair. They worry about cattle thieves. Making a sales pitch to every prospective customer takes a toll in the heat. And if your cows find no buyers, you must go through the whole rigmarole again, complains Anil Renusay, another cattle farmer in Vajeghar.

Then there is fraud, says Satish Birnale, who rears buffaloes in Sangli, a small western city. Some traders inject their animals with steroids. Horns are often polished “as if the cows have just been to a beauty parlour,” he says. “It’s like searching for a bride in an arranged marriage. We have to be careful and not go just by the looks.”

Firms like Pashushala and Animall claim to have solved such problems with a system of checks, including a nod from a local veterinarian. Animall requires sellers to upload videos and pictures of their cattle, and provide details not just of breed or age, but also past pregnancies, how much milk they provide and so on. A team calls every user to verify the information. Ads with blurry photos or listings with pictures taken from the internet are swiftly removed. A close-up of the cow’s udders is important. So are comments by the farmer about the animal’s temperament. In one video a seller croons, “Beautiful! Oh, look at those *singhs* (horns)“. It is not a new pitch. But it is now easier and cheaper to make.

Sung and dance

North Korea’s day of celebration reveals little to celebrate

Kim Jong Un unveils luxury apartments as his people confront food shortages

Apr 21st 2022 | SEOUL

THE ANNIVERSARY of Kim Il Sung’s birth, on April 15th, is often an exuberant affair in North Korea. This year’s tribute to the country’s founder was no exception. Civilians, many dressed in traditional costume, danced in choreographed crowds in the centre of Pyongyang, the capital. Fireworks lit up the night sky. Sculptures of tanks and missiles, made of multicoloured lights, decorated the streets. And all the while spectators cheered, swelling with patriotism and pride.

North Koreans could do with something to celebrate. Mr Kim’s decision to seal the border at the onset of the covid-19 pandemic has taken a harsh toll on the economy. Trade with China is slowly returning but remains far below the level of 2019. Many imports are stuck in quarantine. A shortage of food—bad enough for the state to acknowledge its existence—is getting worse. The price of corn, a staple, has risen almost a quarter since the start of the year. A winter drought threatens a poor harvest of wheat and barley. Remittances from people who have escaped to South Korea have plummeted as it becomes harder to contact relatives.

Little wonder then that Kim Jong Un, the country's dictator and Kim Il Sung's grandson, is keen to focus instead on his regime's successes. In the week before the anniversary he inaugurated two housing projects in Pyongyang. The day after the celebrations, he watched the successful launch of what state media called a "guided weapon" that would improve the efficacy of North Korea's "tactical nukes".

There is less to these achievements than meets the eye. The smaller of the housing complexes, along the capital's Pothong river, has been dubbed a "socialist fairyland". But its 800 flats will go only to those the regime deems "patriots and persons of merit", such as Ri Chun Hi, an octogenarian newsreader known for her vitriolic tone and pink attire. On April 13th Mr Kim personally showed her to her new luxury apartment as she beamed with joy.

The larger block is an 80-story tower in the centre of Pyongyang. It contains 20% of the 50,000 flats Mr Kim promised by 2025 to solve Pyongyang's housing shortage. These too will go to those favoured by the party. But the lucky few allotted flats in the new complex may turn out to be less fortunate than they appear. DailyNK, a Seoul-based news outlet, reported that only the homes of the party elite and *donju*, a class of quasi-capitalists, are actually complete. Other residents will have to finish their homes at their own expense.

For everyone else, there are displays of military might. The weapons tests like the one seen on April 16th are designed not only to assess equipment but also to elicit pride. A dozen such tests have been conducted this year, including at least one of an intercontinental ballistic missile. A snazzy video of the launch was released for domestic consumption. Many also expected a parade of the armed forces on April 15th. One may still be in the offing, perhaps on April 25th, when the army celebrates its own anniversary. Soldiers were seen rehearsing on April 17th.

Mr Kim is also redoubling efforts to root out the “evil spirits of anti-socialism and non-socialism infesting the heads of the people”. He has waged a long campaign against the distribution of USB drives packed with South Korean dramas and other nefarious foreign media, promoting more ideologically sound fare in their stead. A flurry of cultural events was held around the anniversary of his grandfather’s birth, including an art festival postponed since 2020. This month North Korea released its first new feature film in five years, telling the tale of Ra Myong Hui, a plucky nurse and war veteran who exposed an anti-party plot in 1958.

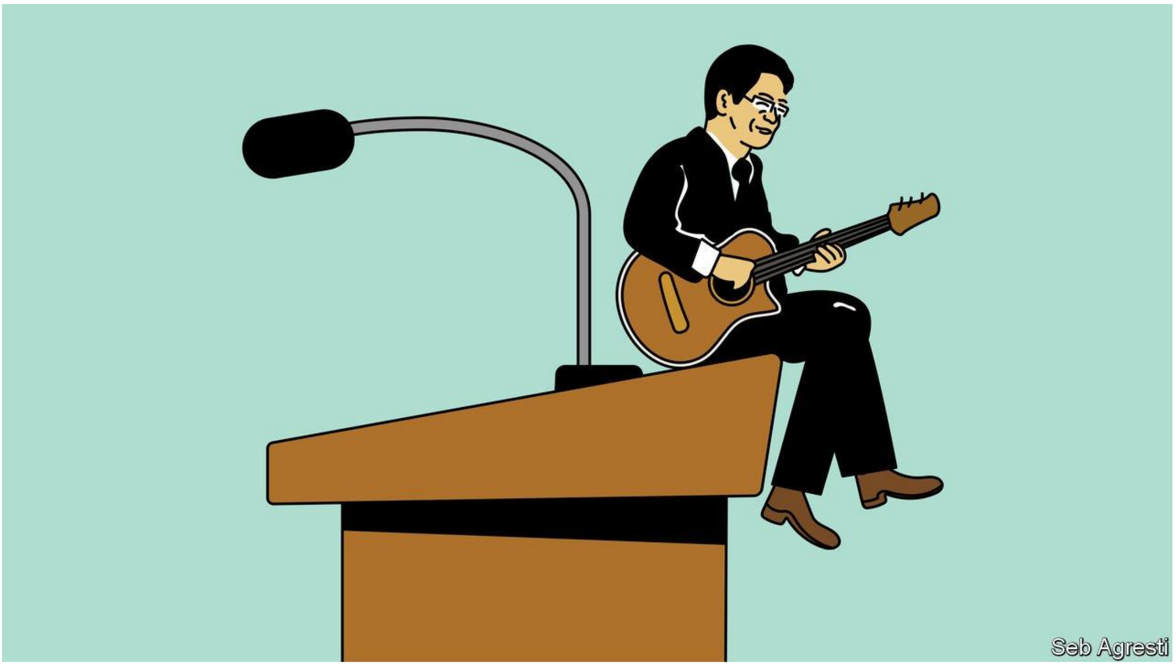
Despite his brutality and his vice-like grip on the population, Mr Kim must still command the continuing support of both the elites and ordinary citizens. Red-letter days offer him a chance to show both that their faith in him has borne fruit. Unfortunately for most North Koreans, fruit of this sort will not fill hungry bellies. ■

Banyan

Lawrence Wong is Singapore’s presumptive next prime minister

The ruling party’s new leader-in-waiting is meant to show its softer side

Apr 21st 2022



IN MANY RESPECTS Lawrence Wong resembles the scholar-statesmen both epitomised and prized by Lee Kuan Yew, Singapore’s founding father. Like Lee, the country’s first prime minister, and his son Lee Hsien Loong, the third and current one, Mr Wong did a stint at Harvard, earning a masters in public administration. He then climbed the ranks of the civil service, ending up as principal private secretary to Lee the younger. As a politician, his ministerial portfolios have included education and national development. He is currently the finance minister and co-chair of the government’s covid-19 task force. Although Singapore is a multiracial country, Mr Wong is an ethnic-Chinese man, like all previous heads of government.

Yet he is also the kind of bloke you could drink a beer with. That, at least, is the impression one gets from Singapore’s state-owned media, which have been full of glowing reports ever since it was announced, on April 14th, that Mr Wong will take over as leader of the People’s Action Party (PAP) when its current boss, Lee junior, eventually steps down. (Mr Lee had planned to retire by February, but deferred that during the pandemic. He has yet to declare a new departure date.) Barring a historic upset at the next election, Mr Wong is on course to become the country's fourth prime minister.

Mr Wong grew up, he has said, in an "ordinary family". His father was a salesman and his mother a schoolteacher. Like most Singaporeans, they lived in public housing. And unlike many leading politicians, he attended his local high school rather than an elite institution. He then went to the University of Michigan—not quite Cambridge, where the two Lees studied. His private life is not picture perfect. In a socially conservative country, he is a divorcé, since remarried, and has no children. He has hobbies—he likes to play the guitar—and a softer side. When his golden retriever died in 2020, he mourned publicly on Instagram: "baby Summer has crossed the rainbow bridge… We will miss u :(".

All this cuts against the image of the typical PAP politician. The man with whom the party is most closely associated is Lee senior. Unabashedly elitist, he possessed immense intellect, ruthlessness and a penchant for telling Singaporeans what was best for them. A colossus who transformed the city, he saw no need to be liked. Over the course of his long career—he retired from politics only in 2011—he moulded the party in his image.

The man first selected to succeed Lee Jr, Heng Swee Keat, resigned from the post last year citing his age—he is 61—rather than his many gaffes. But he was widely perceived as dull and distant. By the same token, the two other main candidates for the job are considered arrogant (Chan Chun Sing, the education minister) and stern (Ong Ye Kung, the health minister).

The 49-year-old Mr Wong is a bit more personable. Perhaps the first time the public took notice of him was in 2020 when, while giving a speech in Parliament about the sacrifices made by front-line workers at the height of the pandemic, he broke down in tears. His sniffles endeared him to the public, who think of the party's elite as cold and calculating.

Mr Wong is not considered a charismatic visionary, says Linda Lim, a professor at the University of Michigan who has known him since his student days. But he is "a decent guy" who is comfortable showing emotion.

If the men in white, as PAP stalwarts are known, are supermen, Mr Wong is everyman.

Mr Wong's more human bearing may have won him the job, but he is unlikely to take the country in a different direction, reckons Michael Barr of Flinders University in Australia. Instead, his elevation, in an opaque process involving the PAP's so-called "fourth generation", or "4G", is a sign of the party's adaptability. Even though the PAP commanded 61.2% of the vote in the most recent election, in 2020—a landslide anywhere else—it won the smallest share of seats in its history.

The opposition remains small and structurally disadvantaged. Yet the PAP's election post-mortem revealed that many Singaporeans found their rivals more empathetic and wanted them to act as a check on the ruling party's power. The PAP is therefore preparing for a future in which politics will be more contested. As Mr Wong said recently, echoing the prime minister, "We do not assume that the PAP will win the next general election." Its leaders seem to hope that they can hold on to power by climbing down from their pedestals and showing that they, too, are only human.

Read more from Banyan, our columnist on Asia:
Australian politicians need to think harder about defence (Apr 16th)
India's vaunted strategic autonomy is a mirage (Apr 9th)
The invasion of Ukraine has turned Japan definitively against Russia (Apr 2nd)

China

Democracies and the dragon

Chinese political interference has Western spooks worried

With money and support, China hopes to bend foreign politicians to its will

Apr 21st 2022

CHRISTINE LEE once mingled easily with members of Britain's elite. The Hong Kong-born British solicitor frequently visited Parliament, where legislators supported her work helping ethnic Chinese get more involved in politics. She even received an award for her efforts from Theresa May, who was then prime minister. The two were photographed together at Downing Street in 2019.

In January that award was rescinded—because, according to MI5, a British spy agency, Ms Lee has been covertly working for China. In a security notice issued to parliamentarians that month, the agency warned them about her "political interference activities". It was the first of its kind naming China, though not a complete surprise. "You might think in terms of the Russian intelligence services providing bursts of bad weather," said Ken McCallum in 2020, shortly after becoming MI5's chief. "China is changing the climate."

Britain is not the only Western country sensing a change in atmosphere. American officials also warn of covert attempts by China to bend local politicians to its will. The alarms grew louder during the presidency of Donald Trump. “China is expanding its influence efforts to shape the policy environment in the United States, pressure political figures it views as opposed to China’s interests, and counter criticism of China,” noted William Evanina, then the director of the National Counterintelligence and Security Centre, in 2020.

In a report last year the Canadian Security Intelligence Service (CSIS) said it had observed “persistent and sophisticated state-sponsored threat activity targeting elections for many years now” with “a rise in its frequency and sophistication”. It did not name the countries involved, but earlier in the year David Vigneault, the chief of CSIS, said his agency was most concerned about actions by “countries like Russia and China”. In January the *Globe and Mail*, a newspaper, said Canada’s spies had been briefing selected parliamentarians about influence operations by China, as well as other countries.

“Espionage and foreign interference has supplanted terrorism as our principal security concern,” said Mike Burgess, the head of the Australian Security Intelligence Organisation (ASIO), in February. He says his agency recently thwarted an attempt by a person nicknamed “the puppeteer”, working on behalf of a foreign government, to interfere in an Australian election. Using an offshore account, the puppeteer planned to support candidates who either backed the interests of the foreign government or who were deemed vulnerable to inducements and cultivation. “It was like a foreign-interference startup,” said Mr Burgess.

The spy chief did not identify the government or the puppeteer. An Australian senator (who died last month of a suspected heart attack) said she had been “reliably informed” who the person was: she named a prominent ethnic-Chinese Australian businessman. ASIO has not confirmed this, and the person has denied the allegations. But the country referred to by Mr Burgess was undoubtedly China.

It is believed that a common factor in these allegations of political interference is a branch of the Chinese Communist Party called the United

Front Work Department (UFWD). MI5's notice about Ms Lee says the organisation "identifies and cultivates individuals" with the goal of promoting the party's agenda and "challenging those that do not subscribe to its policies".

Ms Lee's connections with the UFWD are hardly a secret. She has acknowledged her work as a "legal adviser" to the Overseas Chinese Affairs Office, a division of the UFWD. She has served as a director of the China Overseas Friendship Association, a body under the UFWD's control. Her website in China, now closed, described a meeting in Beijing of the association's directors in 2019. "I should do a good job as a communicator of China's voice," she told the gathering. "I should also keep firmly in mind General Secretary Xi Jinping's instructions," she said, referring to China's leader. "I should turn them into guidance for my own actions and firmly implement them." State television showed a grinning Ms Lee shaking Mr Xi's hand at the gathering (the UFWD's chief was also there).

It had also long been known that Ms Lee had been providing money for staff in the office of a prominent opposition politician in Britain, Barry Gardiner of the Labour Party: a total of more than £500,000 ($650,000) over several years. Mr Gardiner says that this funding ended in 2020, that Ms Lee had no role in the appointment or management of his team members, that he did not profit personally and that Ms Lee's son, who was working as his diary manager, resigned after MI5 issued its warning.

From China with love

MI5, it appears, is now more certain that Ms Lee obtained funds from China to hand out to a wide range of recipients, from political parties and legislators to aspiring politicians. Mr Gardiner says security officials told him they had no evidence that the money his office received came from China, and no evidence of any complicity in Ms Lee's alleged activities by her son.

Little has come to light publicly that shows China has gained much from its overseas influence operations. Only one case has been reported so far of a senior Western politician receiving money from a source linked to the Chinese campaign and then siding with China in a way clearly at odds with mainstream opinion. It involved Sam Dastyari, an opposition legislator in Australia who, in 2017, urged his government to "respect" China's territorial claims in the South China Sea. Amid a furore over this, he resigned from parliament.

What worries the spooks, however, is something subtler than securing support for China's building of bases on contested reefs. The UFWD, they believe, often wants politicians to help China just by keeping silent: avoiding criticism of Chinese policy and refraining from supporting action, such as sanctions, that might cause difficulties for China's government. The UFWD is not a spy service, but its targets are sometimes of interest to China's espionage outfits, too. It facilitates their work.

Much of the UFWD's effort is directed at people inside China: influential citizens such as businessmen, academics, religious leaders, ethnic minorities and people from Hong Kong and Taiwan. Abroad, it mainly focuses on winning over ethnic Chinese, and through them, creating bonds between the party and Western elites, including politicians. Like his predecessors, Mr Xi calls political-influence efforts one of the party's *fabao* (talismans). In 2015 he set up a "leading small group" to supervise them, bringing such operations closer to the heart of the party's decision-making.

China's official media have highlighted Ms Lee's work as leader of the British Chinese Project (in February she applied for its dissolution). The aim of this organisation was to encourage ethnic Chinese to play a bigger role in British politics. On the face of it, this was a noble cause. Historically, voter-turnout rates have been low within this community; it was not until 2015 that Britain elected its first ethnic-Chinese MP. But the promotion of *huaren canzheng* (ethnic-Chinese participation in politics) is also one of the stated missions of the UFWD in the West. Ms Lee took ethnic-Chinese candidates on trips to China, where UFWD officials preached to them about the virtues of China's political system.

Again, there is no evidence that such tactics work. China's prestige in the West has taken a battering from the horrors Mr Xi has unleashed in Xinjiang, his gutting of freedoms in Hong Kong and, most recently, from his tacit backing of Russia's invasion of Ukraine. It would take a brave politician to stand up in any Western legislature and defend such a record.

Support for Chinese investment in the West's critical infrastructure has all but evaporated in recent years because of security concerns. Western spies warn of the danger of overreaction. ASIO's Mr Burgess said it was critical not to let fear of foreign interference "stoke community division". In February America's Department of Justice ended a Trump-era campaign against Chinese theft of intellectual property amid claims that the effort, called the "China Initiative", was encouraging ethnic profiling.

There is a clear danger, however, when China's real spooks get involved. Their work abroad—apart from gathering secrets—includes intimidating political enemies such as exiles from Xinjiang and other dissidents. A recent case involves Yan Xiong, a student leader during the Tiananmen Square protests of 1989 who became an American citizen and served as a chaplain in the US Army. Mr Xiong is now making a bid for Congress as a Democratic candidate in New York. A primary election is due to be held in June. His Tiananmen background makes him the kind of ethnic Chinese whom the party definitely does not want elected.

In March the FBI alleged that an operative of China's spy service, the Ministry of State Security, had asked a private investigator in America to try to thwart Mr Xiong's campaign by finding something that might discredit him, such as a tax violation or contact with a prostitute. Failing that, the FBI quoted the spy as saying in a voice message, "violence would be fine, too", including a "car accident".

Although the FBI did not name Mr Xiong, the candidate confirmed that he was the target. "I was a soldier, I have the Lord in my heart," he insists. "I have no fear." But Mr Xiong says that now he drives even more cautiously and is on guard when he is out at night. ■

The Russian treatment

Could the West punish China the way it has punished Russia?

New economic weapons are double-edged swords

Apr 23rd 2022 | HONG KONG

"WOULD THE US really dare to freeze or confiscate China's reserve assets?" asked Wang Yongli, a former director of Bank of China, in an article last month. Good question. After Russia invaded Ukraine, America and its allies imposed crippling sanctions on Russia's central bank, removing from its reach about half of its foreign-exchange reserves. They also cut off some of Russia's biggest banks from the Western financial system and banned many high-tech exports to the country. If China were to do something geopolitically rash, such as invading Taiwan, could the West do to China what it has done to Russia?

America and its allies certainly have the means. "The locus of financial power still sits firmly in the West," says Eswar Prasad of Cornell University. China probably keeps about two-thirds of its $3.2trn of foreign-exchange reserves in Western government bonds and the like. Because of the size of its holdings, it has few viable alternative stores of wealth. If America and

Europe instruct their financial institutions not to deal with Chinese banks, they would lose access to the dollar, euro and pound.

But would the West really dare? “Freezing” China’s reserves might not be too destabilising. Even if China wanted to dump its holdings to spite the West, the sanctions would prevent it from doing so. China would be unable to buy more of these securities. But the bond markets would not miss it much. China has not been a big buyer of late. And by invading Taiwan it would create panic, triggering a stampede into highly rated bonds from private investors.

China could find other ways to punch back, though. In particular, it could seize the sizeable assets that Westerners hold in China. At the end of last year, foreigners owned $3.6trn in direct investments, including immovable factories, and $2.2trn in shares, bonds and other “portfolio” investments, notes Gerard DiPippo of the Centre for Strategic and International Studies, a think-tank in Washington. The combined total is over six times the size of the equivalent foreign holdings in Russia.

What if the West also imposed sanctions on other Chinese financial institutions, beyond the central bank? That could expose Western institutions to financial “blowback”. Four of the world’s 30 “systemically important” banks are Chinese, according to the Financial Stability Board, a group of regulators. Crippling these banks could also damage Western institutions that have lent to them or hold accounts with them. Could Western countries be confident that cutting off Chinese banks would leave their own financial stability undisturbed? “No,” says Clay Lowery of the Institute of International Finance, a bankers’ group. “I’m not confident of that.”

Such measures would also wreak havoc with trade. Less than a fifth of China’s trade last year was settled in its own currency. Much of the rest was conducted in dollars. “If you can’t get insurance and trade credit, a lot of economic activity dries up,” says Martin Chorzempa of the Peterson Institute for International Economics, a research organisation. Since China is the leading trade partner of over 120 countries, the disruption might turn the rest of the world against America and its allies.

The Economist

Western countries would suffer, too, which could erode their unity and resolve. China accounts for about 18% of America's imports and over 22% of the EU's, including many parts and components used in domestic manufacturing (see chart). For this reason, obstructing trade with China can damage a country's own production, including its exports. If America and its allies were to cut Chinese imports by over 90%, their own exports would fall by almost 10%, according to simulations by Gabriel Felbermayr of the Vienna University of Economics and Business and his co-authors.

China's biggest source of leverage is its own vast market. America might, for example, wish to deprive it of certain high-tech inputs, such as semiconductors. But a complete ban would cost American semiconductor firms 37% of their revenues, according to Boston Consulting Group, and jeopardise over 120,000 jobs.

China, for its part, might curb exports of the "rare earths" used in many electronic goods. It could disrupt the supply chain for electric-vehicle batteries and other manufacturing niches. And it could squeeze adversaries out of markets they might not want to forfeit. European sanctions, for example, initially spared Russia's $2.4bn market for luxury goods: the so-called "Gucci exemption". The same market in China is worth over $50bn a year, according to Statista, a data provider.

The West can hit Russia with a harder economic punch any time it tries to hit back. The same is not necessarily true with China, says Eddie Fishman of the Centre for a New American Security, a think-tank. That in turn makes it more likely that China would indeed hit back. America and its allies could, then, suffer considerable pain if they imposed on China the same sanctions they have inflicted on Russia. For that reason, they would probably not dare go that far. But they must hope that China does not dare to find out. ■

Read more of our recent coverage of the Ukraine crisis

The blame game

China says imports are causing outbreaks of covid-19

Alleged vectors include everything from pork knuckles to clothing

Apr 21st 2022 | BEIJING

IT STARTED WITH Norwegian salmon. Chinese officials blamed the frozen fish for a surge of covid-19 cases in Beijing in 2020. Later they claimed to have found the virus on crabs from Chile and shrimp from Ecuador. A smorgasbord of other delicacies, from pork knuckles to bananas, have also been labelled as hosts by China. So have South Korean clothing and packages arriving from abroad.

Most experts—even some Chinese ones—think this is hogwash. The World Health Organisation says there is no evidence that people can catch covid from food or food packaging. The virus rarely spreads through surfaces. Most transmissions occur when an infected person breathes out tiny droplets that are inhaled by someone close by. When China claims to find covid on an imported banana, say, it is probably just finding harmless fragments of the virus.

But imported products make for good scapegoats. Under China's "zero-covid" policy local officials are punished when an outbreak occurs on their watch. It probably helps if they can blame foreigners. Indeed, Chinese officials and media have pushed an unfounded conspiracy theory that the virus originated in America and was brought to Wuhan, the Chinese city where the pandemic started, by American soldiers.

This leads to paranoia. A video shows health officials in a Shanghai market swabbing the lips of a live carp. Last year the National Health Commission published advice on imported cherries. "Since the virus is running rampant in foreign countries, cherries cannot come out of the mud unsullied," said an expert on its website. Some goods come with a QR code that a Chinese buyer can scan in order to check its covid test results.

The testing and quarantining of imports adds costs for businesses. When a good tests positive, trade in it may be halted. "China has never shared any scientific justification for having adopted such restrictive and unjustified measures," says the European Union's delegation to China. Joerg Wuttke, president of the EU Chamber of Commerce in China, blames "voodoo science" for the way imports are treated. According to him, "The hysteria is still sky-high."

Dig deeper

All our stories relating to the pandemic can be found on our coronavirus hub. You can also find trackers showing the global roll-out of vaccines, excess deaths by country and the virus's spread across Europe.

Chaguan

China’s harsh and elitist covid rules

The pandemic revives old fears about migrants from humble places

Apr 21st 2022

IN TIMES OF disease, revolution or famine, Beijing’s city gates offered China’s imperial rulers more than mere security. These hulking towers of grey brick and stone were symbols of a system that strove to keep death itself far from the seat of supreme power. When smallpox swept the arid plains and mountains of north-east China, the sick were quarantined miles outside Beijing and even imperial family members banished, if they lacked immunity from a previous infection. During some bubonic plagues, burials were banned in Beijing and detailed records kept of each coffin exiting its gates. In the heyday of China’s final, revolution-haunted dynasty, the Qing, the city maintained a garrison of 33,000 paramilitary police—or about one guard for every 20 Beijingers—with orders to track and register every stranger who entered its walls, whether domestic or foreign. When famines stalked the countryside, a gruel of millet and rice was served at temples just outside the city gates, to keep refugees from storming Beijing.

Under the Communist Party most of Beijing's walls and gates have been torn down, but its privileges endure. Until the late 1970s all outsiders, especially from the countryside, had to register on arrival in the capital. To migrate to the city required something few newcomers could obtain: a Beijing *hukou*, the household registration papers needed to access housing, jobs, schooling and other public services. When famines killed millions in the era of Mao Zedong, Beijing was kept supplied with food to preserve political stability. Even today, provincial Chinese cannot easily buy property or raise school-age children in the capital without a Beijing *hukou*. Yet for some years outsiders, notably well-educated youngsters, could work and live in Beijing and feel almost equal to natives. The covid-19 pandemic shows that they are wrong to.

The Baimiaobei police checkpoint, straddling a four-lane road linking Beijing to the next-door province of Hebei, lacks the battlemented grandeur of an imperial gate. This open-sided, blue and white shed, one of over 160 checkpoints around Beijing, resembles a motorway toll station. Before covid it barely slowed buses and cars bringing commuters from Sanhe, a dormitory town separated by a river from Beijing. In normal times, Sanhe offers cheaper housing and shorter commuting times than many outlying districts of Beijing, with the added lure of easy-to-obtain Hebei *hukou*. Then in early March three covid cases were found in Langfang, a sprawling city of 5.5m people of which Sanhe is a part. Within hours authorities in Langfang banned non-essential travel to Beijing, pledging to make their region of Hebei a "political moat" for the capital. As more cases were confirmed, the city locked down for more than 30 days. Now that it has reopened, residents who work in Beijing need "commuter passes" issued by local officials. Obtaining a pass requires a declaration stamped by employers in the capital. That is impossible for some day labourers, self-employed cleaners and the like, leaving them out of work. Even students studying in Beijing have struggled to obtain the "Langfang exit certificates" needed for one-off trips.

Chaguan headed to the Baimiaobei checkpoint just after dawn on a recent weekday. With cross-border buses suspended, a stream of inbound commuters crossed from Langfang on foot. The smoggy air rang with the cries of touts promoting express coaches to central Beijing, and hawkers selling hot soybean milk and fried dough-sticks for breakfast. A smartphone salesman from Sanhe reported missing weeks of work in the capital, taking some of it as unpaid leave. He is sure that Langfang residents will find it harder to land jobs in Beijing in the future. Asked if he fears another border closure, he sighed: "There is nothing you can do."

A defence of Beijing's strict border controls might stress the importance of shielding the central government from outbreaks. But that does not explain why pandemic rules inside the capital have been strikingly lenient, compared with those imposed on humbler places like Langfang. For instance, more than half a dozen covid cases were found in April in Jiuxianqiao, a district of Beijing near modern-art galleries and posh apartment blocks. A compact "high-risk zone" was drawn around that outbreak as if with a scalpel. Nearby schools, shops and restaurants stayed open.

Some lives are more equal than others

To be sure, Shanghai, the only Chinese city to rival Beijing in importance, has suffered ferocious pandemic controls since the end of March. Residents of several districts went without food for days and hundreds of thousands of Shanghainese have been sent to grim mass-quarantine sites. Even so, Shanghai is receiving special treatment. On April 20th the city was home to 18,495 new cases, or over 95% of China's total. But officials are imposing lockdowns as precisely as possible while opening individual neighbourhoods. It is even possible to leave Shanghai and travel to Beijing—at least for those who can afford at-home covid tests, covid-exempt taxis to the airport and 14 days of home quarantine in Beijing.

In contrast, tens of millions of people in dozens of little-known cities are currently under sweeping lockdowns and "static management" orders banning travel, some triggered by a single case. Some border cities in China's far north and south have repeatedly quarantined residents and closed schools and businesses over the past two years, plunging locals into debt and despair. Beijing bans arrivals from all such places. Controls are especially tough on migrant workers, lorry drivers and others who move for a living. Their suffering attracts a fraction of the attention paid to Shanghainese, whose woes have made headlines for weeks.

Party bosses call strict covid rules proof that China cares about the lives and interests of the majority, unlike the decadent, freedom-obsessed West. Harsh controls have prevented many deaths, for China has lots of unvaccinated old people and a weak health system. But fast-spreading Omicron is testing that strategy. It is also exposing inequalities with ancient roots. ■

Read more from Chaguan, our columnist on China:
China goes on the offensive over human rights (Apr 16th)
Don't underestimate Xi Jinping's bond with Vladimir Putin (Apr 9th)
A final victory for China's propaganda chiefs (Apr 2nd)

All our stories relating to the pandemic can be found on our coronavirus hub. You can also find trackers showing the global roll-out of vaccines, excess deaths by country and the virus's spread across Europe.

United States

Greener than thou

California wants to lead the world on climate policy

The energy crunch offers the state a chance to live up to its green reputation

Apr 23rd 2022 | Los Angeles

THE GLOBAL energy crunch brought about by Russia's invasion of Ukraine has given Joe Biden's presidency a slogan usually associated with Republicans crowing about energy independence: "drill, baby, drill". In addition to releasing 1m barrels of oil a day from America's Strategic Petroleum Reserve, the Interior Department will resume new lease sales for oil and gas drilling on public lands, reneging on Mr Biden's campaign promise to end the practice. Sounding less like a Republican, the president has also suggested that long-term energy independence would come only from weaning America off fossil fuels.

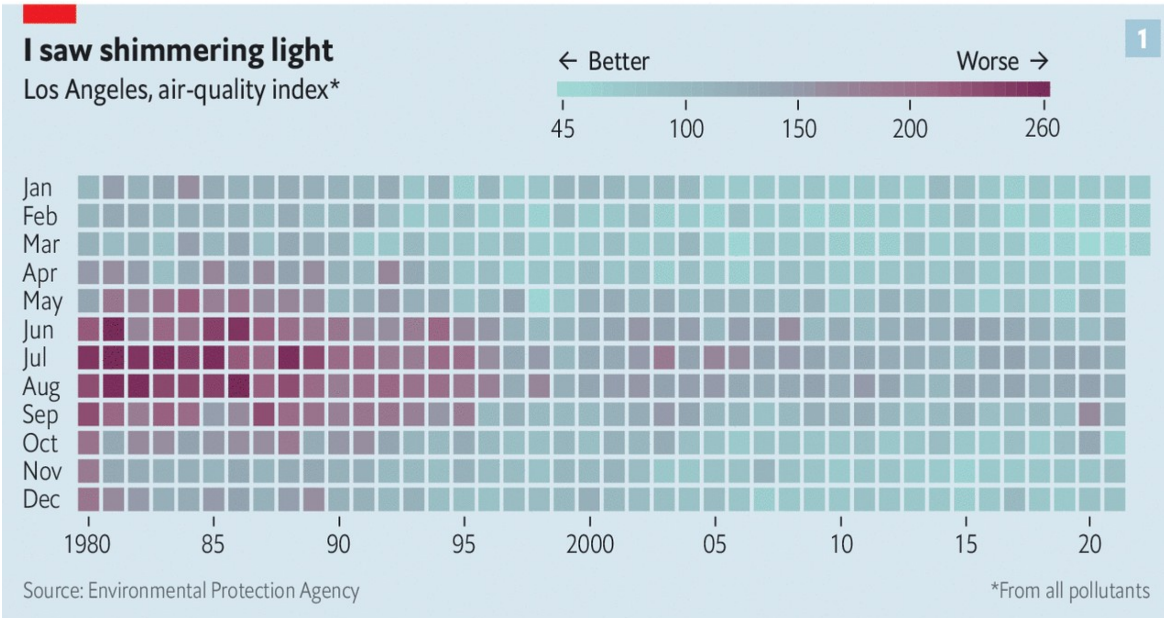
The pain at the pump is most agonising in California. On April 20th the average price of a gallon of petrol in America was $4.11; in highway-laden Los Angeles it was $5.79. Yet for all its gas-guzzling, California also claims to be America's greenest state. In a recent speech Gavin Newsom, its

Democratic governor, proclaimed that "California has no peers" on climate policy. His proposed annual budget includes a $22.5bn climate wish-list that would invest in electrifying transport, shoring up public-transit infrastructure and protecting people from droughts and fires. This follows decades of ambitious environmental policy that has influenced officials in other states, in the federal government and abroad. How will the Golden State's green reputation hold up at a time of deepening energy worries?

Two policies stand out for their impact within the state and beyond. First is California's unique ability among America's states to set its own standards for vehicle emissions. In the 20th century, Los Angeles's booming population, topography and sprawling port contaminated its air. The sky was so filthy one summer day in 1943 that Angelenos worried they were victims of a gas attack related to the war. Officials enacted exhaust-emissions limits in 1966 to try to tame the city's noxious smog.

Because California's rules predated the Air Quality Act of 1967 and the Clean Air Act of 1970, when federal officials first set national standards for air quality, the feds granted the state waivers which allowed it to set its own, stricter pollution rules. California has applied for more than 100 waivers since 1967. Today, states can choose to adopt the Environmental Protection Agency's (EPA) rules for vehicle emissions, or California's. By 2022, 16 states followed California's standards. The state's laser focus on car exhaust stems from twin concerns: local air pollution and the global climate crisis. Transport accounts for 29% of greenhouse-gas emissions in America and fully 41% in California.

Los Angeles's air quality is still often foul, but it has improved a lot over the past 40 years (see chart 1). Yet the Trump administration revoked California's waiver in 2019, arguing that it should not set standards for other states. The decision was the most serious manifestation of President Donald Trump's resentment of California's environmental leadership, says Richard Revesz of New York University. The EPA restored the waiver last month around the time it announced new federal pollution limits for buses, vans and lorries—based on similar rules in California.



The Economist

The second landmark policy dates back to 2006, when California passed a law requiring it to cut greenhouse-gas emissions to 1990 levels by 2020. Britain was the first country to set a legally binding emissions target, but not until 2008. Six months after the bill's passage Arnold Schwarzenegger, the governor at the time, was on the cover of *Newsweek* balancing a globe on one finger. Mary Nichols, a former boss of the California Air Resources Board (CARB), the state's air-pollution regulator, recalls giving a lecture in Switzerland to crowds of people "wanting to hear what California under Arnold Schwarzenegger was going to be doing about climate change".

The target was achieved early, in 2016. Lawmakers then required the state to cut emissions to 40% below 1990 levels by 2030. Today California still has the second-highest total emissions (after Texas) among the 50 states. Yet as of 2016 only New York had lower emissions per person.

California was early on emissions-cutting for several reasons. First, it enjoys rare bipartisan support for bold climate action. CARB was created during Ronald Reagan's governorship in the 1960s. "Arnold Schwarzenegger was pretty lonely among Republican governors who believe deeply in the need to address climate change," says Bill Ritter, a former governor of Colorado who runs the Centre for the New Energy Economy at Colorado State University. States without Democratic supermajorities or climate-conscious conservatives cannot hope to move as fast. Voters are also on board. In a recent poll 68% of Californians said the effects of climate change are already being felt, and nearly three-quarters said they support the 2030 target.

Second, California has the cash and manpower to invest in climate mitigation and adaptation. The Golden State is the world's fifth-largest economy. Thanks to a colossal budget surplus, Mr Newsom's $22.5bn climate blueprint is almost twice the size of President Joe Biden's 2023 budget request for the EPA (although the EPA is just one of many federal agencies that formulate climate policy). More than 1,700 people work for CARB.

Lastly, Californians have been suffering the effects of climate change for years. Wildfires have incinerated towns and their smoke has dirtied the air. Drought has dried up water supplies. Extreme heat has baked cities and farms. And rising seas threaten coastal towns.

This could be heaven or it could be hell

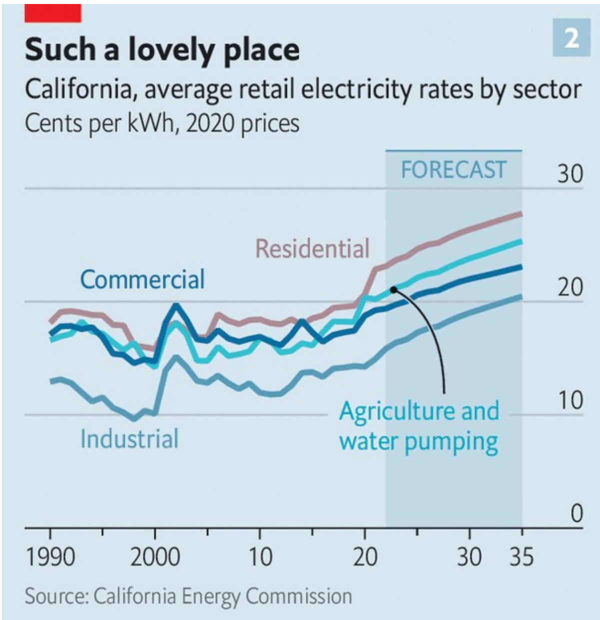
Few dispute California's past successes. But recently some have argued that its big achievements—such as implementing a cap-and-trade system in 2013—are long past. The state's politicians are used to being badmouthed by their counterparts in Texas and Florida, but on climate the toughest criticisms often come from within. "It's one thing to set goals, which we've done a great job of," says Anthony Rendon, the Speaker of California's state assembly. "It's another thing to actually attain those."

Scepticism about the state's ability to reach its climate targets may be warranted. Last year a report from the state auditor said CARB has failed to measure accurately the success of its incentive programmes for electric vehicles, leading it to overstate emissions reductions. Data collection is just one problem. Some hurdles, such as the need to build transmission lines to import wind and solar power from states farther inland, are to be expected. But many obstacles are of California's own making.

Consider Diablo Canyon, the state's lone nuclear plant, which is due to be shut down by 2025 despite being a source of clean, reliable energy. Diablo supplies California with about 9% of its electricity generation and accounts for 15% of its clean-electricity production. California plans to replace the plant with other low-carbon sources, but it cannot afford to forgo baseload power when it is trying to electrify everything from cars to stoves.

The Golden State's tireless NIMBYs are also hampering the fight against climate change. Anti-growth activists have used the California Environmental Quality Act to block public-transit projects and new housing, which is often denser and more energy-efficient than are old buildings and single-family homes. Estimates suggest that California could produce 112 gigawatts of offshore wind power, yet NIMBYs fret that floating turbines will spoil the view.

Making things trickier is the need to tackle short-term troubles—such as high petrol prices—while aiming to hasten decarbonisation. Squabbling in Sacramento over what to do about California's highest-in-the-country fuel prices epitomises the state's contradictions on climate. Mr Newsom's proposal to send $400 to all car-owners has baffled some Democrats, who argue that helping only drivers leaves out poorer Californians who happen not to drive but are also squeezed by inflation. Subsidising petrol also seems a curious way to encourage drivers to buy an electric car or take the bus. The $750m that Mr Newsom would spend to subsidise public transport pales in comparison with the $9bn he would splash out on fuel rebates.



The Economist

Californians in oil-rich Kern County are, like Mr Biden, clamouring to drill. Most new fracking permits have been denied as California has tried to phase out oil production. As fuel and electricity prices rise, lawmakers must reckon with how to decarbonise without hurting more residents and losing firms to cheaper states.

Republicans fret that the state's web of regulations, steep energy costs and high taxes levied in the name of greenery are harming California's competitiveness. A report last year from Stanford University's Hoover Institution, a conservative think-tank, found that businesses cited all three as reasons they decided to flee the state—usually for Texas. In 2021 the cost of electricity in California was the third-highest among the states, after Hawaii and Alaska. In part that is because consumers foot the bill for utilities to upgrade their equipment, so as to spark fewer wildfires. Rates are projected to keep climbing (see chart 2).

Years of climate denial under Mr Trump and the current dysfunction in Congress mean that states are driving the country's fight against climate change. California is one of four American states that helped found the Under2 Coalition, a group of subnational governments committed to the Paris Agreement of 2015.

But even if California and other green states can hit their targets, a coalition of the willing can only do so much. The Rhodium Group, a consultancy, reckons that 60% of emissions stem from states without climate goals. To force high emitters such as Texas to act, “Joint action with the federal government is absolutely required,” says Mr Ritter. Last year Joe Manchin, the Democratic senator for West Virginia, demolished his party’s hopes of passing $555bn in climate provisions that were part of the huge Build Back Better bill (he has recently restarted talks with other Democrats about an energy package).

While Congress sits on its hands, CARB has proposed banning the sale of new gasoline-powered cars by 2035. Mr Biden’s more modest national goal is for half of all cars sold in 2030 to be electric. Regulators are also investigating what it would take to decarbonise California by 2035, moving the state’s goalposts forward by a decade. “I think sometimes there is an aversion to following the California example because other parts of the country may have a strong reaction to the idea of being like California,” says Aimee Barnes, a climate adviser to Jerry Brown, a former governor of the state. “And I think that’s a mistake.” ■

For more coverage of climate change, register for [The Climate Issue](), our fortnightly newsletter, or visit our [climate-change hub]()

Cottage industry

The case for granny flats

Adding density would boost housing supply and lower emissions

Apr 23rd 2022 | Los Angeles and Denver

"A NIGHTMARE," is how Sam Schneider, a co-founder of Homestead, a startup that finances and builds granny flats, describes the permit process in California. Yet, sitting on the rooftop deck of his office in Los Angeles, he concedes that the paperwork is getting easier. Granny flats—or Accessory Dwelling Units (ADUs), as Americans call them—have taken off in California and cities around the American West as house prices have soared.

An ADU is a cottage or flat built on the same lot as a single-family home. Owners rent them for cash, or house family in them. About 180 municipalities in California passed ADU laws between 2017 and 2020. Los Angeles issued permits for nearly 6,700 units in 2019, up from about 4,100 in 2018. Seattle approved some 500 in 2020 and 800 in 2021. Tobias Peter of the American Enterprise Institute (AEI), a think-tank in Washington, DC, views ADUs as one example of "light-touch density", which also includes splitting single-family homes into several units. Such conversions may become more common in California thanks to a law passed last year which eliminated single-family zoning.

Things are moving more slowly in cities with strict zoning codes. Denver approved just two granny flats in 2010 and 71 in 2019. Many single-family homeowners in Colorado's capital who want to build an ADU must petition the city to have their plot rezoned, which can take months. Permits and construction can also be costly and confusing. That is where startups like Homestead come in. As interest in ADUs grows, so does the number of firms wanting to build them.

It is no mystery why local officials are keen on granny flats. They are "low-hanging fruit", says Mr Peter. The infrastructure costs of adding a new unit on undeveloped land are $50,000 more than for an "infill" unit, according to AEI.

High-density developments are also greener than single-family ones thanks to reduced heating and cooling costs, and shorter commutes. Adding units to urban areas allows more people to live close to public transport and the places where they would work or socialise, curbing transport emissions. Encouraging density rather than sprawl would avoid "letting the affordability and housing crisis further our climate woes", says Lauren Sanchez, a climate adviser to California's governor.

Granny flats alone will not solve California's housing crunch, but their popularity is a good sign. "If you create enough housing stock," says Mr Schneider, Los Angeles and San Francisco "become places where people can actually live, and not places where people can only leave."

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A fight over jurisdiction

Oklahoma takes a tussle with Indian tribes to the Supreme Court

Challenging the long arm of tribal law

Apr 21st 2022 | Tahlequah, Oklahoma

WITH AN AIR of efficiency Judge Amy Page moves through the day's docket. Defendants stand sheepishly before her to face their charges: assault and battery, stalking, larceny, drunk driving. Most take a plea deal and a scolding, and exhale with relief when dismissed. The proceedings resemble those of any county courtroom in the country—but for the fact that every defendant is Native American. The seal of the Cherokee nation adorns the wall.

The Cherokee court in Tahlequah, Oklahoma, used to see at most 70 criminal cases a year. Now it handles 4,000. The shift stems from the Supreme Court's 5-4 decision in *McGirt v Oklahoma*, which in 2020 held that the reservation of the Muscogee (Creek) nation, an Indian tribe, had not been legally dissolved by Congress. That gave the tribe jurisdiction over members who commit crimes there. The ruling has since been extended to the Cherokee, Chickasaw, Choctaw and Seminole. Their land covers 43% of the state, home to 1.8m people. It includes Tulsa, a city that sits within Cherokee and Muscogee territory.

McGirt meant the state lost jurisdiction over some 18,000 cases a year. The caseload of the Tulsa district-attorney's office shrank by 15%. Most of these —misdemeanours and petty felonies committed by Indians—now go to tribal prosecutors. Federal courts handle the rest: crimes with non-Indian defendants and Indian victims, and serious ones by Indians. Federal prosecutors in the northern district of Oklahoma, which covers Tulsa, file 600 indictments a year, up from 200 pre- *McGirt*. Its staff of attorneys has nearly doubled, to 50.

The Supreme Court's ruling was a victory for Oklahoma's tribes—a recognition of sovereignty, in their eyes. But it inflamed tensions with the state. Kevin Stitt, the governor, who is Cherokee, has said the decision "robbed" him of the authority to pursue criminals and created a "public-safety nightmare". He calls *McGirt* the state's "most pressing issue" and has petitioned the court to revisit its ruling.

On April 27th the justices will hear oral arguments in *Oklahoma v Castro-Huerta*, which could reduce *McGirt'*s scope by returning some prosecutorial authority to the state. Oklahoma wants concurrent power to prosecute crimes by non-Indians against Indians on reservations (only the federal government has that jurisdiction). These represent a fifth of the cases that *McGirt* diverted from state courts. The state contends that overwhelmed federal prosecutors are letting suspects go unpunished. Clint Johnson, the US attorney in the northern district, concedes that some minor felonies are not charged immediately. He prioritises "murders, rapes and strangulations more than the John Deere mower stolen out of someone's barn". Those low-level cases will be prosecuted, he insists. "It's just a matter of timing."

Sara Hill, attorney-general of the Cherokee nation, calls Mr Stitt's worries "crocodile tears". She thinks he is motivated by anxiety over *McGirt*'s civil implications. The state's opposition is "fundamentally based on money", says Jeff Fife, chief of staff to the head of the Muscogee nation.

McGirt dealt with criminal law. But by determining that the reservations are "Indian country", it opened the door for tribes and the federal government to assert tax and regulatory powers there. States cannot tax Native Americans on income earned on reservations. In February a Choctaw couple sued the Oklahoma Tax Commission, challenging its authority to tax them. Such exemptions would cost the state $73m a year, estimates the commission.

After *McGirt* the federal government tried to stop the state from regulating coal-mining on Cherokee, Choctaw and Muscogee land. The dispute has gone to federal court. Tribes might try to tax oil and gas firms operating in Indian country on land owned by non-Indians. This is a legal grey area. But the mere possibility enhances their leverage. Oklahoma and the tribes were already bargaining over issues related to gambling and hunting. "Tribes asserting their full authority under *McGirt* strengthens their position in other negotiations too," says Seth Davis of Berkeley Law.

Oklahoma is pinning its hopes for *Castro-Huerta* on a shift in the Supreme Court's composition since *McGirt*. (Ruth Bader Ginsburg has been replaced by Amy Coney Barrett.) But any win would be narrow and technical. The big question, of whether the tribes' land is Indian country, is settled. The court denied Oklahoma's request to consider overturning *McGirt.* ■

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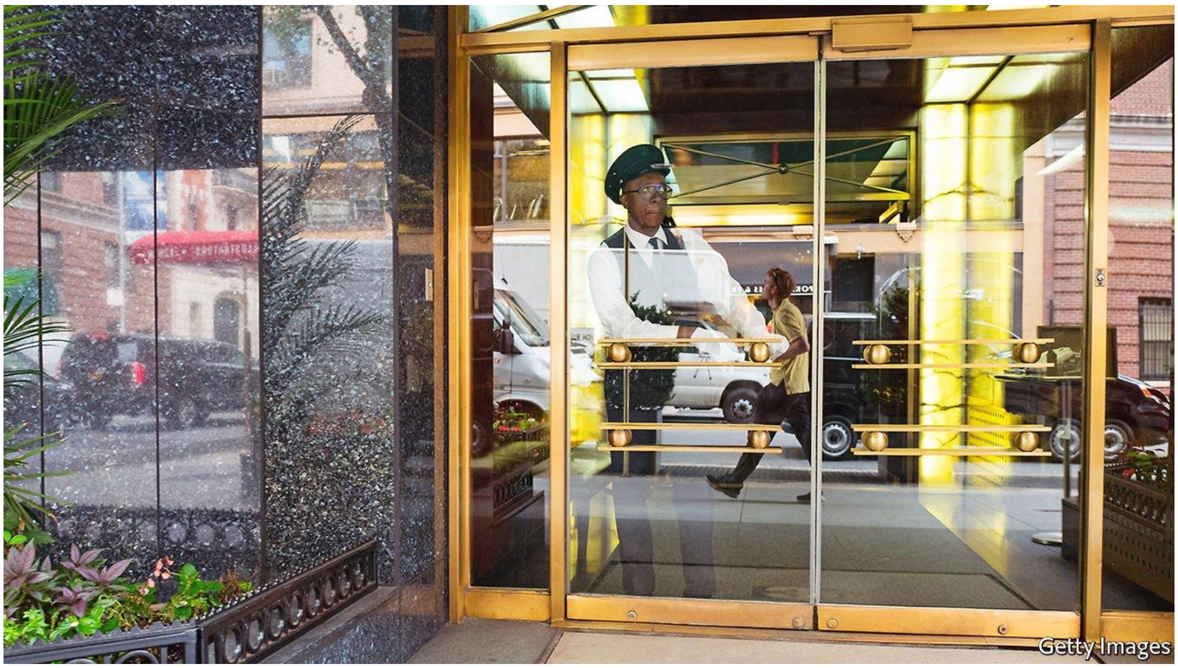
Dust-up with doormen

New York's well-to-do avoid having to open their own doors

The white gloves almost come off

Apr 23rd 2022 | New York



FEW THINGS are as quintessentially New York as its doormen. Yes, other places have concierges. But that is like saying you can get a bagel anywhere. New York doormen are special. Residents often say their doormen are like family. They're trusted, discreet and act as gatekeepers. They watch out for the kids and the safety of residents. "We're all part of the same team," says one doorman.

That team was divided during recent contract negotiations. The doormen's union, Service Employees International's Local 32BJ, which represents some 30,000 doormen and other building staff, voted on April 13th to strike. But on April 19th, a day before the contract expired, the two sides—the union and about 3,000 residential-building owners represented by the Realty Advisory Board on Labour Relations—reached an agreement. The union got the pay increase it wanted, and it keeps fully employer-paid health care.

Kyle Bragg, head of the union, says his members have had a tough two years. Doormen (and women) went to work when residents stayed at home or fled the city. About 40 New York doormen died from covid-19. Covid protocols meant even more cleaning. When residents fell ill doormen were sometimes the only people making sure they got fed. Deliveries increased as more people relied on online shopping and food delivery. “We make sure everything that they need is available for them,” says Crystalann Johnson, who works in a 60-storey building in midtown.

The pandemic affected management, too. Many ground-floor tenants, such as retailers and restaurants, closed and did not reopen, meaning loss of revenue. The union was sceptical: Manhattan rent is at a record high, and residential-property sales had their strongest-ever first quarter, with purchases of $7.3bn. A doorman adds 10-15% to an apartment’s value, says Jonathan Miller of Miller Samuel, an appraisal firm.

In a way, doormen always had the support of management—in the form of the residents. Some doormen even helped them prepare for a possible walkout, showing them where rubbish gets recycled and how to work the lifts. It is unusual, says Peter Bearman of Columbia University, author of “Doormen”, which examines that curious relationship. “There is no other situation in which you will see that kind of dynamics. The tenants become the scabs, essentially, replacing the labour of the doorman. But it’s done with such grace and mutual support.”

Happily for the scabs and the doormen, the strike was averted. The last one was in 1991 and lasted for 12 days. A strike in 2022 would have had a bigger impact because deliveries have changed from a luxury to a necessity for many households: food-delivery workers and couriers might not have wanted to cross picket lines. And perish the thought that residents would have to open their own doors and hail their own cabs.

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Ketamine clinics

More American clinics are offering ketamine to treat depression

Is this a good thing?

Apr 23rd 2022 | Naperville, Illinois

SAT NEXT to a nursery on an industrial estate in Naperville, a suburban city on the outskirts of Chicago, the Ketamine Wellness Centres (KWC) clinic does not look like anything revolutionary. Inside, a television plays videos of landscapes with calming music; tubs of sweets sit on a coffee table. The clinic is one of several in the region, and of over 100 across America, where patients are injected with ketamine to treat persistent pain or depression.

Interest is rising in the idea that ketamine, typically used as an anaesthetic (or as an illegal party drug), can help provide a lasting cure where traditional treatments, such as antidepressant drugs, have failed. PSYCH Global, a provider of information on psychedelic health care, estimates that the revenue for American clinics could be over $3bn between 2023 and 2029. Critics, though, worry that the drug can lead to dependency and that not enough is known about its long-term safety.

It is more than 20 years since studies first suggested that ketamine was an effective, rapidly acting antidepressant—albeit one whose impact lasts for only days and weeks. Its take-up has been limited because it has not been approved for use specifically as an antidepressant. That deters doctors, patients and those who pay for medicines. It is also unlikely to gain such regulatory approval, which would require a pharmaceutical firm to invest in a drug that is now a cheap generic that anyone can make. Still, off-label prescriptions are possible—and they are on the rise.

In KWC's treatment rooms, people spend between two and four hours experiencing what Kevin Nicholson, the founder and chief executive of the firm, calls a mildly "floaty" and "dreamlike" high, under the close watch of a nurse or paramedic. Although there may be less clinical evidence for ketamine than for traditional antidepressants, its ability to act quickly to relieve depression is an enormous advantage. It stands in stark contrast to antidepressants that can take weeks or months to have an effect—if they work at all. For patients who have failed to respond to antidepressants, and for those who may be suicidal, ketamine is an attractive option.

Quicker but potentially quackier

Some of KWC's patients struggled for a decade, though a growing number are coming a year or two after their first diagnosis. At the Naperville clinic, to get treatment for depression patients must first go through a psychological evaluation, usually over a video call. They must also have been experiencing symptoms that have not lifted after the use of antidepressant medications and lifestyle changes.

Once accepted, patients have four to six injections over two weeks, then more as needed with widening spaces between. Each one costs $449. Most medical insurance does not cover the actual injections yet, says Mr Nicholson, though it may cover the related assessment and therapy. And a few insurers, including the federal VA, which provides health insurance to former soldiers, now pay for the injections too.

In addition to depression, there is growing evidence that ketamine may be effective in treating several other mental-health conditions, such as post-traumatic stress disorder, chronic pain and alcoholism. But it can also cause adverse reactions, ranging from dizziness, nausea and poor co-ordination to hallucinations and paranoia. Delivery of the drug, therefore, needs to be supervised in a safe environment such as that provided by KWC. There is also the thorny, unanswered question of whether it has a long-term downside.

Providing ketamine to those who may have previously struggled with addiction to opioids, alcohol or other drugs may seem risky. But the treatment does not seem likely to appeal to people who just want to get high. The dose given is much lower than recreational users of ketamine typically take, and far costlier. (A gram of street ketamine costs around $100 in the United States; the dose used by KWC is rarely more than 100th of that.) A suburban office in which users are hooked up to cardiac and blood-pressure monitors is also not exactly a party space. After the session is over, patients have to be driven home by a friend or relative.

Plenty of other firms use the drug as an adjunct to psychiatry. While the exact mechanism by which ketamine works is not entirely clear, it is known to increase neuroplasticity and stimulate the growth of new synapses. By combining the ketamine experience with psychiatric support, the idea is it helps the patient learn new ways of thinking during a window of neuroplasticity opened by the drug.

Many of these new clinics also have a weather eye to rapid shifts in the science, and cultural acceptability, of using psilocybin and MDMA, two psychedelic drugs, for many of the same mental-health conditions. The path to such treatments is trickier: both these drugs are illegal in most of the country. But ketamine clinics provide the ideal setting for delivering future substances, if and when their time arrives.

Without approval from a regulator, however, ketamine will remain in a medical no-man’s-land. In 2016 the Louisiana State Board of Medical Examiners advised doctors against its use in mental-health conditions, warning that doing so might be deemed “unprofessional conduct”. Many doctors who deal with addiction are still reluctant to recommend it, admits Mr Nicholson: “It’s new and different, so it scares them.”

Others are too keen. As interest grows, without better oversight of new clinics there is a risk that vulnerable people may be exploited by unscrupulous actors. And a boom in at-home use through telemedicine, spurred by the pandemic, is taking ketamine into uncharted territory. ■

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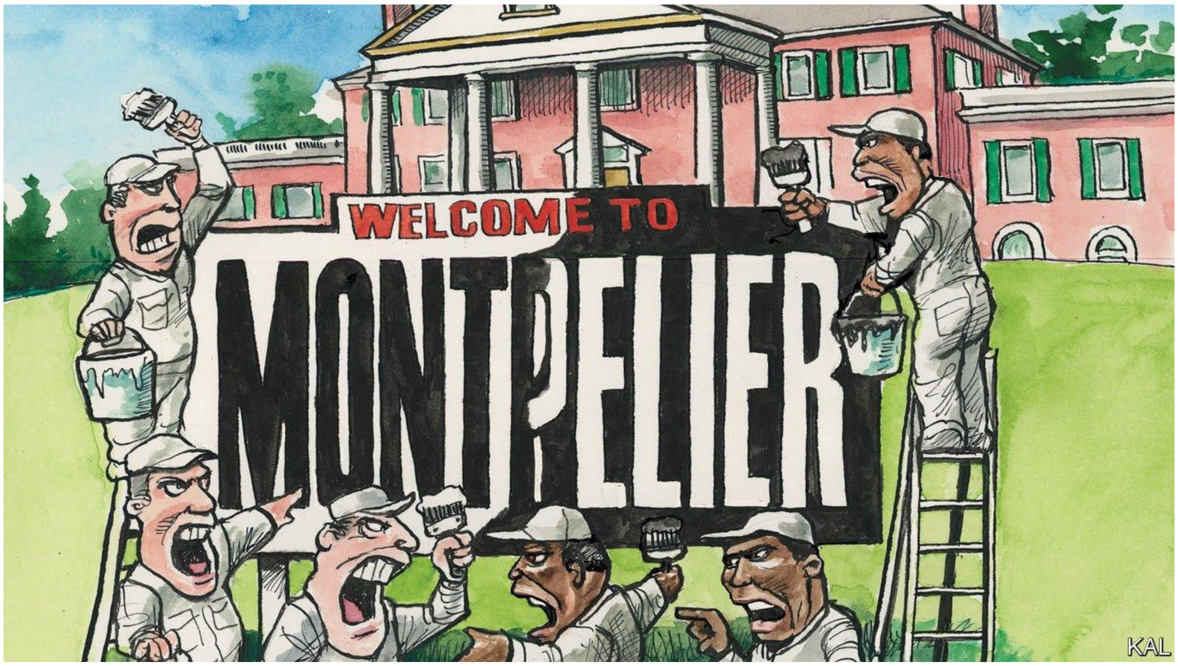
Lexington

James Madison and his slaves

A row over the management of Montpelier illustrates the racial politics of cultural preservation

Apr 21st 2022



LAST JUNE the foundation that runs Montpelier, the former Virginian slave plantation of James Madison, made a dramatic announcement. It had resolved, by a two-thirds vote of its board, to share management of the property with a group representing the descendants of slaves. The Montpelier Descendants Committee (MDC), a local charity, would be "co-equals in sharing governing power and responsibility for the very site that enslaved their ancestors", said the foundation's chairman, Gene Hickok.

The decision brought acclaim to Montpelier, one of the least visited yet perhaps the loveliest of Virginia's Founding Father abodes. Set in rolling horse-country north of Charlottesville, the historic site had already come a long way towards confronting the slaver past of America's fourth president. Its domestic slave cabins had been located and reconstructed—within shouting distance of the room where Madison drafted the American constitution. Yet the Montpelier Foundation's promise of "structural parity" for the slave descendants implied a far greater commitment.

Sadly, the foundation has broken its word. Even as slave-descendant groups trumpeted the arrangement as a new template for historic places, its board, dominated by local worthies, began questioning the MDC's right to represent Montpelier's slave descendants. It removed MDC representatives from its governance committee and promoted members of a rival descendant group—which claims kinship with Montpelier's best-known slave, Paul Jennings, author of a memoir of enslavement in the White House. Last month the board voted to reduce the MDC'S role in nominating descendant board members, a move slammed by the trust that owns Montpelier and by most of its senior staff. As a result, the site's chief curator and chief archaeologist—veterans of three decades at Montpelier between them—were sacked this week.

Their opposition to the board's move was understandable. Advances in genealogy have seen a proliferation of slave-descent groups in recent years, and many have contributed to America's ongoing reckoning with slavery. The Monroes of Monroetown, a settlement formed by former slaves of James Monroe, are as revealing of the fifth president's legacy as his rebuilt house, Highland, a short drive from Montpelier. It helps that America has a long tradition of lineage societies—some of which, in a compelling irony, long pushed a lily-white version of American history. The Madison family cemetery at Montpelier was renovated by Daughters of the American Revolution, an educational society that openly refused to accept black members until the 1980s. This makes it especially logical that the MDC claims an oversight role at Montpelier's slave burial ground. Similarly, in Monticello, the nearby residence of Thomas Jefferson, the long-standing role of his descendants in pushing a sanitised version of his biography provided an opening for descendants of the third president and his slave-concubine, Sally Hemings, to offer an accurate version.

Such interventions can be especially powerful because of how thin the record of individual slaves is—especially set against the magnificent details of the slaver presidents. The names of slaves were noted patchily, if at all, in estate accounts. Amid the clutter of Jefferson's inventions, books and collections at Monticello, there is no image of Hemings, with whom he had six children. Most of what is known of her comes from her descendants' family histories. Jennings, who was sold by Madison's widow but later bought his freedom, is the only one of Madison's 100 or so slaves of whom an image and much biography remain. To hear James French, a banker who chairs the MDC, recount his family tree is therefore to be guided back to a time and place from which little evidence of human life or interaction survives. His ancestors were enslaved offspring of two of Madison's white neighbours, including James Barbour, a governor of Virginia.

Yet, impressive as its achievements are, slave-descendant activism may not be as straightforwardly positive as some claim. The MDC argues for a lead role at Montpelier not on the basis of its impressive academic and business capacity, but solely by moral right. Its blueprint for slave-descendant activism, known as "the rubric", suggests any institution that omits slave descendants is by definition "perpetuat[ing] the exploitative practices of the past by privileging the perspectives of slave owners". Slave descendants are not merely defending the interests of dead slaves, in other words; they consider themselves almost synonymous with them. This may help explain why the slavery exhibits at Montpelier use photographs of slave descendants to represent slaves. For Lexington, at least, these portraits of middle-class Americans with sombre expressions do not bring history alive; they push it away.

By extension, Monticello, whose excellent slavery exhibits your columnist also visited last week, is nonetheless failing as far the rubric is concerned because it does not reserve seats on its board for slave descendants. Or rather, according to the blueprint's loose definition of descendance, because it does not reserve seats for people who consider themselves as slave descendants, "whether or not they know of a genealogical connection". It can be hard to prove slave lineage; yet that seems like a contestable basis on which to claim a right to manage Monticello or Montpelier.

The meaning of Madison

"Ambition must be made to counteract ambition. The interest of the man must be connected with the constitutional rights of the place," wrote Madison of the constitutional system he designed. The same seems to be true of the management of his former house. The Montpelier Foundation has behaved shamefully in abrogating its agreement with Mr French's organisation. But you do not need to be racist to suspect that the overreaching descendant movement could be a difficult partner. Both parties will have to compromise to co-exist. That, despite his terrible moral flaw, remains Madison's great insight. ■

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Ken Paxton's bid for re-election is a test of Texas Republicans' values (Apr 16th)
Bill Burns and the bear (Apr 9th)
What Joe Biden's gaffe says about his end-game in Ukraine (Apr 2nd)

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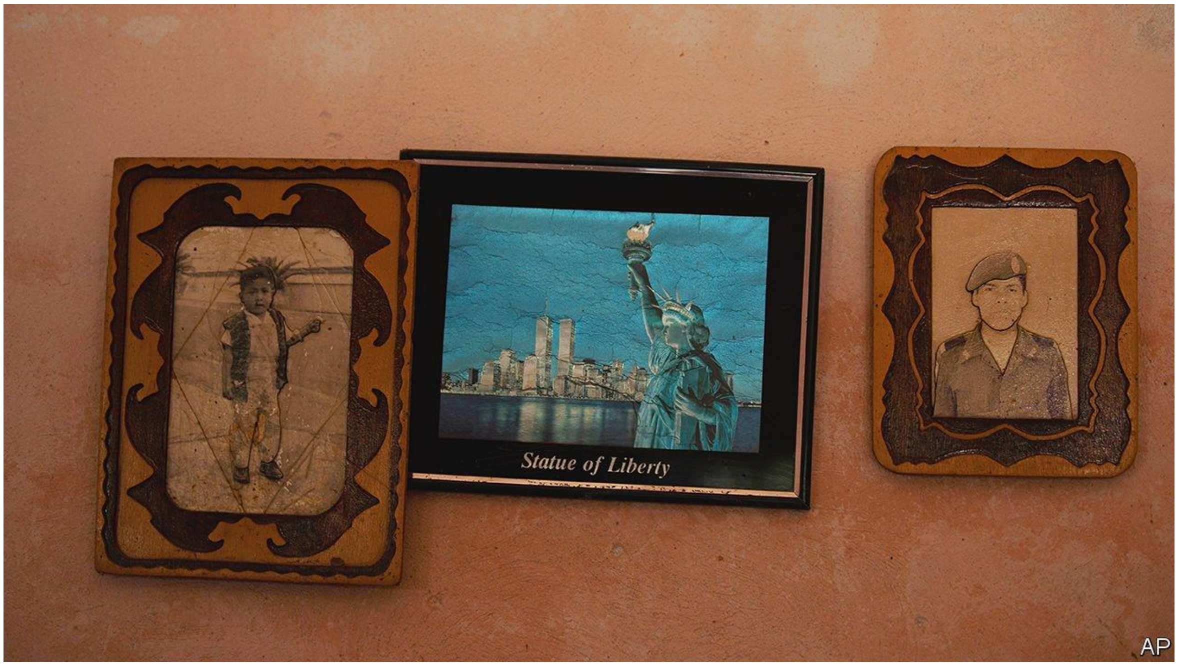
The Americas

The United States of Mexico

Mexican migration has changed America for the better

Remittances sent home have helped Mexico, too

Apr 23rd 2022 | LOS ANGELES AND SANTA ROSA



PEDRO MORALES, a 73-year-old retired farmer, sits at the table of his sparsely furnished house in Santa Rosa and flicks through faded pictures of José, one of his sons. In 1990 José, then just 19, left this small village two hours outside of Guadalajara, in the central Mexican state of Jalisco, where chickens still roam the streets. He crossed the border to the United States illegally, and has lived there ever since.

Some 3,000km (1,800 miles) away, José explains over breakfast in Los Angeles that he migrated north for “a better life and to help my parents”. It has been hard work, but he achieved both aims. With the money he earned through a series of construction jobs, he bought a house in California. He married Claudia, also an undocumented Mexican. Their 26-year-old daughter, Evelyn, is an American citizen.

José was not the only person from his family to make the journey. His brother Roberto lived in the United States for nine years until he was deported. One of Pedro's grandsons, named after him, worked for four years legally in America before returning to Mexico at the start of the pandemic. Juan Carlos, another grandson, migrated north last year for six months on a visa for agricultural labourers.

One family, two countries—and a tangled web of legal statuses and experiences. The Morales family illustrates the vast and varied panorama of migration from Mexico to the United States, one of the largest movements of people from one country to another in the past 50 years. Since 1965 over 16m people have left Mexico to go north of the border.

The Economist

Partly because so many Mexicans (and Central Americans) have moved illegally to the United States, immigration is an issue that haunts every American administration. President Joe Biden, for example, is under pressure to extend a policy known as Title 42, introduced under his predecessor Donald Trump. This policy, ostensibly adopted because of the pandemic, allows officials to turn away migrants at the border, including asylum-seekers, and is due to expire in May. But such squabbles over Mexican migration fail to capture its nuances. And they ignore how these migrants are shaping both their countries, mostly for the better.

The border between the two countries has always been porous. But the period of mass movement north dates to 1964, when the closure of the *bracero* seasonal work programme in the United States spurred many Mexicans to make the journey illegally. The number of migrants gathered pace in the 1980s and rocketed in the 1990s and early 2000s (see chart).

Las fronteras

Mexican migration is primarily driven by a demand for manual labour in the United States, says Jorge Durand of the University of Guadalajara. By one estimate 68% of California's agricultural workers are Mexicans. "I knew there was work in the United States," says José.

The first wave of migrants fitted squarely into this pattern. They were single young men from rural areas, according to Filiz Garip of Princeton University. They did not have documents and worked in agriculture. Later, however, they were joined by migrants from cities, who were richer and better educated than the average Mexican. Women started to make the journey. Migrants fanned out from California, Texas and Illinois to other parts of America. They stayed for longer, too.

The patterns of Mexican migration shifted again over the time that José was beginning to settle down in the United States. For a start, after a peak in 2007, fewer Mexicans have been making it over the border each year, not least as border security has been tightened by successive administrations. In the 2000s there were several years of negative net migration, because of a large number of deportations and a less buoyant jobs market caused by the Great Recession. The second trend is that since around 2017, there have been more legal than illegal Mexicans in the United States, estimates suggest.

The overall fall in the number of migrants also correlates with Mexico's shifting demography. An average Mexican woman had 6.6 children in her lifetime in 1970 but only 2.1 in 2020; the country's median age rose from 15 to 28 over the same period. Mexican migrants, in turn, have changed the United States. The country is home to around 11m migrants born in Mexico. They constitute around a quarter of the foreign-born population, and are increasingly a political and an economic force. Hispanic migrants are younger and, until recently, tended to have more children. According to the Pew Research Centre, some 17% of American women who gave birth in 2018 were of Hispanic origin, up from 10% in 2000. But Mexican migrants to the United States are having far fewer children than they used to: in 2000 they accounted for 42% of all births to women born abroad. By 2018 their share was half that.

Hope accompanies them

The newcomers changed where they lived, too. Almost half of the population of Los Angeles is Hispanic. Most are of Mexican heritage. In the neighbourhood where the Morales live, there are "lavanderias" (laundries), "tiendas" (shops) and "taquerias" (taco shops), not unlike back in Mexico. Claudia says when Evelyn was small she would panic about not being able to speak English in a medical emergency. Now Spanish-speaking doctors are plentiful. Mexican-Americans are creating new traditions, too. "On the one hand I have a sense of lost identity, but on the other we are creating our own culture," says Evelyn.

The presence of Mexican labourers willing to work for less pay than Americans can push down wages. Research by economists such as Gordon Hanson of Harvard University and Giovanni Peri of the University of California suggests this affects only a small proportion of Americans. Mexican migrants boost the purchasing power of far more people by providing cheap childcare and the like. "Anyone who has bought a house or eats fruit and vegetables" has benefited, says Mr Hanson. However, other economists, such as George Borjas at Harvard University, think the number of poorly paid American workers affected may be higher.

Either way, most economists agree that immigration is good for the receiving economy over the long run. A model built by Mr Hanson and colleagues found that reducing immigration from Latin America by half led to a small decline in average real income. The decline was larger in places with many Hispanic immigrants, such as Los Angeles.

Moving north also improves the lives of Mexican migrants. Mr Hanson calculates that the income of those who move goes up between two-and-a-half and five times, even after adjusting for the higher cost of living in

America. Pepe Zárate, a 41-year-old undocumented Mexican, could have earned a decent living at home as a doctor but still left for the United States two decades ago. He now makes around $4,000 a month as a construction worker. In Mexico he would struggle to earn an equivalent wage even as a doctor.

An essential worker

Evaluating migration's impact the other way, on Mexico's economy, is trickier. Economists reckon remittances have helped keep the economy relatively stable. They boost spending and are a big source of foreign exchange. Pedro's house in Santa Rosa is modest compared to his son's in Los Angeles, but far more luxurious than others in the area. With the money José sent him, he installed a toilet which flushes, for instance.

During the pandemic remittances have been particularly important. They rose by 27% between 2020 and 2021, reaching a high of $52bn, equivalent to 4% of Mexico's GDP. In contrast, the government under Andrés Manuel López Obrador, the fiscally conservative president, has spent only 0.7% of GDP on direct aid.

But Mexico has failed to make the most of its migrants, says Tonatiuh Guillén, a former head of Mexico's National Institute for Migration. Those with fluent English could work in call centres, so boosting the country's nascent service industry. Migrants could also be tapped for investment. Mr López Obrador ended a programme in which municipal, state and federal governments could match gifts or contributions from hometown clubs of migrants in the United States to pay for roads and the like.

Today is all they have

Lately the number of Mexicans making the journey north has been climbing again. Last year US border patrol agents caught 655,594 Mexicans trying to enter America illegally. Numbers this year are already up by 44%. That includes some double-counting, but it still seems likely that the number of people crossing is rising sharply.

Mexico's economy is 3.8% smaller than in 2019, and is not expected to reach its former size again until next year. Gang violence has not previously spurred migration, but that appears to be changing, too, reckons Stephanie Leutert of the University of Texas at Austin.

The political backlash to this will make the lives of those Mexicans who are already settled in the United States harder. According to Doug Massey at Princeton University, most studies suggest that Mexican migrants are becoming more like Americans, both financially and socially. But as so many are undocumented, they do not have access to services that could help them integrate further. Many live in fear of being booted out; few dare leave as a result. American immigration policy "has never really recognised that historically Mexicans didn't want to settle [in the United States]," argues Mr Massey, but to "circulate and keep their home in Mexico".

José, for example, has only visited his father once in the two decades since moving away. He and Claudia would return to Mexico permanently if they knew they could go back to see Evelyn in the United States. "This country has given us so many opportunities," he says. "But I would like to be able to hug my brother on his birthday or share a family meal." ■

Enemies with benefits

Can Venezuela help the West wean itself off Russian oil?

Nicolás Maduro, the country's autocratic president, may make that difficult

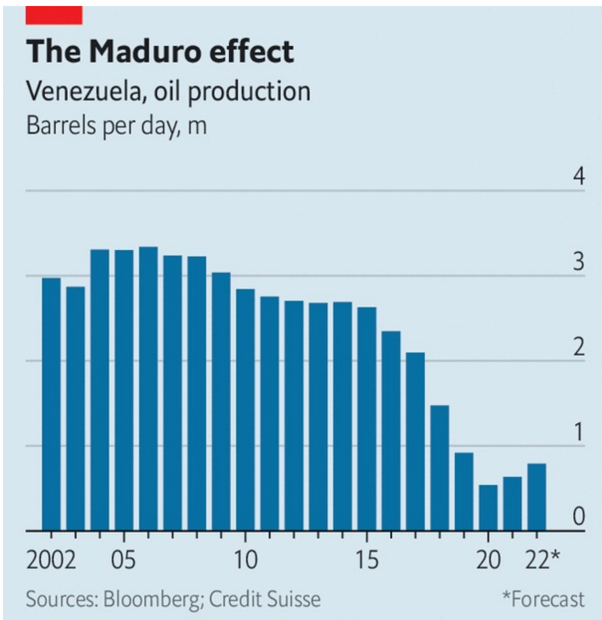
Apr 23rd 2022 | Caracas

Getty Images

ON APRIL 22ND a ban on Russian oil imports will come into effect in the United States. One of the countries that could benefit is Venezuela. According to Credit Suisse, a bank, its economy is expected to grow in real terms by 20% this year, albeit from a very low base. This will be driven wholly by the oil industry. The bank expects petroleum output to increase by more than a fifth.

Even before Russia's war in Ukraine, Venezuela had been producing more oil. Over the past year, it doubled its output to around 800,000 barrels a day. Although that is a fraction of the 3m it produced in the 1990s, it is enough to replace the 199,000 barrels a day the United States imported from Russia in 2021. Several American refineries were built to process viscous Venezuelan crude specifically. They struggle with runnier Saudi stuff or domestically produced shale oil.

At the moment, however, the United States bans the import of Venezuelan oil, one of a series of sanctions designed to make life difficult for the regime of Nicolás Maduro, the dictatorial president. It has charged Mr Maduro himself with "narco-terrorism" and is offering a $15m bounty to anyone who helps bring him to justice. It has declared that an opposition politician, Juan Guaidó, is the legitimate president.



The Economist

Yet last month in Caracas, Venezuela's capital, three American officials met Mr Maduro, in an encounter he described as "respectful". Three days after the delegation arrived, President Joe Biden announced the ban on Russian oil imports. "The timing [of the meeting] suggests the administration's real effort is to get more oil," says Elliott Abrams, who served as special representative for Venezuela under Donald Trump, Mr Biden's predecessor.

If Mr Biden is considering a detente with Venezuela, it would not just be for economic reasons. He may hope to exploit the war in Ukraine to drive a wedge between Venezuela and Russia, one of its closest allies. Vladimir Putin, Russia's president, became interested in the South American country after the United States suggested in 2008 that Ukraine and Georgia could eventually become members of NATO. Mr Putin seems to have decided to meddle in the backyard of the United States in retaliation—and found, in Hugo Chávez, Mr Maduro's predecessor, a willing partner. Between 2009 and 2019 Russia sold nearly $9bn worth of arms to Venezuela. When Mr Trump flirted with the idea of invading Venezuela in 2017, the Russian government sent long-range bombers capable of firing nuclear weapons to Caracas. In 2019, when the United States and other governments recognised Mr Guaidó as president, Mr Putin sent soldiers and mercenaries to defend Mr Maduro.

Since 2019 Russia's government has also created a sanctions-busting network for Venezuela, helping it sell gold and oil, albeit at a deep discount. That year Petróleos de Venezuela, the state oil company, moved its European offices from Lisbon to Moscow. Plane-loads of cash arrived in Caracas from Moscow, giving the regime enough hard currency to stave off collapse. Mr Maduro's cronies are also assumed to be stashing their money in Russian banks.

The Kremlin has claimed that, on a phone call with Mr Putin, Mr Maduro backed Russia's bloodthirsty invasion of Ukraine. But the conflict is damaging relations. Western sanctions on Russian banks will make it difficult for Mr Maduro and his lieutenants to get their money out of Russia, suggests Francisco Monaldi at Rice University in Texas. At the meeting in March Mr Maduro is said to have asked the American delegation to lift sanctions on Russian banks temporarily, in order to allow the regime to withdraw its funds. They reportedly refused.

Mr Maduro may also be concerned that, now Russia is a pariah, too, it will become a competitor in selling cut-price oil. Since 2020 China has been the main buyer of Venezuelan crude. But importing oil from halfway around the world makes little sense if Russian oil is going begging on China's doorstep.

Chevron, the last American oil company operating in Venezuela, is poised to take advantage of any change in the sanctions regime. The American authorities currently allow it to maintain its infrastructure, but not pump any oil. Even that permission expires in June. Chevron has been lobbying for an expanded licence which would allow it to trade Venezuelan oil. According to Reuters, it has started to assemble a trading team to market oil from Venezuela. It has also begun preparations for employees to get Venezuelan visas in Aruba, just in case.

According to Caracas Chronicles, a blog, Delcy Rodríguez, the vice president, and Felix Plasencia, the foreign minister, plan to meet American officials in Trinidad & Tobago soon. On April 14th a group of 25 Venezuelan economists and civic leaders, most of whom are opposed to Mr Maduro's regime, sent a letter to Mr Biden arguing that sanctions should be eased and that Western oil companies should be allowed to operate in the country once more.

The Biden administration insists that it is not about to embrace Mr Maduro and that it remains concerned about human rights. After the meeting in March, Mr Maduro released two American prisoners who had been held hostage in Caracas. He also pledged to return to talks with the Venezuelan opposition in Mexico.

Black gold

But many observers are sceptical that the United States can both buy oil and make Mr Maduro change his dictatorial ways. "If you're going to go for oil and try to pry Maduro away from Russia, then you have made a decision to deal with his regime the way it is," says Brian Winter of the Americas Society, a regional forum. Several analysts also doubt that, even if sanctions were lifted immediately, Venezuela would be able to ramp up production after years of mismanagement and corruption. "To me, this looks like Obama's Cuba policy," says Mr Abrams. "That is, you give and you give and you get nothing."

Mr Maduro's position has clearly grown stronger in recent years. His approval ratings, at 19%, are higher than those of Mr Guaidó, at 12%. Since 2019 Mr Maduro has quietly instituted a range of economic reforms, including lifting price controls and some restrictions on foreign exchange. He has courted private investment. The dollar has become, in effect, the national currency, which may have helped bring down inflation from almost 3,000% in 2020 to 686% in 2021. "Maduro has never been in such a position of strength," says Temir Porras, his former chief of staff. "He is the boss." If there is a deal to be done, it will not be entirely on Mr Biden's terms. ■

Read more of our recent coverage of the Ukraine crisis

Middle East & Africa

The call of the south

Turkey is making a big diplomatic and corporate push into Africa

It is sending engineers and soap operas, but also guns and soldiers

Apr 23rd 2022 | Ankara and Mogadishu

THE RECEP TAYYIP ERDOGAN hospital in Mogadishu, the capital of Somalia, is named after Turkey's president. It has 47 intensive-care beds, more than any other in the country, but it does not treat covid-19 patients. "If we did, we would have to isolate them," explains Asir Eraslan, the manager, "and we would not have enough room to treat the bomb victims." These keep on coming because of an insurgency by al-Shabab, an affiliate of al-Qaeda, and clashes between rival clans.

Along one of Mogadishu's main roads, packed with armoured vehicles and red tuk-tuks (motorised rickshaws), locals point out where bombs have ripped through crowds. During your correspondent's visit, security forces were on the lookout for two suicide-bombers.

Given the violence and risk of kidnapping, Mogadishu attracts few foreigners. Few aside from Turks, that is. One Turkish company has renovated and operates the port. Another runs a hotel and the international airport, from which Turkish Airlines flies daily to Istanbul. Turkish firms have repaired the city's main roads and the parliament building, with funding from Turkey's development agency. At its biggest foreign military base, Turkish officers have trained and equipped more than 5,000 Somali soldiers and police commandos.

Perhaps more distinctive even than the size of Turkey's presence in Somalia is its boots-on-the-ground approach, helped by a common religion. "In Somalia one of the advantages of being a Turk is that you pray at the same mosques as everyone else," says Kadir Mohamud, a Somali businessman. Non-Turkish companies and embassies tend to operate from the guarded "green zone" around the airport. "We are the only ones in the field," says Mehmet Yilmaz, the Turkish ambassador. With its own herd of dwarf antelope and a sweeping view of the Indian Ocean, his embassy is Turkey's biggest anywhere, too.

Somalia is a striking example of Mr Erdogan's broader push into Africa in search of markets, resources and diplomatic influence. Only two decades ago Turkey had very little interest in Africa below the Sahara. Instead it looked west and dreamed of joining the European Union. But as relations with the West have cooled, Turkey has pivoted south. The turning point was in 2011 when Mr Erdogan, flanked by Turkish businessmen, aid officials and Muslim charities, visited Somalia, then in the grip of a drought and civil war. His visit, the first by a non-African leader in about two decades, marked the start not just of Turkey's involvement in the Horn of Africa but of deeper ties across the continent.

In 2009 Turkey had just a dozen diplomatic missions in Africa. Now it has 43. Ambassadorial glad-handing has helped businesses expand. Turkish Airlines, which flew to only four African cities in 2004, now flies to more than 40. Trade with the continent has expanded greatly, to $29bn last year, of which $11bn was with sub-Saharan Africa, an almost eight-fold increase since 2003. So has construction, where Turkish firms are chipping away at the dominance of Chinese ones, helped no doubt by a drop in lending by China. Turkish officials reckon that Turkish firms have completed some $78bn worth of African projects, including airports, stadiums and mosques.

Last year Tanzania awarded a Turkish firm a $1.9bn contract to build a modern railway line.

The Economist

Turkey is also gaining clout through aid. Previously it gave money mainly through international agencies such as the UN. In 2003 some 60% of Turkish aid was channelled this way. By 2019 that share had plummeted to 2%. These days Turkish flags adorn packages of food, schools and wells. "Turkey is known for giving a blank cheque, particularly when you're in desperate need of economic or military aid," says Abel Abate Demissie, who works for Chatham House, a British think-tank, in Addis Ababa, Ethiopia's capital.

Yet there is a harder edge, too. Mr Erdogan, who has readily sent his army into the many-sided civil war in Syria, has also started flexing his muscles in Africa. He has, for instance, dispatched Turkish soldiers and Syrian mercenaries to Libya to fight against Khalifa al-Haftar, a warlord then backed by Egypt, France, Russia and the United Arab Emirates (UAE).

Turkey and France, after sparring in Libya, have also locked horns in west Africa, the Sahel and the Maghreb, where Mr Erdogan has challenged French influence by playing on France's image as a colonial oppressor. In Somalia Mr Erdogan faced off against Saudi Arabia and the UAE when their spat with Qatar, which is friendly with Turkey's government, spilled over into a proxy struggle in the Horn of Africa.

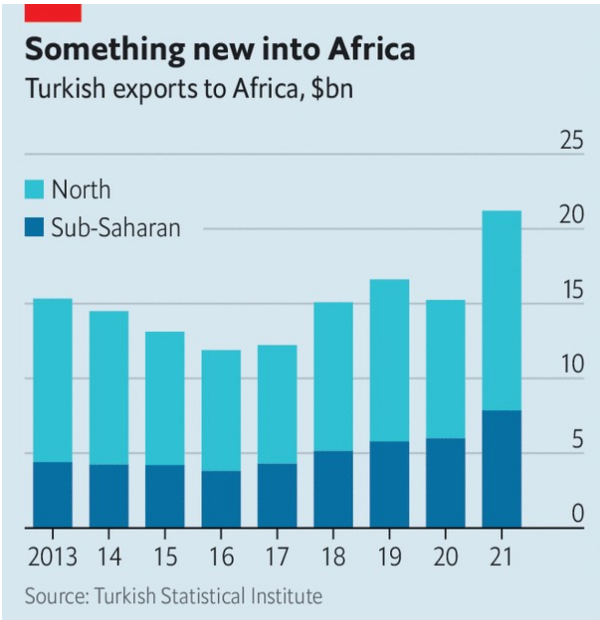
Arms are the plan

Turkey has also signed military pacts with several African countries, most recently Nigeria, Senegal and Togo. Many are keen to take advantage of Turkey's experience in counterinsurgency. Tellingly, an increasing share of African ambassadors appointed to Turkey are active or retired generals.

Turkey's aim is not to get involved in wars, but rather to sell weapons. It is not in the same league as countries such as Russia, which provided 30% of all arms sold to sub-Saharan Africa in 2016-20, or China (20%), according to the Stockholm International Peace Research Institute. But last year Turkey's sales surged seven-fold to $328m. In the first two months of this year they approached $140m.

Turkey's top products are drones of the sort currently bombing Russian tanks in Ukraine. They have been seen in Ethiopia, Libya, Morocco and Tunisia. Other countries, including Angola, Nigeria and Rwanda, are thinking of buying them. "Wherever we went, they asked us for unarmed and armed drones," said Mr Erdogan after a visit to Africa last year. Somalia would also like more arms, but cannot get them because of a UN embargo. "Turkey is giving us everything they can give," says Abdulkadir Mohamed Nur, Somalia's defence minister. "But right now they can only give us small weapons."

Unlike America, Africa's fourth-largest arms supplier, which stops sales to African countries that use them to commit war crimes, Turkey seems unconcerned about how its kit is used. Its drones, which helped turn the tide in Ethiopia's civil war, have reportedly killed dozens of civilians. Because of Turkey's silence about this, Ethiopia sees it as one of its very few trusted allies. Somalia's president, Mohamed Abdullahi Mohamed, known to his people as Farmaajo, has used Turkish-trained soldiers against his rivals, to cling to power after his term expired more than a year ago, says Matt Bryden of Sahan Research, a Nairobi-based think-tank. "We do not dictate, and we do not tell anyone what to do," says an official in Ankara, Turkey's capital.



The Economist

Like China and Russia, which have expanded their reach in Africa in recent years, Turkey touts its policy of non-interference as a selling point. Mr Erdogan presents Turkey as a rising power and the champion of a fairer world order. “Turkey is coming in with no colonial baggage whatsoever,” says Wamkele Mene, the secretary-general of the African Continental Free Trade Area (AfCFTA). “That’s an advantage.” Mr Erdogan takes this a step further, arguing baselessly that colonialism persists. “The British, the French and the Western colonisers,” he said earlier this year, “continue to loot Africa’s diamonds, its gold and its mines.”

In truth, Turkey is not above strong-arming African governments. Last year its security agents in Kenya abducted the nephew of Fethullah Gulen, whom Turkey accuses of spearheading a failed coup in 2016. He was snatched right outside the police headquarters with the connivance of Kenyan officials and flown to Turkey, flouting a court order barring his deportation. Turkey has also pressed African countries to close schools set up by Mr Gulen’s Islamist movement.

Turkey’s interest in Africa is reciprocated. The number of African embassies in Turkey has tripled in two decades, to 37. At least 14,000 students from Africa have received scholarships to study in Turkey over the past decade. Africans are also buying property in Turkey, not least since spending

$250,000 on a house brings a Turkish passport. Ankara has emerged as a hub of the Somali diaspora. Turkish soap operas, which are winning audiences across the continent, are spreading soft power.

Still catching up

Though Turkey’s involvement in Africa has grown fast, occasionally bringing confrontation with other outside powers, its economic, military and diplomatic reach is still nowhere near as extensive as those of America, China and the continent’s former colonial powers. China’s government reckons its two-way trade with Africa was worth $254bn last year, dwarfing Turkey’s $29bn. Turkey’s military aid carries nothing like the punch of Western powers. America has about 6,000 troops and supporting civilians deployed in Africa, where they battle al-Shabab in Somalia and jihadists in the Sahel, and train African counter-terrorist forces across the continent. France, too, deploys roughly 5,000 troops, many of them in the Sahel. This is reflected in popular opinion. In a survey conducted for *The Economist* in March by Premise, a data firm, 72% of Kenyans and 58% of Nigerians named America as the most reliable security partner.

Yet Turkey seems ready to play a long game. Its recent launch of TRT Français, a French-language edition of its state propaganda channel, clearly had an African audience in mind. And by providing aid and security assistance, Turkey hopes that in time it will reap durable rewards. “Right now, we are the ones in need,” says Mr Nur, Somalia’s defence minister, talking of Turkey. “But when there is an opportunity, we will give our friends a chance others cannot have, because they helped us when we needed it most.” ■

Monetising Madiba

Making money from Nelson Mandela’s name

A boutique hotel and NFTs are the latest examples of Madiba’s lucrative legacy

Apr 21st 2022 | JOHANNESBURG

House of Mandela

ONE ROOM is named “Rolihlahla”, his forename at birth. Another is “46664”, his prison number on Robben Island. A third is “Madiba”, his clan name. And the most luxurious suite? That is simply “Mr President”.

Sanctuary Mandela, a boutique hotel that opened in September, is evidence of the power of the brand built around Nelson Mandela, South Africa’s first democratically elected president. The hotel is owned by the Nelson Mandela Foundation (NMF), a charity established by Mandela when he stepped down.

Before his death in 2013, Mandela charmed money out of rich Americans, who accounted for 80% of donations to the NMF and included the likes of Bill Clinton and the Gates Foundation. But recently American funders have “turned inwards” to domestic causes, laments Sello Hatang, the NMF’s CEO. Others have been scared off by the corruption that has spread in South Africa since Mandela left office in 1999.

Fortunately his foundation owns about a dozen valuable trademarks, including “46664”. It sometimes uses them to boost its coffers, for instance with a hotel or branded clothing. It also approves a few of the many licensing requests it gets. But it tries not to cheapen the former president’s legacy. A Nelson Mandela burger, Mr Hatang suggests, would be a no-no. “We are trying to maintain the stature of the man.”

But the foundation does not have a monopoly on making money from Mandela. Last month the Liliesleaf Farm and Museum sold an NFT, or non-fungible token (an electronic chit to a digital artwork) of Mandela’s arrest warrant from 1961. The money may help reopen the museum, which was once a safe house for anti-apartheid groups. It shut last year, partly because of covid-19.

And last month Makaziwe Mandela, Madiba’s surviving daughter from his first marriage, auctioned NFTs of his paintings (pictured). Mrs Mandela and two of her children run House of Mandela, a retailer. Among other things it sells a range of $5 wines inspired by the family clan— “noble, respected, trusted”. In December the government halted an auction, also involving Mrs Mandela, of the key used to lock her father’s cell at Robben Island, on the grounds that the item is state property. (Mrs Mandela did not respond to requests for comment but has reportedly said that the earnings would have funded a memorial garden.)

“You can’t stop the family,” says Mr Hatang, since they have the name, too. Though critics accuse Madiba’s descendants of exploiting his legacy, there is perhaps a broader lesson from all of the ventures. Economics is about scarcity. So long as South Africa lacks leaders in the mould of Mandela, his value will endure.

The sour milky way

Why Egypt isn't open for business

Despite pro-business talk, the army grabs whatever it wants

Apr 21st 2022 | Cairo

EGYPTIANS OFTEN complain that their country produces little of value. Juhayna, the country's largest dairy and juice maker, has been a notable exception. Its red and blue cartons are a staple in Egyptian homes. Its milk and yogurt are sold across the Middle East and Africa. It is one of the most valuable companies on Cairo's stock exchange and a darling of foreign investors. In most countries it would be considered a national champion. But under Egypt's military rulers it has faced a Mafia-style shakedown. Its fate illustrates the flaws of the Egyptian economy.

Juhayna's troubles began when the Egyptian state decided to take it over. After its founder, Safwan Thabet, refused to hand over a controlling stake, he was thrown into a prison notorious for torture. When his son, Seif, refused the same deal, he joined his father in jail.

The state accuses the Thabets of funding terrorism. Safwan's grandfather and uncle had been leading lights in the Muslim Brotherhood, a religious and political movement. In 2013, after a government dominated by the

Brothers was overthrown in a coup led by General Abdel-Fattah al-Sisi, the group was labelled as terrorist and outlawed. The Thabets insist they have nothing to do with it. Though father and son have been in jail for more than a year, the courts have not heard their case.

The Thabets were once part of the establishment. Safwan was chummy with Egypt's previous autocrat, Hosni Mubarak. He flew abroad with state delegations to woo investors and advised ministers. After Mr Sisi became president in 2014, the older Thabet donated 50m Egyptian pounds ($7m) to the Long Live Egypt fund for development projects. Mr Sisi happily took cash from members of the Thabet family, despite their supposed links to terrorism.

Egypt has borrowed $20bn (about 5% of its GDP) from the IMF since 2016, making it the fund's second-largest recipient after Argentina in that period. It is negotiating a fresh loan after the war in Ukraine prompted nervy investors to flee, which caused a hard-currency crunch. The IMF has praised Egypt for swiftly taking painful (and unpopular) austerity measures.

But it has also complained that Egypt's government is stifling the private sector. One survey shows that it has shrunk in all but nine months since 2016. Mr Sisi makes pro-business noises in public. But his generals, who dominate chunks of the economy, make a mockery of the free market.

Take another case. Ramy Shaath is a successful businessman whose company produces electronic devices that track the usage of electricity, water and gas for state utility companies. When he refused to let a military firm share his technology, the utility firms began cancelling contracts. "We started going bankrupt. And not because we were underperforming, but because the army was pressuring us," says Mr Shaath. A critic of Mr Sisi's politics, he was sent to jail for more than two years on unspecified terrorist charges but, like the Thabets, was never tried.

Last December Mr Sisi was shown on television browbeating three owners of construction firms into accepting delays for payments from the state for building roads and bridges. The businessmen grinned sheepishly and yielded. What would have happened if they had refused? Though the army gets special tax breaks and customs exemptions, the government lauds it for saving the public from greedy merchants and speculators. During the current holy month of Ramadan, soldiers hand out meat at subsidised prices. But when in 2019 a new state firm entered the lucrative market for certifying meat as *halal* (compliant with Islam), the agriculture ministry banned private competitors. Up shot the price of the certificates.

Last year Egypt launched Silo Foods Industrial City, a complex of food factories overseen by the army. The firm's slogan, "The World has a New Taste", echoes Juhayna's, "The World has a Beautiful Taste." The company wants to open a milk factory of its own. After Seif Thabet was arrested, he offered to run its operations for a token salary if the state laid off Juhayna and freed him and his father. The offer was rebuffed.

Few businessmen dare stand up to the army. The Thabets' treatment shows what might happen if they do. "If they took [Juhayna], they would destroy it. I'm not handing over what my father built," Seif has lamented from prison. In a video posted on Facebook last year his mother begged Mr Sisi to free her son and husband. When it went viral she was summoned for questioning and told to shut up, or suffer the same fate. Last month she died of cancer. The regime prevented hundreds of mourners from attending her funeral.

Though GDP has grown since the bail-out in 2016, the economy is in poor shape. Egypt has failed to build up its manufacturing base. Exports are sluggish. By the latest reckoning its current-account deficit had widened to $18.4bn. The poverty rate has risen. Last month the central bank devalued the Egyptian pound by 14%. At the first sign of distress, sales of short-term treasury bills have faded. Mr Sisi has persuaded friendly Gulf states to deposit billions of dollars in the central bank and pledge investment. But cases like Juhayna's are hardly likely to encourage foreign investors to come knocking. ■

Unhappy royals

Jordan’s troubled king and his bothersome brother

Rivalry within the royal family is threatening the kingdom’s stability

Apr 21st 2022 | AMMAN

AFTER 23 YEARS on the throne, King Abdullah looks tired, aloof and despairing of his kingdom. While his counterparts in the Gulf unveil grand visions, he sounds short of ideas: his favourite way to tackle a problem is to create a committee. As more Arab states normalise ties with Israel, Jordan’s strategic importance as a front-line state has dwindled. So has aid from Saudi Arabia and the Gulf, which used to be a primary source of revenue given Jordan’s lack of natural resources. Meanwhile prices for ordinary folk have soared; nearly half the young are jobless, and the economy—in the words of a disgruntled former prime minister—is bankrupt. In sum, Jordan and its king are unhappy.

Mockery of the monarch has become more frequent. Leaks about his plethora of properties in America and Britain have forced Abdullah and his family to deny that they have squirrelled national wealth abroad. His recent sojourn in Frankfurt for back surgery has been prompting catty comments about the state of Jordan’s health service. The decision to level a poor neighbourhood near the palace, supposedly for aesthetic reasons, has enraged some of the Bedouin who were living there.

To cap it all, Abdullah faces a lingering leadership crisis. Last year he put his half-brother, Hamzah, under house arrest for plotting what palace officials said was a coup. Efforts to patch up the row have failed. Hamzah has asked for the king’s forgiveness but has not been freed. The more the king tries to sideline him, the more he becomes a focus for popular grievances. Hamzah’s likeness to their father, King Hussein, who reigned from 1952 until his death in 1999, and his mastery of Bedouin Arabic evoke nostalgia for better times. “The efforts to silence Hamzah are increasing his popularity and turning him into a threat,” says a former official. A Western military expert calls him “trouble”.

By contrast King Abdullah looks and sounds more British. His mother, née Toni Gardiner, a British colonel’s daughter, was the only one of King Hussein’s four wives not to be formally crowned queen. Hamzah was said by some to have been his father’s favourite. His mother, Queen Noor, an American partly of Levantine heritage who lives mainly abroad, wrote in an autobiography that King Hussein intended Abdullah to be a placeholder for a decade until Hamzah was ready to reign. This may be conjecture. In any event, Hamzah was displaced as crown prince in 2004, and in 2009 Abdullah promoted his own son, Hussein, to the role. A fraternal feud has festered ever since.

Hamzah is now sending mixed signals. On April 3rd he declared that he was discarding his royal title. “From the matter of honesty to God and conscience, I see nothing but to transcend and abandon the title of prince,” he tweeted. Some say he is tired of the military cars at his gates and the headlights that shine at his windows at night, so wants to drop out of the race. But the word “transcend” makes others surmise he still aspires to higher things. His mother has dubbed him “sharif”, a title his forebears used before they established monarchies (in Iraq as well as Jordan), claiming leadership of all Arabs.

A succession struggle between Hamzah, with his Bedouin accent, and Crown Prince Hussein, whose mother is Palestinian, could dangerously widen the kingdom's old cleavage between the indigenous Bedouin and Jordanians of Palestinian descent who are now more numerous.

For all their economic woes, Jordanians still prize their country's enviably longstanding stability above all. Whatever his faults, their king is something of a rarity in the region for having no blood on his hands. But cracks in the monarchy are causing jitters. Jordanians want their kingdom to serve as a regional crossroads, not as a cockpit of royal intrigue. ■

Europe

A new phase begins

Fighting has intensified in the Donbas region

Ukraine may find it harder to hold Russian forces back there

Apr 23rd 2022

“IT CAN NOW be stated that Russian troops have begun the battle for Donbas,” pronounced Volodymyr Zelensky, Ukraine’s president, late on April 18th. More than three weeks have now passed since Vladimir Putin, Russia’s president, abandoned his assault on Kyiv and retreated from northern Ukraine. Now Mr Putin is throwing a large portion of his weary army at eastern Ukraine in the hope of salvaging something from his war. The coming weeks are likely to see the bloodiest battles since Russia first invaded the Donbas region in 2014.

The clashes that intensified on April 18th are “preludes to larger offensive operations”, according to American defence officials. They are probably a mixture of Russian reconnaissance, to establish the strength of Ukrainian defences, and shelling, to soften them up in advance of ground attacks that will follow. Oleksiy Danilov, the head of Ukraine’s security council, says that Russian attacks occurred “along almost the entire front line” in Donetsk, Luhansk and Kharkiv provinces, spanning around 400km in all.

Russia is beginning this offensive with a depleted army. American officials say that it retains only 75% of the combat power, across ground and air forces, that it had at the start of the war. Russia originally amassed 120 or so battalion tactical groups (BTGs), formations of around 700 soldiers. Dozens of these are no longer battle-worthy after suffering heavy losses of men and equipment. The Pentagon reckons that there are 78 BTGs in Ukraine presently; Ukrainian officials put the figure at 87. But a dozen or so are tied up battling [pockets of resistance]e in Mariupol, a port city in the south-east. The remainder constitute a relatively modest force to throw against Ukraine's most experienced and now well-equipped troops.

The Economist

Notably, instead of amassing a large force and then striking, Russia has chosen to initiate the battle for Donbas even while it is still scraping together extra troops and equipment. Some American and European officials think that this curious decision may be guided by an arbitrary constraint: Mr Putin's reported desire to see results by May 9th, Victory Day, on which Russia marks the end of the second world war in Europe. But this piecemeal and hasty commitment of forces seems sure to reduce their effectiveness.

A great deal depends on how quickly and ably [General Alexander Dvornikov], the recently appointed commander of Russian operations in Ukraine, can move and concentrate his forces to overwhelm Ukrainian defenders in crucial areas. Russia is attacking south-east of Izyum, a strategic transport hub where it has around 25,000 troops and support staff, trying to head towards Slovyansk and Kramatorsk, so far without significant success. A senior Ukrainian officer told *The Economist* that Russian forces were still largely probing these positions, rather than launching a full-scale offensive. A big push will probably follow in the coming days.

Elsewhere along the front lines, there have been reports of some modest Russian gains. Ruslan Leviev of the Conflict Intelligence Team, an open-source investigative outlet, says that it has verified advances in Popasna, a small town in Luhansk province that has been on the front line since 2014. Russia now controls the city council building, he notes.

Ukrainian troops look vulnerable in a salient around Severodonetsk, a city about 80km from Luhansk, which is now under pressure from three sides. Russian forces have taken Kreminna, a small town to its north-west. Battles were also raging in Zaporizhia province, an industrial region immediately to the west of Donbas and to the north of Crimea.

Ukraine, not content with merely absorbing these blows, seems to have pre-emptively mounted counter-attacks. On April 17th Oleksiy Arestovych, an adviser to Mr Zelensky, described "an interesting movement around Izyum which should make any Russian attack difficult", calling it "manoeuvring, active defence". That appears to refer to Ukraine's recapture of several villages south-east of Kharkiv.

A Ukrainian counter-attack could threaten the highway between Kharkiv and Izyum, potentially cutting Russia's supply lines. "If Ukraine can obtain some level of firepower control over the roads, it would disrupt the operation and tie down significant Russian forces," says Mykola Bielieskov of the National Institute for Strategic Studies, a Ukrainian think-tank.

The battle for Donbas may look very different from the first phase of the war, when Russian units were unprepared, poorly led and bogged down in suburban and urban warfare. The terrain in Donbas is more open, better suited to tanks and trickier for anti-tank teams, who need cover—although the mud created by heavy rains in recent days will present tanks with a different challenge. The armoured clashes that result may be some of the largest since the Arab-Israeli war of 1973, in which thousands of tanks were destroyed.

The most important factor will be Russia's ability to fix the many problems that doomed its offensive on Kyiv: inadequate manpower, poor command and control, woeful tactics, shaky logistics and weak air power. Russia's air force is stronger in Donbas than in the north, and it has been ramping up sorties in recent days. But it remains "terrified of flying over Ukrainian-held positions", according to Western officials, because of the continued threat of surface-to-air missiles.

That will influence the intelligence contest, too. Ukraine, which is being fed lots of Western intelligence, says it has already downed a large number of Russia's Orlan-10 reconnaissance drones in Donbas. The hostility of ordinary Ukrainians to the Russian invasion rules out most human reconnaissance missions. "It's not army versus army in any normal sense," says Mr Bielieskov. "It's the Ukrainian nation against a military, and one with plenty of question marks." ■

Read more of our recent coverage of the Ukraine crisis

The reticent Mr Scholz

Why Olaf Scholz hesitates to send Ukraine heavy weapons

Germany has changed its defence and foreign policies, but not its mentality

Apr 23rd 2022 | BERLIN

ON FEBRUARY 27th, three days after Russia invaded Ukraine, Olaf Scholz delivered a speech to Germany's parliament that astonished even his close political allies. Calling the moment a *Zeitenwende* ("turning point"), the German chancellor outlined the biggest strategic shift in German security, foreign and energy policy in the federal republic's history. Earlier he had refused operating permission for Nord Stream 2, an $11bn pipeline to carry natural gas from Russia to Germany which has taken many years to build, but which allies had long warned would reinforce Germany's dependence on the Kremlin. Now the understated chancellor, who during his first two months in office seemed to have gone into hiding, announced a startling plan. It included an increase in Germany's defence spending from 1.5% of GDP to the NATO target of 2%, the establishment of a €100bn ($110bn) special fund for the *Bundeswehr* (the German armed forces), and the construction of two liquefied natural gas (LNG) terminals to reduce Germany's dependence on Russian energy.

Mr Scholz's new strategy raised high hopes in the western world. Yet eight weeks into the war in Ukraine these hopes are being dashed, bit by bit. Mr Scholz refuses to support calls for a German or European embargo or tariff on Russian oil and gas. Every day Germany pays Russia tens of millions of euros for fossil fuels, even as the war grinds on.

Still more damaging has been his refusal to give Ukraine heavy weapons such as tanks. Ukraine needs them more than ever thanks to the new Russian offensive in the east. Other Europeans are exasperated by German dithering. "This is costing Germany lots of political capital in the European Union and NATO," says Rafael Loss of the European Council on Foreign Relations.

Germany's allies fear that the country is wavering in its commitment to the *Zeitenwende*. Such fears are exaggerated; Mr Scholz is following through on important parts of his new policies with impressive speed. His government has already said it will buy 35 American-made F-35 fighter jets to replace its ageing Tornados. It is buying 140 armed drones from Israel, and is mulling the acquisition of an Israeli anti-missile system. A draft law is in the works that will anchor the €100bn special fund in Germany's constitution.

"I would have never expected an SPD politician to do this against [the will of] his own party," says Thomas Kleine-Brockhoff of the German Marshall Fund of the United States. The Social Democratic Party (SPD) has typically preferred engagement with Russia to confrontation. That attitude harks back to *Ostpolitik*, the policy of rapprochement with Germany's eastern neighbours (including Russia), which was launched in 1969 by Willy Brandt, a celebrated SPD chancellor.

Mr Scholz is also honouring his promise to reduce Germany's dependence on Russian energy as fast as possible. In March Robert Habeck, his economy minister, swallowed his distaste for autocracies and travelled to the United Arab Emirates and to Qatar, one of the biggest exporters of LNG, to forge new gas-supply partnerships. Besides the two new permanent LNG terminals in Wilhelmshaven and Brunsbüttel, the government will spend €3bn to lease four floating ones.

Yet while Mr Scholz is charging ahead with implementing his *Zeitenwende,* he is neglecting to win hearts and minds. Rather than tirelessly communicating the need to break with old policies on Russia, the soft-spoken Mr Scholz seems to have retreated into his shell. In a televised speech on April 18th, he failed utterly to explain why he is not authorising the delivery of heavy weaponry to Ukraine. (Germany has sent other military kit, such as anti-aircraft and anti-tank missiles and ammunition.) Mr Scholz said the country should not “go it alone”. But other NATO allies are sending armoured vehicles, helicopters, heavy artillery and even fighter jets; Germany now stands out for its reticence.

The Greens and the Liberals, the junior partners in Mr Scholz’s governing coalition, want to do more. Anton Hofreiter, a Green MP who was part of a German delegation to Kyiv last week, insists Germany must “finally deliver what Ukraine needs, and that is heavy weapons”. He called Mr Scholz “too hesitant”. Marie-Agnes Strack-Zimmermann, an outspoken Liberal MP who also travelled to Kyiv, echoed his call.

Opponents argue that supplying heavy weapons would make Germany a party to the war. Experts in international law say this claim is simply wrong. Russia has threatened to strike NATO countries that give Ukraine heavy weapons—but that would probably draw all of NATO into the war, and seems to have been a bluff. It would take many weeks of training, argues Erich Vad, a retired Bundeswehr general, to teach Ukraine’s army to operate German-made Leopard and Marder tanks and to develop a supply chain for spare parts. Yet as the months go by, such caveats begin to look like excuses.

Christian Lindner, the finance minister, announced on Twitter on April 15th that Germany will increase its *Ertüchtigungs hilfe,* a fund to help allies buy weapons, by about €1bn, with the boost largely going to Ukraine. The money will surely be welcome in Kyiv. But there is an air of unreality to many Germans’ attitudes: they want to help Ukraine defend itself against Russia, but they shrink from the warlike things this implies. The concrete implementation of the *Zeitenwende* is proceeding, but the change in Germans’ thinking has barely begun. To convince them, the reticent Mr Scholz, too, will have to change. ■

Read more of our recent coverage of the [Ukraine crisis]

Finger in the wind

Georgians back Ukraine, but their government is more hesitant

The memory of Russian aggression drives both responses

Apr 23rd 2022

IF ANYONE FEELS Ukrainians' pain, it is Georgians. In 2008 Russia invaded Georgia and garrisoned the self-declared statelets of South Ossetia and Abkhazia, leaving a fifth of Georgia's territory under de facto Russian occupation. When Russia invaded Ukraine in February thousands of Georgians marched in solidarity. Many worry that Vladimir Putin, Russia's president, may target them again to compensate for his failed invasion—or "to continue the expansion started in Ukraine, depending on the outcome of the war", warns Salome Zourabichvili, Georgia's president.

Polls show more than 60% of Georgians believe the government should do more to help Ukraine. Georgians have welcomed thousands of Ukrainian refugees, and bristle at the larger influx of Russians fleeing Mr Putin's regime. The national bank requires Russians wishing to open accounts to sign statements condemning "Russia's aggression in Georgia and in Ukraine".

Yet the government's response has been more muted. It has not joined Western sanctions; Irakli Garibashvili, the prime minister, said doing so would harm the country's interests. Georgia has refused entry to some prominent Russian opposition figures and stopped some of its own citizens from flying to Ukraine to join the fight. The deference to Russia has not gone unnoticed on either side: Ukraine recalled its ambassador, while Russia left Georgia off its list of "unfriendly countries".

The Economist

The ruling party, Georgian Dream (GD), explains its stance as strategic caution. Since coming to power in 2012, GD has sought to normalise relations with Russia. Travel restrictions eased and trade grew; Russia is now Georgia's second-largest trading partner. Sanctions, GD argues, would do little damage to Russia's economy while devastating Georgia's, and could provoke further aggression.

Yet that is only a partial explanation. Bidzina Ivanishvili, the shadowy oligarch who backed GD and once served as prime minister, made his fortune in Russia. He no longer has a formal role in GD, which denies any Russian influence, but speculation is rife. "He is a Russian oligarch, he came from there," says Kornely Kakachia, director of the Georgian Institute of Politics, a think-tank in Tbilisi, the capital. GD's feud with Mikheil Saakashvili, a former Georgian president who relaunched his political career in Ukraine after being forced out of Georgia, complicates things further. “They are taking this personal relationship, the Saakashvili factor, into state relations between Ukraine and Georgia,” Mr Kakachia argues. Mr Saakashvili was arrested on returning to Georgia last year.

Ms Zourabichvili, who was born in France and served as a French diplomat, strongly backs Ukraine. That puts her at odds with GD, which supported her candidacy. She has travelled to Europe to reassure leaders of Georgia’s Western orientation. GD accused her of violating limits on presidential powers by conducting her own diplomacy. But her trips helped facilitate Georgia’s application for EU membership, filed together with Moldova’s in March. “We see a new window of opportunity,” says Ms Zourabichvili.

The government’s caution on Ukraine may make things trickier. Western governments are scratching their heads over Georgia’s response, Mr Kakachia says. It also carries security risks. If Russia threatened military action on its border, Georgia would “need weapons and support” from the West, says Olesya Vartanyan of the International Crisis Group. “Let’s hope that by then there [is] no question about which side Georgia is on.” ■

Read more of our recent coverage of the Ukraine crisis

Art and the war

Protests and politics will dominate this year's Biennale

An empty Russian pavilion will be an eloquent statement

Apr 23rd 2022

NO NATIONAL PAVILION in the latest Venice Biennale, which opens on April 23rd, will make such a brave and unambiguous statement as Russia's. Its airy spaces will be empty, the curator and two artists chosen to represent Russia having withdrawn on February 28th in protest at the invasion of Ukraine.

Politics is seldom distant from the world's most prominent showcase for contemporary art. But this year it was not intended to be central. The Italian curator of the main show, Cecilia Alemani, had chosen to build it around shifting concepts of what it means to be human, and called it The Milk of Dreams after the title of a children's book by a late Surrealist artist, Leonora Carrington. Yet there is every chance the Biennale, including 80 smaller, national exhibitions, will be dominated by the war.

Demonstrations are expected outside the shuttered Russian pavilion. And the exhibition authorities have agreed to the creation nearby of an open-air space around a monument covered by sandbags in which to display work created by Ukrainian artists since the invasion in February. Ukraine was initially going to pull out of the event, but that changed after one of the co-curators of its show, Maria Lanko, drove the main elements of its central exhibit more than 2,000 kilometres from Kyiv to Venice. The journey, which in normal circumstances would have taken her a matter of days, lasted three harrowing weeks.

"In times of brutal wars," said Ms Alemani, "it seems almost impossible to think about art." But in a statement, the Ukrainian curators of the open-air show argued their wartime art might even chime with her chosen themes. "For months," they wrote, "human bodies have been shaking along with the walls of their homes and cities. Every day, technologies kill and protect also. Every day, human relationships with plants, animals, earth and non-humans change or strengthen, and this is not a dream."

Read more of our recent coverage of the Ukraine crisis

The final choice

Emmanuel Macron remains the strong favourite to win France's presidency

He outclassed Marine Le Pen in their only televised debate

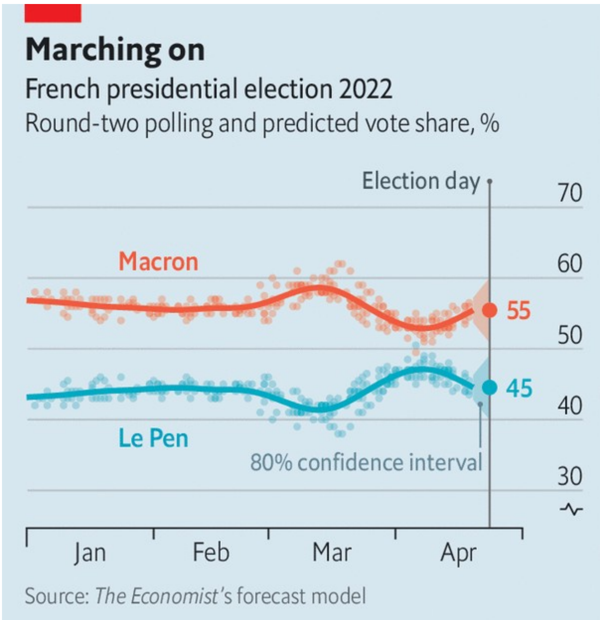
Apr 23rd 2022 | MARSEILLE AND PERTUIS

SEVEN MONTHS ago Emmanuel Macron stood in the gardens of the Palais du Pharo in Marseille, before the sunlit backdrop of the old port, and declared: "If we can't succeed in Marseille, we can't make a success of France." On April 16th the sitting president was back in the same majestic setting for his first rally before the final vote at the French presidential election, on April 24th. The Mediterranean city did not vote for Mr Macron in the first round, preferring the radical-left Jean-Luc Mélenchon. So the president was on hostile ground. But, by returning to the spirited, rebellious city, Mr Macron seemed to be saying: if he can win over Marseille, he can succeed in winning over France.

In the closing days of the campaign the two finalists, the centrist Mr Macron and the populist-nationalist Marine Le Pen, were out chasing the votes of those who picked neither of them in the first round. The biggest chunk of these are the 7.7m people (22% of voters) who backed Mr Mélenchon, many of them young and green-minded. Conscious of this, Mr Macron vowed in Marseille to put the environment “at the heart” of a second term, to double the pace of France’s effort to reduce carbon emissions, and to make France the first big country to end the use of fossil fuels. The run-off, he declared, was a choice between fear and hate on the one hand; and respect, diversity and ecology on the other.

An hour north of Marseille, at the edge of the Luberon hills, a beaming Ms Le Pen was the previous day pressing the flesh in the local market. For an hour, she edged her way past stalls selling asparagus, olives and charcuterie, stooping to hug children or posing for selfies with passers-by. A few protesters chanted “go home” or “fascist”. Fatima Benmalek, a grandmother of Algerian origin, beseeched Ms Le Pen not to ban the Muslim headscarf from being worn in public, as she has promised. But the welcome Ms Le Pen got from most of those filling their shopping baskets shows how far she has broadened her appeal. “She’s calm, poised, less aggressive than before,” said Josiane, a retired florist. “She’s visiting all the villages. Macron, he’s not really close to the population.”

Though brought up in a mansion outside Paris, Ms Le Pen has successfully styled herself as a defender of “the people” against the Paris elite, embodied by a “globalist” president; and as a single mother who has struggled like anyone else. She has steered clear of the capital and criss-crossed rural France, where her vote is strongest, promising to cut VAT on heating bills, petrol and food.



The Economist

On the back of a savvy campaign the populist leader has never looked so close to winning the highest office. Twenty years ago her father, Jean-Marie Le Pen, the co-founder of the party she rebranded from the National Front to the National Rally and has led for over a decade, scored a mere 18% in the presidential run-off. In 2017 Ms Le Pen nearly doubled this, winning 34% of the vote, to 66% for Mr Macron. On April 20th *The Economist*'s poll average put her at 45%, to 55% for Mr Macron.

But that is still a huge gap. Indeed the second-round poll dynamic has shifted in Mr Macron's favour. The more Ms Le Pen's manifesto has come under scrutiny, the wider Mr Macron's lead has become. This was particularly evident during their one and only head-to-head debate on April 20th, which lasted over two-and-a-half hours. Mr Macron laid into Ms Le Pen's links to Russia, reminding viewers of her outstanding loan from a Russian bank: "You are speaking to your banker when you speak to Russia." Her fantasy of building an "alliance of nations" within the European Union, he said, amounted to nothing less than "taking France out" of the union. Unsurprisingly, he outclassed Ms Le Pen on technical detail and grasp of policy.

For her part, Ms Le Pen was a calmer figure than when she debated Mr Macron in 2017, offering plenty of feel-your-pain empathy for those struggling to get by, and waiting for condescension to get the better of Mr Macron, which at times it did. The pair clashed over wind turbines (which she wants to dismantle), the legal retirement age (which he wants to raise, from 62 years to 65) and her proposed ban of the Muslim headscarf in public (which he vigorously rejected). Such a ban, Mr Macron declared, would "start a civil war".

It is unlikely that the debate will shift voting intentions much. Even before it took place, those on the left who are instinctively hostile to Mr Macron seemed to be preparing to put their feelings aside and back him, if only to keep Ms Le Pen out. The share of Mélenchon voters who said they would support Mr Macron jumped ten points over the Easter weekend to 38%; only 16% swung behind Ms Le Pen.

In Marseille there was little of the thrill that surrounded the fresh-faced Mr Macron in 2017. His supporters were measured rather than fervent. "He may not be a popular president, but he is a courageous one," said Victor, a civil servant from Montpellier. Some mentioned approvingly Mr Macron's rejection of Ms Le Pen's headscarf ban; others Europe and his management of the pandemic. "He hasn't succeeded with everything, but he's not done badly given what's been going on," said Marianne, a care worker from Marseille.

On April 20th [our forecasting model]() had the probability of a Macron victory at a massive 93%. Re-election would be a feat for the 44-year-old, who had not stood in any election until he ran for the presidency in 2017. Under the Fifth Republic the French have never re-elected an incumbent president holding a majority in parliament. Yet, if he wins, Mr Macron will face a fractured, discontented country, much of which has little time for him. Victory would be quite something. But a second term would be about managing the dismay as much as the expectations.

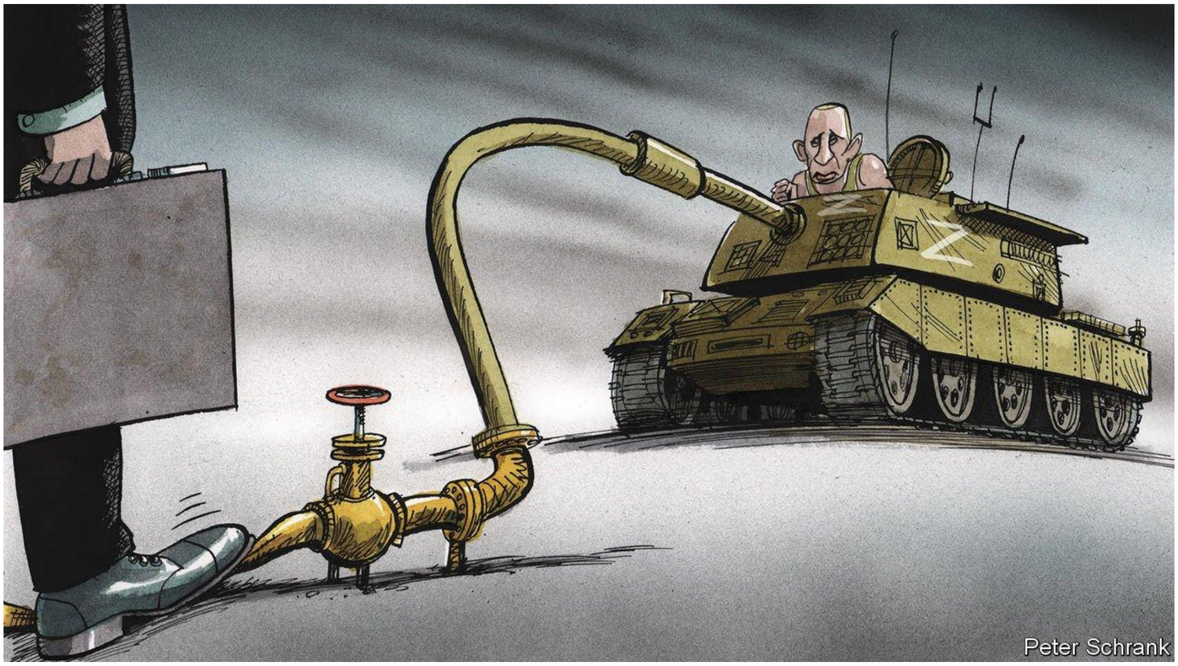
For more coverage of the French election, visit our dedicated [hub]()

Charlemagne

Tariffs on Russian energy are a smart way to hobble Vladimir Putin

If Europe can’t agree to ban Russian oil and gas, it should tax it instead

Apr 23rd 2022



THE INDUSTRIAL outskirts of Lubmin, a town on the windswept Baltic coast of what was once East Germany, feature in no tourist guide. Nor is the port of Rotterdam, the grittiest part of a city already struggling for charm, much of an attraction. Certainly neither has the appeal of Notre Dame or Venice, as Luis Garicano, an MEP, economics professor and recent day-tripper to both can attest. Yet few places could help a vacationer to Europe better make sense of what is actually happening there today. In the Dutch port, ships from Russia discreetly unload lakes of crude oil each worth up to $80m, to be processed in European refineries. Even further from the public gaze, the Nord Stream pipeline makes landfall at Lubmin, pumping Siberian gas for which customers in Germany and beyond send back over €160m ($174m) every day. This is the dark economic underbelly of Europe, a continent that congratulates itself on aiding Ukraine while having paid nearly €40bn for Russian energy since the war started eight weeks ago.

Banners in demonstrations from Paris to Prague have advocated simply shutting off the pipeline and turning away tankers carrying Russian crude. Yet wave upon wave of European sanctions have all but ignored oil and gas, even as drastic measures targeting other bits of the Russian economy have been adopted. Politicians wish they could stop payments to the Kremlin's coffers; Germany's have prevented the opening of a new pipeline, a twin to Nord Stream. At the same time they worry that going cold turkey on Russian gas might result in cold citizens come winter. Voters are already feeling the pinch of high heating and petrol bills. Firms are struggling, too, not least in Germany where reliance on Russian energy is acute. Estimates of how much an embargo on energy imports from the east would harm Europe's economy vary wildly, but are high enough to derail consensus within the EU beyond mulling partial restrictions on oil imports in future.

If sanctions are off the table, Europe might consider stiff tariffs on Russian energy instead. Taxing imports of oil and gas would not stop them from flowing west entirely. It would, however, crimp demand for Russian hydrocarbons as surely as levies on booze and cigarettes deter drinking and smoking. An analogous "sin" tax on Russian oil would recognise that buying Russian energy is a form of commercial turpitude, given the remitted funds will fuel President Vladimir Putin's war machine. Firms that belch greenhouse gases into the atmosphere have to compensate the wider public by purchasing carbon permits. Today Putinism is to geopolitics what climate change is to the planet: a problem that needs to be dealt with, and fast.

The aim of any sanctions regime is to impose crippling costs on the enemy while suffering little inconvenience yourself. Some economists reckon tariffs would even help the EU turn a profit at Russia's expense. Ricardo Hausmann, a former Venezuelan planning minister now at Harvard, points out that if a punitive import tax—of perhaps 90%—were to be added to the price of Russian oil, European refineries would source crude from elsewhere unless they were granted a sizeable discount. Russia makes such vast profits on its oil—extracted for less than $6 a barrel and sold for ten times that—that it would still make sense for it to export it at the global price minus the tariff imposed by Europe (and indeed Russian crude is already being sold at a steep discount to benchmark rates). Since Russia's pipelines and ports are arranged mainly to cater to Europe, re-routing the oil and gas to other customers would be complicated and costly. The new tariff would become a source of income for Europe, at the expense of the Kremlin.

Real life would be messier than economic models. But the broader point, says Guntram Wolff of Bruegel, a think-tank in Brussels, is that Europe has more options to substitute Russian oil than Russia has options to replace European customers. Things are different with gas, given that it is delivered through pipelines which tie producers and consumers together. Europe cannot quickly replace much of what Russia delivers, though to some extent it can switch to gas from other places or other forms of energy entirely. A levy on gas would thus be less likely to force Russian prices down in the short term; but as Europe diversifies its sources of supply, for instance by building more LNG terminals, it will become more viable. The money raised by a levy could be used to compensate users of Russian gas unable to switch away from it.

Mario Draghi, another economist, who is currently moonlighting as Italy's prime minister, also wants to hobble Russian energy, but by capping the price paid by Europe for its imported gas instead. In many ways that is similar to a tariff: you limit the flow of money headed to Moscow, and force Russia to adapt. But this approach would do nothing to stymie the demand for Russian energy—on the contrary. It would encourage industry to crave more, not less, of Mr Putin's now-even-cheaper gas. In contrast a bump in prices of some Russian energy would send a signal that those who currently use it should cut back. Politicians are demanding this: Europe is aiming for a two-thirds cut in Russian gas imports this year, though partly based on optimistic assumptions. A higher Russian gas price, while painful, would provide an incentive for those who use the stuff to wean themselves off it.

The levy was high

The likeliest outcome, says Mr Garicano, is the current approach: doing nothing. A levy on imports is at least a step in the right direction, and politically feasible. It could be adjusted depending on circumstances, unlike an all-or-nothing embargo. In normal times taxing imports is frowned upon for fear of irking trading partners. But vexing the Kremlin would be a plus in this case. Russia might respond by reducing supplies, but it is already threatening this anyway. The EU has the right idea when it comes to wanting to free itself from the shackles of dependence on Russian energy. Now it needs the right approach. ■

Read more from Charlemagne, our columnist on European politics:
Thank the elderly for keeping Europe's extremists out of power *(Apr 16th)*
Europe is learning to cope with Viktor Orban *(Apr 9th)*
It will take years for Ukraine to become an EU member *(Apr 2nd)*

Britain

The big squeeze

A guide to Britain’s cost-of-living crunch

Incomes in Britain will not keep up with inflation over the coming months

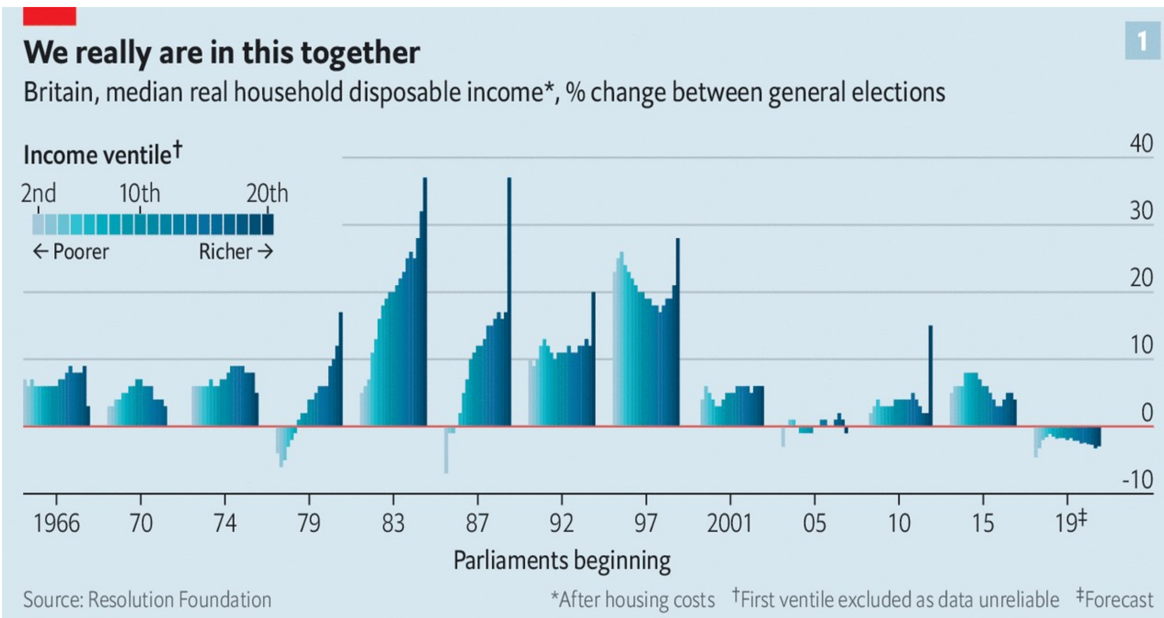
Apr 21st 2022

THE SIGNS are there. Richard Walker, the boss of Iceland, a discount supermarket, reports that his customers are switching towards frozen food, as a way to reduce waste, and buying fewer items as they try to manage their cash. Although Iceland is gaining new customers as people trade down, it is losing others to charity. Charlotte White, who runs a food bank in south London, reports a dramatic increase in demand for its services, and a drop in donations that she attributes to squeezed incomes. And Kantar, a research firm, reckons that British households cancelled some 1.5m video-streaming accounts in the first three months of the year, up from 1m in the final quarter of 2021.

Belts are tightening in response to rising prices. In March the rate of annual inflation in Britain reached 7%, the biggest such increase in 30 years. Energy bills are rising most sharply, but price increases are occurring across the board. The consequence will be a fall in living standards over the coming fiscal year of 2.2%, a drop not seen since records began in the 1950s.

Whether that counts as a crisis depends on your income. For the very poorest the choice is already between heating or food; for the more affluent, the dilemma is picking Netflix or Disney+. But what is clear is that the rising cost of living will be unusual in affecting people across the income distribution (see chart 1)—and that the worst is yet to come.

Start with the cost pressures that are already visible. Energy prices have been rising dramatically for many months, but after Russia's invasion of Ukraine some types saw a particular surge. The cost of heating oil, used by around 3% of Britons to heat their homes in winter, soared by 44% in March compared with the prior month. Motorists paid around 30% more to fill up at the pumps in March than they did in the corresponding month in 2021.



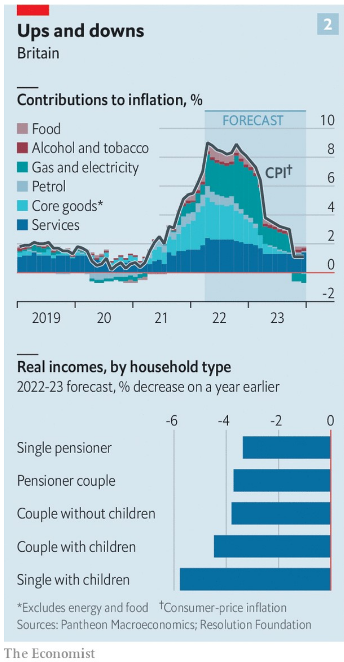
The Economist

Household energy bills are also spiralling. The government limits the amount that energy suppliers can charge households; the cap jumped by 54% in April, to an average annual charge of around £2,000 ($2,610). Customers on prepayment plans, who pay for their gas and electricity before they can use it, get bills that fluctuate with the seasons. The Fuel Bank Foundation, a charity, says that average prepayment bills will rise from around £107 in March to £131 in April. Bills for the majority who pay in smooth increments via direct debit will see a bigger rise, of closer to £60 this month.

Eating has also become pricier. In March food was 6% more expensive than the year before. There are shortages of workers in fields and factories, as well as of specific commodities—over 70% of sunflower oil, for example, comes from Russia and Ukraine. The prices of inputs such as fertiliser and energy have soared (the cap for households does not apply to firms).

Although food- and energy-price increases have garnered most attention, they are part of a broader trend. Several major mobile-phone networks yanked up their prices by as much as 11.7% at the beginning of April. The expiry of a lower rate of value-added tax on restaurants and hotels means higher prices in the hospitality industry. Rising national-insurance contributions, a payroll tax, will add to the pinch on budgets from this month.

If that sounds like Britain must already be suffering a cost-of-living crunch, the reality for many is closer to an inexorably tightening squeeze. Energy use is highly seasonal: it tends to fall between March and April as the weather warms, and will continue to do so as summer approaches. For many cash incomes will increase this month, as wages and benefits rise at the start of the fiscal year. Consumer credit offers a way for customers to make the sums add up, at least for a while. And around 80% of households will get £150 of emergency support from the government this month in the form of a one-off discount on council-tax bills.



But over the coming months rising prices will keep eating away at people's spending power. Economists expect higher inflation to persist until next year. Pantheon Macroeconomics, a consultancy, predicts that, after rising to around 9% in April, it will only be a year from now when inflation falls back below 6% (see chart 2). Trends in producer prices suggest that food will become even more expensive over the next few months. But energy is again the biggest threat.

The price cap can be raised once more in October, and another big jump is expected. The Fuel Bank Foundation reckons that average monthly energy bills will climb by a further £23 at that point for those paying by direct debit. It estimates that people paying for energy as they use it will get a monthly bill in January 2023 which will be £138, or 76%, higher than a year earlier.

Incomes are set to lag behind prices. Median pay awards in the three months to March 2022, as measured by Incomes Data Research, a data firm, were just 3%. An early look at a sample of pay awards for April, which is typically when around two-fifths of the annual total are decided, suggests that the median award this month may only be around 3.5%. Although the government has proposed that teachers' starting salaries be raised by 9%, starting from this September, it is arguing for an increase of just 3% for experienced educators on the “upper pay scale”, who represent over half of the total.

Retirees will probably see a fall in the real value of their pension income, too, at least in the short term. The state pension rose by just 3.1% in April, in line with September’s inflation rate. Most private pensions offer some protection against inflation, but analysis by the Pensions Policy Institute, a think-tank, suggests that a majority of such schemes cap rises, often at 5%. (Many also increase payments according to a lagged measure of inflation, which means that as inflation rises, income will take a while to catch up.)

The poor, who tend to spend the biggest share of their budgets on household energy bills, face the greatest pain. Economists at the Institute for Fiscal Studies (IFS), a think-tank, predict that in June, even before the next leap in the energy-price cap, the poorest 10% of British households will endure an inflation rate 3.5 percentage points higher than that experienced by the richest decile.

Although the national minimum wage increased by 6.6% in April, those on benefits have fared much worse. During the pandemic the government propped up the incomes of the working-age poor—among other things, by raising the value of universal credit, a welfare payment, by £20 a week. That increase was taken away again in October, and a 3.1% rise in universal credit this month was much too low to prevent another drop in the real value of benefits. The expected increase in domestic energy bills in the autumn will prompt a further plunge. According to Robert Joyce of the IFS, by the first quarter of next year monthly benefits for a single homeowner who has two children and is out of work will be worth 9% less than they were before the covid-19 pandemic.

Matt Copeland of National Energy Action, a fuel-poverty charity, warns that people have not understood how bad this coming winter could be. Cold homes can be deadly for the elderly and disabled people whose medical conditions require them to stay warm. In testimony to Parliament this week, the boss of one energy supplier warned that things were going to get “truly horrific”. The Resolution Foundation, a think-tank, predicts that over half of the poorest third of households will be pushed into fuel stress, which is defined as devoting at least 10% of their non-housing spending on gas and electricity. More will be pushed towards tactics like staying in bed to keep warm, eating cold meals or putting newspapers over windows for extra insulation.

Winter is still coming

Other coping mechanisms are less useful than they once were. Charities including Age UK, which serves the elderly, Gingerbread, which helps single-parent families, and Citizens Advice, which helps people with problems including debt, each report increases in the number of people calling to ask for help. Those doling out advice would normally suggest searching around for a better energy deal, but that is no longer helpful when capped prices are the cheapest option.

"We've reached the limits of what can be done through salami-slicing budgets," warns Morgan Wild, head of policy at Citizens Advice. "There has to be some substantial government intervention." So far help has been rationed. Rishi Sunak, the chancellor of the exchequer, has already announced that £200 will be taken off energy bills in October, to be repaid over the following five years in instalments of £40. But for the poorest households, this assistance will not be enough for them to cope. Mr Sunak has a bit of time left to decide what else he should do, but not much. What is beyond doubt is that he will have to do something. ■

Red and buried

Sir Keir Starmer’s transformation of the Labour Party

The grip of the hard left has been broken

Apr 21st 2022

THREE YEARS AGO Momentum seemed to be riding high. The left-wing activist group had been formed to support Jeremy Corbyn, the radical leader of the Labour Party. Mr Corbyn’s allies controlled the party’s most important offices; his opponents had been scattered; and he enjoyed the support of Unite, a big trade union. The prospect of forming a socialist government seemed tantalisingly close.

These days the meetings of Momentum’s national committee are downbeat affairs. Officials lament the rightward slide of the Labour Party on crime, immigration and defence. They complain of shrinking influence and the “vilification” of its socialist MPs. There is, recent minutes note, “extreme demoralisation amongst the left”. Momentum urges its supporters to “stay and fight”; many have quit.

Such gloom reflects the dramatic transformation that Sir Keir Starmer has wrought on the Labour Party since becoming its leader in April 2020. Mr Corbyn's personal unpopularity goes a fair way to explaining Labour's heavy defeat in late 2019, its worst electoral showing since 1935. Boris Johnson would like to portray the party as still under Mr Corbyn's spell. On April 19th, delivering yet another apology for his failure to obey pandemic-era restrictions, the prime minister dubbed Sir Keir a "nodding dog" to his predecessor.

Which is why Sir Keir is often urged to deliver a "Kinnock moment", a reprise of Neil Kinnock's forceful denunciation of Trotskyite factions at the Labour conference of 1985. No such moment of theatre has arrived; Sir Keir's speeches are forgettable affairs, and his clipped speech no match for Lord Kinnock's Welsh roar. And yet the current Labour leader has already moved against the left just as effectively, ousting them from the critical decision-making bodies in the party.

Whereas for the left, seizing the party was an end in itself, Sir Keir is said to be fixated on becoming prime minister. His circle saw the party bequeathed by Mr Corbyn as turned inside-out—one which had come to think of itself as an expression of virtue rather than an instrument of power, and in which the desires of its card-carrying members were elevated over those of the electorate. Some doubted that it could be salvaged at all, given the depth of the far left's penetration. Although Sir Keir had campaigned for the leadership as a unifier, he moved with speed to reshape the party before Mr Corbyn's crowd could regroup.

Jennie Formby, the pro-Corbyn general secretary of the party, quit in May 2020. By that November Sir Keir's supporters had a working majority on the National Executive Committee (NEC), which makes the major decisions over the party's management and policy. Richard Leonard, the party's leader in Scotland, was squeezed out. The composition of local Constituency Labour Parties (CLPs) appears to have shifted, too. A tally of delegates' votes at the party's annual conference in 2018 suggested that Mr Corbyn had the backing of 80% of CLPs, whereas by 2021 Sir Keir had the support of just over half, reckons Luke Akehurst, an NEC member and organiser for the party's moderate faction.

The art of mobilising moderate members to win back control of the party is a painstaking one, ground out one vote at a time. “This all had to be done 30 years ago under Kinnock,” says another organiser. “It’s getting the right people in the right Zoom at the right time.” The composition of the party’s membership has changed in Sir Keir’s favour, too: perhaps a quarter used to be dogmatic Corbynistas, tens of thousands of whom have left to be supplanted by new members loyal to him.

All of which has allowed Sir Keir to make some big changes. Mr Corbyn has been suspended from the parliamentary party over his response to revelations of anti-Semitism on his watch. (His followers are split over whether to support him as an independent candidate at the next election, and have not found a successor to rally around.) A string of revolutionary-left organisations have been proscribed from the party, and their members expelled.

Reforms passed narrowly by the party’s conference last September are intended to prevent a repeat of Mr Corbyn’s storming of the leadership in 2015 on the back of an influx of new members, and to shift power from the party’s rank and file back to its parliamentarians. The changes strengthen the power of MPs to pick future leaders, and reduce members’ ability to deselect MPs who displease them.

The next front in the struggle for the Labour Party will be over the selection of candidates for Parliament. Mr Corbyn’s faction in the House of Commons, the Socialist Campaign Group, is isolated and numbers a few dozen out of Labour’s 199 MPs. Momentum has made it a priority to increase this number. Moderates complain that Mr Corbyn’s tenure produced too many low-wattage MPs unqualified for ministerial office. Sir Keir’s reforms ought to raise the bar here too. There will be tougher central vetting to weed out cranks; spending caps and shorter campaigns will tip power away from the unions. Sir Keir has squeezed the hard left out of the party apparatus. The next test of his overhaul is whether he can remake the ranks behind him on the green benches of the House of Commons. ■

Less shooting, more sequestering

The carbon market drives land sales in Scotland

Environmentalists are buying up estates in the Highlands

Apr 21st 2022


Kieran Dodds/Panos

WHEN PRINCE ALBERT purchased the 20,000-hectare (50,000-acre) Balmoral estate in 1852, he did so for his family and for the views, the grouse and the deer. Owners of estates in the Scottish Highlands have conventionally had similar motives. But a new breed of landowner is drawn to something else entirely: the estates' ability to suck in carbon from the atmosphere.

Individuals, companies and trusts have been buying up properties for their environmental potential for about two years, says Robert McCulloch of Strutt and Parker, an estate agent. Estates in the Highlands are often not fertile enough for profitable farming and the properties are large, making it easier to do tree-planting or peatland restoration that sequesters carbon at scale.

In 2021 46% of estate transactions in Scotland involved companies, investment funds or charitable trusts; Mr McCulloch estimates the proportion was less than 20% in previous years. Their interest has driven prices up. In 2021 the sale price of an average Scottish estate was £8.8m ($11.5m), almost double the amount of a year before. Between 2020 and 2021 the total spent on buying estates increased by 119%.

In Britain the amount of carbon dioxide a landowner is sequestering counts as credits that can be used to offset emissions. Firms and funds mostly set their land holdings against emissions from their own businesses. In 2020 BrewDog, a beermaker, bought 3,800 hectares in the Highlands; it now claims that its carbon offsets are double its emissions. Aviva Investors snapped up 6,300 hectares in Aberdeenshire for similar reasons.

Individual buyers tend to have their sights on making money. Jeremy Leggett, an environmentalist who founded and sold a solar company, bought a 511-hectare estate along the shores of Loch Ness in 2020. He is gambling that its woodlands, peatlands and plants will yield carbon credits that can be sold to firms looking to offset their emissions. (If a market forms, he hopes to sell biodiversity credits, too.)

The influx of green buyers is positive in many ways. Scotland has ambitious climate goals, including to reach net-zero carbon emissions by 2045. Most of those cuts in emissions will come from phasing out fossil fuels, but native woodland and healthier peatlands help. The Scottish government has a target of planting 18,000 hectares of woodland every year, beginning in 2024, and restoring 250,000 hectares of peatland by 2030. The government will not meet those targets without changes on the country's private estates, which make up more than half the countryside.

But the new landowners bring controversy, too. The tenant farmers and gamekeepers who rely on traditional use of the estates could find work harder to come by. And land ownership is a touchy subject in Scotland: 400-odd people own half of the country's area. Lawmakers have taken note of the possibility that rising prices risk making land even less accessible to local communities. On March 31st the government published a set of non-binding principles which, among other things, encourages would-be buyers to consider leasing land to generate carbon offsets. Legislation may follow. Green landowners may be good for the planet, but they don't do much for equality. ■

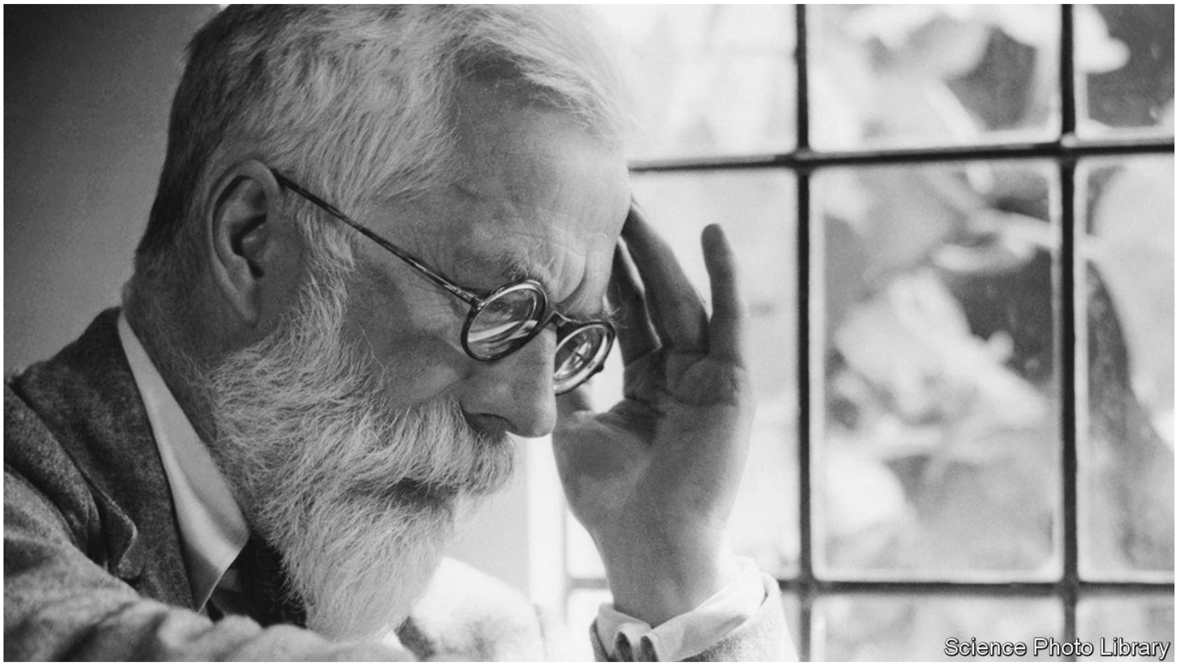
For more coverage of climate change, register for [The Climate Issue](), our fortnightly newsletter, or visit our [climate-change hub]()

Window pains

A Cambridge college reflects on the controversy over Ronald Fisher

The defenestration of a statistician and eugenicist

Apr 23rd 2022 | Cambridge



STEP INSIDE the dining hall of Gonville & Caius College, Cambridge, and within its cool, wood-panelled walls are memorials to great scholars of Caius and their work. There are windows to John Venn and his diagram; to Francis Crick and the DNA double helix; there is a painting of Stephen Hawking. And—until two years ago—there was a window to the work of a statistician called Ronald Fisher. It has now gone.

Fisher is one of the most famous statisticians ever, which is another way of saying he is not very famous at all. Venn and Crick and Hawking are all household names. Few have heard of Fisher. Yet, says Sir David Spiegelhalter, professor of statistics at the university, he was a giant. "Everything from the Higgs boson to the statins that I take every morning are evaluated using Fisher's innovations." It is less that Fisher is important to 20th-century statistics, says Sir David, than that "he essentially established my subject."

People have learned a little more about him of late. Because he was also, like many statisticians of the time, a eugenicist. In 2020 protesting graffiti ("Fisher must fall") was sprayed onto an aged Caius door; a petition was raised. "Not publicly acknowledging the racism of Fisher is ahistorical," it declared. "Remove the commemorating window to R.A. Fisher, Caius. You must do better." Almost 1,500 signed the petition. That summer saw what Professor Sir Alan Fersht, a former master of Caius, calls the "defenestration" of Fisher. "Victory!" celebrated the students.

The college seems a little less certain that this was a triumph. This week it is holding a two-day conference, organised by Sir Alan, on the topic of "Fisher in the 21st Century". The event is not, he says, aimed at "putting Fisher on trial" or resurrecting the window debate. But the probability that the subject won't arise seems low. Sir Alan himself—somewhat appositely for a row about a window—says that he "can see both sides".

Iconoclastic debates over racism and memorials arise regularly in British universities. A "Rhodes Must Fall" campaign has smouldered for years over a statue of the Victorian imperialist at Oriel College, Oxford. In March, Jesus College in Cambridge went to court to try to remove a memorial to a man who made money from the slave trade. In 2020 Edinburgh University renamed "David Hume Tower" for the philosopher's "comments on matters of race".

Iconoclasm, as Cambridge knows well, has a long history: in 1643 a Puritan iconoclast destroyed 120 images—or "monuments of superstition"—in Jesus College in a single day. Always the intention is improvement; always the focus is narrowly on the controversies of the day. Few iconoclasts morally multitask. Which is a shame, as they'd have ample material if they did: opposite where the Fisher window in Caius used to be hangs a portrait of a former master who was an avid enthusiast for Mao Zedong.

One thing is not in dispute: Fisher, who died in 1962, was brilliant. One of his greatest intellectual leaps came when taking tea in a Cambridge garden. A woman claimed that merely by tasting tea she could tell "whether the milk or the tea infusion was first added". His companions scoffed; Fisher wondered how you could be sure what was going on. The answer led to one of the most important statistical ideas of all: the "null hypothesis", the idea that what you see—an apparent ability to distinguish tea-making techniques, say—could be due to chance alone. Every drug tested, every vaccine trialled draws on this insight of his.

In other ways Fisher was unremarkable. A belief in eugenics—a word to cause an intake of breath today—was then standard: fellow-eugenicists included John Maynard Keynes, H.G. Wells and Beatrice Webb. Eugenicists were fired by idealistic zeal for doing better. As the first issue of "The Eugenics Review" (a publication that started in 1909 and only saw fit to change its title in 1968) explained, its purpose was "the noblest that can be imagined—the betterment of the Human Race". Humans could become better, brighter.

The history of the 20th century leads most to elide eugenics and racism but Fisher's interest was within races, not between them. He thought abilities might differ between races since their genes differed—but offered no particular view on which might be better. A recent article in *Heredity*, a journal, concluded that his eugenics work "provides no support for the view that he was a racist in the stronger sense of supporting racial discrimination". His worry was the ever-breeding poor and the "defective", where his views, to modern eyes, were extreme. At one point he advocated voluntary sterilisation of the feeble-minded. "I could understand," says Sir David, "why people would want to remove memorials to Fisher as a person."

But those were not the reasons that the petition focused on. Somewhat ironically for a document so keen on historical precision, it was riddled with errors. It attributed quotations to him that he never said; it quoted from a blog that confused Fisher with another eugenicist. The author of that blog admits that the post in question contained infelicities but says that it had been written six years ago: "It's clearly a product of the time."

Indeed. The past is another country; they do things differently there. And in the hall in Caius, the light—a better, brighter light—now shines through the window where the Fisher memorial once was, onto the painting of a man who was a fervent supporter of Mao. ■

Really not new York

The NIMBY city

The parable of York, a place that does not want to grow

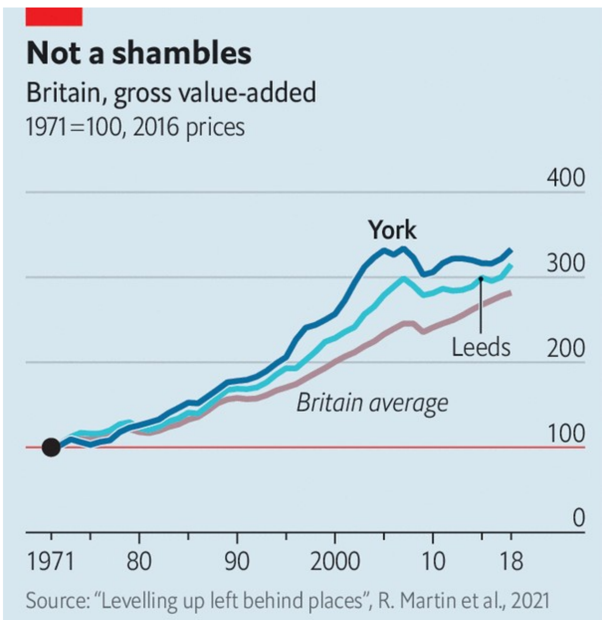
Apr 21st 2022 | YORK

LAST DECEMBER York City Council considered a proposal to demolish a Mecca bingo hall and replace it with student housing. The building was acknowledged to be architecturally undistinguished. It was also unused—it had closed during the covid-19 pandemic and never reopened. Still, some councillors objected. One argued that the bingo hall was "clearly a cultural facility, if not institution" and called on the chairman to resign.

The council eventually approved the plans. But the eruption of controversy over the redevelopment of an ugly, defunct building is pure York. "It's quite a backward-looking city—it's very nostalgic," says Helen Heraty, co-owner of the Grays Court Hotel, which unlike the bingo hall is both old and beautiful. And nostalgia is a problem, for York and for Britain.

When politicians talk about "levelling up" Britain, they tend to imply that northern England, the Midlands and Wales are hungry for development and growth. This is certainly true of prominent northern politicians such as Andy Burnham and Ben Houchen, respectively the mayors of Greater Manchester and the Tees Valley. But the north also contains places that are as NIMBY as any other in the country.

York is a small city of 211,000 inhabitants with a lovely, largely medieval centre. Over the past few decades it has fared well economically, although like many places it has slipped a little since the financial crisis (see chart). York University churns out more graduates every year. Taking an average of the past five years, 50% of residents are estimated to have a post-secondary qualification, compared with 41% in Britain as a whole. The city could be a powerful engine of the northern English economy. But it does not want to be.



The Economist

British cities are supposed to have local plans, agreed with the government, which explain where they will build new homes and offices. The last time York managed to do this was in 1956. That is not an oversight. York has simply not wanted to turn into a bigger city like Leeds or Manchester, says Neil Ferris, the corporate director of place at York City Council: "Do you need all those big sheds, do you need all those factories to have a good quality of life?"

York has surrounded itself with an enormous green belt, eight times as large as the built-up area of the city, which prevents suburban sprawl. It cannot grow upwards, partly because planners do not want to block views of the cathedral. And apart from some railway yards, which will be redeveloped in a plan known as York Central, it lacks the large blocks of post-industrial wasteland that have allowed cities such as London and Manchester to build rapidly in their centres.

As a result it adds homes and people only slowly. Between 2015 and 2020 York's population grew by 2.5%, or an average of just over 1,000 people a year. That is slower growth than the United Kingdom as a whole. Students seem to account for nearly all of the increase: full-time enrolments in the University of York alone have risen by 4,785 over the past five years.

York is hardly better at creating commercial buildings. A new office development known as Hudson Quarter claims to be the first of its kind in the city for at least ten years. The amount of office space in the centre of York fell after the national government made it easier to convert offices into homes. "We have a lot of people looking at York and then going elsewhere," says Laurence Beardmore, president of the chamber of commerce.

York might well be a richer city if it allowed itself to grow faster. The council does worry that York loses too many graduates, who push off because they cannot find entry-level homes or highly skilled work. It is generally the case that bigger cities are more productive than smaller ones, although this is less true in Britain than elsewhere. And as Mr Beardmore points out, even sprawling cities can have beautiful centres. Just look at Paris.

But the truth is that the established residents of York are doing fine. Desirability and limited construction help explain a ratio of median home prices to earnings of 8.8, above the 6.4 average for the Yorkshire and Humber region. "Your average person in York who owns a house is quids in," says Philip McCann of the University of Sheffield. York's refusal to grow harms its residents less than the people who cannot afford to move there. ■

Bagehot

Why Boris bashes the archbishop

Fighting institutions trumps actually governing for the Conservatives

Apr 23rd 2022

ARGUMENTS BETWEEN the government of the day and the Archbishop of Canterbury have a long, bloody pedigree. In the 12th century Thomas Becket ended up with his brain splattered across the floor of Canterbury Cathedral after clashing with Henry II. In the 16th century Thomas Cranmer was chained to a stake and burned to death for heresy and treason.

When Justin Welby, the current Archbishop of Canterbury, attacked a new government plan to deport asylum-seekers to Rwanda, the response was less violent. MPs reacted with hammed-up anger rather than bloodshed. In an ingenious if wholly inaccurate analysis of Britain's constitution, Ben Bradley, the MP for Mansfield, declared: "We separated the church from the state a long time ago." One commentator accused the cleric of "virtue-signalling", which is a decent summary of an archbishop's job. Boris Johnson grumbled to Conservative MPs that Archbishop Welby had not been as critical of Vladimir Putin's invasion of Ukraine.

Spending Easter weekend scrapping with bishops is no way to introduce a policy. For this government, however, it was the perfect launch. Political spectacle trumps substance. Coming up with a scheme to deport people to Rwanda does take aim at a real voter concern about the rising numbers of asylum-seekers crossing the Channel. But it is also an excellent way for the government to engage in its primary purpose: fighting Britain's institutions.

The Church of England makes a fine opponent because Britain does have meddlesome priests. The country is, after all, a form of theocracy. Bishops sit in the House of Lords (and the queen sits just below Christ in the church's pecking order). The Lords Spiritual play an active role in legislation, turning a corner of Westminster into Tehran-on-Thames. Even before the Rwanda scheme was announced, bishops were all over the Nationality and Borders bill, which aims to make it harder to claim asylum in Britain. Unelected peers, particularly ones in fetching hats, can do little to thwart a determined government. But they make a useful enemy.

So do civil servants. The top official at the Home Office demanded a "ministerial direction", in effect putting on record an objection to the Rwanda plan. The scheme would be expensive—the African country is getting £120m ($157m) in exchange for taking in asylum-seekers—and probably not work, he wrote. Officials in the Home Office tend not to be wet liberals. Bishops may believe in the best of humanity, but the Home Office focuses on its worst. Theirs is a world full of paedophiles, terrorists and drug-smugglers; deporting people is the day job. Objections from Whitehall are practical rather than moral. Yet the government can still cast civil servants as obstinate ideologues standing in the way of their democratic masters.

Whether Britain can deport people to Rwanda will ultimately be settled in the courts. The broad international conventions that dictate Britain's asylum policy, such as the Refugee Convention and the European Convention on Human Rights, have been left untouched by the scheme. Judges will decide whether the new proposal violates them. In a taste of things to come, Mr Johnson this week took aim at "politically motivated lawyers", who, he argued, made the policy necessary in the first place. A clash between the government and the judiciary is inevitable. Having a proposal struck down by a court was once an inconvenience. For this government, however, it would be a virtue.

All governments fight those who appear to thwart them. Usually, however, there is a reason to have the tussle. The Church of England was a vociferous opponent of Margaret Thatcher's welfare reforms in the 1980s. Likewise, she had a low regard for chunks of the civil service. (Her favourite television show was "Yes, Minister", where scheming officials try to defy their minister's wishes.) Whereas the current Conservative government chunters about the BBC, Thatcher went to war with it, easing out a director-general of whom she did not approve. Yet this was not a campaign of casual vandalism. Thatcher was in the middle of an economic revolution; those opposed to it had to be crushed. Shaking the system was necessary in order to change it.

In contrast, the current government launches fights for the sake of it. Such an attitude extends beyond illegal immigration. Brexit policy has gone from being the existential goal of Mr Johnson's government to a pantomime. Jacob Rees-Mogg, part-cartoon character, part-cabinet minister, has been given the task of winkling out Brexit opportunities. But geeing up friendly newspaper headlines has supplanted the boring and complex task of actually improving post-Brexit regulation. Politics is no longer the art of the possible but performance art.

What miserable drones and traitors have I nurtured

The government exists in a realm in which it is eternally 2016, opting for a constant campaign over a programme of actual reform. In the referendum, Vote Leave's strategy was one of picking fights they wanted to have, on everything from half-truths over the cost of the EU to Turkey's prospective membership of the club. Opponents were engulfed by outrage. Vote Leave's alumni are now in office, but their tactics have not changed.

When Britain's political system ground to a halt after the Brexit referendum, pugilistic rhetoric had appeal. In 2019 Mr Johnson's pledge to bulldoze through anyone who stood in his way won him a fat electoral majority. But things are calmer now. Competent governance, rather than picking fights, is what is needed. At a time when living standards are set to fall sharply, scrapping with the civil service or judges provides little hope of electoral salvation. The Conservatives have a large majority, and Britain has the least-constrained executive of almost any European democracy. It is within the government's gift to change Britain radically, yet they are signally failing to do so. Accepting that is hard. Far better to blame a bishop. ■

Read more from Bagehot, our columnist on British politics:
Martin Lewis faces up to a world he can no longer fix (Apr 16th)
The cruelty of the British state (Apr 7th)
To appreciate the SNP's dominance, look at what it has done to the Tories (Mar 26th)

International

- **Climate lawsuits: Habeas carbon**

Going to court for the climate

Lawsuits aimed at greenhouse-gas emissions are a growing trend

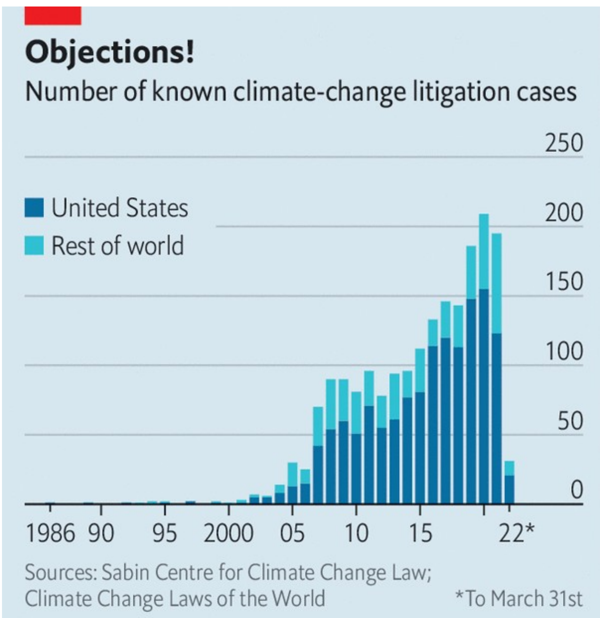
And better science could make them more precise

Apr 21st 2022

I N AUGUST 2018 ClientEarth, an environmental organisation based in London, paid €20 ($23) for ten shares in Enea, a power company based in Poland. The trans action bought the lawyers at Client Earth a tiny stake in Ostroleka C, a one-gigawatt coal-fired power station Enea was about to build 120km north of Warsaw. It also bought them the standing they needed to stop the company from building it.

The lawsuit ClientEarth filed against Enea's directors a couple of months later alleged that, in pursuing the project, they were failing to act in shareholders' best interests. Ostroleka C, the lawyers argued, was destined to become a stranded asset: one which, in the increasingly decarbonised world of European electricity generation, would be unable to operate profitably. It therefore presented an "indefensible" financial risk. In July 2019, a judge in Poznan ruled in their favour. Construction was abandoned a few months later. Enea and its partner, Energa, wrote off the 1bn zloty ($250m) invested in it. There will probably never be another coal-fired plant built in Poland.

Lawsuits to fight carbon emissions began to make themselves felt in the mid-2000s. After the Paris agreement of 2015 they reached a new level (see chart). The Sabin Centre for Climate Change Law in New York and the Grantham Research Institute in London collate data on cases which cite climate science, climate policy, emissions reduction or efforts to adapt to the consequences of climate change as a significant factor. More than 1,000 of the 1,951 cases on the Grantham institute's list were filed post-Paris.



The Economist

This is in part because Paris brought a broader awareness of climate change. But it is also because the 2015 agreement made things actionable in a way that they had not been before. The deal in Paris committed governments to keeping the increase in average global temperature since the 19th century well below 2°C. Climate science allows the greenhouse-gas emissions compatible with that goal to be quantified.

Those two things give imaginative lawyers a lot to work with. And because Paris is a global agreement, they have a lot of venues to work in. The Grantham list includes cases in 41 countries and 13 international or regional courts and tribunals.

There are three reasons the trend is likely to continue. One is that as more countries put their Paris pledges, and the updates to them made in Glasgow last year, into law there are more opportunities for lawyers to pounce. A second is that success breeds success. According to the Grantham data, as of 2021 58% of cases outside America which had been concluded had outcomes favourable to the parties seeking more action on climate. Only 32% of results had been unfavourable.

The third is that more lawyers are getting interested and more activists are trying to interest them. Organisations and individuals fed up with the slow pace of change brought about by political dealmaking and activism on the streets see the courts as a promising new front in the fight against emissions.

Most of the cases to date have been attempts to get governments to live up to what are seen as their commitments. This approach's most striking success has been in the Netherlands. In November 2013 the Urgenda Foundation, an environmental organisation, and 900 Dutch citizens sued their government on the basis that its emissions targets were too weak to keep the country safe. In December 2019 the Dutch Supreme Court upheld a lower court's ruling in their favour. The government was ordered to ensure that emissions at the end of 2020 were at least 25% lower than 1990 levels, rather than the 17% it had adopted. The revised target was met—just.

In a review of climate litigation published in July 2021, Joana Setzer and Catherine Higham, who work on climate governance at the Grantham institute, identified 37 subsequent cases that built on Urgenda's approach in challenging a government's climate strategy. The approach has had successes in France, Ireland and, most impressively, Germany.

In February 2020 a group of young Germans led by Luisa Neubauer, a climate activist, sued their government for failing to set climate targets that were in line with the Paris agreement goals. A year later the Federal Constitutional Court found in favour of the plaintiffs; it ruled that the government had a duty to protect future generations and that the nation's emissions budget could not be consumed by one generation at the expense of the next. As a result of the ruling, Germany's climate-change act was amended to aim for a 65% reduction in greenhouse-gas emissions by 2030, relative to 1990 levels, instead of the 55% previously required.

The Paris agreement was specifically designed not to be binding on America—if it had been, it would have needed ratification by the Senate, something it would not have achieved. But that has not stopped lawsuits alleging that the government is failing to live up to commitments on the climate which plaintiffs claim to find in the country's constitution. In August 2015, 21 American citizens aged 19 or younger (as well as a plaintiff listed as "Future Generations") filed *Juliana v United States,* a suit against the federal government alleging that it had violated their rights to "life, liberty and property" by allowing "dangerous levels" of fossil fuel to be burnt. The case is still ongoing.

As in Poland, so in Japan

If most of the cases to date have been against governments, though, lawsuits against companies associated with large emissions, especially fossil-fuel companies, and the institutions which finance them are multiplying. Sometimes, as with Ostroleka C, these are based on the interests of shareholders; sometimes they are based on damage to the environment or the rights of the public; sometimes they are based on specific harms caused by past emissions or brought about through misinformation. Those involved frequently draw parallels between these cases and the lawsuits which clobbered Big Tobacco in the late 1990s and the class-action suits that bankrupted dozens of companies selling asbestos insulation from the 1960s on.

For ClientEarth and similar organisations the idea is not just to change the behaviour of single companies. They want to mount "strategic" lawsuits designed to change the way that whole industries think. The Enea suit is a case in point. After its Polish success, ClientEarth used similar tools in a campaign against a coal-fired plant that J-Power, a Japanese utility, was building in Ube. It developed a financial-risk assessment and, with Japanese investors, wrote formal letters to the board, as it had done with Enea. "Having established the principle in Europe…the letter in Japan brought a director from the company to me," says James Thornton, ClientEarth's CEO. "The end of the meeting, essentially, was him saying 'I see your point'." In April 2021 J-Power announced that it was abandoning its plans for the plant, citing competition from renewables.

As the number and diversity of climate lawsuits grows, companies are taking them more seriously. Financial-risk disclosure statements filed annually to America's Securities and Exchange Commission show that the lawyers and auditors working for some companies increasingly consider climate litigation to pose a material risk. On reviewing statements filed by several fossil-fuel companies between 2014 and 2021, *The Economist* found that prior to 2016 those which mentioned climate litigation at all made only passing reference to it. Some continue in this vein: ExxonMobil does not explicitly mention climate litigation in any of its filings, despite being a defendant in numerous cases.

Since Paris, though, several big fossil-fuel companies, including Chevron, ConocoPhillips and Shell, have been systematically including climate lawsuits as a potential material risk. Having made scant mention of such litigation previously, in 2016 Chevron listed "private" climate litigation as a "potential" risk. By 2020, the company was referring to a risk of "increased investigations and litigation" related to climate change. Shell's disclosures refer to climate lawsuits for the first time in 2017. In its 2021 filing it had a paragraph on the various climate lawsuits that had been brought against it, including 21 pending in America as of December 31st 2021. It concluded that there was "a high degree of uncertainty" regarding outcomes, "as well as [the lawsuits'] potential effect on future operations, earnings, cashflows and Shell's financial condition".

One of the cases it was referring to was that brought by Milieudefensie, another Dutch environmental organisation, in April 2019. Like the Urgenda case which inspired it, this suit began in The Hague's district court; it also used some of the same lawyers and arguments. Its thrust was that, like the Dutch government, Shell had a duty of care towards Dutch citizens under the country's civil code and the European Convention on Human Rights, which guarantees the right to life. By failing to take adequate steps to avoid dangerous climate change, the plaintiffs said, Shell was unlawfully endangering lives.

In May 2021 the court found in favour of the plaintiffs and ordered Shell to reduce its emissions in 2030 by 45% relative to 2019 levels. Remarkably, the 45% cut was not just to the emissions for which the company and its suppliers were directly responsible, but also to those produced when consumers burn Shell’s oil. Shell has appealed. Pending a new decision, though, it must comply. That ruling is widely expected to trigger similar cases elsewhere. Tessa Khan, a climate and human-rights lawyer, says she expects it to do for oil and gas companies what the Urgenda case did for governments.

Dude, where’s my shoreline?

The impact of such litigation extends beyond the fossil-fuel companies being sued. The Network for Greening the Financial System, a group of 114 central banks and financial regulators, deems climate litigation to be a “growing source of risk” above and beyond the legal fees and potential damages to be paid to plaintiffs. Being caught up in a high-profile lawsuit and its associated news cycle can have reputational costs that spill over to others in the same sector. In a report published in November 2021, the NGFS concluded that the risk of litigation should be factored into a company’s credit risk.

It may also affect a company’s value. Dr Setzer and her colleagues are collecting data on the effects that new litigation and judgments have on public companies’ share prices. It would be wrong, though, to assume that the market’s response is always to the company’s disadvantage. Shell’s shares have not fared too badly since the Milieudefensie decision. Mr Thornton likes to point to the fact that Enea ’S share price rose 3.2% the day after the judge ruled against the company on Ostroleka C. That suggests some investors thought the stranded-asset argument was a good one, though others may just have liked the certainty which comes when a problem goes away.

Corporate defendants argue that providing a structure for the transition away from fossil fuels is a matter for policymakers, not judges. Donny Ching, Shell’s legal director, points to the complex trade-offs that are needed in a world where, as the Paris agreement allows, different countries move at different speeds in different sectors. “Leaving [these trade-offs] in the hands of a court, I think, is really oversimplifying it,” he says.

In America, New Zealand and other jurisdictions some judges have agreed and dismissed cases on those grounds. Others have found in favour of the plaintiffs but declared that the fix was outside their remit and bounced the issue back to legislators. The Milieudefensie case, where the judges mandated quantitative emissions-reduction targets, is a notable exception.

Fossil-fuel companies also argue that having a patchwork of legal decisions in different courts and different countries will not add up to a cohesive and effective solution to climate change. Not all judges are convinced, though, that the limitations of any single ruling constitute grounds for inaction. As Germany's Federal Constitutional Court said when ruling on the Neubauer case, the fact that "no state can resolve the problems of climate change on its own…does not invalidate the national obligation to take climate action."

Companies are also going to the courts themselves, in America and elsewhere. Early in 2021, after the Dutch government decided to phase out coal by 2030, RWE and Uniper, two German energy companies, sued it for anticipated unfair losses. Three other energy companies have made similar arguments in cases about the pace of decarbonisation requirements in America, Italy and Slovenia. ExxonMobil is using an obscure Texan rule to pursue Californian municipal officers involved in a case against the oil giant which alleges that it participated in climate-misinformation campaigns. The company says the case violates its first-amendment rights.

The past use of misinformation is the basis of a number of other cases. Another source of harm sometimes cited is a company's failure to adapt to climate change it could have foreseen. Arkema, a chemicals company, was sued over a chemical fire at a Texas plant that spewed toxic smoke for days after hurricane Harvey in 2017: the ultimately unsuccessful lawsuit alleged that it had not properly prepared for the risks of storms and floods, which climate change is exacerbating.

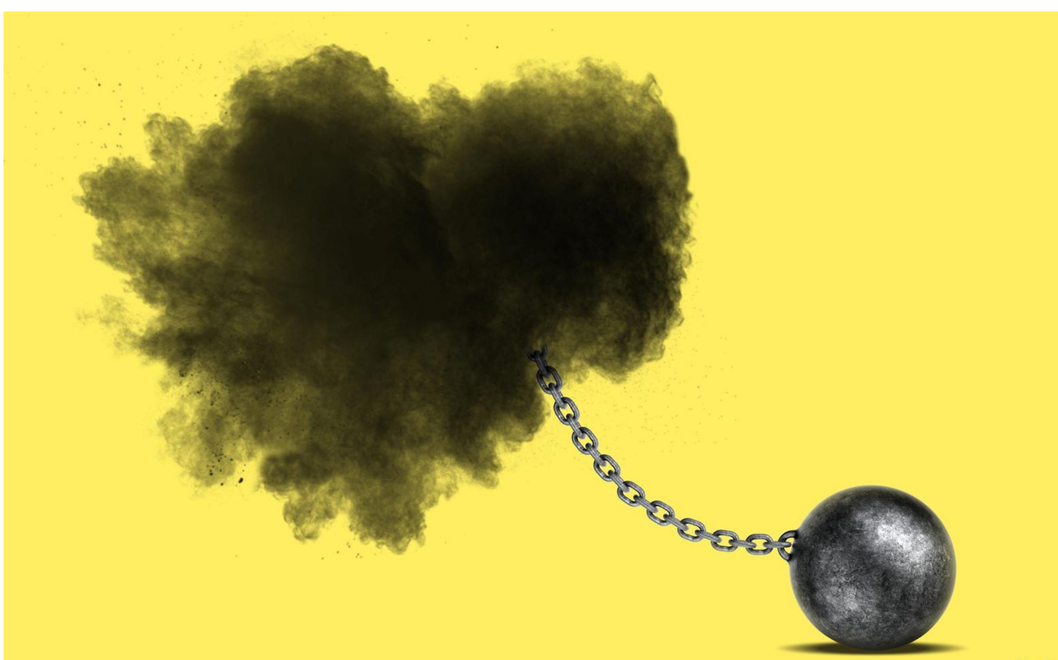
Seeking damages for what has gone before is not a strategic response to future emissions, which is why Ms Khan says she hopes the Milieudefensie ruling will inspire "cases that seek to change business models rather than extract compensation for past harm". But when it comes to the costs of adapting to damage already on the way, some plaintiffs feel that such compensation could come in very handy.

In 2008, in one of the earlier examples of this approach, the village of Kivalina, precariously located on a stretch of low-lying Alaskan coastline, argued in a suit against more than 20 energy companies that it needed \$95m-400m to move the whole settlement somewhere safer. More recently, San Francisco and Oakland sued BP, Chevron, ConocoPhillips, ExxonMobil and Shell in pursuit of funds to help them adapt to future sea level rises.

Fractional culpability

The UN Environment Programme's finance initiative argues that by making future costs material today such suits could lower the barriers to adaptation. But for that to happen the plaintiffs have to win. So far they have not. Kivalina's case was thrown out; the California cities' suit, after bouncing around various lower courts, was sent back to them by America's Supreme Court in June 2021 . It is likely, though, that some such case will eventually make it to the Supreme Court; oil companies seem to quite like the prospect.

One of the problems with such suits is that, even if a case can be made that climate change has or will produce specific harms, finding someone to blame for them is hard. That is what makes the case against RWE brought by Saúl Luciano Lliuya, a Peruvian farmer and mountain guide, particularly interesting.



Mr Luciano Lliuya’s beef is that his property is at risk of being damaged by a dwindling glacier in the mountains above it; a lake fed by the glacier’s meltwater is threatening to break its banks. In 2021, a paper by researchers at Oxford University found that emissions due to human activity were responsible for 85-105% of the 1°C warming in the region since 1880.

At the time that Mr Luciano Lliuya filed his case RWE was Europe’s largest emitter. According to a much cited 2014 report led by Richard Heede, a researcher with the Climate Accountability Institute, an environmental organisation based in Colorado, RWE is one of 90 “carbon majors”: companies that are collectively responsible for 63% of the carbon dioxide and methane emitted between 1751 and 2010. Mr Heede’s analysis lays 0.47% of all historical emissions at RWE’s door. So Mr Luciano Lliuya’s lawyers are suggesting the company should pay 0.47% of what it would cost their client to protect his property. The case was initially dismissed, but in 2017 a German appeals court deemed it admissible. Evidence is currently being gathered for what legal scholars believe will be a landmark test of how well various forms of attribution science hold up in court.

If sophisticated approaches like that in the Oxford study find favour in this case or others, suits seeking money to deal with future harms may leave behind the coastal properties which have dominated the arena to date (rising sea levels are an easy form of damage to attribute to climate change). As temperatures continue to rise and extreme weather events become progressively more extreme, the odds that they were caused by climate change increase. To wit: after temperatures in the Canadian village of Lytton hit a whopping 49.6°C in summer 2021, attribution models suggested it was “virtually impossible” that such an event would have happened in the absence of climate change. The day after the record was set, with temperatures and drought levels still exceptionally high, a wildfire burned Lytton to the ground.

Asked whether that remarkable event has yet been used as the basis of a lawsuit Mr Thornton says he doesn’t know. But, he adds, it's not a bad idea. There are doubtless already lawyers on the case. ■

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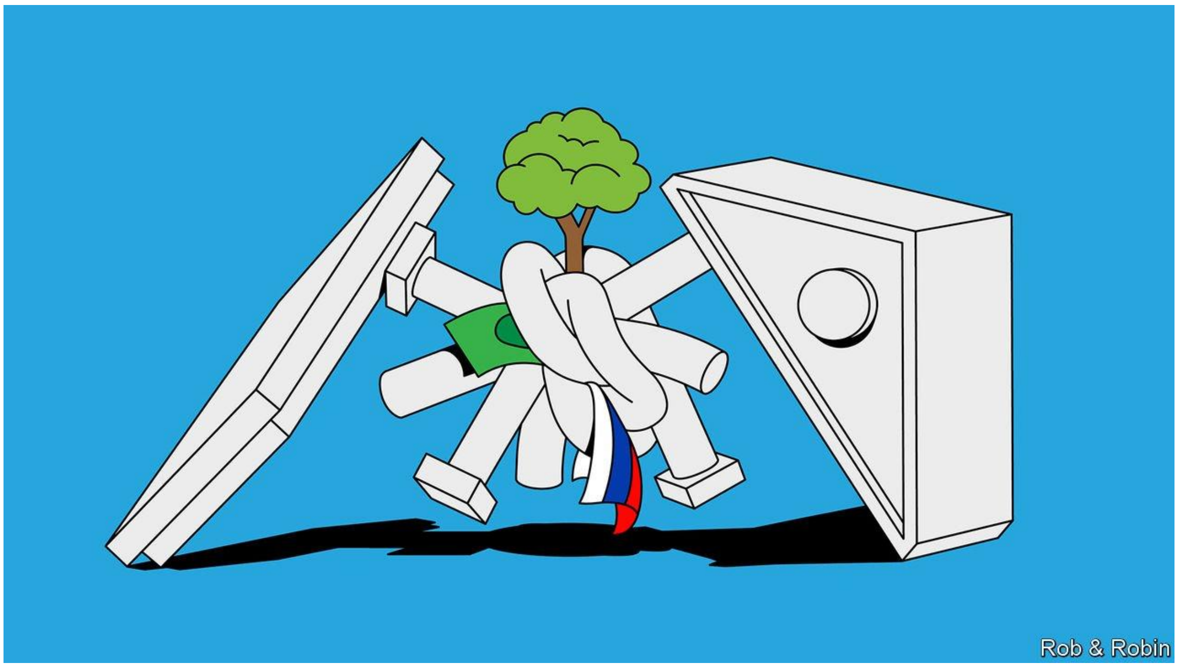
Special report

Central banks

The danger of excessive distraction

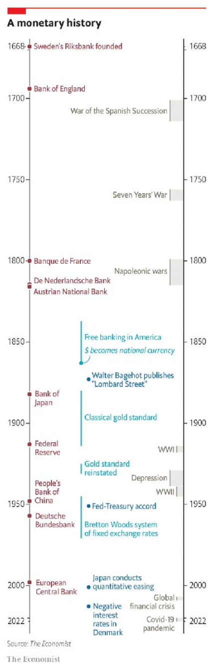
Central banks are under attack for failing to stop inflation. That partly reflects being given too many other jobs to do, argues Rachana Shanbhogue

Apr 20th 2022



CENTRAL BANKS are the guardians of money, the lifeblood of capitalism. Their actions influence people's wages and savings, whether they can borrow and at what price, and steer the broader direction of the economy. Whether you are a worker or a pensioner, a saver or a borrower, their decisions affect you.

Thirty years ago, after inflation in the rich world had spiked in the double digits, these powers were harnessed for a single goal: to keep prices stable. Most central banks were given strict mandates and made independent of meddlesome, vote-seeking politicians. For a time it seemed that this ingenious policy fix had banished the spectre of inflation altogether. Central banks' targets moulded expectations of price rises everywhere. Inflation in America, Britain, Germany and Japan averaged 2.1% a year between 1990 and 2007, down from 8% in the 1970s. Before covid-19 hit the big worry was too-low, not too-high, inflation.



Today, however, the inflation-fighting regime faces its most spectacular failure yet. Inflation has come roaring back, spurred by surging energy prices, rising wages and supply-chain disruptions. In America and the euro area consumer prices rose at an annual rate exceeding 7% in March, the fastest pace in decades. Labour markets in many places have become uncomfortably tight as jobs chase too few workers. Even the Bank for International Settlements (BIS), the central bank for central banks, is warning that the world may be on the cusp of a new inflationary era. Monetary policymakers across the rich world are scrambling to react.

This special report notes that this threat to central banks' credibility comes as they have extended themselves far beyond just fighting inflation. After the financial crisis of 2007-09 their regulatory authority was beefed up. During the pandemic they intervened in a wide range of asset markets, hoovering up government bonds and even lending directly to companies and governments. Lulled by quiescent inflation before the pandemic, they became all-purpose policymakers, venturing into fixing structural problems such as inequality and climate change. As inflation makes a comeback, the danger is that these new aims will hinder, or distract from, the central mission of taming it.

An expansive phase

The powers of central banks have waxed and waned over time, especially after crises. The Swedish Riksbank, the first central bank, was set up in 1668 "to maintain the domestic coinage at its fair and right value". The Bank of England was established in 1694 to fund war against France. Other central banks followed, although the Federal Reserve was created only as late as 1913. A series of financial panics in the 19th century led to central banks becoming lenders of last resort, ready to support the banking system during a crisis. To ensure trust in money, most linked their currencies to gold.

In the depression of the 1930s the gold standard collapsed, central banks were disgraced and a period of subservience to governments ensued. During the second world war they kept public borrowing costs low. Many veered into industrial policy. In emerging markets they came to resemble national development banks. (An arm of Mexico's central bank financed the construction of tourist resorts in Cancún.) But as inflation picked up in the 1960s and 1970s, the tide shifted in favour of giving them independence.

In America the Fed and the Treasury agreed that the central bank would no longer cap government-bond yields. The Fed forcefully displayed its independence in the early 1980s, when Paul Volcker provoked a recession to tame inflation. Central banks were given independence and inflation targets, first in the rich world and then in many emerging economies. Today most are independent (the People's Bank of China, or PBoC, is an exception).

Why is the role of central banks ballooning again? One reason is the steady decline in interest rates as desired global saving rose, which made reviving inflation after the financial crisis harder. In 2000 the Fed's benchmark rate was around 6%. Today it is 0.25-0.5%. Although the central bank has begun raising interest rates, investors expect them to peak only at 3.1% in two years' time. As they tried to revive inflation central banks have reached for all manner of tools. Many in the rich world began buying government bonds to lower long-term interest rates. The European Central Bank (ECB) bought corporate paper and subsidised bank lending to households and businesses.

The Bank of Japan went further, buying equity exchange-traded funds, and promising to keep ten-year government-bond yields at 0.25%.

Another reason for the growing role of central banks is the new attention paid to financial stability, after a period of neglect. Stricter regulation of banks has led to a rise in non-bank intermediaries in a range of credit markets. When the crisis came, central banks had to stabilise these markets. The extraordinary cash crunch brought on by the lockdowns of 2020 pushed central banks back to the sphere of credit allocation. Technological change has accelerated the decline of physical cash, which once embedded trust in central banks. That has led central banks to consider if the banknotes they supply to the public should go virtual.

Politics is another reason for central banks’ bigger footprints. One sign is that appointing Fed governors has become more fraught since the financial crisis. Confronted with big intractable problems such as climate change and inequality, ministers and activists also eye central banks’ huge balance-sheets, hoping to use them to achieve socially worthy or green goals. Central bankers talk about such issues a lot more. Rising global tensions have also forced some to go beyond technical risk management when managing their foreign-exchange reserves, into geopolitics.

Many emerging markets have adopted inflation targeting, casting off their development roles and enjoying lower, less-volatile inflation as a result. But they keep a firmer hand on markets, given their vulnerability to exchange-rate movements and capital outflows. Some vestiges of the old industrial policy remain, such as bank-lending quotas for farmers or rural borrowers in India. The PBoC chases several objectives, often at the behest of the government. Although it has liberalised interest rates a bit, it relies heavily on managing the quantity of credit, rather than its price, nudging banks to lend to certain preferred borrowers.

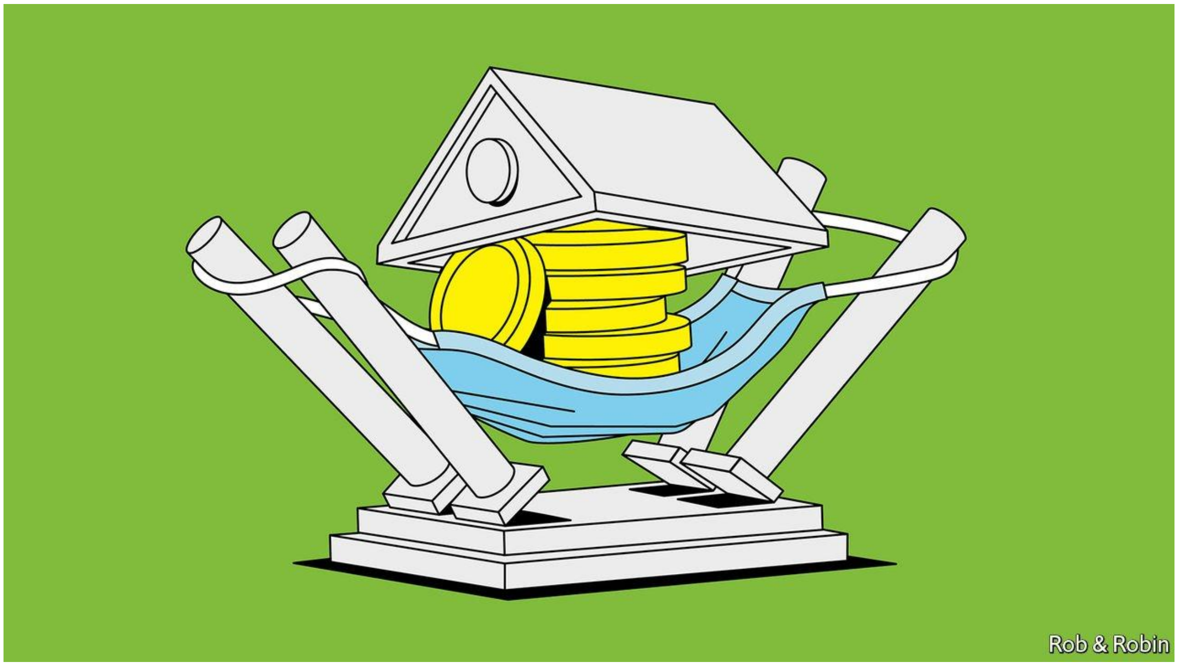
This special report considers five areas where central banks are being pressed to do more: intervening in financial markets; tackling inequality; combating climate change; introducing digital currencies; and reacting to geopolitics. Each represents an important shift in markets and the economy. But each also risks pulling central banks deeper into political terrain, the price of which would be a loss of focus. When inflation was low, a broader role may have seemed harmless. Now, however, it has slammed into the reality of high inflation. The danger is that, with too many objectives, central banks will fail in their most important mission. ■

Emergency response

The perils of expanded balance-sheets

The power—and the limits—of central banks' balance-sheets

Apr 20th 2022



A CENTRAL BANK'S power stems from its ability to create reserves from thin air so as to buy assets or lend to borrowers. The use of the balance-sheet involves choices: which assets to buy, and how much. Central banks are guided by their legal mandates, using their clout to defuse risks to the financial system and meet their inflation targets. But their actions create winners and losers. After the financial crisis the Federal Reserve was castigated for bailing out Wall Street over Main Street. The ECB was attacked for being slow to act as a lender of last resort to the euro area's heavily indebted southern members.

The power of central banks was on its fullest display during the pandemic. As countries began locking down in spring 2020, an enormous shock reverberated across the financial system. Desperate for cash, investors dumped even safe Treasuries. Corporate-credit markets dried up. Central banks reacted strongly. Between March and June 2020, writes Athanasios

Orphanides of the Massachusetts Institute of Technology, the Fed created as many reserves as it had in its first 100 years.

As unparalleled as the scale of this intervention was its scope. The Fed introduced nine emergency-lending schemes, backstopping financial markets worth about $24trn and supporting bank lending to firms. It bought Treasuries, first to stabilise the bond market, then to lower borrowing costs (a policy known as quantitative easing, or QE). The assets of central banks in America, Britain, the euro area and Japan rose during the pandemic by more than $10trn. More than a dozen emerging markets, including India, Indonesia and South Africa, bought government bonds.

The mere announcement of these policies stemmed market chaos. "As of March 2020 there was a clear and rapid reaction that we could visibly point to," said Christine Lagarde, president of the ECB, speaking in mid-February. Yet the take-up of some schemes remained modest: the Fed's corporate-credit facilities lent only $14bn, a fraction of the $750bn available. A rapid economic bounceback led many lending schemes to wind down. And, as inflation surges, net purchases under QE are ending. Yet the consequences of these interventions will endure, not least by creating expectations that central banks will always come to the rescue if trouble hits. Vast stockpiles of government bonds have left monetary policy uncomfortably enmeshed with the public finances. Both considerations could make central banks less willing, or less able, to act forcefully to fight inflation.

The support for markets reflected the need to preserve financial stability. Following a doctrine laid out by Walter Bagehot, a former editor of *The Economist*, in the 19th century, central banks now act as lenders of last resort, standing ready to lend to sound financial institutions, against good collateral and at a penal rate, in order to prevent financial panics. Bagehot clearly had banks in mind. "The great wish on the part of the English people as to currency and banking is to be safe," he wrote in 1844.

According to the Financial Stability Board, a group of regulators, non-banks conducted half of all financing activity worldwide in 2019. And it was these, not banks, that caused most panic in the pandemic. As mutual funds and money-market funds faced redemptions, they rushed to sell Treasuries and corporate bonds, disrupting credit markets and exposing weaknesses in government-bond markets. The Fed dusted off lending facilities for money-market funds set up during the financial crisis. Central banks also became buyers of last resort, both of government bonds and of commercial paper.

As Raghuram Rajan of the Chicago Booth School (and a former governor of the Reserve Bank of India) puts it, central banks became "corporate safety-nets". The Fed bought commercial paper from companies, backed bank loans across the economy and even backstopped municipal debt. The ECB extended loans to banks. The Bank of England lent directly to firms. For some central bankers this was uncomfortable. The ECB, having run out of monetary firepower even before the pandemic, had already resorted to subsidised loans. And the PBoC is "a lending machine", says Alicia Garcia Herrero of Natixis, an investment bank. In the middle of a trade war, it told banks how much to lend to the private sector. The Fed's actions were its deepest involvement in the corporate-credit market since the 1930s. "We would always prefer not to be there," says Andrew Bailey, governor of the Bank of England.

Independence days

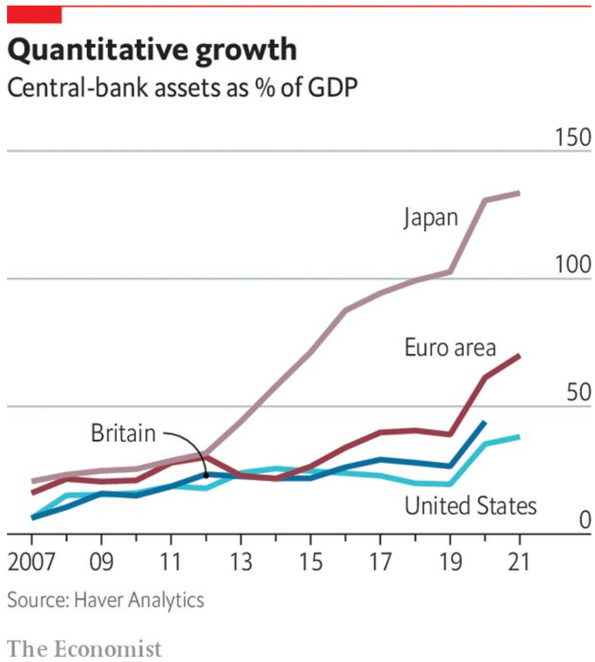
These measures were justified by the extraordinary covid shock, says Randal Quarles, a former vice-chairman for supervision on the Fed's Board of Governors. But his testimony to Congress in May 2020, after the Fed announced its schemes, serves as a reminder of how politically fraught they are. "Every question was along the lines of 'where's mine?'" he says. The Fed cannot buy private assets without permission from the Treasury secretary. Yet now that the "emergency glass has been broken", he worries that credit support might be seen as just part of the regular toolkit. That makes norms around independence crucial.

The safety-net for investors may also feed the belief that central banks will always step in at the merest hint of trouble. Such moral hazard may just encourage investors to take greater risks. "The whole point of the Dodd-Frank Act in 2010 was to keep the Fed from intervening again," says Mr Rajan. "But in 2020 it did everything and more. How do you get markets not to believe that you'll do it again and again?"

Such moral hazard may just encourage investors to take greater risks

One answer is to ensure non-banks do not need rescuing again. In December the Securities and Exchange Commission proposed rules to lessen the likelihood of money-market funds fire-selling assets when in trouble. A group of academics and former regulators suggests making the insurance the central bank offers non-banks explicit, by setting up a repo facility so they can borrow against Treasuries when they need cash, rather than sell them. This would be open to all market participants and charge unregulated non-banks a fee rather like an insurance premium. But the events of 2020 also make a case for more targeted ways of dealing with financial instability, says Mr Bailey. Last time it was fortuitous that a single tool of large-scale bond purchases served both to stabilise the financial system and to ease monetary conditions. If market dysfunction were to coincide with monetary tightening, central banks would face a tricky choice between stabilising markets and quelling inflation.

Large-scale bond purchases pose another set of headaches. Where programmes to provide liquidity can be quickly wound down, QE involves holding on to assets for some time. Central banks are now a huge presence in bond markets. The Bank of Japan owns 44% of Japanese government bonds. The ECB, which first began QE in 2015, holds more than 40% of Dutch, Finnish and German sovereign debt. The Fed and the Bank of England hold about 40% of Treasuries and 30% of gilts, respectively, much of it bought since 2020.



The pandemic required closer co-ordination between monetary and fiscal policies. In May 2020 the Bank of Japan and the finance ministry said they would do "whatever it takes" to stabilise the economy. The ECB played a key role in backstopping heavily indebted euro-area countries after Mario Draghi, its president, promised in 2012 to do "whatever it takes" to preserve the single currency. In the spring of 2020 it even began disproportionately buying bonds of the zone's southern member states. Overall, its purchases more than exceeded governments' net bond issuance in 2020 and 2021. A survey of big investors by the *Financial Times* found that the "overwhelming majority" thought the Bank of England's bond-buying was meant to fund the government's emergency spending, rather than support the economy. Mr Bailey rebuffs the charge: "To think that we knew precisely what Treasury issuance was going to be ahead of time is absurd," he says.

The nightmare scenario is that central banks end up financing fiscal deficits, and governments press them to keep monetary policy loose, leading to spiralling inflation. But the pandemic seems to have been different. In Ghana, the Philippines and Indonesia, for example, central banks began buying bonds directly from debt-management offices, rather than secondary markets, with barely a backlash from investors—a sign of how much credibility they had built up. Markets have been unfazed as Indonesia extended its direct financing of the government into 2022. In a study in

January, economists at the IMF found that large monetary expansions tend to lead to "considerable" price increases when fiscal deficits are wide and central-bank independence is weak. But during the pandemic, the researchers say, direct-financing programmes had little effect on inflation expectations.

The real test lies ahead. QE did not lower the government's borrowing costs but rather changed when the bill falls due. In effect, central banks became managers of the public debt. With many starting to raise interest rates to tackle inflation, governments, weighed down by debt burdens swollen during the pandemic, will not be happy.

QE works by swapping long-term bonds for the shortest-duration liabilities possible: central-bank reserves. These reserves, which are remunerated at a floating rate, form part of consolidated government finances. The effect of central banks' vast holdings of bonds has therefore been significantly to shorten the maturity structure of public debt. In Britain, the median maturity of gilts falls from 11 years to four years once the effects of the Bank of England's QE are included, according to the Office for Budget Responsibility, an official fiscal watchdog. The OBR estimates that, should interest rates rise by an extra percentage point, the government would have to spend an extra £20.8bn ($27.1bn, or 0.8% of GDP) in interest in 2025-26.

Taken together, this looks like "a big debt-management mistake", says Sir Paul Tucker, a former central banker now at the Harvard Kennedy School and author of the book "Unelected Power". Rather than locking in very low long-term interest rates, governments have exposed the public finances to rising short-term rates as monetary policy normalises. The worry is that, particularly if their independence looks frail, central banks will be leant on to raise rates more slowly, or not at all.

Although interest rates are now rising, central banks may find them uncomfortably close to zero when recession next hits. Longer-term factors, such as population ageing, that have borne down on interest rates are unlikely to go away. In the face of such forces, it is the job of structural and fiscal policy to act, says Shirakawa Masaaki, a former governor of the Bank of Japan. Monetary policy aims to pull forward demand from tomorrow. But that is unlikely to do much if there isn't the demand to bring forward, he says. The “hubris” of central bankers, says Mr Rajan, lies in thinking they can solve all problems.

That suggests a different co-ordination is needed: for fiscal policy to step in as monetary policy reaches its natural limits. But public spending faces “political transaction costs”, says Sir Paul. “A finance minister might agree that the best response to a deep recession is a mix of fiscal and monetary stimulus, but the difficulty of getting it past the party and parliament means that he leaves the central bank to do more alone.”

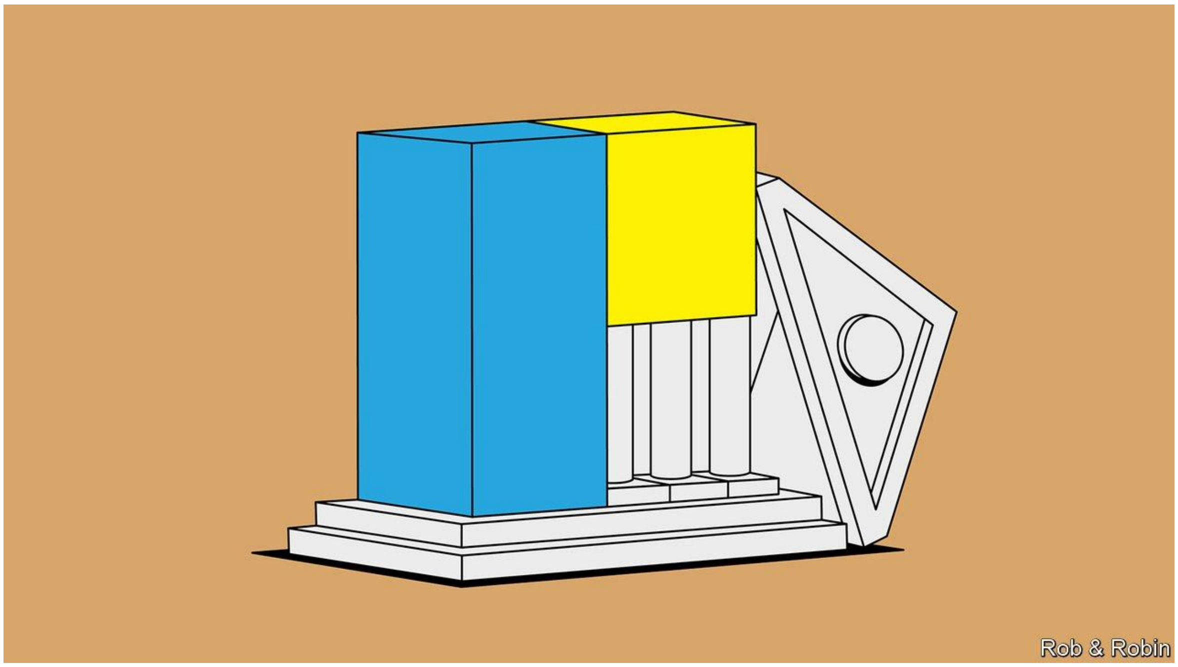
The close links between monetary policy, on the one hand, and financial stability and the public finances, on the other, could together make central banks think twice about how tough to be in response to rising inflation. So could their new-found emphasis on social responsibilities. ■

Social issues

When central banks become one-stop policy shops

Central banks are under pressure to cure social ills

Apr 20th 2022

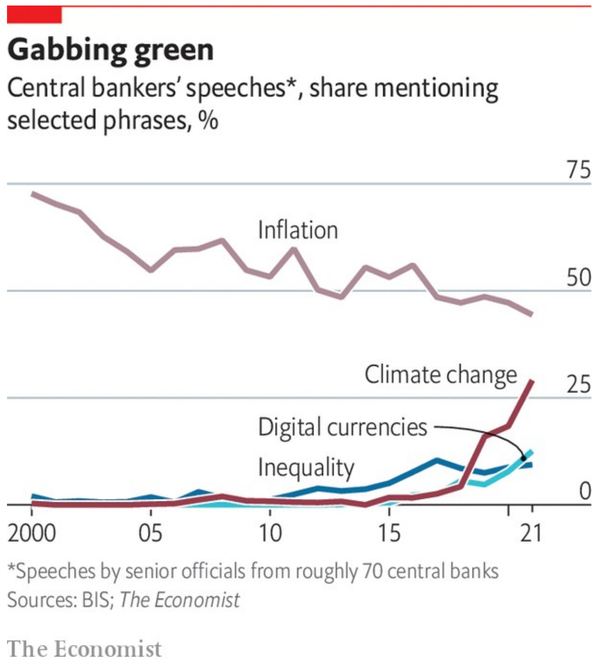


ALL AROUND the world politicians are exercised by the yawning gap between haves and have-nots. For every $1 the average white American household earned in 2019, the average black one made only 51 cents. For every $1 in wealth held by a white household, a black one owned just 15 cents. Joe Biden came into the presidency promising to tackle such disparities, vowing that “The dream of justice for all will be deferred no longer.” In New Zealand Jacinda Ardern, the prime minister, promised to “make homeownership possible again”. House prices went up by more than 25% in 2021, making property among the least affordable in the OECD club of mostly rich countries. “Anyone else want to leave New Zealand purely because of the housing crisis?” asked one buyer on an online forum. “This housing market sucks.” In China, the conspicuous gap between rich and poor and slowing social mobility spurred President Xi Jinping to launch a campaign of “common prosperity” last year, which took aim at everything from tech firms to celebrities.

Central banks seem almost as preoccupied with income distribution. According to a database maintained by the Bank for International Settlements (BIS), words relating to inequality cropped up in a tenth of speeches made by central bankers last year, compared with about 2% before the financial crisis. (By contrast, mentions of inflation drifted down.) In America about 15% of research papers published by the Federal Reserve studied inequality in 2021, up from about 5% in 2005, according to research by Carola Conces Binder of Haverford College and Christina Parajon Skinner of the Wharton School at the University of Pennsylvania.

This greater attention in part reflects a response to arguments that central banks have worsened inequality by keeping interest rates low and boosting asset prices. But they also face calls to do more to remedy inequality and other social ills directly. And they sometimes embrace a social role themselves. Recent experiences in America, China and New Zealand provide illustrations.

In America progressive Democrats have called on the Fed to tackle racial gaps in employment, income and wealth. In April 2021 the House financial services committee passed a bill proposing to amend its mandate, which requires it to aim for price stability and maximum employment, to add demands that it tries to eliminate racial gaps. “Systemic racism and inequality is not something that happens on its own—it is a result of specific policy choices and the Fed must take deliberate action to fix it,” said Elizabeth Warren, a senator for Massachusetts.



Research shows that black workers benefit most from long expansions. Black unemployment is not only always higher than white unemployment (the current gap is about three percentage points) but also tends to rise faster in bad times. As the labour market tightens, excluded workers are drawn in, and the gap starts to close. This suggests that if monetary policy stays loose for longer, it will enhance equality. As the Fed reviewed its strategy in 2020, when inflation looked low, it leapt on the idea, redefining its goal of maximum employment as "broad-based and inclusive". "This change reflects our appreciation for the benefits of a strong labour market, particularly for many low- and moderate-income communities," said Jerome Powell, the Fed's chairman.

Betting the house

In 2021 the Reserve Bank of New Zealand became the first central bank to have house prices included in its remit, 31 years after it became the first to be given an inflation target. As in other rich countries, the central bank is seen as a big contributor to the housing boom. At the finance minister's instruction, and subject to its primary inflation and employment goals, the RBNZ must now "have regard to house prices" and the government's objective of making property affordable for first-time buyers.

By contrast, the PBoC has long had a multiplicity of goals. Chief among them is currency and economic stability. But the government has also asked it to improve the economic structure, implement reforms and enhance household welfare. Since 2014 the PBoC has conducted "structural monetary policy", which targets credit to different sectors through subsidised lending facilities, to boost specific parts of the economy without worsening debt problems for overextended state-owned firms. As of June 2021, according to its Monetary Policy Report, it had lent nearly 1.5trn yuan ($234bn) to support rural development, small and midsize firms and poverty alleviation. The push to lend to small firms also supports the wider common-prosperity campaign, by lifting employment and therefore household income, says Helge Berger, the IMF's mission chief for China.

Many economists doubt these attempts can succeed. One problem is that interest rates are a blunt tool. To have a big effect, the macro hammer must be used with great force, but that risks breaking other things. A study by Stephanie Aaronson of the Brookings Institution, a think-tank, and others suggests closing the gap between black and white men's unemployment rate requires headline unemployment in America to fall to 1%. Another paper by economists at the New York Fed suggests that a percentage-point interest-rate cut reduces the gap in unemployment rates for black and white workers by less than 0.2 percentage points. Closing the wedge would require interest rates to fall by more than ten percentage points. Even if that were possible, it would overheat the economy and stoke serious inflation.

The economics linking monetary policy and inequality is "confused", says Larry Summers of Harvard University (and a former Treasury secretary). He has spoken before of the danger that "woke" central bankers neglect rising inflation. Easy money buoys asset prices by design—and white people own an outsize share of those assets. The New York Fed researchers find that interest-rate cuts lead to large gains in white households' wealth, far outweighing the impact of lower unemployment and higher incomes for black families. High inflation tends to affect the poorest in society most. Another study by Fed economists suggests that black households suffer more from inflation spikes, because they consume more goods with volatile prices. Both suggest that interest-rate increases, rather than decreases, would be a way to narrow disparities. The question of whether to raise or lower interest rates is a conundrum which the RBNZ would also face. It could raise interest rates to bring down house prices, but that would slow the economy, thereby denting the incomes of prospective homebuyers.

There is also debate over whether low rates cause inequality. Adrian Orr, the RBNZ's governor, has pointed to the global savings glut, which holds down interest rates globally, and the low availability of housing, as reasons for the boom: the central bank plays only "a bit part". Agustin Carstens, head of the BIS, says there is little central banks can do to counter the side-effects of low interest rates. Their best course, he counsels, is to ensure macroeconomic and financial stability. Just as inflation hurts the poorest most, so do recessions and crises.

The PBoC has more targeted tools at its disposal. Yet even in China many economists see structural monetary policy as a mistake. In an essay on the monetary-policy framework, Yiping Huang, Tingting Ge and Chu Wang, three academics, say there is no convincing evidence that it works. More credit is not always a solution, they say: if farmers do not receive enough, it may be because they are deemed too risky relative to the interest rates on loans. Stimulating competition among lenders, or liberalising interest rates, would be better. More broadly, argues Yu Yongding, a former member of the PBoC's monetary-policy committee, the solution to social ills is not more lending, but a system of better-targeted taxes and subsidies, something only governments can do. This is an argument that applies as much to the case of racial inequality in America, and to housing disparities in New Zealand.

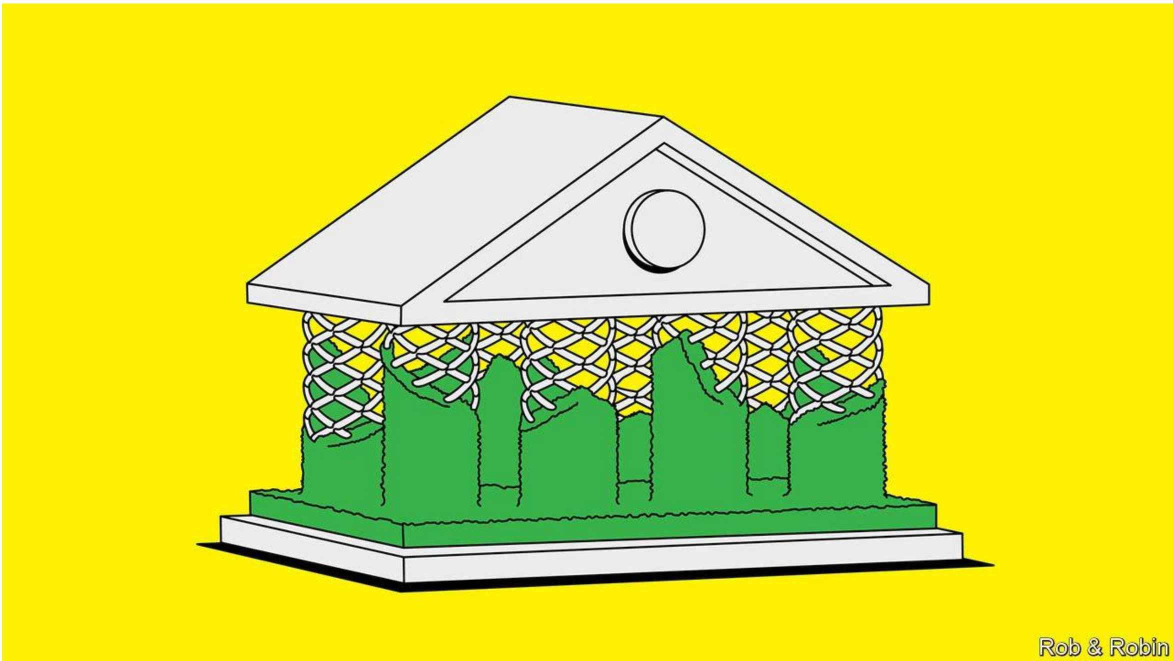
For central banks, meanwhile, the problem of tackling a structural problem with a cyclical tool is that it creates a tension between achieving its main mission and fixing social ills. When inflation was low, it was possible for the Fed to run the economy hot to bring disadvantaged workers into the labour force. But as inflation rises those good intentions could make the central bank slower to ensure its target is reached. According to Bloomberg News, even officials at New Zealand's Treasury advised the finance minister against changing the RBNZ's remit. The central bank, they concluded, would be unlikely to raise rates to reduce house prices, because their goals of maximum employment and inflation must always come first. ■

Environmental concerns

The wish to respond to climate change

How green can central banking get?

Apr 20th 2022



ON A SPRING day in 2021 some visitors to the ECB made an unusual entrance. Just before its governing council was due to meet, two paragliders landed on one of its buildings in Frankfurt, unfurling a banner reading: "Stop funding climate killers!" Another banner urged the bank to "Act on climate now!" Implicit in the stunt, timed to mark the release of a Greenpeace report on the bank's bond-buying, was praise. Politicians might dither but central banks have the power to get things done.

Most central bankers wish to do their bit for the green cause. Christine Lagarde called embedding climate into the ECB's framework "mission critical". Andrew Bailey of the Bank of England talked of "tackling climate for real". Over 100 central banks and financial regulators have joined the "Network for Greening the Financial System". The Fed is cautious, given the political backdrop in America, its mandate and its tools. But other central banks are considering how to favour green firms over polluters. Even the

Fed is working out how climate change may affect the soundness of the banks, the overall financial system and inflation.

The impact on lenders and the financial system may come from two sources: physical damage to property or businesses, which could mean losses for insurers and banks; and transition risks as climate policy pulls capital away from dirty sectors towards cleaner ones, creating "stranded" assets. Mark Carney, a former governor of the Bank of England, talks of a potential "Minsky moment": an abrupt reassessment that leads to a collapse in asset prices. To help understand how bad things could get, at least 30 regulators worldwide are conducting stress tests of the impact of a range of transition paths towards net-zero emissions.

Physical risks already mean losses for insurers and lenders in places like northern Australia. More will be affected. In a stress test in 2020, the Banque de France concluded that insurers in some regions, such as the Mediterranean, would face heavy losses by 2050. But the conclusion of most stress tests is that the impact of climate risk is likely to be moderate. Last year staff at the Reserve Bank of Australia reckoned that 1.5% of houses in the country would lose a tenth of their value by 2050 because of climate risk. (By comparison, the median sale price fell by around 20% during the financial crisis in America.) And research by the New York Fed finds that banks usually make new loans as local economies recover from natural disasters, offsetting initial losses.

What about transition risks? The Australian researchers look at lenders' exposure to dirty industries, such as energy and agriculture. These are deemed "manageable": they make up about a fifth of banks' business loans, but most have a duration of less than five years, allowing banks to adapt lending practices to avoid being stuck with stranded assets. In its stress test last year the ECB found that big banks would make 8% more credit losses in 30 years' time in an extreme case, compared with an orderly transition to net zero. That seems modest, the more so since data limitations mean that it assumes banks do not adjust their loan books over time.

Even in a worst case modelled by the Dutch central bank, where climate policy becomes stricter overnight, and GDP falls by 7%, lenders make losses equivalent to about four percentage points of core capital ratios. Stress tests by the European Banking Authority find banks sufficiently well-capitalised to survive. Insurers' solvency ratios could decline by up to 16 percentage points in the worst case, but that is "relatively small", said the Dutch, considering that they are currently way above the regulatory minimum.

Money to net zero

Climate change may also impinge on monetary-policy decisions. The prices of petrol and air travel will rise. Economists see such changes as reflecting shifts in relative prices within a basket of goods, rather than a sustained rise in inflation that requires monetary-policy action. But in a situation where shocks feed through only slowly, say as a carbon price is raised, inflation expectations may change, forcing central banks to move. Climate change could affect the policy room that central banks have. The surge of investment needed to reach net zero could reduce the imbalance between global saving and investment, giving central banks more scope to raise interest rates. A badly managed transition could also lead to more uncertainty and higher saving.

Put all this together and climate risks seem more "mission vigilant" than "mission critical": worth studying and keeping on banks' radar screens, but not requiring drastic action today. To that end, the ECB is urging lenders to improve disclosure to supervisors, and demanding more information from them.

Should central banks penalise polluters and subsidise green firms? The Fed's answer is no. It is caught in a political row over climate change. Last autumn some Democrats argued against the reappointment of Jerome Powell as chairman for failing to recognise climate change as an "urgent and systemic" risk (he was still reappointed). Senate Republicans objected to Joe Biden's nomination of Sarah Bloom Raskin as a board candidate partly because she had called for bail-outs in the pandemic to exclude polluting firms. "That's not a decision to be made by unelected vice-governors who never faced the voters…the Fed has already been wandering outside of its lane," declared Pat Toomey, a Senate Republican. Ms Bloom Raskin has since withdrawn from the nomination.

Even if it wanted to act, the Fed would be limited by its mandate, which requires it to focus on price stability and employment. It does not have the tools to target clean firms over dirty ones. It is banned from buying private-sector assets except in “unusual and exigent circumstances”, and with permission from the Treasury secretary. And it can hardly do much with interest rates that affect wind farms and coalmines alike.

By contrast, central banks in Asia have been more active. They have often played a role in developing markets and guiding credit before. The PBoC launched its own green lending operation in November and has developed the market for green bonds and pressed forward an environmental labelling scheme. In December Japan extended more than ¥2trn ($18bn) in interest-free loans for climate-linked loans. And the Reserve Bank of India has added green projects to its quota for “priority lending”, which banks must hit when they make loans.

It is in the European Union that the dilemma of greener monetary policy is most acute. The ECB’s mandates offer more leeway than the Fed’s. Both the Bank of England and the ECB are tasked first with price stability and only then with supporting the government’s wider economic strategy. In the EU, that includes everything from protecting the environment to promoting scientific advances, combating social exclusion and ensuring gender equality. Last March the Bank of England’s remit was amended to state that government policy now included a transition to net zero.

Both banks have tools that can be tweaked for green ends. The Bank of England and the ECB have bought corporate bonds as part of their QE schemes. The ECB’s collateral framework classifies 25,000 securities against which it is willing to lend through refinancing operations. The terms of both programmes could be used to make climate disclosures a condition of eligibility, exclude fossil-fuel companies, or value polluters at a discount. A plan to study such tweaks featured in the ECB’s strategy last summer. “Climate change is a key issue that should be considered. It has an impact on the transmission of monetary policy, economic indicators and financial stability,” says Ms Lagarde.

Central banks follow the principle of “market neutrality” when buying assets: they buy in line with issuance in the market, so as not to distort the relative prices of bonds. But because dirty firms are more capital-intensive, they are more likely to issue bonds. Yannis Dafermos and co-authors from the New Economics Foundation, a think-tank, find that more than half the ECB's holdings of corporate bonds are concentrated in the dirty manufacturing and electricity industries, even though they account for only 14% of euro-area employment. The authors urge the bank to dump holdings of fossil-fuel firms to remove this "carbon bias".

It is in Europe that the dilemma of greener monetary policy is most acute

The Bank of England's experience of tweaking its purchases serves to illustrate the difficulties that are involved. In November it announced a framework to make its corporate-bond purchases climate-friendly. It would exclude thermal coal assets, but excluding anything else would shrink the universe of bonds it could buy too much. It would rank firms based on their recent emissions record, and their plans for reducing emissions further. The greener the firm, the higher the price the bank would be willing to pay for its bonds.

What followed was a triple let-down for activists. Because the Bank of England still bought some dirty firms, the carbon footprint of the portfolio, according to Mr Dafermos and colleagues in another paper, fell by only 7%. And the purchases ran the risk of subsidising prospective investors in dirty bonds: research by economists at the Sustainable Finance Lab at Utrecht University compares yields of bonds eligible for a purchase programme with those that are ineligible, and finds that the gap between them has tended eventually to narrow, or even disappear, as investors who sell the eligible bonds to the central bank then buy cheaper non-eligible ones. The kicker came in February. With the recovery on track and inflation rising, the Bank of England decided to run down its stock of corporate bonds. Having applied its green framework just once, there would be no more purchases to tweak.

The bank's hope is that it offers a useful example. "We did it to show it could be done," says Mr Bailey. But this fevered activity still raises some concerns. Even if their mandates give political cover, central banks are in effect designing their own climate policy. The EU's economic policy is wide-ranging enough that the " ECB's secondary objective could be hundreds of things," says Markus Brunnermeier of Princeton University. If it were to pick and choose which to support, its lack of accountability might be problematic. Although it has to provide reports to the European Parliament, it is not accountable to national governments. Changes to its powers require votes by each of the euro area's 19 members.

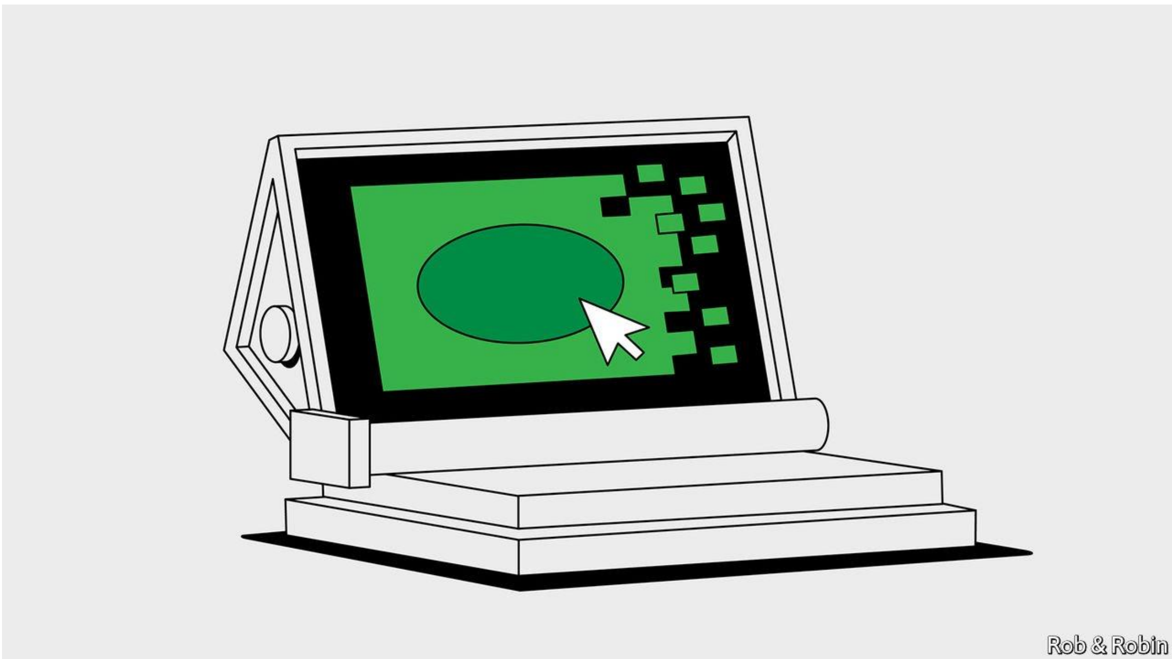
Tackling climate change may be less divisive in Europe than in America, but it is hardly a settled question, says Mr Brunnermeier, recalling the *gilets jaunes* protests in France in 2018. If public sentiment on the green transition were to sour because energy prices stayed high, central banks could quickly look as if they were picking sides, rather than staying above politics. That would ensnare them in debate and cast doubt on their neutrality, damaging the public credibility that is so vital to their taming inflation. ■

Going digital

How central banks are moving into e-money

Designing a digital currency that works—but not too well

Apr 20th 2022 | STOCKHOLM

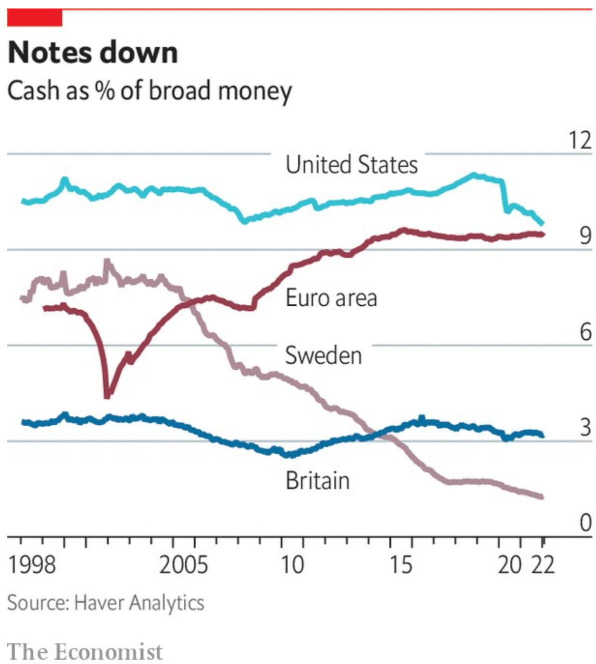


Rob & Robin

THE HISTORY of money is littered with swindles. In 17th-century England William Chaloner counterfeited coins, banknotes and lottery tickets before being sent to the gallows by Isaac Newton, master of the Royal Mint. During America's free-banking era in the mid-1800s Andrew Dexter bought five banks in New England and began circulating banknotes with very little to back them. One bank was found to have issued $760,000 in notes, backed by only $86 in gold and silver.

Things became less lively after central banks gained legal monopolies over banknotes. Yet there were anxieties about this. At the turn of the 20th century, shortly before the Riksbank was given its banknote monopoly, Pontus Fahlbeck, a Swedish politician, wrote of "fears of severe disruptions in the business world", and concerns that the central bank would become "much more powerful and influential than before for the country's entire economy".

Today physical cash has fallen out of favour. The bulk of money is digital and created by commercial banks, albeit regulated ones. A cast of digital-money wannabes are vying for customers' e-wallets. And central banks want to stay in the money business by issuing digital currencies of their own, making the questions Fahlbeck raised more relevant than ever.



A banknote, as a claim on a central bank, is the safest form of money. But only commercial banks have access to a central bank's reserves. A central-bank digital currency (CBDC) would extend that to everybody. The public could either hold accounts with the central bank, or hold central-bank money in privately issued wallets. According to the Atlantic Council, a think-tank in Washington, DC, 89 countries making up 90% of world GDP are exploring a CBDC. The Bahamian sand dollar, the East Caribbean DCash and Nigeria's e-naira are already circulating. China's trial of its digital currency, e-CNY, has expanded to more than 260m wallets.

The ECB is looking into the design and scope of a digital euro. "My preference is to see something in place by 2025," says Christine Lagarde, its president. In Sweden a parliamentary inquiry will opine on the desirability of an e-krona soon. President Biden has issued an executive order asking the government and the Fed to explore the idea of a CBDC. In February researchers at the Boston Fed and the Massachusetts Institute of Technology announced that they had built a system to handle up to 1.7m transactions a second, far exceeding the throughput of Visa.

Central banks want to stay in the money business by issuing digital currencies

The consequences of CBDCs in their most radical form would be serious. They might make central banks responsible for how credit is intermediated. Because public money is safer than commercial-bank money, deposits could trickle out of banks towards the central bank. In bad times that could become a flood, made easier because money can be transferred between wallets at the mere click of a mouse. One study in Canada suggests that, depending on the features of a CBDC, households could hold between 4% and 55% of their liquid assets in one. Deposits are a source of cheap funding for banks. If they drained away, lenders would either have to raise money on pricier wholesale markets or scale back their lending. And central banks' liabilities would expand, says Rickard Eriksson of the Swedish Bankers Association, raising the question of how they should be matched on the asset side. Direct lending to companies and households would be unlikely, but they might have to lend more to banks.

The danger, says Princeton's Markus Brunnermeier, is that lenders' dependence on central banks would alter the balance of relations by giving central banks power to determine who gets credit. Randal Quarles, the former Fed vice-chairman, points out that America's Troubled Asset Relief Programme was meant to have no strings attached, but after it went through the political wringer, all sorts of conditions were added. Somebody would have to monitor payments data, if only because of anti-money-laundering rules. That would turn the central bank into a mighty credit machine and an all-seeing tool of the surveillance state. Eswar Prasad of Cornell University, author of a book on the future of money, reckons the biggest threat from a digital currency is ultimately to the independence of central banks.

Yet most central bankers are confident that a well-designed CBDC can minimise their intrusiveness, but still be attractive. Many are converging on a set of principles to avoid destabilising banks. None of the digital coins so far introduced or tested pay interest, so as not to compete with bank deposits. To avoid the risk of bank runs, most existing CBDCs limit the amount of virtual cash that customers can hold. A report by the BIS and seven big central banks suggests that a system of escalating fees could make CBDCs less attractive than commercial-bank accounts. The solution to the problem of privacy, they say, is to use a two-tier system without letting dodgy dealings off the hook. The users of the Bahamian sand dollar can hold up to $500 without providing any information to set up an account, but those wishing to hold up to $8,000 must pass identity checks. In an attempt to keep central banks at arm's length from the public, most countries use private providers to offer CBDC wallets, so wallet providers do the anti-money-laundering checks.

These changes would, by design, make CBDCs an inferior form of money. Physical cash typically satisfies three functions of money: it is a unit of account, a means of exchange and a store of value. Caps on virtual cash would, however, mean that it would no longer be a store of value. The optimistic view is that this could open the door to innovation and competition. But the pessimistic view is that it might doom the attractiveness of a CBDC.

The result is something of a paradox. Central banks must ensure that the currencies are successful, but not too successful. In a report to the European Parliament Mr Brunnermeier and Jean-Pierre Landau of Sciences Po in Paris suggest that a central bank "will have to ensure that the CBDC is present everywhere but important nowhere".

To some critics this makes CBDCs hardly worth the bother, especially in places where cash is not yet near extinction, and where existing payments systems are fast enough. The average amount in an e- CNY wallet is three yuan (47 cents), which does not suggest it has been a runaway success. In Britain, a House of Lords committee concluded that CBDCs were a "solution in search of a problem". But the momentum for CBDCs is building. That makes the political process for agreeing on them important. ■

Geopolitics and war

When central banks face sanctions

Central banks must grapple with geopolitics, too

Apr 20th 2022

THINK OF A central bank in dire straits, and Turkey's might come to mind. Recep Tayyip Erdogan, the president, has sacked three of its bosses in three years in pursuit of his wacky economic ideas, one result of which is inflation of 60%. Or Lebanon, where the central bank orchestrated a scheme to funnel bank deposits to the government. Riad Salameh, its long-standing governor, faces charges of corruption and money-laundering, and is reportedly in hiding.

The latest to hit trouble is the Central Bank of Russia (CBR). When Russia faced economic sanctions from the West for invading Crimea in 2014, Elvira Nabiullina, its governor, let the rouble float and introduced an inflation target. But now Russia's invasion of Ukraine has led to sanctions aimed directly at the central bank, blocking access to foreign-exchange reserves. Unable to use about half of the $630bn in its war-chest, the CBR had to raise interest rates briefly to 20% and impose capital controls.

Speculative attacks against other currencies have long been part of the arsenal of economic statecraft, says Harold James of Princeton University, in the belief that a financial crisis would force the enemy to spend less on its army. During the second world war America froze Japan's foreign assets, and banned traders from buying gold from Japan. More recently, it took aim at Iran's central-bank assets in 2011-12, as it tried to stop the Iranian nuclear-weapons programme. The American government estimates that Iran can still access only a tenth of its $100bn in reserves. After the Taliban seized control of Afghanistan, America also froze $7bn in assets held by the Afghan central bank at the Federal Reserve. In an executive order, President Biden said that the administration would eventually seek to spend some of the money on aid for Afghanistan.

The CBR has tried to reduce its reliance on American financial plumbing: the share of its reserves in dollars fell from nearly half in 2017 to less than a quarter in 2022. But it increased its holdings of euros, suggesting it may not have expected sanctions from Europe. It is now subject to sanctions from America, Britain, Canada, the EU, Japan and Switzerland. Most of the reserves that it can still access are in either gold or the yuan.

Geopolitics has always influenced foreign-exchange reserves, along with trade, convenience and safety. The obliteration of Russia's financial war-chest will have been noted especially in countries like China, which has around $3.5trn in reserves, and India and Saudi Arabia, with $590bn and $472bn, respectively. The result may be a continued reduction in the dollar's dominance. According to the IMF, it accounted for 60% of global reserve holdings in 2021, down from 70% in 2000.

Where to go instead? Gold could regain lustre. But although it is a good store of value, it must be sold to be useful, and financial sanctions will deter potential buyers. It is also a hassle to move. The CBR's holdings amount to more than 180,000 bars, much of it kept in Russia, estimates Steve Cecchetti of Brandeis University. Safely transporting any of these to China or India, say, would be a costly affair.

What seems most likely is that "each reserve manager lives in their sphere of influence", predicts Mr Cecchetti, buying currencies only of friendly countries. China's yuan stands to gain: it makes up only about 3% of global currency reserves now. But the gains may be modest. Only a quarter of the diversification away from the dollar over the past 20 years has been to the yuan, according to Barry Eichengreen of the University of California, Berkeley. China's closed financial system makes buying many yuan-denominated bonds and securities far from easy. And if America can freeze a central bank's foreign assets, it is not hard to imagine China one day doing the same.

Looking ahead

The curse of being too competent

The temptation to heap jobs on central banks must be resisted

Apr 20th 2022

A CENTRAL BANK'S reputation is determined as much by its relationship with the government as by its handling of financial crises and economic downturns. Over the past 300 years, as governments have sought to enhance or sometimes restrict central banks' powers, the mood has varied from collaborative and harmonious to antagonistic and fractious. By the end of the 20th century the tone had shifted to a grudging respect. Politicians came to learn that they interfered with central banks at their peril. The technocrats were told to aim for some combination of low inflation, high employment, a stable financial system and a reliable currency, and were mostly left alone to get on with the job.

As this special report has laid out, the line between intrusive politics and independent central banking is now blurring again. This is not just because central banks have bought vast quantities of public debt in an attempt to shore up economies. They have also come closer to disbursing implicit subsidies on their own account. During the pandemic they did this to keep firms alive. Now they are mulling schemes to deal with such issues as climate change. They are being pressed to solve various social problems. And they are toying with digital currencies that, in their most radical form, could expand their role in allocating credit further still.

This expansion in powers echoes across the emerging world. Central banking in the rich world has inched towards the approach in China, with its greater emphasis on its balance-sheet and credit guidance, and its multiplicity of aims. The PBoC tends to be called in to solve economic problems, says one observer, because it is regarded as more competent than other ministries. The existence of targeted-lending schemes has made it easier for the PBoC to nudge credit towards green borrowers. And among large economies, China was the first to put a digital currency to the test.

In the rich world, central banks' greater use of their balance-sheets was to a large degree unavoidable as they sought to deliver their mandated goals. Unable to pull the lever of interest rates, they were forced to experiment with new tools. The exceptional circumstances of the pandemic justified a wide, indiscriminate safety-net. It would equally be foolish for central banks to ignore emerging risks and technologies. Geopolitics will become a more important influence on their decisions. Governments may instruct central banks to issue digital currencies. And understanding how climate change could affect the economy and the financial system is a vital task.

Laser focus

What should be fiercely resisted, however, is the endless addition of new policy goals. For one thing, as the examples of climate change and inequality show, not all problems can be fixed by monetary policy. Even in China economists have concluded that it is too blunt a tool to wield against long-standing structural woes. And in democracies the question of how best to subsidise the worthy or tax the unworthy is surely better left to elected and accountable politicians, rather than to technocrats.

Central banks were given independence so as to focus on a narrow remit. That explains why they retain legitimacy in the eyes of the public. But to heap more tasks on central banks risks pulling them into the political sphere, opening them up to ever increasing demands. That would undermine their position as neutral technocrats and could, ultimately, raise doubts about their independence. A survey by Ms Binder and Ms Skinner, the two academics, found that college-educated Americans were much more amenable to the Fed playing an active role in tackling climate change and inequality than those without a college education.

More important today, considering that inflation in the rich world is running at around 8%, is that a proliferation of aims would interfere with the tasks that only central banks can do. For as long as inflation was low, central banks may have seen little harm in venturing into new areas. Its resurgence should serve as a timely reminder of why they were given independence in the first place, and why their mission matters. Pressing social problems may continue to make them seem like convenient dogsbodies to governments. The real question for them now is whether they can control inflation, and at what price. Focus on their core job will remain crucial. ■

Business

Proxy power

Annual meetings are the new frontline in the battle over corporate purpose

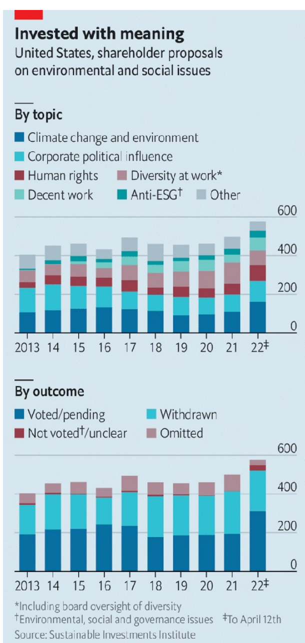
Climate, race and inequality are on the agenda

Apr 23rd 2022 | NEW YORK

COMPANIES HAVE always had to answer to their investors. But these days shareholders have new questions—lots of them. On April 28th shareholders in three big drug companies, Johnson & Johnson (J&J), Moderna and Pfizer, are set to vote on resolutions filed by Oxfam, a charity, that seek to widen access to covid-19 vaccines. In May Amazon's shareholders are due to vote on a proposal from New York state's pension fund, asking for an audit of the e-commerce giant's policies on racial equity. Carl Icahn, a notoriously fierce corporate inquisitor, has broadened his attention from profits to pigs. He has filed proposals at McDonald's and Kroger, a grocer, in a quest to end the confinement of pregnant sows.

These proposals are a small selection of the onslaught of shareholder resolutions that American companies face in proxy season, the time when most publicly traded companies hold annual meetings, which runs from April to June. Emboldened by successes last year and newly favourable regulations, by April 12th investors had filed a record 576 proposals on environmental and social measures, up from 499 in 2021, according to the Sustainable Investments Institute, a research group (see chart). This barrage points to the next phase of America’s fight over corporate purpose. Executives who have endorsed “stakeholder value”, a much broader measure of corporate worth than profits and cashflow, are now seeing their declarations put to the test.

Shareholder activism used to be a much simpler affair. Investors such as Mr Icahn would buy a stake in a firm, then press for changes to strategy or the board to boost the company’s performance. Activists occasionally had broader goals. In 1971, for example, the Episcopal church demanded that General Motors cease making cars in apartheid South Africa. Such campaigns were rarely successful. Often companies and regulators deemed the issues raised not to meet the legal definition of being “material” to the company’s business. Even if a proposal went to a vote, shareholders usually sided with management.



The Economist

What is today considered material, by some shareholders at least, looks considerably broader than in the past. Proposals on climate are up by 42% this year compared with 2021. Other new resolutions push companies to square political donations with their stated corporate values. Most proposals seeking social and environmental changes still fail. However, they are gaining more backing. Last year support for the 185 such proposals that went to a vote won over 34% of the voting shares, up from less than 19% a decade ago. Average support for climate proposals exceeded 50%. This is because the nature of proxy battles has changed—and looks set to evolve faster still.

For one thing, the distribution of voting power has shifted, and so has willingness to wield that power in new ways. BlackRock, Vanguard and State Street, three giant asset managers, last year owned 22% of the average company in the S&P 500 index of big American firms, up from 13.5% in 2008, according to Bloomberg, a data firm. After the financial crisis, managers of big, passive indices faced pressure to improve their understanding of systemic risks, the type that investors cannot adequately control by diversifying their portfolio. They began hiring more staff to understand these threats and urging companies to mitigate them.

Although many investors rely on proxy advisory firms such as Glass Lewis and Institutional Shareholder Services, which publish guidelines on shareholder voting, the biggest asset managers now have their own stewardship staff and extensive voting policies. The team at BlackRock has over 70 people, five times more than in 2009. In the 12 months to last July, the firm had about 3,600 meetings with some 2,300 companies around the world.

These large investors are particularly concerned about the threats from climate change—including physical impacts, energy shocks and the consequences of regulation. State Street this year expects all companies in major indices in America, Australia, Britain, Canada and Europe to disclose both direct and indirect greenhouse-gas emissions and targets for reducing them. But the asset managers' interests do not stop at the climate. State Street has said that, for firms in the S&P 500, it will vote against a company's directors if the board does not include a person of colour. Larry Fink, boss of BlackRock, defended stakeholder capitalism in his annual letter to chief executives this year. "It is not 'woke'," he wrote. "It is capitalism, driven by mutually beneficial relationships between you and the employees, customers, suppliers, and communities your company relies on to prosper." Passive investors have become, if not exactly activist, undeniably more active.

The growing clout of big asset managers, and their newfound cuddliness, has meanwhile simplified the task of smaller investors in winning majority support for new resolutions. "The number of investors that it takes to get to 50% has greatly shrunk," says John Coffee of Columbia University in New York. "It has become much easier, simpler and cheaper to contact a powerful block." Smaller investors have also got cleverer in designing their resolutions. "The targeting of those proposals continues to improve, but so has the materiality of the risks that shareholders are bringing up," says Benjamin Colton, State Street's head of asset stewardship. Last year Engine No.1, a hedge fund that owned less than 1% of ExxonMobil, succeeded in ousting three of the oil giant's directors by winning the support of BlackRock, State Street and Vanguard.

Some smaller investors are hoping to win support for a broader set of issues. Arjuna Capital has filed proposals on insurance for police involved in racist acts. Rhia Ventures has weighed in on business activities in states that are limiting access to abortion. "It's really hard to get anything through Congress," says Heidi Welsh of the Sustainable Investments Institute, "so people that want things to change are looking outside of government and they are looking at the capital markets."

Crucially, this year's proxy season is also the first with new rules from Gary Gensler, appointed a year ago as head of the Securities and Exchange Commission (SEC), which oversees proxy voting. Some regulations remain a muddle. Litigation continues over a measure from 2020 that makes it harder for investors to resubmit failed proposals. Mr Gensler has proposed changes that may complicate small dissidents' courtship of big asset managers. A proposal to require companies to disclose their risks from climate change, outlined in March, is likely to end up in court.

In other ways, though, Mr Gensler has already made it easier for activists to operate. In November the SEC made it tougher for companies to block shareholder proposals that deal with "broad societal impact". Almost anything linked with environmental, social and governance (ESG) issues can now go through, even if it is not directly economically relevant to the company. The result is that by April 12th companies had succeeded in blocking only 16% of proposals from their proxy statements, compared with about half last year. This presents a problem for managements. "The SEC is trying to stretch the definition of materiality," says Evan Williams of the US Chamber of Commerce, America's biggest business lobby. "They are looking to galvanise the activist investor, the investor focused on ESG topics as opposed to enabling corporations to continue to make good governance decisions as they see fit."

As the sway of activists grows, many firms have tried to pre-empt shareholder action, for example by publishing lengthy reports on their environmental policies, or devoting more time to meeting investors. Some placate investors by agreeing to a proposal before it is put to a vote. This year As You Sow, a foundation, has withdrawn proposals at Dominion Energy and Duke Energy, two big utilities, after each revised its policies for reducing emissions.

This new shareholder activism is beginning to provoke a backlash. Bosses grumble that the activists seem uninterested in compromise. "What we are seeing right now is advocacy groups just interested in picking fights with large companies for the sake of building public attention and momentum," says an executive at a big tech firm. Sceptics argue that ESG proposals are more about values than actual value.

Groups seeking to thwart the ESG crusaders are filing their own resolutions. The National Centre on Public Policy Research, a conservative think-tank in Washington, DC, has put forward a proposal with CVS Health and J&Jon seeking disclosure of racial-justice policies and non-discrimination training (which it dislikes). Texas has barred state investments or contracts with firms that shun fossil fuels. On April 6th the American Legislative Exchange Council, another conservative group, published a template for states seeking to "protect pensioners from politically driven investment strategies".

Counter-Reformation

Such groups do not yet appear to be speaking for a silent majority. Of the right-leaning shareholder proposals that made it to a vote in the past two years, average support was about 3%. But those who fret about the influence of the big asset managers may be comforted that the distribution of voting power could change yet again. By next year’s proxy season new SEC rules will allow all investors to vote to appoint individual directors of a company in contested elections. Currently investors voting by proxy must still choose either all the company’s candidates or all those of a dissident. “We have never ever had a corporate board election that has been democratic,” says Andrew Behar of As You Sow.

BlackRock is starting to make it easier for clients to vote as they choose, too. Beginning this year, the firm will allow a segment of institutional clients invested in index strategies to have more choice in their voting. That includes selecting either to vote themselves or to choose from a menu of proxy policies, such as one that is “faith-based”. “It is very difficult for a large asset manager to satisfy the competing expectations of their upstream investors, some of whom want to move very quickly on ESG and others who don’t,” says Paul Washington of the Conference Board, a research group. “For BlackRock to step out of the way as an intermediary relieves some of the pressure.”

Smaller tech firms are seeking to democratise voting, too. Robinhood, a platform for day-traders, last year bought Say Technologies, a firm that helps individual investors raise questions to management. Tulipshare designs proxy resolutions before soliciting investments from retail investors until they have a large enough stake to file a proposal. Broadridge, a big fintech company, has developed an app to make it easier for these investors to vote in shareholder battles. In the new age of proxy power, companies’ owners may at last act the boss. ■

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Take this, sucker

Big tech wants to bootstrap carbon removal into a big business

A consortium of technology firms is ploughing nearly $1bn into a clever market mechanism

Apr 23rd 2022 | New York

A GROUP OF rich do-gooders tried a bold experiment 15 years ago. The Gates Foundation, a charity, and five countries put $1.5bn into a pilot project aimed at encouraging research and development in a previously neglected area. The "advanced market commitment" (AMC) they created promised rewards to drugmakers that came up with an effective vaccine against pneumococcus, a disease which killed many children in poor countries. Defying sceptics, three vaccines have since been developed. More than 150m children have been immunised, saving 700,000 lives.

Now several initiatives aim to apply the same approach to a different scourge. This month four big tech companies—Alphabet, Meta, Shopify and Stripe—and the sustainability practice of McKinsey, a management consultancy, pledged $925m over nine years to bootstrap technology to remove carbon dioxide from the atmosphere in an effort to arrest global warming. A similar AMC-esque project is expected to be unveiled in May at the annual plutocrat retreat in Davos hosted by the World Economic Forum (WEF). That project's instigators in the First Movers Coalition, which was forged last November and unites the WEF, America's State Department and dozens of big global firms, have already made purchasing commitments aimed at helping to decarbonise the aviation, shipping, trucking and steel industries.

Experts reckon the world must remove about 6bn tonnes of CO_2 a year from the atmosphere by 2050 to avert the worst impacts of climate change. Less than 10,000 tonnes have so far been permanently extracted in this way. Closing the gap thus requires heavy-duty bootstraps.

To be eligible for the tech companies' scheme, known as the Frontier Fund, carbon-removal technologies have to pass several tests (besides obvious ones like being safe and legal). One is permanence: the technologies must be able to store the stuff sucked from the air for at least 1,000 years. Another is scalability: they must not have land-use requirements that are in conflict with food security. A third is cost: they must have a path towards a price tag of less than $100 per tonne of carbon dioxide removed (down from hundreds of dollars or more per tonne for existing techniques). These are "absolutely foundational to getting anything close to net-zero", says Mark Patel of McKinsey.

The goal is not to invest in carbon-tech startups, explains Nan Ransohoff of Stripe, which controls the Frontier Fund and will chip in more than a quarter of the kitty. Rather, the idea is to be early customers for the nascent carbon-removal techniques, which can help meet the buyers' own decarbonisation targets. For early-stage carbon-suckers, the fund will offer low-volume pre-purchase agreements. For bigger firms scaling up proven methods, it will offer larger contracts that pay providers for tonnes of carbon once these are delivered to the agreed specifications. Suppliers can then use these commitments to secure financing and expand capacity.

"A billion dollars is a big number but not even close to big enough," concedes Peter Freed, who leads the project at Meta. But, he hopes, it may "start a snowball rolling down the hill". And, if all goes well, it will keep some snow from melting, too. ■

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Commercial brake

Netflix sheds subscribers—and $170bn in market value

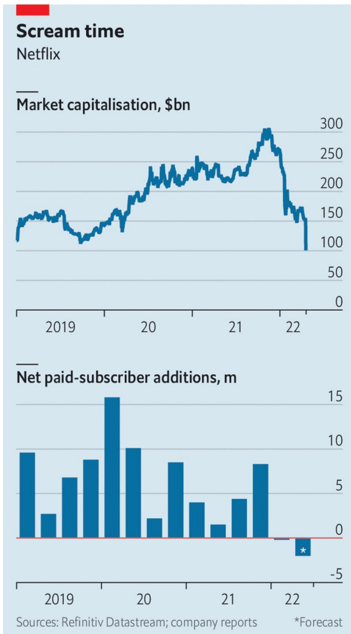
Can it tempt viewers back with advertising?

Apr 23rd 2022

Getty Images

IN JANUARY NETFLIX warned investors that it expected to add only 2.5m subscribers in the quarter ahead, causing a sell-off that knocked nearly 30% off its share price. On April 19th the video-streamer admitted that the reality was worse: Netflix lost 200,000 customers in the period, its first net drop in more than a decade. The firm expects to lose another 2m between April and June. By April 20th it was worth 35% less than the day before—and 63% less than at the start of the year, wiping out nearly $170bn in market value and making it the worst-performing stock in the S&P 500 index.

Subscribers in America drifted away after price rises that made Netflix the dearest big streaming service, at $15.49 a month. Another 700,000 accounts were lost when Netflix pulled out of Russia. Even in Latin America, where it had been growing fast, it shed members. And although it gained 1.1m new ones in Asia, that is fewer than in the same period last year.



The Economist

Peaky economic conditions don’t help. Inflation is eating into households’ budgets; this week Kantar, a research firm, reported that overall streaming penetration in Britain fell in the latest quarter. Consumers also have more options. Hollywood is piling into streaming along with Silicon Valley, increasing competition for both customers and content.

Most worrying for Netflix is that the number of potential streaming customers may be lower than it thought. The firm has long said it is eyeing the world’s 1bn homes with broadband. It now acknowledges that factors such as slow take-up of smart TVs and expensive data are obstacles to reaching many of them. MoffettNathanson, a firm of analysts, puts the real potential streaming market at more like 400m homes. With 222m subscribers, plus 100m or so households using others’ passwords, Netflix is about 80% of the way there.

Reed Hastings, Netflix’s boss, promises a crackdown on password-sharing to make some free-riders cough up. To protect margins, Netflix will rein in content spending. Most dramatically, “over the next year or two” it will launch a cheaper tier with ads, to attract customers on lower budgets. It has long rejected advertising, which risks limiting creative freedom and cannibalising existing subscriptions. The ad industry’s giants, Alphabet, Amazon and Meta, are “tremendously powerful”, so “long term, there’s not easy money there”. Who says? Mr Hastings, two years ago. ■

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Bartleby

Startups for the modern workplace

Sharks, dragons and angels: what are you waiting for?

Apr 23rd 2022

GREAT UPHEAVALS always spark innovation. The covid-19 pandemic is no different. The share of new patent applications in America connected to remote-working technologies more than doubled between January and September 2020. Opportunities abound to invest in a host of transformative early-stage ideas. The pitches below are from startups that aim to improve the modern workplace and are inexplicably struggling to raise capital. Are you in?

Offices are being rejigged to allow more room for collaborative working. More desks are being shared and space is scarcer. Workers often need to make reservations to secure a spot. Towels on Deckchairs is a German startup that uses algorithms and manual workers to claim and hold the best desks. Our high-frequency bots can book slots as soon as reservation systems open; in offices that operate a finders-keepers system, our gig workers will physically occupy space for our customers.

Bottled Boss produces a line of fragrances designed to help harder-hearted managers display their more human side. "Empathy", with its notes of cedar, has a sedating effect, rendering the wearer unable to do much else except look understanding. "Vulnerability" does not smell of anything but if you squirt it in your eyes, it does make you cry.

Class Pet takes the same contact-tracing technology used to monitor whether people have been exposed to covid-sufferers and applies it to the problem of proximity bias in the office. By tracking how often people are physically close to each other, Class Pet can alert firms to whether bosses are giving too much face time to specific people in the office. It's also excellent for gossip.

Employees are under scrutiny as never before, both in the office and at home (see Class Pet). The degree of surveillance is becoming more transparent: a law goes into force in New York state next month requiring employers to tell workers how they monitor their activities. Chaff is a new startup that gives employees a range of options to fight back. Chaff's customers can alter web-camera feeds to show pre-recorded looped footage of them working furiously. Proprietary software will move cursors at random intervals in order to show that employees have not fallen asleep. (Not available in China.)

Video Vici improves the experience that people have on video calls. We have developed a set of features that work on all the main conferencing platforms, and include the following: time-on-mic countdown clocks, to limit the amount of time that any one person spends blathering; a ticker showing how many people are not paying any attention to you at any one time; and nostril filters to help with unfortunate camera angles.

From Serene and Focusmate to Todoist and Evernote, a bewildering array of productivity apps promises to make workers more efficient. Cull takes a new approach to this problem, by ruthlessly prioritising the things you need to do. We use artificial intelligence to work out which colleagues are above you in the organisation, or soon might be. Messages from these people are pulled into your inboxes and notifications, and ranked in order of seniority. Communication from other people is automatically deleted before you even see it.

The commute into the office wastes time that could be spent a) more productively or b) snoring. The same logic applies to the time people spend getting ready to work from home. That is why we founded Bedesk, maker of a revolutionary piece of furniture that allows you to sleep and work in one location. Modelled on hospital beds, Bedesks can automatically adjust their angle of recline and feature a foldable work surface with multiple charger points. Headboards can be stamped with your corporate logo, and our first 1,000 customers will receive a free bedpan.

Pretty soon it won't be enough to spout off about the metaverse; you will actually have to go there. Metamorph is like a personal shopper for your avatar, offering customised advice on what your digital twin should look like. Higher-end avatar designers such as Ready Player Me already allow you to reshape eyebrows, thicken hair, choose to wear virtual combat fatigues and generally have a digital mid-life crisis. Millions of middle-aged workers are about to make some seriously embarrassing choices. Don't be one of them.

If any of these investment opportunities appeals to you, please just send a blank cheque to *The Economist* and we will make sure it gets to the right people.

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How to sign off an email *(Apr 16th)*
How to make hybrid work a success *(Apr 9th)*
The case for managerial decency *(Apr 2nd)*

Hungry, hungry unicorns

After a fat year, tech startups are bracing for lean times

Which are most at risk?

Apr 23rd 2022 | San Francisco

Peter DaSilva/The New York Times/Redux/Eyevine

AFTER A STUNNING run during the pandemic, which put a premium on all things digital, tech stocks have hit a rough patch. The NASDAQ, a technology-heavy index, has fallen by 15% from its peak in November, weighed down by a new outbreak of covid-19 in China and the Russia-Ukraine war, which are gumming up supply chains, and inflation, which erodes the value of future cashflows, making risky growth stocks less attractive to investors. On April 20th the market value of Netflix crashed by a third, or $54bn, after the video-streaming titan reported the first quarterly net loss of subscribers in more than a decade.

The bloodletting in public markets has left many wondering about private technology startups. Like their listed peers, they have enjoyed a covid-fuelled bonanza. Thanks in part to new types of investor, such as hedge funds and corporations, ploughing more cash into the sector, last year was a bumper one for venture-capital (VC) deals. According to CB Insights, a research firm, global tech startups raised $628bn in 2021, more than double the previous year's tally. In the same period the number of deals jumped by a third, to more than 34,000. Fully 528 private firms became "unicorns", valued at $1bn or more. Are these rich valuations now also about to take a tumble?

The short answer: almost certainly. Dealmaking has already slowed. The number of transactions sealed between January and March fell by 5% compared with the previous quarter. The amount invested dropped by 19%, the biggest quarterly decline since 2012. Some of the factors behind the slowdown are those unsettling the public markets, supply-chain snags and inflation chief among them. Another cause is the public markets themselves.

An index of stocks that have floated via an initial public offering (IPO) within the past two years, compiled by Renaissance Capital, a hedge fund, is down by around a third in the past 12 months. This has discouraged many startups from going public. In the last three months of 2021, 296 firms listed. In the first three months of 2022, just 164 did—mostly in Asia. Worried that they will be unable to monetise their stakes soon, venture capitalists have tightened their purse strings.

Private valuations are beginning to be affected. Last month Instacart, a grocery-delivery firm, took the unusual step of announcing its own devaluation, from $39bn in March last year to $24bn, even without an accompanying “down round” of fund raising at a lower price. Valuations are falling in secondary markets, too. Phil Haslett, co-founder of EquityZen, which helps tech employees sell their pre-IPO stock options, says that the prices of some of those stocks have fallen by 30-40% since the second half of last year.

Falling valuations in turn make it harder to raise capital. New projects may be put on hold and new hires may have to stop. Some companies could go out of business altogether. On April 5th Fast, a maker of checkout software for online merchants, announced that it was shutting down because of fundraising problems. Many investors predict that more startups will go bust or see their valuations decline in the coming months.

To see which startups are most at risk, *The Economist* looked at the annual revenue growth and valuation-to-sales ratios for 500-odd unicorns around the world, for which PitchBook, a data firm, had information. For the whole lot, the median revenue growth was 63% and the value-to-revenue ratio was 22. Three sectors looked particularly vulnerable.

One is hardware companies, such as JUUL, an e-cigarette firm, and Royole, a Chinese maker of smart devices. This group has a median revenue growth of 32% and valuations 25 times their annual sales. Another category is fintech firms, including Britain’s Checkout.com and America’s Plaid. Such firms’ median valuation is about 33 times their sales, the highest among the 11 broad sectors we examined, but their median sales growth is only middling, at 70% per year. Business-software firms, such as Miro and Talkdesk, are also looking shaky. These firms have a median valuation of 28 times their sales and revenue growth of 33%.

Some startups will be insulated from the shock. Software firms, for example, tend to boast large gross margins, often around 70% for smaller companies. This can provide a buffer against a downturn. Thanks to last year’s bumper fundraising, many startups of all sorts have healthy balance-sheets and may not need to raise capital for several years. “I have so much money I don’t know what to do with it," the boss of one told *The Economist* earlier this year after a multibillion-dollar round.

Magical thinking

And superstar companies, such as Stripe, a payments unicorn valued last year at $95bn, are so adored by venture capitalists that they will probably be able to raise money even in harsh environments. Indeed, VC firms insist that falling valuations across the industry do not affect their returns, precisely because these ultimately come from a small number of big hits, not a big number of small ones.

Perhaps. Some investors are nonetheless rethinking their strategies. Younger firms, which are further from listing and so are less likely to be hurt by the turbulence in public markets, are in favour. In the past quarter deal size has continued to grow for striplings, while the median deal for late-stage firms has shrunk from $50m last year to $40m. Startups, too, are adapting. Mr Haslett reports a surge of chief financial officers asking for help in arranging the sale of employees' shares in secondary markets. These shares may fetch less than if their owners had waited for their employer to go public. But that may be a long wait. ■

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Schumpeter

Elon Musk's Twitter saga is capitalism gone rogue

The world's richest man is playing with the rules of the game

Apr 23rd 2022

Brett Ryder

Editor's note (April 21st 2022): After this article was published, Elon Musk said he has received funding to finance a takeover of Twitter, and that he is exploring whether to launch a tender offer to all Twitter shareholders.

IDA TARBELL, author of an exposé of the Standard Oil Company in 1904, described its founder, John D. Rockefeller, as "the most successful man in the world". By that she meant "the man who has got the most of what men most want". These days Elon Musk fits that description to a tee. Not only is he worth more than God. He invents things that are changing the world, from electric cars to space rockets. A word from him—on anything from crypto to meme stocks—turns retail investors into slobbering Pavlovians. With millions of adoring fans, he is an idol of modern capitalism.

He is also a shaper of capitalist trends, and that is where the problem lies. His fetish for Twitter—first as a megaphone to promote himself and his companies and now as a plaything that he has offered $43bn to buy—is taking the world of business in a reckless new direction. Call it GameStop for gazillionaires. Like last year's craze for the American games retailer ("Gamestonk!!" as Mr Musk called it), he promotes the idea that the normal rules of investment do not apply. He paints stewards of fair play—regulators and boards—as pettifogging enemies of progress. And he idealises surreal narratives over economic facts. Such mischief-making has hitherto mostly been confined to the fringes of finance. In his pursuit of Twitter, Mr Musk is taking it into the mainstream.

He has brought the whiff of the meme stock to Twitter, not your usual microcap candidate for meme-ification. Before Mr Musk revealed a stake in excess of 9% on April 4th, the social-media platform was the sort of business attractive only to true believers or contrarians. Its advertising revenue has never come close to its potential. Despite its name recognition, it has been a lacklustre investment. Now Mr Musk has cast his bid to take it private as a move to protect free speech, rather than to make money. Presumably, that appeals to his fan base. Day-traders are already piling in on his coat-tails; their share of Twitter's float has risen from 8% to 13.3%, according to Vanda Research, an investment adviser. Option trading has spiked, as has discussion of Twitter on forums like Reddit's WallStreetBets. It could just be harmless fun. However, it could also play into Mr Musk's hands. Individual investors are likelier to support his tactics than the institutional old guard.

Such tactics reek of populism. In effect, they seek to diminish institutions while elevating Mr Musk's own stature as Twitter's saviour. That includes bating those tasked with ensuring that such takeovers are done fairly and transparently, chiefly the Securities and Exchange Commission (SEC), America's market regulator, and Twitter's board. Mr Musk still publicly berates the SEC over a $40m settlement that he and Tesla agreed to pay in 2018 regarding a tweet he sent saying he could take the electric-car company private. In his recent Twitter investment, a class-action lawsuit alleges that he violated an SEC rule by not revealing the stake within ten days of it exceeding 5%. As for the board, since it introduced a "poison pill" on April 15th, setting penalties if he lifts his stake above 15%, he has hit back. He has tweeted a poll that purports to show his followers are heavily in favour of shareholders deciding whether Twitter should be taken private, not the board. He has also noted how few Twitter shares board members own.

For all this impishness, his tactics also trample on the principle that markets need reliable information to function correctly. Fuelling the ongoing guessing game about his intentions, he has tweeted a reference to Elvis Presley's "Love Me Tender", implying—at least to those blessed with meme-stock intuition—that he may try to sidestep the board by launching a tender offer to all shareholders. Then again, he may not be serious about buying Twitter. "I'm not sure if I will actually be able to acquire it," he said in a TED interview recorded shortly after he had made his bid on April 14th. For any other suitors circling Twitter, reportedly including two private-equity groups, Thoma Bravo and Apollo Global, this could be a stumbling block. While Mr Musk remains a shareholder, his unpredictability makes him a poison pill of his own.

The impression that if you are the world's richest man you can have fun with the rules of the game is one thing. As problematic is the idea that Mr Musk might end up controlling one of the world's most powerful means of communication at a time when fortunes are won and lost on "story stocks"—those driven by narratives discussed on forums like Twitter. Mr Musk knows all about the power of the platform. No CEO has the Twitter presence that he does. He has an army of 82.6m followers, many of whom have helped amplify his tweets promoting Tesla, making the site in effect the main marketing department for the $1trn company. Tesla, which on April 20th reported record sales in the first quarter, goes from strength to strength. Twitter helped fuel its rise.

It may not be just his Twitter "fanboys" who have bolstered the Tesla narrative. According to David Kirsch of the Robert H. Smith School of Business at the University of Maryland, tweets generated by "fanbots", or what he claims are pro-Tesla algorithms, accounted for 23% of all messages on Twitter containing the hashtag #TSLA between 2010 and 2020, or 36,000 tweets. The findings are still under review, and do not include comparisons with other firms' fanbots over the same period. But widespread use of fanbots could suggest that Twitter has even greater power to blare out corporate propaganda than previously assumed.

Citizen Musk

Propaganda is not a word widely associated with business. The world has plenty of reasons to worry about politicians buying media assets to peddle ideologies. Less so tech titans. Amazon's Jeff Bezos, for instance, is thought to be an arm's-length owner of the *Washington Post*. Mr Musk is more complicated. What he builds is the work of genius. But when it comes to Twitter, he is often childish and capricious. Imagine if Rockefeller had bought himself the Twitter of his era. He, too, would have had fanboys. And Tarbell's exposé might have been trolled out of existence. ■

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Finance & economics

The Fed's mistake

After getting inflation so wrong, can the Fed now get it right?

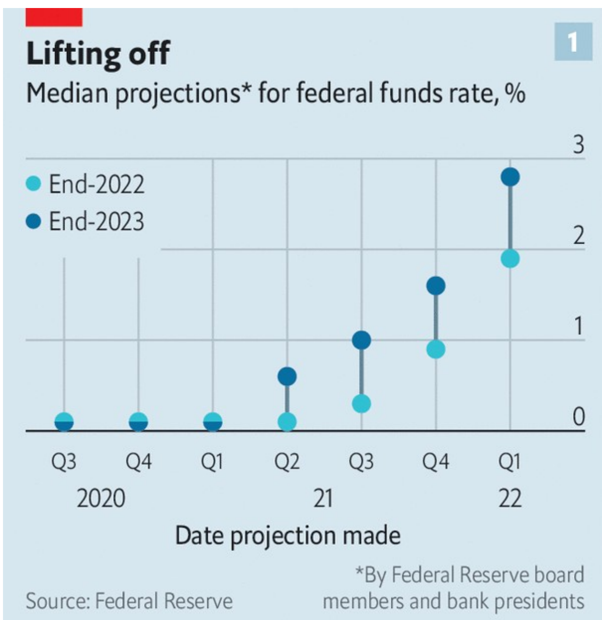
The hawks are taking flight

Apr 23rd 2022 | Washington, DC

IT WAS A simple, stunning admission. "We have had price stability for a very long time and maybe come to take it for granted," said Jerome Powell, chairman of the Federal Reserve, last month. Many factors explain the latest burst in inflation, with snarled supply chains, tight job markets, generous fiscal stimulus, loose monetary policy and, more recently, the war in Ukraine all part of the fabric. But one thread runs through them all. Investors, analysts and, crucially, central bankers believed that high inflation in America had been consigned to history, a problem more for academic studies than for current policy.

No one now doubts that inflation is a problem for today. Consumer prices rose by 8.5% in March compared with a year earlier, a four-decade high. Belatedly, the Fed has swung into action. As recently as mid-2021 most members of its rate-setting committee believed that it would not raise interest rates at all this year (see chart 1). At its meeting in March, however, Fed officials concluded that they would raise rates by nearly two percentage points in 2022, setting America up for one of its steepest tightening cycles in a quarter of a century. How did the Fed get it so wrong? And does its sharp shift mean that it is at last getting it right?

Explanations for the Fed's mistake fit into three related categories: a failure of imagination, a technical trap and institutional inertia. In failing to see how bad things might get, the Fed was hardly alone. When inflation perked up a year ago, most analysts and investors pointed to dislocations from the pandemic. With people avoiding crowded places, demand for goods such as cars and computers had boomed just as companies were struggling to make them. As covid-19 faded away, so would inflation.



The Economist

Not all economists were so optimistic. Notable among them was Larry Summers, a former treasury secretary. In February 2021—when prices were still quiescent—he warned that President Joe Biden's $1.9trn covid-relief bill might "set off inflationary pressures of a kind we have not seen in a generation". Others, including Olivier Blanchard, a former chief economist of the IMF, and Jason Furman, an economic adviser to President Barack Obama, added their concerns. "At a minimum the Fed should have been much more even-handed in assessing that inflation might come down, but that it might also stay high," says Mr Furman. Indeed, as prices rose, interest rates fell in real terms, which only added fuel to inflation.

A common refrain of the Fed's critics is that the central bank was caught fighting the last war. The recovery from the global financial crisis of 2007-09 was long and drawn out, with inflation staying subdued. Sonal Desai of Franklin Templeton, an asset manager, thinks this misled the Fed. "The idea was that inflation expectations were so well-anchored that a free lunch was available. You could have a massive expansion of fiscal and monetary policy, and still no impact on inflation," she says. This time, though, the economy was not emerging from a deep financial crisis. Rather, the pandemic was more akin to a natural disaster, from which recoveries tend to be much swifter.

A more technical explanation for the Fed's mistake was its new framework for monetary policy, unveiled in August 2020, known as "flexible average inflation targeting". Boiled down, the idea was to let the economy run hot to make up for colder periods, so that inflation averages 2% over time. Bill Dudley, a former president of the New York Fed, argues that this framework has merit, but that its implementation was clumsy. The Fed wanted to be certain that inflation would stay above 2% for a while and that the job market was in rude health before lifting rates. "The flaw was putting yourself in a position where you tied your hands, so you almost had to be late with tightening," says Mr Dudley.

Even for those more inclined to be forgiving, there is concern about how long it took the Fed to alter its course. "Committees have inertia," says Adam Posen, president of the Peterson Institute for International Economics, a think-tank in Washington. "Ideally, central banks should be completely shameless about saying, 'oops, we made a mistake. We've got to fix it.' But they're not." Kristin Forbes of the Massachusetts Institute of Technology says the Fed made it hard for itself with its open-ended asset-buying programme, or quantitative easing (QE). The Fed was nervous about how to halt QE without upsetting markets. By contrast, the Bank of England had a fixed end point for its QE. "Everyone expected it to end on a certain date, unless there was big news in a different direction," Ms Forbes says.

At some level the Fed has now corrected its three mistakes. It is alert to the reality of inflation; it has, in effect, shelved its average-inflation framework; and institutional momentum has moved towards tightening, so that even its erstwhile doves sound relatively hawkish. Alongside a steep path of rate increases, the Fed is expected to start shrinking its balance-sheet next month. “It is not clear that moving any faster would gain you more credibility or more inflation reduction. But it is clear that it would massively increase the likelihood of recession,” says Mr Posen. As it stands, the Fed has never before managed to reduce inflation from such lofty levels without inducing a downturn. Mr Powell himself conceded last month that a soft landing would be hard to pull off.

The Economist

Even so, some still sense over-confidence. The median forecast of the Fed’s rate-setting committee has been branded as “immaculate disinflation”: according to its projections in March, inflation is expected to come down to 2.3% (on the Fed’s preferred gauge) in 2024, despite short-term interest rates reaching only 2.8%. Put crudely, this implies that real rates will be barely positive and yet inflation will somehow fizzle out.

Mr Dudley says the next test for the Fed may come in 2023. Given the ebbing of pandemic distortions, inflation may well tick down over the rest of this year. That, however, will not get America back to an annual inflation rate of 2%. Instead it may be closer to 4%, with companies still struggling to hire workers in an overheated economy. If the Fed lets up at that point in its tightening, America could be primed for trouble, warns Mr Dudley. “Underlying inflationary pressures will gradually drift higher, and the Fed will be forced to respond more aggressively later,” he says. “The risk for a hard landing goes up the more it procrastinates.”

Mr Furman is less worried, thinking the Fed will go further with its tightening if inflation remains uncomfortably high next year. “When reality is different from what they think, they themselves will make the necessary changes,” he says. Still, he would like the Fed to be clearer now that its tightening “has no preset stopping point”, and will keep going as long as inflation is elevated. After a year of erring on the side of optimism, and getting it wrong, it is an appeal for more humility. ■

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The hesitant v the urgent

China’s two-front fight to quash the virus and revive its economy

GDP held up in the first quarter, but retail sales slid in March

Apr 23rd 2022 | HONG KONG

THE FORTUNES of the world’s second-biggest economy hinge on two kinds of hesitancy. The first is over vaccines. China’s elderly are surprisingly reluctant to get inoculated against covid-19. That has saddled the country with a vulnerable population that could die in large numbers if the government abandons its controversial “zero-covid” policy. But this uncompromising stance, which tries to stamp out any outbreak of the virus, obliges China to impose ruinous lockdowns on some of its most productive cities, including Shanghai, where some residents have been confined to their homes for over 30 days.

These limits on movement are wreaking economic havoc. Even before the worst restrictions were imposed, retail sales shrank by 3.5% year-on-year in March (in nominal terms), according to figures released on April 18th. Catering services fell by more than 16%. Unemployment in China’s 31 biggest cities is now 6%, higher than in 2020, points out Zhang Zhiwei of

Pinpoint Asset Management. Overall GDP grew surprisingly fast, by 4.8% in the first quarter, compared with a year earlier. But that was mostly because of strength in the first two months of the year.

This quarter could look decidedly worse. Ting Lu of Nomura, a bank, thinks GDP could shrink. China's rulers are not hiding their concern. Earlier this month Li Keqiang, the prime minister, told local authorities that they should show greater "urgency" in stabilising the economy.

Yet a second kind of hesitancy has marked the government's response to the slowdown: a reluctance to stimulate the economy as forcefully as in the past. On April 15th the People's Bank of China (PBoC) said it would reduce the amount of money that banks must hold in reserve. But it cut these requirements by only 0.25 percentage points for most banks, half as much as expected. And it has still not lowered its key policy rates since January, before the latest covid outbreak took hold. Instead this macro-institution has resorted to micro-management, issuing no fewer than 23 instructions to encourage lending for particular purposes, such as elderly care, transport and grain purchases.

What is holding the PBoC back? It says it will "refrain from a deluge of strong stimulus policies" and "strike a balance between internal and external equilibria". It may worry that the monetary easing required to preserve growth would jeopardise China's external balance with the rest of the world. In particular the PBoC may fear that capital would flee if it cut interest rates too boldly just as America's Federal Reserve raises rates sharply. China has already suffered net capital outflows from its equity markets in recent months, as Russia's invasion of Ukraine forced foreign investors to face up to geopolitical dangers they would rather not contemplate.

If China remains hesitant to ease monetary policy more dramatically, it must rely on fiscal stimulus. But even here, it faces impediments and reluctance. The finance ministry, for example, still has a prudish unwillingness to report a big headline budget deficit. Hence much of the extra public spending needed to stabilise growth this year will be carried out by local governments and special funds that do not appear in the headline figures.

Unfortunately, local authorities are themselves under renewed financial scrutiny. Last July, the banking regulator issued “Document No. 15” instructing banks not to increase the hidden debts of local governments. These rules were later shelved. But the threat of a future crackdown remains. Another directive issued by the finance ministry required local governments to pick spending projects more carefully if they wished to finance them with bonds.

Despite these intrusions, local governments probably have enough money as a group, reckons Hui Shan of Goldman Sachs, a bank. They have carried over unspent funds from last year and received transfers from the central government. But the money is not evenly spread. “Some provinces have projects but no money, others have money, but no projects,” she says.

In those parts of the country battling covid, the limits on stimulus may be logistical rather than financial. Lockdowns and other restrictions interfere with the manpower and supply chains necessary for public construction projects. Fighting covid may also monopolise officials’ attention. Yes, local officials are being urged to stabilise the economy with “urgency”. But they are also being sacked for losing control of the virus. That skews incentives towards cutting infections rather than expanding infrastructure. It is hard to be a covid hawk and a fiscal dove.

It is possible for stimulus to bypass such bureaucracy. In America fiscal easing took the form of “stimmy” cheques paid directly to households. China lacks an equivalent system for distributing government largesse. The next best thing, in theory, is cutting income taxes, which leaves more money in people’s pockets to spend. But as only a minority of Chinese pay income tax, such cuts would have little impact. The closest alternative is lower taxes on smaller firms, some of which are not much more than household operations anyway. Thus about a third of fiscal easing this year will take the form of cuts in taxes and fees for small and medium-sized enterprises, according to Goldman Sachs.

Again, however, covid poses an obstacle. The retailers and other small enterprises targeted by these tax cuts are often the same firms hit hardest by lockdowns and other restrictions. If the zero-covid policy deprives a firm of its customers, relieving it of taxes is scant consolation. A company with zero income does not care what tax rate it pays.

China may therefore have to wait until this covid wave subsides before it can revive its economy in earnest. And even then, it must hope that the economic comeback is not immediately halted by another outbreak. Until China's elderly become less hesitant about vaccines, its economy will stay resistant to stimulus. ■

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The Roman question

What an end to quantitative easing means for Italian debt

Investors will begin to follow Italy's politics again

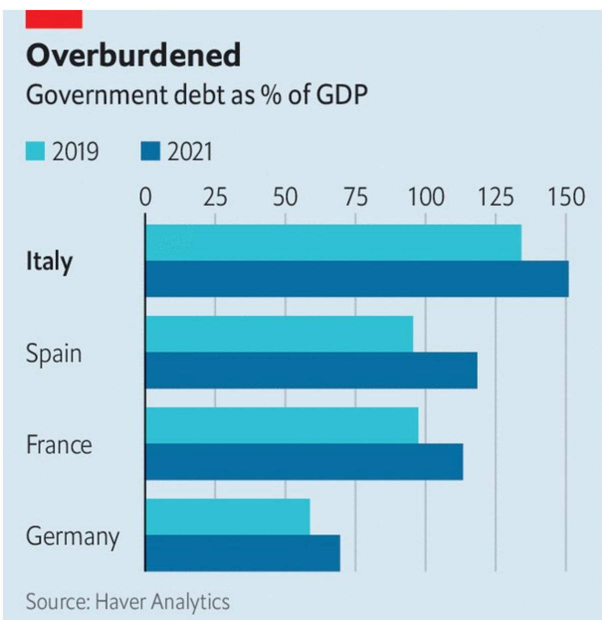
Apr 23rd 2022 | CERNOBBIO

BEFORE THE pandemic, there were a few accepted facts about the euro zone. Heavily indebted southern member states would try to persuade northerners to agree to jointly issue bonds, and fail. Emmanuel Macron, the president of France, would talk of a big common budget, only to be met by opposition in Berlin. And everyone agreed—some would say pretended—that Italy's government debt was manageable. That helped give the European Central Bank (ECB) political cover to buy Italian bonds during downturns.

Covid-19 has laid many of those truisms to rest. In 2020 the bloc set up a €750bn ($813bn) common recovery fund, financed by European bonds, to counter the economic fallout from the virus. The ECB's pandemic bond-buying scheme, through which it has bought €1.6trn in government debt, also helped contain borrowing costs for the zone's more indebted members. But Italy's big debt burden remains: in fact, it has grown, from 134% of

GDP on the eve of the pandemic to 151% by the end of 2021. As inflation surges, the ECB has begun to signal that it will stop net bond purchases after the summer. What does that shift hold for Italian debt?

Italy's bond yields depend in part on the country's economic health. And it has been in better shape than its huge debt ratio might suggest. Recovery from the pandemic has been faster than expected, and the European Commission estimates that spending from the recovery fund could boost GDP by 1.5-2.5% over the next four years. The war in Ukraine, and the attendant rise in energy prices, is likely to dampen activity: on April 19th the IMF revised its forecasts for Italian GDP growth in 2022 down to 2.3%, from 3.8% in January. The hope, though, is that the reforms that are tied to receiving the EU's recovery funds—such as an overhaul of public administration and the justice system—will bolster the economy over the long term.



The Economist

With growth supported and inflation high, Italy's nominal debt burden should eventually start to decline. Carlo Cottarelli, a former director of Italy's fiscal watchdog, reckons that the country's debt ratio could fall by three percentage points a year, provided that its growth spurt continues.

Yields will also be affected by what the ECB does next. It has indicated that it will stop making new purchases that add to its stock of holdings. But it is unlikely to reduce those holdings, whether by letting maturing bonds run off, or by making active sales (a policy known as quantitative tightening). Speaking on April 14th Christine Lagarde, the bank's president, said that such balance-sheet shrinkage was much farther ahead along the path of monetary tightening. The central bank will therefore continue to maintain its stock of assets by re-investing the proceeds of maturing bonds, and so will continue to be a source of demand for Italian debt.

Furthermore, the central bank's view of its role as a lender of last resort has matured. Ms Lagarde emphasised the bank's philosophy of "flexibility", in the name of ensuring that borrowing costs in weaker (ie, southern) parts of the euro area do not deviate too much from those for the rest of the bloc. That approach could extend to future quantitative tightening, which would be good news for Italy. The ECB could, for example, decide to reduce its holdings of German bonds first, to allow Italy more time to bring down its debt.

Perhaps the biggest change as the ECB scales back its asset purchases, though, is that investors will return to following Italian politics keenly. Parliamentary elections are due next spring, and there is a possibility that a populist government emerges victorious. It would probably be less enthusiastic about implementing the reforms that the recovery fund has so far encouraged. That would cloud the growth outlook and worsen the debt problem.

If the government were also hellbent on picking fights with the rest of Europe, the ECB may be forced to be a lot less flexible. Investors could begin to fear that the central bank might be unwilling to backstop a government that blatantly violates "macroeconomic reasonability", worries Francesco Papadia, a former ECB official. In 2018 the formation of a populist coalition led the spread between Italian and German bond yields to double within days to nearly three percentage points. The fate of Italian bonds, in other words, ultimately rests with Rome. ■

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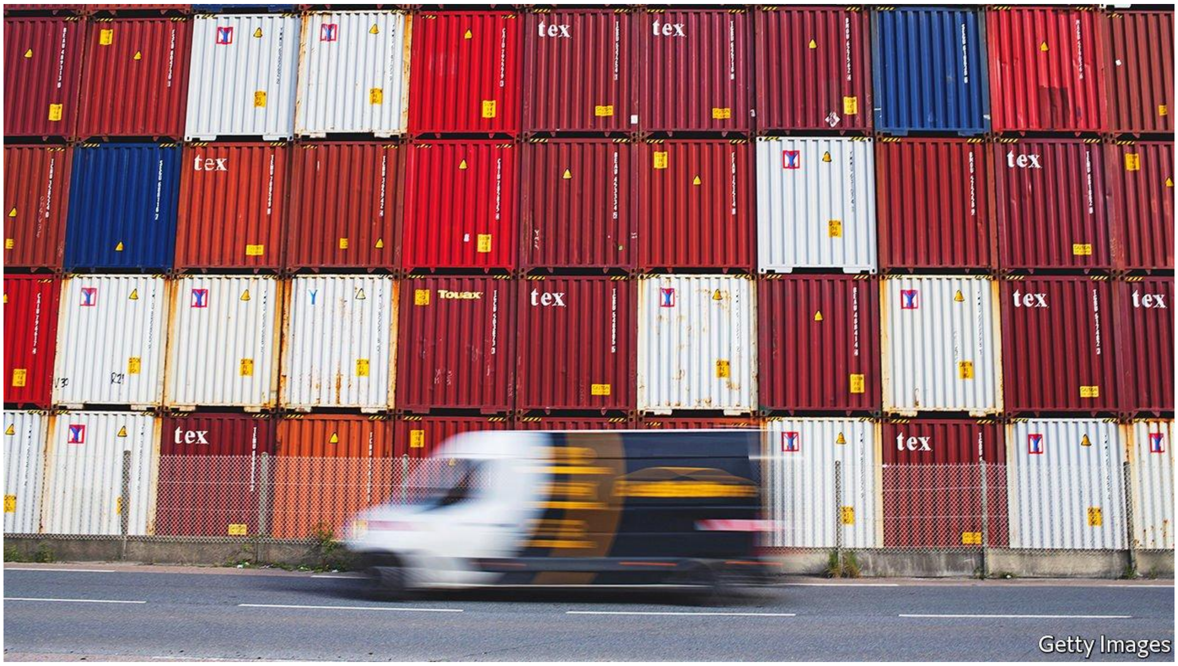
Stronger links

New research spells out the benefits of diverse supply chains

The IMF finds that reshoring leaves a country more exposed to shocks

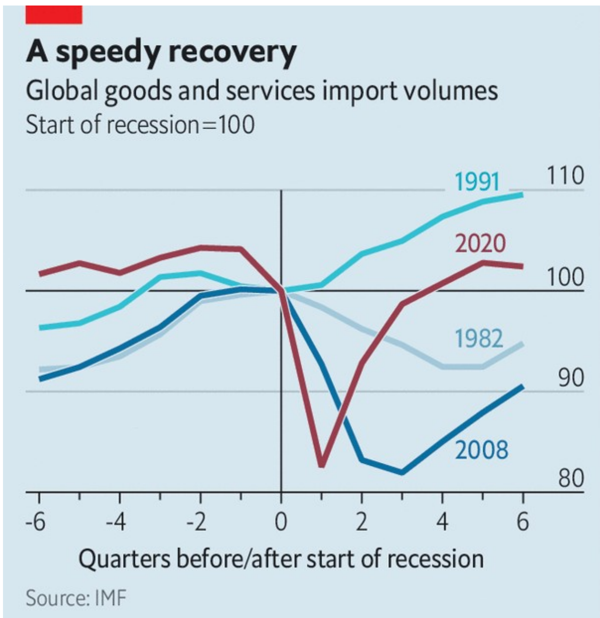
Apr 23rd 2022 | WASHINGTON, DC



OVER THE quarter-century before the pandemic, global manufacturing was transformed by the emergence of complex supply chains, through which firms could efficiently produce all sorts of goods at low cost and enormous scale. The pandemic put these supply chains through the wringer, causing wild swings in demand while forcing repeated lockdowns that frustrated both production and distribution. The result has been a surge in shipping delays, shortages of critical components and soaring prices.

Governments have become keener to boost domestic production, the better to reduce their vulnerability to disruptions in foreign supplies. But new work by the IMF suggests that this would be misguided. Supply chains held up better during the pandemic than is often assumed, it argues, and greater self-sufficiency is likely to leave countries more vulnerable to future shocks, not less.

The covid recession was unusual. Trade in goods fell sharply at its onset—by 12% in the second quarter of 2020, relative to late 2019—but then bounced back faster than has been common in recent downturns. To better understand these gyrations, the fund's economists built a model that predicts trade patterns based on levels of spending within economies. They found large differences between the amount and type of trade predicted by the model and what actually happened during the pandemic—a sign of covid-related weirdness.



The Economist

The virus distorted trade in part through its effects on domestic economies. Places that experienced higher caseloads and more restrictive lockdowns imported more goods than expected, given the blow to overall GDP, for instance. That in part reflects a shift in demand away from services and towards goods such as home electronics and protective equipment. Covid also interfered with the production of some goods at home, which then needed to be imported instead.

But lockdowns in some places also had spillover effects elsewhere. During the first half of 2020, the researchers note, about 60% of the decline in a country's imports could be explained by lockdowns in its trading partners. These ripple effects hit goods that were reliant on long supply chains the hardest. But the drag was smaller when the places that were locked down had greater capacity to telework. And crucially, the effect of restrictions declined over time, as working patterns and supply chains adapted. Exporters in places that ended strict lockdowns earlier saw big gains in market share, with bigger increases occurring in the production of supply-chain-intensive goods.

A lack of data means that the fund's analysis stops in mid-2021, after which a series of unfortunate events, from stranded ships to war, led to port backlogs and rising costs. Nonetheless, the fund reckons the model might suggest how best to protect an economy against disruptions. The answer is not by reshoring production, but by diversification: sourcing inputs from a wider variety of countries, and using components that can easily be substituted for if supply problems arise.

In most countries, the vast majority of components used to make goods tend to be sourced domestically. About 69% of parts in Europe and more than 80% in the western hemisphere are produced at home, for example. If a firm were to choose to import a critical component instead, it would face a more diverse choice: the market share of the average exporting country in the average industry is a little under a third. Re shoring would therefore tend to reduce the diversification of a supply chain rather than increase it, by making production even more dependent on a single country: the home economy. That could prove costly. The fund estimates that in the face of a big disruption (one that causes a 25% drop in labour supply in a single large producer of critical inputs), the average economy could be expected to suffer a fall in GDP of about 1%. Greater diversification stands to reduce the damage by about half.

Encouraging diversification is a tricky matter. The fund suggests that lowering barriers to trade and investing in infrastructure could help. Geopolitical tensions, sadly, mean that openness to deeper integration is in short supply. But the gains to be made, at least, are now clearer. ■

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Executive exit

A surprise sacking at China Merchants Bank frightens investors

One of the world's largest banks sheds tens of billions of dollars in market value

Apr 23rd 2022 | SHANGHAI

CHINA MERCHANTS BANK has always stood out from the pack. It was founded by a former communist guerrilla in 1987 as China's first commercial lender with a corporate-shareholding structure. It is part of a group with ties to a Qing dynasty project that sought in the 19th century to build an indigenous steam-powered shipping industry in order to compete with the West. The English name "merchants'' is a poor rendition of the Chinese, which is better translated as "investor recruitment".

The bank has been at the forefront of China's economic transformation. The southern manufacturing hub of Shenzhen, where it is based, virtually sprang up around it from the late 1980s onwards. Its revolutionary founder, Yuan Geng, also launched some of China's earliest economic reforms. It lent to private entrepreneurs, while clunky state banks preferred mainly to lend to other state entities. Although its shareholders are largely government-controlled, China Merchants Bank has operated more like a privately run group. This helped it attract better managers than the country's four largest state lenders—Bank of China, Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB) and Agricultural Bank of China.

Such advantages were not lost on investors. China Merchants Bank's market capitalisation soared, reaching about $230bn in May last year. At that time it was one of the largest banks in the world, behind only JPMorgan Chase and Bank of America in the West. Most big Chinese state lenders are considered inefficient allocators of capital and, as a result, trade at much lower price-to-book-value ratios. By mid-2021 China Merchants Bank had also surpassed all but one of its state rivals, ICBC, in market capitalisation. Some analysts expected it to become China's most valuable bank.

That target now looks out of reach. China's financial sector is in the throes of yet another corruption purge. On April 18th the bank's board removed its president and chief executive, Tian Huiyu, without explanation. Mr Tian has not been accused of wrongdoing but local media have linked his removal to a corruption probe that has shaken the Shenzhen branch of CCB, his previous employer. Several of Mr Tian's former colleagues have been investigated for serious breaches of the law.

The incident has rocked China Merchants Bank's share price, which is now 29% below its peak last year. By April 21st its market capitalisation had fallen to $162bn, placing it behind three of its state-owned rivals. More worrying are the long-term implications for the bank's operations. Mr Tian had run China Merchants Bank since 2013. Its ability to keep managers for long periods set it apart from state lenders, which often shuffle their executive teams and make appointments based on political merit. That stability had been key to the bank's industry-beating corporate governance, Chen Shujin of Jefferies, a broker, has noted. Now it is in doubt.

China Merchants Bank had so far avoided a high-level scandal. If a graft investigation spreads through the bank, it may end up looking more like other troubled, inefficient lenders in China. Recruiting investors will be that much harder. ■

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Get up and go

All over the rich world, new businesses are springing to life

More entrepreneurship is likely to be good for the economy

Apr 23rd 2022 | SAN FRANCISCO

Whitten Sabbatini/The New York Times/Redux/Eyevine

THE LASTING effects of the covid-19 pandemic on the economy are starting to become clear. Surveys suggest that Americans who can work from home are likely to do so for two or three days a week in the post-covid world, compared with hardly at all in 2019. Companies have regained their appetite for capital spending. And the pandemic appears to be provoking a shift towards higher levels of entrepreneurship around the rich world.

Economists are mainly focusing on the surge of new firms in America. But the trends are wider. Using data for a range of rich countries we estimate that in the fourth quarter of 2021 the number of "enterprise entries"—ie, newly formed companies—was 15% higher than the average before the pandemic (see chart). An extra 1m or so firms have sprung to life across the OECD group of mostly rich countries since the first lockdowns, compared with the pace of business creation before 2020.

Not everywhere is booming. In the 2000s Italians founded about 400,000 firms a year. They probably formed half that number in 2021. But most places are more vibrant. In America during the 2010s the share of people who worked for large companies (ie, those with more than 1,000 employees) was rising. In 2021 it fell, with the proportion of people working for small firms moving up. Britain is experiencing similar trends. In Germany new business creation is slightly higher than it was in 2019. And in France the number of startups is about 70% higher than was usual before the pandemic. Who said the French didn't have a word for "entrepreneur"?

The Economist

Some of these new firms are in glamorous industries. Caroline Girvan incorporated her fitness business in Northern Ireland in October 2020. (Her at-home videos, which your correspondent has discovered are impossibly difficult to keep up with, have racked up more than 250m views.) With global venture capital booming, startups from Triple Whale (e-commerce) in Columbus, Ohio, to Payrails (fintech) in Berlin are receiving lots of investment. Yet most of the companies set up during the pandemic have nothing to do with Silicon Valley or its pretenders. They are construction firms, consultancies and the like.

More entrepreneurship is likely to be good for the economy. New businesses try out fresh ideas and ways of doing things, while drawing capital and people away from firms that are stuck in their ways. Many economists draw links between the low rate of entrepreneurship after the financial crisis of 2007-09 and the weak productivity growth of the 2010s. In addition, a recovery with lots of startups tends to create more jobs, since young firms typically seek to expand and thus hire new staff.

Three explanations for the startup boom stand out. The first relates to family finances. From about 2017 onwards labour markets in the rich world noticeably strengthened, putting money in workers' pockets. With a financial cushion in place, people may have felt comfortable trying something new—which might explain why business creation picked up shortly before the pandemic. Then governments plumped the cushion considerably, as they handed out vast amounts of cash via stimulus cheques or furlough schemes in 2020 and 2021. At the same time, people cut back on spending. The result was a huge rise in saving, and an acceleration in startups.

The second factor relates to economic reallocation. The pandemic has prompted profound changes in consumption habits, meaning that demand has shifted across both geographies and industries. City centres are less busy than suburbs, while industries favoured by social distancing—online retail, for instance—remain more popular than activities that require in-person attendance. Entrepreneurs are responding. In France the number of hospitality startups is 22% below its pre-pandemic level, but those in the information and communication sector are up by 26%.

The third explanation is hard to measure, but could have the longest-lasting effects. The pandemic, by reminding people that life is short, may have encouraged them to take more risks. It would not be the first time. In America from 1918, after the first world war had ended and the Spanish flu epidemic had faded, an even bigger startup boom began, as more people plucked up the courage to set out alone. ■

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Buttonwood

A requiem for negative government-bond yields

The era of cheap money may be ending, but investors will still reach for yield

Apr 23rd 2022

AS INFLATION SURGES and central banks start to reverse the ultra-easy monetary policies that defined the past 14 years in financial markets, one of the starkest signs of the period of cheap money is fading away. The pool of negative-yielding bonds is evaporating.

Less than three years ago, as much as 40% of global government debt offered negative yields. Today that share has fallen below 10%. Much of it is concentrated in very short-term European and Japanese debt, the first of which is not long for this world, if market expectations for interest-rate rises in the euro area are to be believed. The volume of negative-yielding corporate bonds, an especially eye-popping element of recent financial history, is close to zero.

It might seem strange, given this backdrop, to say that the coming years will still be defined by investors reaching for yield. But if the past decade was characterised by a desperate search for nominal returns, an equally frantic scramble for real income seems likely to follow.

Negative yields brought fewer shifts to investors' habits than was feared in 2016, when oil prices tumbled and German and Japanese ten-year bond yields first dipped below zero. Conservative investors—reserve managers and pension funds, say, with tens of trillions of dollars to deploy—still bought bonds. Mass hoarding of physical cash, which offers a nominal interest rate of zero, did not come to pass. That is in large part because stubbornly low inflation left real yields relatively little changed. And to most investors, real yields—the ability to protect and enhance the value of a pot of capital—are what matter.

The road ahead looks at least as bumpy for investors seeking real yields as the one that lies behind, if not rockier. As expectations of interest-rate rises have ratcheted up, the ten-year Treasury yield, at 2.8%, is higher than it was for nine-tenths of the time in the past decade. The yield on inflation-protected Treasuries is still around zero. That is higher than it was during most of the pandemic, but barely above its level during the deflationary wobble in 2016. In the period since 2012, real yields have been higher about two-thirds of the time.

The situation in the euro zone is even more extreme. The real yields on long-dated government bonds are far lower than they were during the height of the deflationary panic. A German inflation-linked bond maturing in 2046 now offers a yield of -1.6%, compared with -0.8% in mid-2016. A modest increase in expectations for interest rates has been swamped by the bigger jump in expected inflation.

What does this change in regime mean for conventional portfolios, which are balanced between equities and bonds? When nominal yields on newly purchased bonds were tumbling and inflation was low, investors at least saw the benefit of capital gains on their existing holdings (bond prices move inversely to yields). Now bond investors must suffer both negative real returns on newly bought bonds, and a decline in the value of their stock of holdings.

Some assets, such as American high-yield corporate bonds and some emerging-market corporate debt, benefited when investors first searched for yield. The recent change in financial conditions complicates the outlook for them. High-yield bonds, for example, are more likely to offer positive real yields. But rising interest rates and the higher possibility of recession make those assets riskier, too. Some emerging-market bonds may gain favour: China is one of the few countries where short-term real interest rates are positive; Brazil, Mexico and South Korea issue inflation-linked debt with yields in positive territory. But hedging against currency risk could eat up the entire return.

Equity in both public and private markets, and underlying assets where returns have some sort of link to nominal economic growth, rather than to interest rates alone, may be more attractive. Assets that carry some pricing power—such as rental property, and commodity and infrastructure investments—are also likely to be favoured.

Even as nominal bond yields undergo their most dramatic rises in a generation, the picture for real yields will remain familiar to investors acquainted with the pressures of the past decade. Unless the world's big central banks become drastically more hawkish about inflation, and engineer an economic recession—much as Paul Volcker, then the Federal Reserve's chairman, did in the 1980s—the scramble for real income could prove to be a decisive force in markets.

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Free exchange

Does high inflation matter?

Economists and the public have very different views on the question

Apr 23rd 2022

IT STARTED IN America, but the surge in inflation has spread to the rest of the rich world. Consumer prices across the OECD club of mostly rich countries are rising by 7.7%, year on year, the fastest pace of increase in at least three decades. In the Netherlands, inflation is nearing 10%, even higher than in America, while in Estonia it is over 15%. How forcefully should central banks respond to the inflationary surge? The answer depends on how much damage inflation is causing. And that depends on whom you ask.

Inflation is regarded as costly because it erodes people's savings and distorts price signals. And there are unquestionably instances when it has brought an economy to its knees. During Weimar Germany's period of hyperinflation in the 1920s people's savings evaporated, eliminating the middle class and paving the way for the rise of fascism. Inflation also spiralled out of control in Zimbabwe under Robert Mugabe. As price signals broke down, millions went without food.

But in more moderate inflationary episodes, such as the current one, the evidence for economic carnage is weaker. One common worry is that increases in prices outpace rises in wages, causing people's real incomes to decline. This has almost certainly been happening across rich countries in recent months. American real hourly earnings fell by nearly 3% in the year to March.

On the whole, though, economists see a tenuous connection between inflation and workers' real living standards. Sometimes prices rise faster than wages; sometimes they do not. British real wages grew strongly during the inflationary era of the 1970s. According to a study published in 1975, American workers, whether unionised or not, had seen inflation-busting pay rises in the preceding decade. *The Economist* has looked at data for 35 OECD countries going as far back as 1990. In years when inflation exceeded 5%, we find, real wages rose on average. Inflation can also help the unemployed find jobs, even as it hurts people already in work. After the global financial crisis of 2007-09 sterling depreciated, lifting inflation in Britain and reducing real wages. Companies could then afford to hire more workers.

The notion that inflation messes with price signals, another putative economic cost, is also exaggerated at moderate levels. Capitalism allocates resources via movements in relative prices: if the price of cars rises compared with that for bicycles, more cars should eventually be produced. The worry is that inflation disrupts this process, making it harder to discern the "true" relative prices of cars and bicycles.

In a paper published in 2018, however, Emi Nakamura of the University of California, Berkeley, and colleagues examine price dispersion for the same sorts of products over time. Looking at the period of high inflation in the 1970s, they find "no evidence that prices deviated more from their optimal level" than just before the pandemic, when inflation was far lower. The "strong conclusions about [the] optimality of low inflation rates [in this regard] need to be reassessed", they conclude.

Sophisticated papers such as these back up a broader body of work, going back decades, that questions the link between inflation and growth. A paper published by the IMF in 2014 noted that "few empirical studies have even tried to find costs of single-digit inflation.” In 1996 Michael Bruno and William Easterly, then both of the World Bank, found “no evidence of any relationship between inflation and growth at annual inflation rates less than 40%”. The next year Paul Krugman wrote that “even though inflation is universally regarded as a terrible scourge, efforts to measure its costs come up with embarrassingly small numbers.”

So does the rich world’s current bout of inflation have minimal costs, or even none at all? The trouble for economists is that there is a world outside their research. Few people know or care about their results. But they know what they think about inflation: they utterly, implacably loathe it.

Inflation seems to hold a special place in the public consciousness. Our analysis of English-language newspapers and blog posts suggests that during the 2010s media organisations mentioned inflation 50% more frequently than they mentioned unemployment, even though joblessness during that decade was a far bigger economic problem. In the 1990s Robert Shiller of Yale University asked people in a number of countries about their opinions on inflation, and compared them with the views of economists. He found that ordinary people held much more extreme views on the subject than the academics who study it for a living.

People believe that inflation makes them poorer. They worry it makes it harder to plan. And they believe that inflation is a sign that unscrupulous companies are taking advantage of them (two-thirds of Americans ascribe the recent rise in inflation to corporate greed). Economists, by contrast, are more equivocal in their answers. More than half of Americans “fully agreed” that preventing high inflation was as important as stopping drug abuse or maintaining educational standards, compared with just 18% of economists. In the same survey Mr Shiller found that 46% of people wanted the government to lower the price level after an inflation spike (ie, to engineer deflation), something few economists would recommend.

Get real

Perhaps policymakers should just ignore the views of ordinary people. If experts find that inflation has surprisingly low costs, then what more information is needed to guide policy? Another way of looking at it, however, is that the psychological costs of high inflation are real, and that central bankers and governments should take them into account. Fighting inflation by forcefully tightening fiscal or monetary policy is often seen as a hard-nosed choice because it cools the economy and risks provoking a recession. In fact it is one of the most populist policies out there. ■

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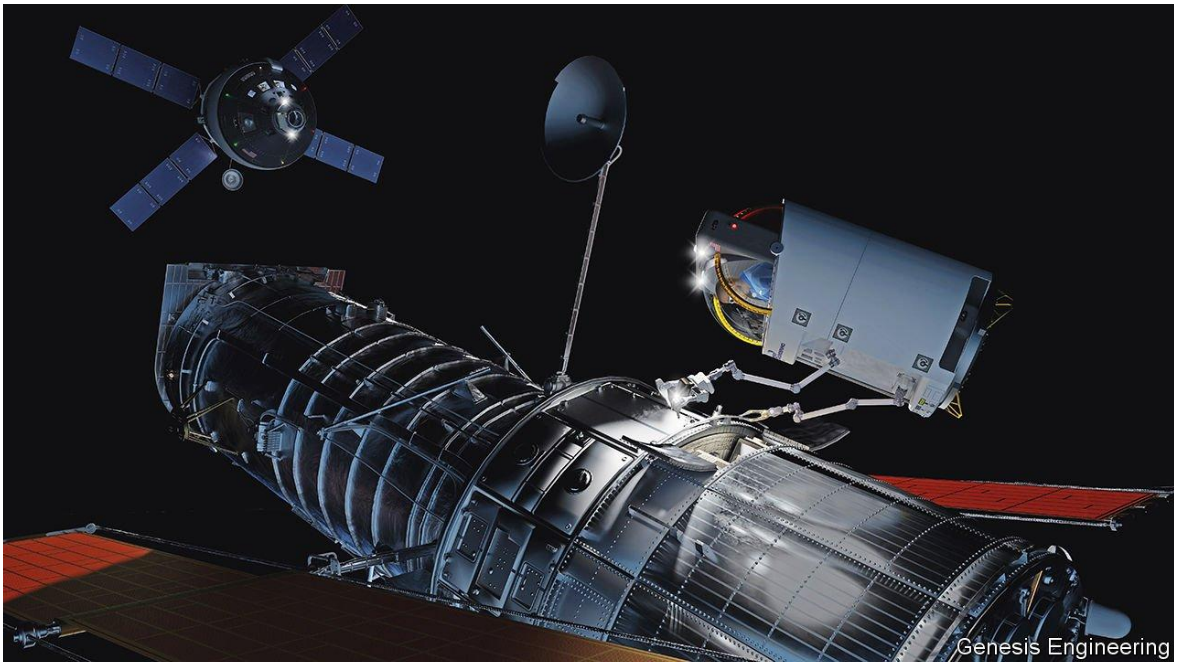
Human space flight

Spacesuits are showing their age

Astronauts' wardrobes are in need of a makeover

Apr 23rd 2022



FIXING PANELS on the International Space Station (ISS) is a bit like doing car repairs while wearing stiff oven gloves and standing on a skateboard. That, at least, is the way Kate Rubins, an astronaut at NASA, America's space agency, describes it. And she has spent 300 days orbiting Earth on board the station, so she should know.

Today's bulky spacesuits weigh (or, for pedants, have a mass that is) nearly a third more than those sported by the Apollo astronauts who walked on the Moon in the 1960s and 1970s. To complicate matters further, the free fall of orbit lacks the dampening effects on Newton's first and third laws of motion (things move for ever unless acted on by a force, and every action results in an equal and opposite reaction) which are offered by the Moon's gravitational field and solid surface. Spacewalkers must therefore think far more carefully about the consequences of their actions than Moonwalkers need to.

Add in the fact that most systems in spacesuits used today were designed in the early 1980s, giving plenty of time for their flaws to become apparent (in 2013, for example, an Italian astronaut on the ISS nearly drowned when more than a litre of cooling water pooled inside his helmet). Add further that NASA hopes to return astronauts to the Moon at some point in the 2020s and it is clear the time has come for an upgrade. NASA has a long list of features it would like to modify or add. But Chris Hansen, head of extravehicular activity at the agency, says the immediate objective is to develop suits that permit far more body movement than the rigid ones which, as he puts it, had Apollo Moonwalkers “hopping around like bunnies and falling over”.

Tailoring away

NASA’s quest for new suit designs has not, however, gone well. In August 2021 Paul Martin, its inspector-general, concluded that 14 years and $420m had been spent for meagre results. Mr Martin also said that despite NASA’s intention to double that sum over the following few years, it would still not produce spacesuits in time for a Moon landing that was then planned for 2024 (and now delayed to 2025). So, learning yet again a lesson that it really ought to have taken on board by now, the agency is farming out suit design to the private sector. The idea is to come up with something that can be adapted for use both in orbit and on the lunar surface. The winner will be announced next month.

As Dr Hansen’s remarks foreshadow, an important criterion of success in this competition will be a spacesuit’s flexibility. One contender is Astro, a suit proposed jointly by three firms: Collins Aerospace, of Charlotte, North Carolina; ILC Dover, of Newark, Delaware; and Oceaneering, of Houston, Texas. Astro makes extensive use of Vectran, a synthetic fibre tougher than the Kevlar employed in bulletproof garments. This is made using a liquid-crystal polymer that confers both strength and the necessary flexibility.

Wearers of such a suit should be able to reach up and bend down, gestures that would be impossible in today’s spacesuits. According to Dan Burbank, a former astronaut who helped assemble the ISS in orbit and who is now a technologist at Collins, they could even perform press-ups, at least when gravitationally bound to the surface of the Earth.

A version of Astro designed for Moonwalks would allow treks of perhaps 10km, a distance that dwarfs those managed by Apollo astronauts. This lunar hiking kit would be fitted with special boots and a "breadcrumb-trail" display on its face shield to show the occupant where he or she had been—and thus, crucially, how to get back home.

For spacewalks in Earth orbit, however, some people question the need for suits at all. Instead, they propose miniature spacecraft fitted with thrusters and robotic arms. Genesis Engineering Solutions, a firm in Maryland, is going down this route with what it calls the Single-Person Spacecraft (SPS). The thrusters use compressed nitrogen—though, in an emergency, they could also tap into the craft's air tanks. The arms were originally designed for defusing bombs, making them far more dexterous than an astronaut's gloved hand; they can be controlled either by the spacewalker or by a remote operator. If all goes well the SPS will be used on Orbital Reef, a commercial space station being built by firms including Blue Origin and Sierra Space, and scheduled for launch in the late 2020s.

The SPS, Genesis believes, offers several advantages over conventional spacesuits. For one thing, no airlock is needed to permit entry to and exit from a space station. Instead, the craft docks directly with the station, so the two share their air until the hatches between them are closed. That means a pilot can shimmy in and out of an SPS with little fuss. In contrast, for a suited spacewalker to leave and return to the mothership requires an airlock to be pumped down for exit and then pumped up for re-entry. Given that pumping down is never completely efficient, this inevitably leaks part of a station's air supply.

Another key difference is that a spacecraft can operate at atmospheric pressure. Pressurising a suit to this extent, however, increases its rigidity, making its gloves in particular so stiff as to be useless for manual tasks. The pressure inside a spacesuit is therefore normally held at about one-third of an atmosphere. But this would not deliver enough oxygen for an astronaut to breathe if standard air were used. So pure oxygen is employed instead.

One consequence of that pressure drop is a risk of decompression sickness, in which nitrogen gas emerges from the bloodstream in painful and dangerous bubbles. So before suiting up spacewalkers must undergo a so-called pre-breathe of pure oxygen to purge the blood of nitrogen. A pure-oxygen atmosphere is also a fire hazard. That is not a theoretical risk. Three Apollo astronauts were killed by fire in a ground test in 1967 because their capsule contained such an atmosphere.

Spacesuits bring a third safety hazard, too, according to Brand Griffin, who leads the SPS effort at Genesis. He says that the shielding on an SPS provides protection against fast-moving debris and micro meteoroids that would puncture a suit. Were this to happen, the vacuum of space would cause the astronaut's body fluids to vaporise. And yet another advantage of a spacecraft is that, if a pilot were somehow incapacitated, its thrusters could be remotely controlled and docked with the mothership more easily than a spacewalker could be hauled back into an airlock.

The downside to miniature spacecraft is price. An SPS will, according to Genesis, cost nearly \$70m—around four times the price of a spacesuit. But lower running costs may compensate for such upfront expenditure. With tasks including adjusting a suit to the astronaut who will wear it (for they are not bespoke items), donning and doffing it, and sterilising its interior after use, a single spacewalk requires about 63 hours of labour on board the ISS, not counting the excursion itself. For an inkling of the expense involved in this, consider that the charge-out rate for a NASA astronaut's services on the ISS is \$130,000 an hour. Blue Origin, the moving spirit behind Orbital Reef, reckons that, once such costs are factored in, an SPS will end up being the cheaper option.

Suited spacewalks are, in any case, so dangerous that NASA is discouraging the operators of planned commercial space stations like Orbital Reef from engaging in them. As for space tourists, extravehicular outings have always been out of the question, no matter how dazzling the experience would be. The SPS will change that, says Brent Sherwood, Blue Origin's head of advanced development programmes. He foresees "tourist-proof", automated excursions as part of package holidays in space.

Haute couture

Even if it works as intended, though, the SPS will not end the need for spacesuits. Gateway, a lunar-orbiting international space station, the assembly of which is planned to start sometime after November 2024, has been designed for outings from it to happen in suits, not single-astronaut spaceships. Orbital Reef will, for its part (and despite NASA's scepticism), support suited spacewalks as well as the SPS. That system, after all, has yet to prove itself.

Moreover, spacesuit technologists have other ideas up their sleeves. ILC Dover, for example, plans to simplify suited spacewalking by delivering life support via an umbilical cord. This would limit mobility but cut costs sharply, says Dan Klopp, head of business development at the firm. "Suitports" are also promising. With these, an astronaut would climb into the back of a spacesuit attached to the outside of a vehicle. After the spacesuit and vehicle had been sealed, the suit could be detached with no airlock required, as with the SPS.

Hovering over all of this, it should be acknowledged, is the question of whether spacewalks and Moonwalks by people actually achieve anything that robots (either remotely controlled or fully autonomous) cannot. To ask that, though, is to challenge the whole reason for crewed space flight. And that would never do, would it? ■

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Launch break

America is ending anti-satellite missile tests

No one wants Kessler syndrome. But will other countries to follow suit?

Apr 23rd 2022

"SIMPLY PUT, these tests are dangerous, and we will not conduct them." So said Kamala Harris, America's vice-president, in a speech on April 18th at Vandenberg Air Force Base in California. Ms Harris was announcing an American ban on full-fledged testing of "direct-ascent anti-satellite missiles"—ground-launched weapons designed to blow up satellites in orbit.

Four countries—America, China, India and Russia—have conducted such tests, most recently Russia in November last year. The danger Ms Harris fears is not so much the weapons themselves, but the mess they create. Space is already full of junk: empty rocket stages, flecks of paint, nuts and bolts, toothbrushes dropped by careless astronauts and the like. It can stay aloft for decades. At orbital speeds, even small items can cause damage. The International Space Station (ISS) has to dodge bits of junk roughly once a year. In June 2021 debris punched a jagged hole in one of its robotic arms.

Anti-satellite missiles, designed to blow satellites to smithereens, make the problem far worse. A typical test might generate over 100,000 pieces of debris, says Marlon Sorge at the Aerospace Corporation, a non-profit organisation based in California. Ms Harris noted that after a Chinese test conducted in 2007, more than 2,500 chunks of debris big enough to track remain in orbit. There will be an unknown but much larger number of smaller bits.

Meanwhile the number of satellites in orbit is rising fast. SpaceX, an American firm, has permission to launch around 12,000 satellites for its Starlink orbital-internet service, more than have been launched since the Space Age began in 1957. Others firms such as Planet and Maxar, which provide orbital imagery, run fleets of their own. Armies rely on satellites for communication, weather forecasting and even to provide early warning in the event of a nuclear attack.

In the worst case, a combination of more clutter and more things to hit could begin a slow-motion chain reaction, in which each collision produces more debris, making future collisions more likely. This Kessler syndrome—named after the NASA scientist who first modelled the phenomenon in 1978—could leave important orbits unusable for decades.

Since that would be bad for everyone, Ms Harris hopes that other countries might copy America's policy. Perhaps. The timing of the initiative is inauspicious, to put it mildly. Alongside $2.5bn in weapons shipments, America is thought to be supplying intelligence, including from satellites, to Ukraine's army, to help that country fight Russia's invasion. Russian officials have complained about SpaceX's shipments of satellite terminals to Ukraine's armed forces.

And although space debris is bad for everyone, it is worse for some than others. More than half of all active satellites are American, meaning that other countries would have less to lose if parts of Earth's orbit became too dangerous to use.

But there are reasons for optimism, too. America's self-imposed ban is only on "destructive" missile tests, so nations that followed suit would not have to give up their orbital weaponry entirely. Other methods of disabling satellites are being investigated, from blinding or jamming them to grabbing them with other satellites. And, says Robin Dickey, another analyst at the

Aerospace Corporation, Ms Harris's speech seems to be focused more on building "norms of responsible behaviour" than formal arms-control agreements—leaving other countries free to adopt bans without international pressure.

Such norms, it would seem, already have power. Countries that conduct anti-satellite tests are tellingly defensive about them. America justified one in 2008 on the dubious grounds that the targeted satellite, which was out of control, contained hundreds of kilograms of hazardous rocket fuel. After an Indian test in 2019, the country's foreign ministry claimed that, by deliberately choosing a target in a relatively low orbit, the resulting debris would "decay and fall back onto the Earth within weeks". The battle, in other words, may be half-won already. ■

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Light entertainment

Why 15,000-year-old art might have been displayed in firelight

Markings on prehistoric art hint at an early attempt at animation

Apr 23rd 2022

THE BRITISH MUSEUM has in its care more than 8m artefacts. Visitors can see a mere 80,000 of them or so on display at any one time. Partly that is a blunt matter of space and variety. Few museums can display all they have and many cycle through their collections to give visitors new experiences on successive visits. But it is also about context. Curators have plenty of prehistoric objects in the basement that they know to be significant and interesting, even if they do not know what those objects were for.

Artefacts are dug up over the course of centuries by teams with varying skills or commitment to book-keeping. Objects end up in archives, entirely shorn of their context. For finds whose purpose or beauty is not readily apparent, or for those that do not fit neatly into an archaeological tale that explains that purpose, eternal repose in the basement is likely.

That is why results from Andy Needham and colleagues at the University of York and the University of Durham, published this week in the journal PLOS ONE, may prove to be so valuable. The team believes, tentatively, that it has discovered evidence of a fireside art gallery from 15,000 years ago.

They started by hauling up 54 carvings that had languished for decades in the British Museum's vaults. First excavated in the 1860s at Montastruc in France, near Toulouse, these "plaquettes"—flat, mostly limestone slabs about the size of a postcard—were made by the Magdalenian people. This seemingly art-minded culture spread throughout western Europe between roughly 23,000 and 14,000 years ago. The Montastruc slabs feature carved depictions of then-common local wildlife, such as the ibex and cattle-like aurochs.

While cataloguing the plaquettes' appearance, Dr Needham was struck by how many of them had pink edges. This "rubefaction" occurs when iron impurities within limestone begin to oxidise; it happens at temperatures of around 200°C, approximately the heat felt at the edge of a wood fire. Much hotter than that, and the material would turn grey.

The pinkness suggested a few possibilities. Perhaps the plaquettes had ended up buried and later fires had burned above them. Or they might have outlived their aesthetic appeal and experienced second lives as cooking stones. Or, more intriguingly, perhaps they were deliberately set near to fires for purely cultural reasons. That thought would be interesting enough to chew over, but the researchers have gone one hypothesis further: that the fire was more than mere illumination and its flickerings acted to provide a primitive animation to the plaquettes' carvings.

That idea is reminiscent of findings at Chauvet cave, a site from more than 30,000 years ago deeper in south-east France. The limestone walls there host perhaps the most stunning cave paintings of animals in existence. That the beasts were painted one over another, some with as many as eight legs, suggests humanity's early artistic attempts at depicting motion. Those walls also show signs of rubefaction.

Trial by...what else?

It was then time for the team to get their hands dirty. They fashioned their own sets of limestone plaquettes, burying some beneath fires, using others as cooking stones and illuminating some with nearby firelight. What created the best match to patterns on the museum artefacts was placing the replicas around a fire.

Suppose the purpose was a fireside art gallery. What, the team wondered, might those prehistoric people have seen among the carvings? Subjecting the British Museum's treasures to the rigours of flame-based experimentation would not do, so the team took to their computers. They made a simulation of a hearth as would have been constructed by the Magdalenians, set light to a virtual fire and then subjected precise, 3D models of the plaquettes to the resulting light. The results were strikingly vivid, even from artefacts whose initial brilliant-white carvings had long since faded. "This might have been a very powerful, visceral experience, seeing animals jump off the rock," Dr Needham says.

That is informed guesswork. The meticulous and multidisciplinary methods of the new work are worthy of praise, says Gilles Tosello, a member of the scientific team that has studied the Chauvet caves. So, too, is the attempt to bring new context to old objects—especially, Dr Tosello says, objects obtained from a 19th-century dig that was excavated using what would now be seen as primitive methods. But he is cautious about guessing what people long ago would have seen, or sought.

Yet this is what archaeologists and curators must do: attempt to fill in the blanks when no new data are expected to roll in. Dr Needham hopes that similar techniques could be applied to finds from other sites, perhaps shedding more light, as it were, on past cultures—and rescuing a few more overlooked artefacts from the basements of museums. ■

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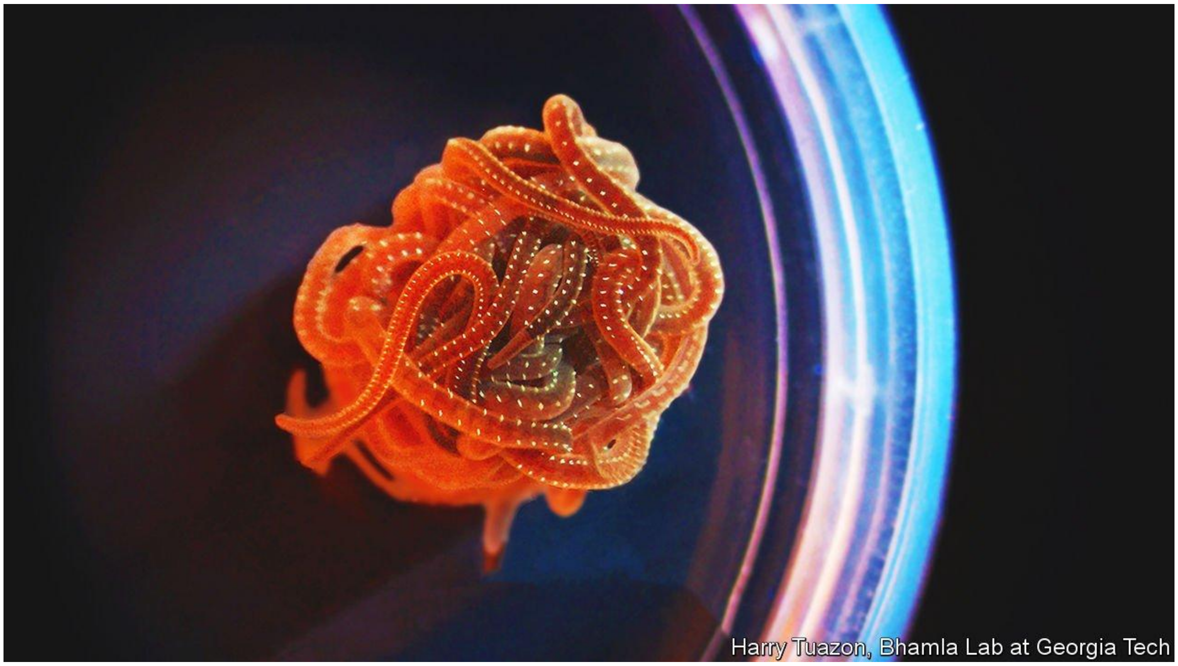
Twists and turns

How balls of blackworms avoid the knotty step

Thousands of them can disperse in thousandths of a second

Apr 23rd 2022



MANY ANIMALS find safety in herds, colonies, schools or swarms. But few species opt for the technique of the stringy, water-dwelling blackworm *Lumbriculus variegatus*, a creature that at a few centimetres in length is far longer than it is wide. In trying times, for instance when water is scarce, tens of thousands of them can swiftly wriggle together into a tangled ball, to seek a wetter environment and save from desiccation all but the poor creatures on the blob's periphery. How they escape that situation, however, had until recently been a mystery both to biologists and to anyone who knows about knots.

Saad Bhamla, a professor of bioengineering at the Georgia Institute of Technology, has made his career investigating such unusual talents. He was first intrigued by the motion of these blackworm blobs. But another behaviour was even more beguiling. If the blob is spooked in some way, for example by a bright flash of light, it dissolves back into its thousands of constituents in mere thousandths of a second. Dr Bhamla was perplexed: how do they manage not to knot?

He came across research by Jorn Dunkel and Vishal Patil, two mathematicians both then at the Massachusetts Institute of Technology who had turned their attention to knots (the abstraction of which turns out to be rich pickings for the mathematically minded). He put the conundrum to them, and a truly interdisciplinary team was assembled.

The trio first had to work out what was going on in the midst of a blackworm super organism. So they froze one solid and scanned it with ultrasound. An analysis of the scans revealed that each worm was tangled up with, on average, 1.7 others. The quick-release dissolution of a blob, then, required each worm only to free itself from a couple of neighbours. But then plenty more knotting opportunities arose as thousands more made a break for freedom.

To analyse that, the team had to consider how the worms get around in the first place, and that is where Dr Bhamla's expertise came in. He knew that blackworms tend to weave left and right when searching for food but that, when alarmed, they snap into a corkscrew shape and spiral away at speed—occasionally switching the corkscrew motion of their bodies from clockwise to anti-clockwise and back.

Dr Patil, who is now based at Stanford University and who presented the team's preliminary results at a recent meeting of the American Physical Society, discovered that this technique may be what saves the worms from repeated entanglement. He created a computer model of the balls, complete with the physical particulars of the worms' bodies. The resulting simulation revealed that they would struggle to get out by making a beeline for the exit, or by weaving left and right. What worked best for a speedy escape was not just a corkscrew motion but one that periodically changed between clockwise and anti-clockwise directions.

Dr Bhamla says this kind of finding may be of use in the field of so-called soft-active matter—the study of collective action by a great many self-propelled individuals (biological or mechanical) acting independently. Never mind all that: what is certain is that he is delighted to have unravelled a knotty problem. ■

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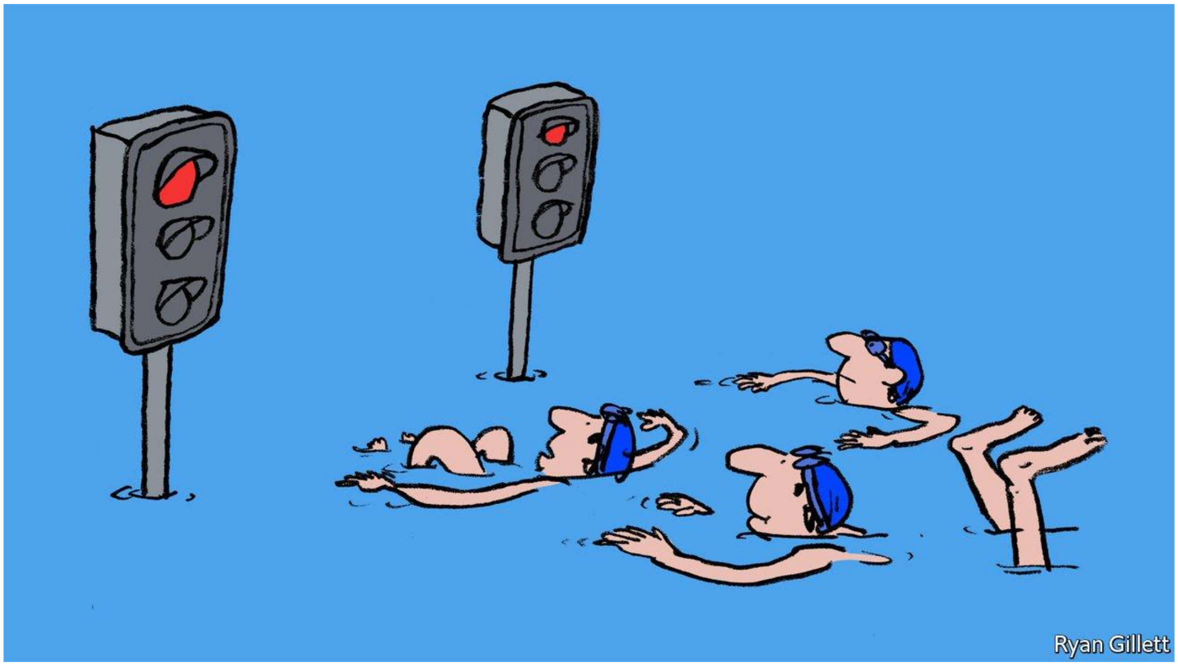
Out, dammed spot

A sound way towards reversible vasectomies

Researchers test a means to block—and neatly unblock—men's reproductive ductwork

Apr 23rd 2022



THE MOST reliable means of contraception for men—and one that cannot fail or be forgone in the heat of the moment—is a vasectomy. But the procedure is largely irreversible: it involves stopping the flow of sperm from the testes by cutting conduits known as the *vas deferens* and sealing them or tying them off. A reconnection, after a reconsideration, is no small task.

Researchers are now examining a different tack: blocking the *vas deferens* using compounds that combine to form a barrier that can later be removed. Lab trials have involved four separate injections to establish a sperm-proof barrier, which could later be dissolved using a blast of focused, infrared light.

Aware that repeated injections into the penis might affect men's willingness to undergo such a procedure, Wanhai Xu, a urologist at Harbin Medical University in China, and colleagues propose a different idea: a barrier that can be put in place with one injection and broken down with ultrasound.

Dr Xu's recipe includes three parts, principally a polymer known as a hydrogel that thickens inside the body and is already approved for medical use. Crucially, in that gel were plenty of thioketals, compounds that fall apart when exposed to reactive, oxygen-containing molecules, plus just a sprinkle of titanium dioxide—an inert material that, when exposed to ultrasound, releases just those molecules.

To check their work, Dr Xu's team employed a few dozen male rats. Some were given a traditional vasectomy, others an injection of the new material and the rest injected with saline, as a control. Each was then permitted to follow its essential nature with four females. Only those rats given the saline sired offspring.

The real test, as the team reports in ACS *Nano*, a nanotechnology journal, came next: half the rats given the new treatment were exposed to a blast of ultrasound. That evidently dissolved the hydrogel in the creatures' pipes: they could again reproduce, while those not thusly blasted stayed sterile.

What works in rats, alas, does not always work in humans, so further trials will be needed. But Dr Xu is hopeful that these findings represent a sound idea for a reversible contraceptive—with fewer sticking points.

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Culture

Wanghong art

Social media are changing the way art is seen and presented

The marriage of art and apps is especially conspicuous in China

Apr 23rd 2022 | BEIJING

ON A WINTRY weekend, young couples wander through “ LOVELOVELOVE”, an exhibition at the Today Art Museum in Beijing. Some of the items on display are tenuously related to the theme, but the visitors seem not to mind, intent as they are on snapping a striking selfie amid the mirrors and neon lights. A young woman poses on a white staircase, peeking over her shoulder at her friend’s camera.

Elsewhere in the museum “Bord de Mer”, a film by Agnès Varda, a late French director, plays on a loop. The floor of the gallery has been covered in sand; deckchairs are set up in front of a screen showing gently lapping waves. Viewers discuss the best angle for a picture. Each has around ten seconds to rush into a chair, simulate a relaxing beach scene and get out of the way. Experiencing love, or Varda’s sea view, seems less important than showing others that you have experienced it.

Galleries across the world are attracting snap-happy youngsters eager to impress their online followers. Immersive exhibitions of the art of Yayoi Kusama and Vincent van Gogh have drawn camera-wielding crowds from Melbourne to New York. But in China the marriage of art and social media is especially conspicuous. The country's private museums have long been subject to oversight by local bureaucrats. Increasingly, however, curators are as beholden to the whims of online taste makers and fads as they are to the censors. Old assumptions about power in the art world are being overturned. More and more it is the crowd, not the experts, who determine the status of artworks.

Young at art

The word *wanghong* roughly means "viral" or "internet famous", with a hint of tackiness. As a noun, it can refer to China's social-media influencers, otherwise known as "key opinion leaders" (KOLs). As an adjective, it describes hotspots to which young Chinese flock to take selfies, urging their followers to " *da ka*", or check in, at the same place: the phrase basically means "been there, done that", says Cathy Cao, a 22-year-old KOL. "It validates that you are on the trend and that you aren't left behind." The *wanghong* location might be a café, a tree—or, quite often, an art gallery.

The *wanghong* effect can be mutually beneficial. Reliant on ticket sales as they are, many private art museums welcome it. Galleries often hike their prices in anticipation of *wanghong*-inspired demand. Philip Tinari, director of the UCCA Centre for Contemporary Art in Beijing, says his institution "has evolved to embrace" KOLs, who are invited to private views. A partnership with Douyin—the inside-China version of TikTok—means UCCA's shows are promoted to its 600m daily users.

As marketing, it works. Mr Tinari says UCCA has seen a boost in visitor numbers since it began thinking hard about social media. A recent exhibition on Maurizio Cattelan, an Italian artist, was crammed with *wanghong* devotees, thanks to a promotional push that included social-media competitions, KOLs and Chinese pop idols. Search for the show on Xiaohongshu, a photo-sharing app, and you find posts advising visitors to sport dark colours to complement its neutral palette. In their pictures they lie languidly beside a stuffed horse, a sign reading " INRI" (the Latin abbreviation for “Jesus of Nazareth, the King of the Jews”) jutting out of its flank.

Much more than in Western galleries, these visitors tend to be young—and, says Mr Tinari, they “don’t have this accumulated austerity” in their approach to art. Many private contemporary-art galleries and museums in China are young too, and attitudes in and towards them are different; the Western etiquette of hushed tones and awed deference is absent. Although many visitors want to explore and learn, these are also places to hang out and have fun.

These technological and demographic shifts are opening up old debates about the role and value of art. What is it for, diversion or edification—and who has the authority to say? For centuries, museums, curators and collectors have judged what is enduring and what is schlock. They sought to interpret the intentions, influences and contexts of each piece. On social media, that hierarchy is upended and scholarly exposition discarded. Here, says Mr Tinari, “everyone has a perspective, and that perspective has some degree of validity.”

Some internet celebrities seem to care about art for art’s sake. Ms Cao’s feed on Weibo, a microblogging service on which she has over 267,000 fans, is a mix of museum selfies and photos of the works. She does not post lengthy captions about the artists or canvases, but strives to “take pictures that can really show the glamour and the beauty of the artwork”, and to dress in “harmony” with the exhibits. But detractors of the *wanghong* trend argue that paintings and sculptures are being relegated to a mere backdrop for marketing. The art itself is receding from view.

Concern, or snobbery, about seriousness and expertise is not the only objection to the rise of *wanghong* art. Curators dislike it when KOLs paid to promote clothing or perfumes stage photoshoots in their museums. A few are discouraging the practice, banning visitors from taking pictures with people in them, or asking KOLs to delete them when they do.

But dissenters are in a shrinking minority. Mr Tinari says shows that prioritise photo opportunities are being put on “all over the place” (though not by UCCA, he insists). The curators of an exhibition of Man Ray’s photography at the M Woods museum in Beijing installed artificial grass and a tree as aids to posing. The Fosun Foundation in Shanghai posted an article on WeChat, another app, encouraging visitors to exploit the interplay of light and shadow in certain rooms. The Museum of Art Pudong, also in Shanghai, has publicised the top selfie spots in and around the building.

In China and beyond, apps with hundreds of millions of users will increasingly shape the ways visual art is displayed and consumed—and ultimately, because artists want their work to be seen and bought, how it is created. When Ms Cao promoted an exhibition of Raphael's work in Beijing, the vast majority of comments remarked on her appearance rather than the art. Piggybacking on her post, the organisers promised that visitors to the show "may come across beautiful people like her". ■

Centennial tributes

The comic genius of Kingsley Amis

In his life and writing, the author of "Lucky Jim" relied on his friends

Apr 23rd 2022

HIS BIGGEST fear was loneliness. Kingsley Amis could sit in his study all day, with just his flamboyant characters for company, but when the sun set he collapsed into panic if he was alone. The solution? Parties, lovers, dinners. His was a life of constant company, punctuated by hard work. This routine began early. As an only child, he took up writing as a form of "self-entertainment". The two states, writing and socialising, were linked. It was his affability that made Amis, born in London 100 years ago this month, the greatest comic novelist of his generation.

His oeuvre is varied. He excelled in many forms—campus novels to murder mysteries, grammar guides to historical counterfactuals. (What if the Reformation hadn't happened? Answer: Luther would have become the pope.) Nearly all his more than 30 books are laugh-out-loud funny.

Amis's brilliance in print was matched in person. It is sometimes said that writers can afford to be everyday bores—saving the excitement for the typewriter—but Amis thrilled off the page, too. He was a gifted joker, drinker and seducer. The antics in his novels drew on this life of mischief. He couldn't have written the outrageous climax of his debut, "Lucky Jim" (published in 1954), in which the protagonist gives a lecture while drunk, if not for his sprees at Swansea University, his first employer. "Few writers have written as perceptively about bad behaviour as Amis or been as consistently accused of it," notes Zachary Leader in his authorised biography.

Sociability was also key to his commercial success. Though his years as a student at Oxford had disappointments—an unpublished novel and a postgraduate thesis flopped—he gained something more useful: friendship. His most important was with Philip Larkin, already a published novelist and a gifted poet. They exchanged ideas in intimate, jokey correspondence; Larkin advised Amis on his second go at fiction, which would become "Lucky Jim".

Another friend proffered his mother, a publisher, as an early reader. She told Amis to create more conflict and expand the female roles. Casting around for a book deal, Amis called in a favour from a television-producer friend, who organised a reading from the novel on the BBC. The chosen extract—in which Jim burns the bedsheets after drunkenly falling asleep with a lit cigarette, then cuts up the linen to conceal the accident—had viewers in stitches. Within days, editors came calling.

His irreverence was as captivating as his humour. A morally questionable hero, Jim is callous to his girlfriend, exploits his friends and disdains his elders. "She permanently resembled a horse," he thinks of a professor's wife, "he only when he laughed." He did little to hide his inspiration. The fuddy-duddy in the story was recognisably modelled on his father-in-law. It was one of the first novels to tap into the youthful rebelliousness that came to define much of post-war culture in the West.

Amis followed "Lucky Jim" with a string of hits. None eclipsed it, but he settled into the role of a respected (and rich) author. His lifestyle, encompassing American lecture tours and the purchase of a large country house, was extravagant. He left his first wife, Hilly, for Elizabeth Jane Howard, a fellow novelist. He became, perhaps, too comfortable. Drinking took up more of his time. Youthful iconoclasm gave way to blimpish politics that bled into the novels. Amis began hectoring younger talents and calling himself a “senior writer”.

As he approached 60 in the late 1970s, his comforts fell away. Howard moved out with a stinging note: “You are not going to stop drinking and I cannot live with the consequences.” Heartache and a bid to quit smoking made him put on weight. The famous libido evaporated. Evenings became lonely. His son, Martin Amis, by then an established novelist too, set up a “dad-sitting” rota.

He kept writing but told Larkin he found it harder than ever. That lifelong balance between work and play had slipped. Readers found more venom than vim in the new novels. “Jake’s Thing”, a sequel of sorts to “Lucky Jim”, follows an ageing stand-in for Jim who gives up on romance and castigates women. In “Stanley and the Women”, written during the divorce from Howard, Amis and his caricatures were even more bitter. “Kingsley’s novels”, says Martin Amis in his memoir “Experience”, “seemed to me in moral retreat.”

Yet just when he had been written off, he was saved by his friends. He settled into a peculiar new living arrangement: his first wife Hilly moved in (with her new family) as a “sort of companion-housekeeper”. After a rough start, this put an end to “dad-sitting” and revitalised his creativity. Amis wrote a surprising comeback, “The Old Devils”, a charming tale of “piss-artistry” among a group of pensioners. The characters’ bitingly funny reminiscences, and their willingness to forgive past betrayals, hint at the breakfast-table conversation in the reconstructed Amis household. Reviewers raved. When he won the Booker, seeing off Margaret Atwood’s “The Handmaid’s Tale”, no one was more surprised than Amis. “Until just now I had thought the Booker prize a rather trivial, showbizzy caper,” he said in an acceptance speech that brought the house down.

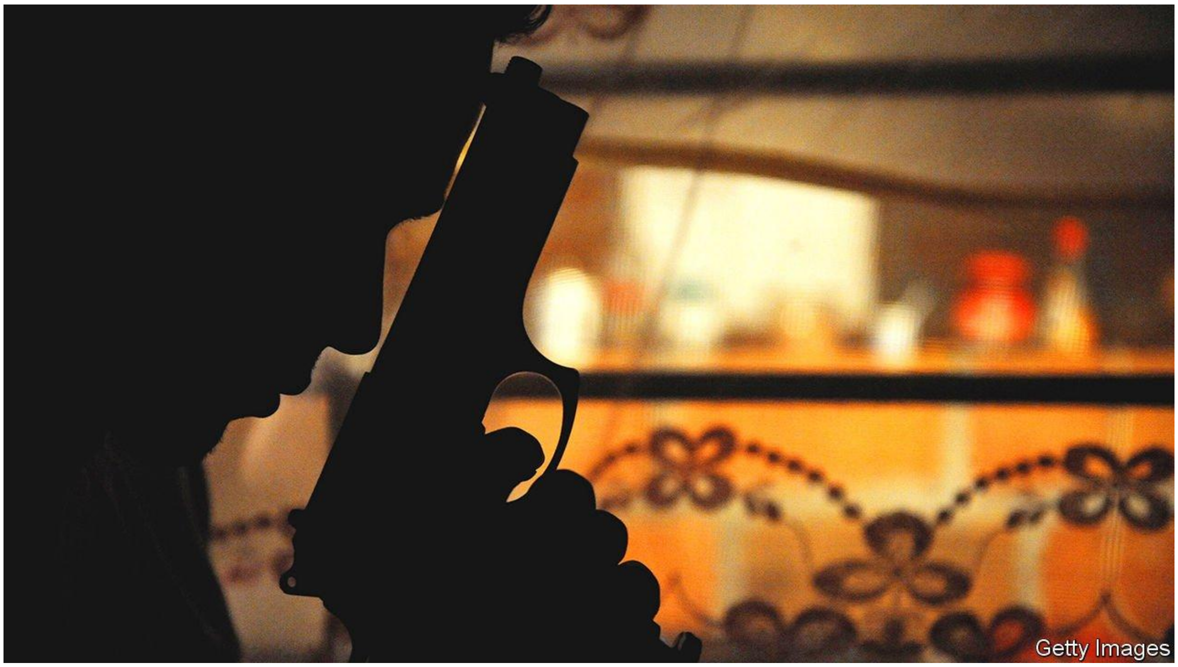
It is not just one-liners for which Amis is remembered. His technique, with its spring-loaded comic sequences tightening over pages and erupting into hilarity, is much imitated. It puts him in the pantheon of England’s funniest writers, stretching from Jane Austen to P.G. Wodehouse. In his happier last years, he wasn’t so fussed about being a “senior writer”. Not long before he died in 1995, he said he would “like to be remembered as somebody who made people laugh”. They are still laughing. ■

The roads to war

“Why We Fight” investigates the origins of war

The high costs make fighting rare, explains Christopher Blattman

Apr 23rd 2022



Why We Fight. By Christopher Blattman. *Viking; 400 pages; $32 and £18.99*

AS WHAT COULD end up as Europe’s bloodiest war since 1945 grinds on, this is an apposite time for a book explaining why and when human beings fight and, at least as importantly, why they do so rarely. A dismal belief holds that people are hard-wired to settle disputes by violent means. Christopher Blattman, a Canadian development economist specialising in the study of conflict, says the opposite is true.

Even people with a reputation for making extreme violence the basis of their business models, such as gang members in Chicago or the leaders of Medellín’s drug *combos*—both of whom the author got to know well—have strong incentives to do deals with rivals, thus avoiding the high costs and uncertainty of fighting. The Colombian *combos* may hate each other, and their bargaining power comes from the barrel of a gun, but it still makes sense to avoid war because it is so destructive and the outcomes are so unpredictable.

As long as both sides have a realistic appreciation of the huge price of fighting, Mr Blattman writes, the rational option is almost always to avoid it. Nuclear weapons have been extraordinarily effective in preventing hot wars between the countries that have them, because mutually assured destruction is the ultimate deterrent. This approach to preventing war works most of the time, but, obviously, not always. Mr Blattman identifies five "logical ways" why, despite all the reasons to compromise, people opt to fight. All five map quite neatly onto the war in Ukraine.

The first is what the author calls "unchecked interests". This is when the interests of rulers differ from those of the ruled—who have no means of influencing their overlords. Vladimir Putin may have invaded Ukraine to stop it turning West and becoming a successful liberal democracy, an example that could undermine his grip on power. Or he may have hoped his legacy would be the recreation of the tsarist empire. Perhaps he did take into consideration the killing and maiming of young Russian soldiers and economic hardship for ordinary people due to the imposition of sanctions. But he did not much care and there was nobody to stop him.

"Intangible incentives" are the second of Mr Blattman's "five logics". People will fight over values and ideas that a realist view of economic self-interest fails to capture. Ukraine's heroic resistance and willingness to absorb suffering arose because its people, like most when given the choice, want to live in a liberal democracy that is free to determine its own destiny.

The author's final reason why wars start is "misperception". Do states and leaders really understand the other side—or even themselves? As well as underestimating Ukraine's sense of national identity, Mr Putin must have been highly confident in the capability of his armed forces to deliver a quick victory. He may also have convinced himself that a decadent and divided West would fail to exact more than a petulant slap on his Patek Philippe-clad wrist.

The second part of the book is full of practical tips for incremental peace-building, partly drawn from previous interventions in places such as Liberia and South Sudan. But it becomes clear that there is no equivalent toolbox for dealing with wars involving great powers—particularly those with bulging nuclear arsenals.

Still, as the bloodshed in Ukraine, and its costs, increase, and both sides become clearer about what they can hope to achieve, a deal of some kind may become possible. Unless, as the author would put it, Mr Putin's "uncheckedness" allows him to continue waging war when there is nothing to fight for except saving his own skin. Mr Blattman has produced a valuable guide, supported by engaging anecdotes, to what makes people turn to violence—and why, mercifully, they are usually too sensible to do so.

Read more of our recent coverage of the [Ukraine crisis]

Home Entertainment

Love and exile in “Letter from an Unknown Woman”

Stefan Zweig’s book, and Max Ophüls’s film, evoke thwarted passion and a lost world

Apr 21st 2022

THE ART conceived in Sigmund Freud’s Vienna has stood the test of time better than some of his debatable theories. For the Austrian writer Stefan Zweig, for instance, Freud—whom Zweig knew and revered—meant not so much a set of clinical doctrines as a climate of feeling.

A century ago, in 1922, Zweig published his novella “Letter from an Unknown Woman”. Drenched in a feverish mood of doom-laden eroticism, it takes the form of a dying woman’s testament sent to the oblivious philanderer “whom I have always loved”. Her obsessive, unrequited passion has consumed a life that the Spanish flu will soon end. Flu has already killed their son, born after the three nights the couple spent together a decade previously.

On one level, this is a fanciful, masochistic melodrama. A woman sacrifices her whole existence to the fantasy version of a forgetful narcissist who "never recognised me", even when the pair sleep together again after an encounter at a louche café. Yet Zweig's grasp of the dynamics of romantic infatuation and its childhood roots—the "unknown woman" falls for her beloved, a writer, as a moonstruck 13-year-old—lent his story a mesmeric allure. Somehow, the woman's narrative turns the tables on her lover. This self-abasing stalker grabs the power to define the meaning of the man's life and so rescue their liaison from "the smoke of oblivion".

A quarter-century later, the book found a matchless interpreter in Max Ophüls. Born in Germany, the director made his name in the 1920s at the Burgtheater in Vienna and put out several German comedy films in the early 1930s. Like Zweig, he was Jewish, and like him Ophüls fled Europe as the Nazi menace intensified. The author and his wife, Lotte, committed suicide in Brazil in 1942. In Hollywood, his fellow-exile Ophüls endured seven lean years before Zweig's tale gave him a chance to shine. Although Ophüls sumptuously recreated the *fin-de-siècle* sensuality of the city both men had lost, his nostalgia had limits. He never felt at home there: "Fate had put me into a wonderfully golden Rococo carriage," he said of Vienna, "but I much rather wanted to ride a motorcycle."

Washed in mysterious twilight tints thanks to Franz Planer's black-and-white cinematography, the film of 1948 showcases the sinuous pans and tracking shots that were Ophüls's hallmark. His ever-roving camera dissolves fixed points of view into a Freudian shadow-play of perspectives and illusions. Howard Koch's screenplay alters plot details: the man (played by Louis Jourdan) becomes a pianist; after her son's birth the woman—a superb Joan Fontaine—marries respectably rather than working as a high-class courtesan. Still, the essence of Zweig's vision endures.

Written in the aftermath of world war and pandemic, gorgeously filmed by central-European exiles in the wake of a second, genocidal conflict, "Letter from an Unknown Woman" shows how the "child's magic realm" of romantic illusion can overshadow, and curse, a life. For later viewers and readers, it conjures another lost, enchanted kingdom too: the bittersweet Vienna of its birth. ■

American lives

Paddle alongside Dick Conant in “Riverman”

Ben McGrath’s book is a tribute to a fully lived life

Apr 23rd 2022

Riverman. By Ben McGrath. *Knopf; 272 pages; $29. Fourth Estate; £22*

AS HE PADDLED the great rivers of America, Dick Conant counted. Numbers lent structure to the endless strokes and days, and staved off boredom. He made a game of reaching key figures—palindromes and years with historical significance (abundant in his encyclopedic memory). Conant also marked dates from his own life. In 1972 he slept on a featherbed in a Bavarian farmhouse. In 1999 he met the love of his life, resigned from his job and set out on a canoe journey.

He cut a rare figure as he travelled on the Missouri, Yellowstone, Ohio and Hudson rivers. A bearded giant of a man, Conant resembled “Santa Claus crossed with a lobster, in overalls”, according to one observer. He sipped Tabasco sauce from the bottle and swapped his boots between his feet for extra wear, like a motorist rotating tyres. A hoarder, he travelled with books, coolers and a mobile phone he didn’t use: nearly enough detritus to sink a

14-foot canoe. Also aboard were the atlases that doubled as journals, in which Conant recorded details of the people he met.

They remembered him, too. As Ben McGrath of the *New Yorker* writes in "Riverman", the impression Conant made is what made his life extraordinary. He was a good listener; after a few hours in his company, people were drawn into life-changing conversations. "How could a stranger have such an effect on me?" wondered a tearful woman who never caught his last name. It was as if "he had all the knowledge in the world", said another. "He cut me right to the heart," said a man who spoke about his ailing father to the kind traveller.

Before 1999 Conant's life meandered like the rivers he came to love. A military brat, he grew up in middle-class comfort and went to university. Yet signs of alcoholism and mental illness flashed. Medical schools turned him down. He spent time roughnecking in the American West and in the navy. Bar fights and a drunk-driving arrest kept him from finding respectability, for all that he was educated and thoughtful. So he took to the water.

Mr McGrath tells Conant's story in an affecting book that calls to mind "Into the Wild" and "Nomadland", two other peripatetic tales. Little distinguished a dull day in the canoe from an exquisite one. Simple pleasures abounded, like the way a slow drift south extended the autumn foliage. Conant knew if he stayed anywhere too long he might seem an awkward vagrant. "He often departed towns abruptly, without proper goodbyes, seizing on the weather as an excuse," writes Mr McGrath. Perhaps he wanted to maintain a bit of mystique. Then again, goodbyes can be hard.

Conant was planning his retirement when the author met him by chance. His final river voyage was to take him from Canada to Florida. But in 2014 he disappeared near North Carolina's border with Virginia; his body has not been found. This gives the story a melancholy air. Yet "Riverman" also brims with the rich possibilities of a fully lived life and expectations exceeded. One fellow voyager who drifted alongside Conant for less than an hour remembered him keenly. He left behind "memories all over the place. We all could be so lucky." ■

Johnson

On the origin of languages

It is tempting to think that they have clear beginnings. They don't

Apr 23rd 2022

IN A CHURCH hewn out of a mountainside, just over a thousand years or so ago, a monk was struggling with a passage in Latin. He did what others like him have done, writing the tricky bits in his own language between the lines of text and at the edges. What makes these marginalia more than marginal is that they are considered the first words ever written in Spanish.

The "Emilian glosses" were written at the monastery of Suso, which was founded by St Aemilianus (Millán, in Spanish) in the La Rioja region of Spain. Known as *la cuna del castellano*, "the cradle of Castilian", it is a UNESCO world heritage site and a great tourist draw. In 1977 Spain celebrated 1,000 years of the Spanish language there.

Everyone loves a superhero origin story. Spanish is now the world's third-biggest language, with over 500m speakers, and it all began with a monk scrawling on his homework. But as with the radioactive bite that put the Spider into Spider-Man, there is more than a little mythmaking going on here.

First, while “Castilian” and “Spanish” are synonymous for most Spanish-speakers, philologists argue that what the anonymous monk wrote is closer to the Aragonese than to the Castilian variety of Romance (the name for the range of dialects that continued their wayward development when Rome retreated from most of Europe after the fifth century AD). In any case, the Suso monk’s scribblings have been pipped by the discovery in nearby Burgos province of writings that may be two centuries older.

Even those are not the origin of Spanish. The very idea treats languages like a person, with a name, birth date and birthplace. But languages are not like an individual. They are much more like a species, gradually diverging from another over many years. It would be as accurate to describe such jottings as degenerate Latin as it is to call them early Spanish—but that would probably not draw as many tourists.

Most accurate would be to call the monk’s prose an intermediate form: words like *sieculos* (centuries) in the text are almost perfectly halfway between Latin’s *saecula* and modern Spanish’s *sieglos*. In its way, the church in which the glosses were written is a mirror of such evolution. It includes arches in Visigothic, Mozarabic (Moorish-influenced) and more recent styles, added as it was expanded. As many visitors to an ancient site find, it can be hard to date buildings in use for centuries. Little of the original remains; all is layers upon layers.

The desire to create heroic origins of languages is an urge to impose order on chaos. Students of other European languages are offered “Beowulf” or “La Chanson de Roland” as the earliest exemplars of English or French, which gives the grand story a comprehensible beginning. But literature, by its nature, requires the language to exist before poems and epics could be written. Imagining that a piece of writing represents the beginning of a language is like thinking the first picture of a baby is the beginning of its life.

A better analogy is that the first written records of a language are like the first fossil traces of a distinct species. But even this should not be mistaken for the moment at which the species emerged. After all, the neat nodes on a palaeobiologist’s tree of life are just simplifications of a messy continuum.

The urge to put dates on the founding of languages seems universal. Google "Basque Europe's oldest language" to see how many people think this language (which evolved gradually from some now-unknown ancestor) is somehow older than Spanish, though Basque has no clear birthday, either. By quite a coincidence, the first known words written in Old Basque—just six of them—also appear in the Emilian glosses, though the site makes much less of this fact. Or to take a more modern example, a book on American English called "The Forgotten Founding Father" aims to give Noah Webster's modest early-19th-century reforms, such as respelling "center", the heroic role humans seem destined to seek in the birth of their cultures.

Legal entities like the United States of America really do have a birth date. But languages do not. American English, Castilian Spanish and all other products of slow, disorderly change do not lend themselves to neat origin stories. Remembering this is a good thing, reminding people of their membership in a common family. The need for stories of a glorious past is part of human nature, too. But like "Beowulf" or "La Chanson de Roland", these are often best seen as literature, not history.

Read more from Johnson, our columnist on language:
As the scale of science expands, so does the language of prefixes *(Apr 9th)*
A guide to renamed cities *(Mar 26th)*
Rules for teaching grammar in schools *(Mar 12th)*

Economic & financial indicators

- **Indicators: Economic data, commodities and markets**

Indicators

Economic data, commodities and markets

Apr 23rd 2022

Economic data

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	Gross domestic product % change on year ago: latest		quarter[*]	2022[†]	Consumer prices % change on year ago: latest		2022[†]	Unemployment rate %	
United States	5.5	Q4	6.9	3.0	8.5	Mar	6.6	3.6	Mar
China	4.8	Q1	5.3	5.5	1.5	Mar	2.0	5.8	Mar[‡§]
Japan	0.4	Q4	4.6	2.8	0.9	Feb	1.7	2.7	Feb
Britain	6.6	Q4	5.2	3.9	7.0	Mar	6.4	3.8	Jan[††]
Canada	3.3	Q4	6.7	3.8	6.7	Mar	5.1	5.3	Mar
Euro area	4.7	Q4	1.2	3.3	7.5	Mar	5.0	6.8	Feb
Austria	5.5	Q4	-2.0	3.2	6.8	Mar	4.0	4.8	Feb
Belgium	5.7	Q4	1.7	3.9	8.3	Mar	4.6	5.6	Feb
France	5.4	Q4	2.9	3.2	4.5	Mar	4.1	7.4	Feb
Germany	1.8	Q4	-1.4	2.5	7.3	Mar	5.3	3.1	Feb
Greece	7.4	Q4	1.7	3.5	8.8	Mar	5.8	11.9	Feb
Italy	6.2	Q4	2.5	3.0	6.5	Mar	6.3	8.5	Feb
Netherlands	6.5	Q4	4.1	2.5	9.7	Mar	9.6	3.4	Feb
Spain	5.5	Q4	9.2	5.4	9.8	Mar	4.5	12.6	Feb
Czech Republic	3.7	Q4	3.2	2.7	12.7	Mar	9.5	2.5	Feb[‡]
Denmark	6.8	Q4	12.5	2.7	5.4	Mar	2.0	2.5	Feb
Norway	5.4	Q4	0.3	3.3	4.5	Mar	3.6	3.2	Jan[‡‡]
Poland	7.6	Q4	7.0	4.2	11.0	Mar	7.9	5.4	Mar[§]
Russia	5.0	Q4	na	-10.0	16.7	Mar	16.0	4.1	Feb[§]
Sweden	5.2	Q4	4.6	3.3	6.0	Mar	3.0	7.9	Feb[§]
Switzerland	3.7	Q4	1.1	2.9	2.4	Mar	1.2	2.2	Mar
Turkey	9.1	Q4	6.2	3.0	61.1	Mar	50.5	11.4	Feb[§]
Australia	4.2	Q4	14.4	3.2	3.5	Q4	4.3	4.0	Mar
Hong Kong	4.8	Q4	0.8	0.8	1.7	Feb	4.5	4.5	Feb[‡‡]
India	5.4	Q4	26.6	7.2	7.0	Mar	5.2	7.6	Mar
Indonesia	5.0	Q4	na	5.2	2.6	Mar	4.2	6.5	Q3[§]
Malaysia	3.6	Q4	na	4.0	2.2	Feb	2.9	4.1	Feb[§]
Pakistan	6.0	2021[**]	na	3.0	12.7	Mar	9.5	6.3	2021
Philippines	7.8	Q4	13.0	6.0	4.0	Mar	4.6	6.4	Q1[§]
Singapore	3.4	Q1	1.4	3.6	4.3	Feb	4.5	2.4	Q4
South Korea	4.1	Q4	5.0	2.7	4.1	Mar	3.2	3.0	Mar[§]
Taiwan	4.9	Q4	7.6	4.5	3.3	Mar	3.8	3.7	Feb
Thailand	1.9	Q4	7.5	2.9	5.7	Mar	5.0	1.5	Dec[§]
Argentina	8.6	Q4	6.3	3.2	55.1	Mar	54.5	7.0	Q4[§]
Brazil	1.6	Q4	2.2	0.3	11.3	Mar	9.5	11.2	Feb[§‡‡]
Chile	12.0	Q4	7.5	3.2	9.4	Mar	7.9	7.5	Feb[§‡‡]
Colombia	10.7	Q4	18.2	4.2	8.5	Mar	7.9	12.9	Feb[§]
Mexico	1.1	Q4	0.1	1.9	7.5	Mar	7.4	3.8	Feb
Peru	3.2	Q4	-12.9	3.1	6.8	Mar	6.5	7.9	Mar[§]
Egypt	9.8	Q3	na	5.1	10.5	Mar	9.7	7.4	Q4[§]
Israel	11.1	Q4	17.8	4.1	3.5	Mar	3.8	3.9	Feb
Saudi Arabia	3.2	2021	na	6.7	2.0	Mar	2.1	6.9	Q4
South Africa	1.7	Q4	4.7	2.1	6.1	Mar	4.8	35.3	Q4[§]

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

The Economist

Economic data

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	Current-account balance % of GDP, 2022[†]	Budget balance % of GDP, 2022[†]	Interest rates 10-yr gov't bonds latest,%		change on year ago, bp	Currency units per $ Apr 20th	% change on year ago
United States	-3.4	-7.5	2.9		127	-	
China	1.8	-5.4	2.6	§§	-36.0	6.42	1.2
Japan	1.1	-5.9	nil		-8.0	128	-15.3
Britain	-3.3	-5.5	1.9		102	0.77	-6.5
Canada	1.3	-3.6	2.8		132	1.25	0.8
Euro area	2.4	-4.3	0.9		112	0.92	-9.8
Austria	1.0	-3.8	1.3		137	0.92	-9.8
Belgium	1.3	-4.7	1.3		132	0.92	-9.8
France	-1.3	-5.5	1.3		134	0.92	-9.8
Germany	5.5	-2.4	0.9		112	0.92	-9.8
Greece	-5.2	-5.1	2.9		194	0.92	-9.8
Italy	2.3	-5.7	2.5		173	0.92	-9.8
Netherlands	5.9	-3.0	-0.2		36.0	0.92	-9.8
Spain	1.4	-5.7	1.7		132	0.92	-9.8
Czech Republic	-1.6	-4.8	4.5		260	22.5	-4.2
Denmark	8.6	nil	1.1		112	6.85	-9.9
Norway	9.2	2.6	1.4		76.0	8.80	-5.3
Poland	-1.0	-4.0	6.1		457	4.27	-11.5
Russia	6.7	-6.5	10.1		278	82.2	-6.7
Sweden	4.3	0.1	1.6		121	9.44	-10.8
Switzerland	5.6	0.5	0.9		111	0.95	-4.2
Turkey	-2.8	-3.9	20.9		340	14.7	-44.8
Australia	2.0	-3.0	3.1		143	1.34	-3.7
Hong Kong	-1.6	-6.9	2.9		162	7.84	-1.0
India	-1.5	-6.5	7.1		104	76.2	-1.7
Indonesia	0.5	-4.8	7.0		55.0	14,354	1.0
Malaysia	2.9	-6.1	4.2		113	4.28	-3.7
Pakistan	-5.8	-6.6	12.0	†††	201	186	-17.7
Philippines	-3.0	-7.7	6.0		209	52.5	-7.9
Singapore	17.5	-0.9	2.6		100	1.36	-2.2
South Korea	2.2	-3.0	3.3		132	1,236	-10.0
Taiwan	13.1	-1.2	1.0		64.0	29.3	-3.9
Thailand	0.1	-4.8	2.6		95.0	33.8	-7.4
Argentina	1.2	-4.3	na		na	114	-18.4
Brazil	-0.9	-7.7	12.2		285	4.62	19.3
Chile	-2.7	-4.5	6.7		315	815	-14.3
Colombia	-4.0	-5.3	9.8		374	3,754	-3.3
Mexico	-0.9	-3.5	8.8		246	20.0	-0.8
Peru	-3.1	-2.6	6.9		215	3.71	-0.8
Egypt	-6.3	-7.0	na		na	18.5	-15.0
Israel	3.4	-2.7	2.4		140	3.22	0.9
Saudi Arabia	17.8	12.1	na		na	3.75	nil
South Africa	-0.9	-6.0	9.9		81.0	15.1	-5.1

Source: Haver Analytics. §§5-year yield. †††Dollar-denominated bonds.

The Economist

Markets

In local currency	Index Apr 20th	% change on: one week	Dec 31st 2021
United States S&P 500	4,459.5	0.3	-6.4
United States NAScomp	13,453.1	-1.4	-14.0
China Shanghai Comp	3,151.1	-1.1	-13.4
China Shenzhen Comp	1,985.7	-1.3	-21.5
Japan Nikkei 225	27,217.9	1.4	-5.5
Japan Topix	1,915.2	1.3	-3.9
Britain FTSE 100	7,629.2	0.6	3.3
Canada S&P TSX	21,998.4	0.7	3.7
Euro area EURO STOXX 50	3,896.8	1.8	-9.3
France CAC 40	6,624.9	1.3	-7.4
Germany DAX*	14,362.0	2.0	-9.6
Italy FTSE/MIB	24,878.2	0.6	-9.0
Netherlands AEX	725.6	1.1	-9.1
Spain IBEX 35	8,769.5	1.8	0.6
Poland WIG	62,780.0	-2.0	-9.4
Russia RTS, $ terms	960.4	-3.7	-39.8
Switzerland SMI	12,310.2	-0.6	-4.4
Turkey BIST	2,525.9	2.7	36.0
Australia All Ord.	7,869.6	1.3	1.2
Hong Kong Hang Seng	20,944.7	-2.0	-10.5
India BSE	57,037.5	-2.2	-2.1
Indonesia IDX	7,227.4	-0.5	9.8
Malaysia KLSE	1,593.8	-0.2	1.7
Pakistan KSE	45,943.2	-0.5	3.0
Singapore STI	3,335.3	-0.2	6.8
South Korea KOSPI	2,718.7	0.1	-8.7
Taiwan TWI	17,148.9	-0.9	-5.9
Thailand SET	1,680.4	0.4	1.4
Argentina MERV	92,559.3	1.7	10.8
Brazil BVSP	114,343.8	-2.1	9.1
Mexico IPC	53,831.0	-0.6	1.0
Egypt EGX 30	10,444.8	-3.7	-12.3
Israel TA-125	2,150.9	2.1	3.8
Saudi Arabia Tadawul	13,668.5	0.9	20.6
South Africa JSE AS	73,783.4	0.9	0.1
World, dev'd MSCI	2,994.6	0.3	-7.3
Emerging markets MSCI	1,095.6	-2.1	-11.1

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2021
Investment grade	147	120
High-yield	373	332

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

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Commodities

The Economist commodity-price index 2015=100	Apr 12th	Apr 19th*	% change on month	year
Dollar Index				
All Items	192.7	193.4	1.7	9.4
Food	164.3	167.5	1.7	27.2
Industrials				
All	219.2	217.6	1.7	-0.5
Non-food agriculturals	180.0	185.0	1.9	12.7
Metals	230.8	227.3	1.6	-3.3
Sterling Index				
All items	225.6	227.2	3.8	17.5
Euro Index				
All items	196.5	198.8	3.9	22.2
Gold				
$ per oz	1,975.6	1,953.2	1.8	10.0
Brent				
$ per barrel	104.7	107.3	-7.0	60.9

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

The Economist

Graphic detail

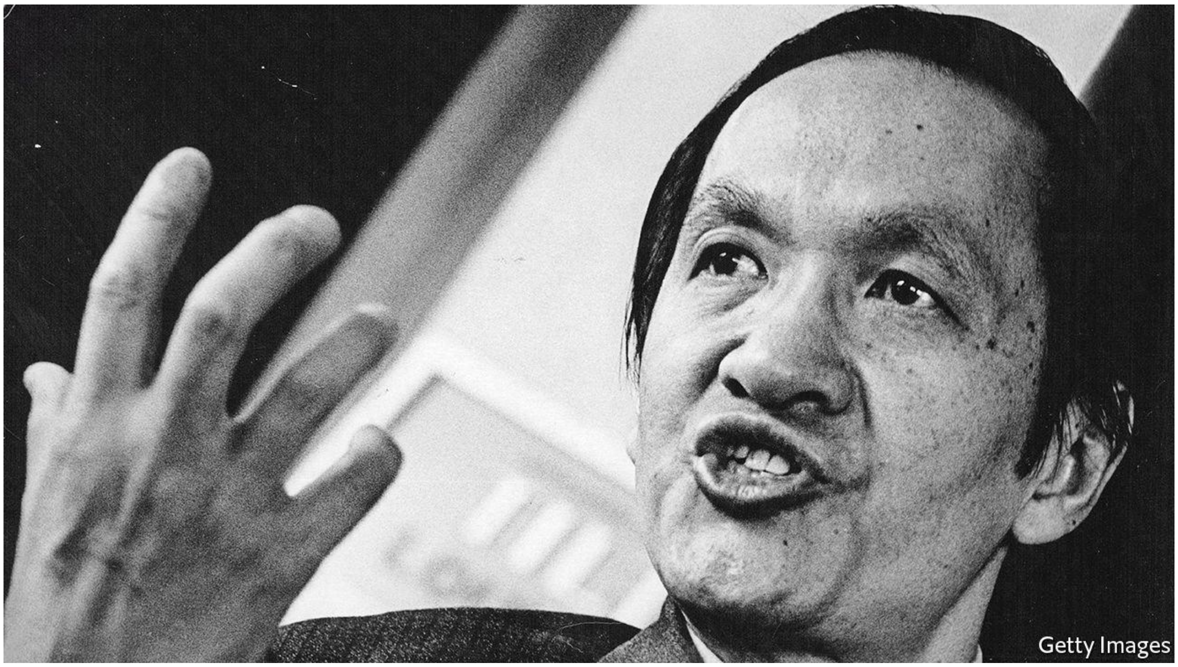
Obituary

A taste for freedom

Peng Ming-min fought for the idea of "one China and one Formosa"

A leading advocate of Taiwan's independence, he died on April 8th, aged 98

Apr 21st 2022



WHEN HE WAS a boy, few would have singled out Peng Ming-min as a future firebrand. Born in 1923 in Taiwan, then widely known as Formosa, he was bookish and other-worldly, with his main extra-curricular passion being baseball not politics. But by the time he had become a successful academic, four decades later, Taiwan's peculiar and unhappy international position had virtually forced him into taking a political stand—one that was to lead him to jail, escape into exile and, eventually, a job as a presidential adviser, after a failed run at the top job himself.

In 1895 Taiwan had been ceded "in perpetuity" to Japan by decaying imperial China, in an effort to placate Japanese expansionism. Mr Peng's father, the fourth generation of the family on the island, was a successful doctor and set great store by academic success. Ming-min did not disappoint. He was a school star, one of the few Formosans of his generation able to compete at the highest level with Japanese students, winning a place at university in Japan itself. To his father's disappointment, he did not want to study medicine. To his relief, his son relented over his first love, French literature and philosophy, compromising on law and political science. He became a respected authority on international law, especially in the new fields of the law of the air and, later, space.

He was lucky to survive Japan. In an American air-raid on a ferry in 1945, he lost his left arm (this had one accidental benefit in later life, rescuing him from an unpromising career in banking, where new recruits had to count banknotes), and was close enough to Nagasaki on August 9th to see the mushroom cloud. Japan's defeat meant the end of its occupation of his homeland. At the Cairo conference in 1943, China's leader, Chiang Kai-shek, secured the agreement of Churchill and Roosevelt that after the war Taiwan would be returned to China. Just as in 1895, the views of the island's inhabitants were not thought worth considering.

On going home Mr Peng found Taiwan not so much liberated as under a reign of terror. Chiang's Nationalist troops were "a rabble of scavengers", for whom the native Formosans were a "conquered people". In February 1947, after the police beat up an old woman selling cigarettes without a licence, local resentment boiled over into an island-wide insurrection, put down at the cost of thousands of lives, including many members of the local social and intellectual elite. For the next four decades, Taiwan was to be ruled as a harsh, one-party dictatorship, with the Nationalists' rule bolstered by the arrival of 1.5m-2m refugees from mainland China as the civil war there ended in their defeat in 1949. The Nationalists continued to claim sovereignty over all of China (and Mongolia).

But Mr Peng was doing well. He had married and had a son. He completed his studies in Taipei and went on to Montreal and Paris, gaining promotions at home, a growing international reputation, and even a job advising Taiwan's—ie, in those days, "China's"—delegation at the United Nations. He also earned the envy of some of his colleagues that a mere Formosan should be doing so well. Gradually he began to suspect that part of the secret of his success might be to show that "Formosans were being given their proper place". But he still shunned politics, writing in 1972 in his memoir, “A Taste of Freedom”, that he thought of himself “only as a member of an academic elite, removed from active political affairs”.

This became untenable. An authority on international law, how could he lend his prestige to the government’s nonsense about recovering the mainland, and connive in its discrimination against Formosans like himself? In 1964 he and two friends drafted a “Declaration of Formosan Self-Salvation” insisting that the world must recognise the truth “that there is one China and one Formosa”. It is as simple as that: Taiwan is its own country.

But it was a fairly efficient police state. The knock on the door came before the manifesto was distributed. He was sentenced to eight years in prison. His international fame and contacts must have been a help. He was not tortured, and was freed to house arrest the following year, from where he achieved an elaborate escape in 1970 via Hong Kong to Sweden, disguised as a “goofy-looking beatnik” and carrying a guitar case. This was a huge embarrassment to the authorities, who suspected, wrongly, that the CIA had spirited Mr Peng out. China was also suspicious that America was trying to foster Taiwan independence, and Zhou Enlai raised the case with Henry Kissinger on his secret visit to Beijing in 1971. But Mr Peng did move to America, taking up a professorship at the University of Michigan, from where he became a prominent international spokesman for Taiwan’s opposition, and in 1981 was one of the founders of the Formosan Association for Public Affairs, which remains an influential pro-Taiwan lobby.

His next homecoming was a happier one. He had spurned an invitation from Chiang Kai-shek’s son and successor, Chiang Ching-kuo, to come back as a free man, provided he accepted the dogma about regaining the mainland. But martial law had been lifted in 1987 and opposition parties legalised. So in November 1992 a crowd greeted him at Taipei airport. In 1994 he joined the most important of these, the Democratic Progressive Party (DPP), and such was his prestige that he became its candidate in the country’s first free presidential elections in 1996. He made a point by speaking Taiwanese, not the mainlanders’ Mandarin, in a televised debate, but was trounced by the Nationalist incumbent, Lee Teng-hui, himself a native of the island. Four years later, the DPP did win the presidency, as it did again in 2020.

Of the “three principal objectives” outlined in Mr Peng’s manifesto in 1964, two had been achieved: nobody now disagreed with the acknowledgment that “return to the mainland is absolutely impossible”; and the constitution has been rewritten to that of a functioning democracy. The third, that Taiwan should participate in the UN, however, is more remote than ever, and the threat of violent Chinese intervention to end its de facto independence does not diminish. Mr Peng’s ideas, once so seditious, have become mainstream. But no more achievable. ■

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